



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name

2. Organization/Affiliation

3. Address Lopez Wa 98261

4. E-mail

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

Why can't you find a way to adjust training procedures to reduce noise impact in the area. Reduce thrust and clean up aircraft after take off even if you are staying in the pattern. It would reduce noise a huge amount. I realize you are training new pilots and it may make it harder for them, but we need to find a way to work with each other better. Flying dirty all the time and having to listen to it, gets very disruptive when you are on the ground.

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 4.t. Noise Mitigation

Forks, WA 98331

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Please do not expand the use of growler aircraft. The entire state has a sensitive environment and this would cause great harm to the wildlife, both plant and animal. Also is not good for humans in the area.



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1. Name [REDACTED]
2. Organization/Affiliation _____
3. Address [REDACTED] Lopez Island WA 98261
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

1. Evaluate impacts of the Growler at low frequencies - section 3.2
↳ C-weighted, dBC).
2. From draft EIS 3-22: Recognize the impacts of low frequency Growler noise on human + wildlife health.
3. From Section 1.9.5 - There is a NEED to incorporate San Juan County noise reports in the EIS analysis.
4. At 3.5.2.4 Draft - Evaluate impacts of the

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YOUR INPUT MATTERS

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

Alternative on the SJI National Monument
and remove language stating that the
monument is exempt from NEPA.

- 5. Need to evaluate a new Alternative that
deploys UCLASS jets instead of more Growlers.
- 6. At section 1-20 - Need to commit to
mitigation measures with timelines in the
Record of Decision.

For more information, please visit the project website at whidbeyis.com

Please print

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Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

Open House Comments

Fill in and Submit at the Open House

1. Name _____

2. Organization/Affiliation _____

3. Address _____ Lopez Island 98261

4. E-mail _____

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like your name/address kept private

7. Please check here if you would like to receive a CD of the Final EIS

Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

- ① Evaluate impacts of the Growler at low frequencies (C-weighted, dBC). - section 3.2
- ② Recognize the impacts of low frequency Growler noise on health. - 3.22
- ③ Incorporate San Juan County noise reports in the EIS analysis. - 1.9.5
- ④ Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. - 3.5.2.4
- ⑤ Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.
- ⑥ Commit to Mitigation Measures and timelines in the Record of Decision. 1-20
- ⑦ Add your own comments here:

Evaluate CUMULATIVE EFFECTS ON HUMAN + ANIMAL HEALTH from low frequency Growler noise.

(Continue on the back)

- 1.a. Thank You
- 19.b. Revised Cumulative Impacts Analysis
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to: EA-18G EIS Project Manager NAVFAC Atlantic Attn: Code EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508

- 1. First Name [redacted]
2. Last Name [redacted]
3. Organization/Affiliation SELF
4. City, State, ZIP Lopez Island, WA 98261
5. E-mail [redacted]
6. Please check here [X] if you would NOT like to be on the mailing list
7. Please check here [X] if you would like your name/address kept private

- 1.a. Thank You
10.m. Impacts to Marine Species and Habitat
12.a. Socioeconomic Study Area
12.h. Tourism
12.j. Property Values
2.c. Compliance with the National Environmental Policy Act
2.e. Public Involvement Process
2.k. Range of Alternatives
2.n. Alternatives Considered But Eliminated
4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
4.c. Advanced Acoustic Model
4.d. Day-Night Average Sound Level Metric
4.f. Noise Measurements/Modeling/On-Site Validation
4.g. Average Annual Day/Average Busy Day Noise Levels
4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
4.j. Other Reports
4.r. Nonauditory Health Effects
4.t. Noise Mitigation
7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

7. Look at noise effect on marine mammals: **THANK YOU!**

- 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

- 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

- 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

- 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

- 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.”

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:

Langley, WA 98260

I am concerned that many issues relating to the increased Growler operations at the OLF in central Whidbey have not been addressed in the EIS. Specifically: 1. Health concerns relating to increased noise, both for humans and wildlife 2. Economic impacts for central Whidbey agriculture and tourism 3. Decrease in private property values due to noise. 4. Aquifer and well contamination Please investigate other sites for basing the Growlers.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.j. Property Values
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered but Eliminated
- 4.r. Nonauditory Health Effects

Port Angeles, WA 98363

We appreciate the extended time period for comment. After frequent visits for a number of years, we just recently moved to Clallam County, west of Port Angeles. The regular sound of the Growlers from our home confirms what the flight path chart in the DEIS appears to indicate, we are in the corner of the flight path just west of Port Angeles. The DEIS appears to only identify the city of Port Angeles as the location of Residences for concern for our area. It also appears to indicate that the decibel level is below thresholds for interference with sleep, indoor speech or outdoor speech. Basically, the DEIS suggests only a slight increase in chance of sleep interference. Actual experience in the area would suggest a greater effect. We believe that the DEIS fails to take into account of the actual altitude at which the flights travel through our area and fails to recognize the Natural Resources and Community Resources nearby. There are two county parks (Freshwater Bay Park and Salt Creek Park) and State Natural Resources Recreational land on the coast in our immediate vicinity and less than 5 miles inland are Olympic National Park and other State Natural Resources recreational land. There are also efforts under way to designate land surrounding the national park in the area as a wilderness area, land which is even closer to the coast near us. All of these areas are best preserved and enjoyed in quiet. We believe the resources mentioned above should be considered. With respect to the altitude of the flights in our area, some are low enough and loud enough to be similar to the noise contours shown in the approaches to Ault field. The planes on the return route appear at times to be little more than a thousand feet above the Strait. The sound would seem to be in excess of the

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

4.l. Points of Interest

4.m. Supplemental Metrics

7.d. Recreation and Wilderness Analysis and Study Area



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- 1. Name [REDACTED]
- 2. Organization/Affiliation PRIVATE CITIZEN
- 3. Address [REDACTED] ANACORTES, WA 98221
- 4. E-mail [REDACTED]
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

THANK YOU FOR CARRYING OUT YOUR DVE DILIGENCE IN ORDER
TO INFORM THE PUBLIC ABOUT THE FACTS, AND TO INFORM
THE NAVY LEADERSHIP SO THEY CAN MAKE THE BEST DECISION
POSSIBLE FROM THE ALTERNATIVES PRESENTED - I FULLY SUPPORT
NAVAL FLIGHT OPERATIONS IN THE PACIFIC NORTHWEST. NAS
WHIDBEY ISLAND WORKS HARD TO BE A GOOD NEIGHBOR.

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1.a. Thank You

1.a. Thank You

Oak Harbor, WA 98277

This is a letter that I dispatched to SecNav Ray Mabus; Mr. Ray Mabus Secretary of the Navy Office of the Secretary of the Navy 1000 Navy Pentagon, Room 4D652 Washington, DC 20350 RE: Flight operations on Whidbey Island, Washington Secretary Mabus; Since the few who find the idea of enduring the noise associated with jet aircraft operations over Whidbey Island, Washington have made their objections known to those who govern and oversee such activity, I feel compelled to let my own voice be heard. Since the abolition of military conscription in this country, the burden and sacrifice of military service has been absorbed by a very small percentage of the population. Worse yet, those who have not made such a sacrifice find any level of imposition on their life unreasonable. For such people, a magnetic "support our troops" sign on their car is the extent of their support to those who protect our nation. While I have not served in the military, I have dedicated my career as a journalist to reporting on military activities in both conflict and peacetime. It troubles me that many of the issues and complaints from citizens about the military are based on untruths and ignorance of the importance of training and preparation in the safe and successful execution of their missions. Such is the case with operations at the Outlying Field (OLF) in Coupeville, Washington. I'm certain that those who find these operations an imposition and inconvenience have never witnessed the difficulty of night operations on an aircraft carrier. In the course of my work, I've had the privilege to witness these and came away with a respect and appreciation for the skill and dedication to all those who make this impossible task happen. Let it be known to you and all those who have jurisdiction in this matter that I, as a private citizen and resident of Oak Harbor, Washington, support any and all flight operations at the OLF in Coupeville and Naval Air Station, Whidbey Island. For the record, for 18 months, I resided in Admiral's Cove. When the E/A-18's were engaged in Field Carrier Landing Practice (FCLP) at the OLF, they flew directly over my house. When they did, I stepped outside and saluted them. It is my hope that you and those others who have jurisdiction in this matter will see to it that the men and women who perform this vital and challenging task have every opportunity to train to assure their safety and the successful execution of their missions. Very sincerely, [REDACTED] Oak Harbor, WA 98277-8030

1.a. Thank You

Oak Harbor, WA 98277

I unconditionally support NASWI and all operations associated with the base Ault Field and the OLF. I moved to Whidbey Island in 1990 fully aware of the flight operations and with each rental and house purchase, I was required to sign a release advising me of the environment i was wishing to live. Whatever the Navy needs, i support it.

[REDACTED]
Coupeville, WA 98239
[REDACTED]

- 1.a. Thank You
- 1.c. Segmentation and Connected Actions
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.b. Invisible Costs
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.l. Community Service Impacts
- 15.b. Potable Water and Wastewater Capacity
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 17.a. Hazardous Materials and Waste Impacts
- 19.b. Revised Cumulative Impacts Analysis
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.d. Arrivals and Departures
- 3.f. Field Carrier Landing Practice Operation Totals
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.a. Regional Land Use and Community Character
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

February 17, 2017

EA-18G Growler EIS Project Manager
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard
Norfolk, VA 23508
Attn: Code EV21/SS

Re: Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex
Public Comment

Dear Sir or Madam:

Thank you for extending the public comment period for the subject draft Environmental Impact Statement (the "DEIS"). Such an extension is warranted by the technical complexity and length of the document, which considerably exceeds the length set forth in the governing regulations (40 CFR 1502.7).

I reside on Smith Prairie on central Whidbey Island within Ebey's Landing National Historical Reserve. I have lived in my present home, located within one mile of the runway at Outlying Field Coupeville (the "OLF"), since 1981. My comments are as follows:

1. The DEIS examines and attempts to quantify effects on a plethora of environmental parameters arising from expanded flight operations at Naval Air Station Whidbey Island ("NASWI"). It is, however, unrealistic to look at these effects individually, when the overall result of the proposed action will be a change in the fundamental character of central Whidbey Island, which is recognized for its rural ambience and links to history:

"Ebey's Reserve is a national model for sustainable development in rural communities. It is the only remaining area in the Puget Sound region where a broad spectrum of Northwest history is clearly visible on the land, and protected within a landscape that is lived in and actively farmed. It is a place that is sustained using contemporary conservation strategies, local stewardship, and by leaving the land in primarily private ownership, while preserving its historic, cultural, and rural character."
(Pickard, Jan and Mark Preiss, Ebey's Landing National Historical Reserve

February 17, 2017

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Trust Board, in Dept. of the Interior National Park Service et al., *Ebey's Landing National Historical Reserve Long-Range Interpretive Plan*, September 2009.)

Applicable Federal regulations require that aesthetic, cultural, and social effects, “whether direct, indirect, or cumulative” be considered in an EIS (40 CFR 1508.8). It is therefore necessary to look beyond the tables of statistics and consider the qualitative change that will occur in this historically quiet, rural community if the frequency of operations at OLF is increased up to five- to six-fold over the present level (as in proposed Scenario A). Friends of mine, who are long-term residents of this area, have already moved away or are making plans to do so in anticipation of expanded flight operations at OLF. The final EIS must also consider the cumulative effects of the proposed action on health, student learning, land use, property values, tourism, etc. and how those changes will shape Coupeville and the surrounding community.

2. The DEIS lacks objectivity; it appears to have been crafted to rationalize the Navy’s stated preference (DEIS at page ES-3) for conducting the majority of FCLPs at OLF. Coupeville Middle/High School and Whidbey Health are omitted as points of interest. It is also telling that the Rhododendron Park ball fields, dog park, and campground, as well as Ebey’s Landing National Historical Reserve receive no mention in the discussion on recreation areas at page ES-7, a discussion that does single out effects on recreation areas in the vicinity of Ault Field.
3. Section 3.14.2.3 Seismic Activity fails to describe major seismic events along the Cascadia Subduction Zone, the most recent of which is believed to have occurred in 1700. Evidence for the 1700 earthquake, estimated at magnitude 9, is presented in Atwater, Brian F. et al., *The Orphan Tsunami of 1700: Japanese Clues to a Parent Earthquake in North America*, 2nd ed., United States Geological Survey and University of Washington Press, 2015. The statement, “The most recent apparent significant activity was approximately 18,000 years ago” (EIS at 3-187) is therefore incorrect and not based on best available science. Seven Cascadia Fault earthquakes have occurred in the last 3,500 years, with an average interval of about 500 years between events (Atwater et al., *ibid.*, and references cited therein). It is estimated that there is a one-in-ten chance of such a major quake (up to magnitude 9) occurring in the next 50 years. Such an event would be “the costliest, and potentially deadliest, natural disaster in US history” according to the Washington State Emergency Management Division (*Seattle Times*, January 27, 2017). I find it disturbing that the Navy has failed to address this risk in the DEIS, but am hopeful that this is merely an oversight and that appropriate emergency plans exist.

Section 3.14.2.3 correctly states, “Seismic activity in this region results from subduction of the Juan de Fuca plate beneath North America.” However, this is the sole mention of subduction zone earthquakes and it is presented within a discussion of other types of faults, thereby conflating two very different classes of risk. The Strawberry Point, Devil’s

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Mountain, and Utsalady Faults are believed to be oblique-slip, transpressional faults. Evidence indicates that these faults have been active much more recently than 18,000 years ago and that such activity may have resulted in tsunamis affecting north Whidbey Island as recently as 1160 years B.P. (Johnson, Samuel Y. et al., *Active Tectonics of the Devils Mountain Fault and Related Structures, Northern Puget Lowland and Eastern Strait of Juan de Fuca Region, Pacific Northwest*, USGS Professional Paper 1643, 2003. <https://pubs.usgs.gov/pp/p1643/>). The EIS should be revised (a) to discuss seismic risks associated with the Cascadia Subduction Zone; (b) to correctly identify other seismic risks based on current science; (c) to distinguish between seismic risks arising from the Cascadia Subduction Zone and those arising from other, more local faults; and (d) to present plans for management/mitigation of seismic risks.

4. The risk of a major earthquake in the foreseeable future calls into question the decision to base all Growlers at NAS Whidbey (DEIS at ES-2). A major, subduction-zone earthquake in the Puget Sound basin would be characterized by an extended period of ground shaking (measured in minutes), soil liquefaction¹, and ground subsidence, causing major structural damage to runways and other infrastructure. See, Atwater et al., *ibid.* An earthquake of such magnitude, occurring without warning, could leave much of the Navy's Growler fleet grounded. In view of seismic risk alone, alternative basing sites for at least a portion of the Growler fleet should be given more serious consideration.
5. Ault Field receives its water from the City of Anacortes via pipes on the Deception Pass bridge (DEIS at 3-179 to 3-180), which was built in the early 1930s. The Deception Pass bridge is in need of a seismic retrofit (*Seattle Times*, *ibid.*). A major earthquake as discussed in comment 3, above, would likely damage the bridge and disrupt the water supply to Ault Field (and Oak Harbor/northern Whidbey Island) for an extended period. Ault Field has water storage equal to less than eight days of consumption (DEIS at 3-180), and such storage would also likely be damaged. The risk of an extended interruption of the water supply further calls into question the decision to base all Growlers at NAS Whidbey. In addition, the Navy should consider steps to safeguard its water supply against earthquake risks, such as supporting a seismic retrofit of the bridge and water pipes, and increasing storage capacity.
6. The DEIS states, "OLF Coupeville is available for use 7 days per week, 24 hours per day, although in recent years operations at OLF Coupeville have not been conducted on weekends." (Page 3-11.) Will the historical pattern of no weekend use be honored, or will FCLP operations be conducted at OLF seven days per week? Will operations be conducted around the clock? This is particularly significant given the importance of tourism to the local economy. The final EIS should disclose the contemplated weekly

¹ Ground underlying Ault Field consists of unconsolidated sediments of glacial and other origin (Dragovich, Joe D. et al., *Geologic Map of Northwest Washington—Northwest Quadrant*, Washington Division of Geology and Earth Resources Geologic Map GM-50, 2002).

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use of OLF Coupeville, and should discuss the economic effects of such use as well as what steps will be taken to mitigate the impact.

7. According to the DEIS (p. 3-179), "Island County has 229 public water systems serving over 78,000 individuals." This statement is incorrect. According to Douglas J. Kelly, Island County Hydrogeologist (pers. comm., 2017), Island County has 284 Group A water systems and 590 Group B water systems, for a total of 874 systems. In addition, there are 450 two-party systems. The EIS should be revised to include correct data on public water systems in Island County.
8. The DEIS states, "There would be no significant impacts on water resources from construction activities or operation of new aircraft." (Page ES-9.) At page ES-10, under "Hazardous Waste and Materials" it is stated, "The existing practices and strategies would successfully manage the use and disposal of these materials." Similarly, page 4-285 asserts, "Hazardous waste management activities would follow existing procedures for the safe handling, use, and disposal of hazardous substances and waste." These assurances notwithstanding, it has recently come to light that a mile-long plume of 1,4-dioxane, a likely carcinogen, has been found in groundwater emanating from a dump site at Ault Field (*Whidbey News-Times*, January 21, 2017). The existence of this plume suggests that "existing practices" for handling of hazardous waste are insufficient.

At page 3-62 the DEIS asserts, "Remediation construction was completed in September 1997, *human exposure and contaminated groundwater exposures are under control*, and the [operating units] at Ault Field and the Seaplane Base are ready for anticipated use." (Emphasis added.) In view of recent revelations of groundwater contamination, this statement is demonstrably false. The DEIS must be revised to include a discussion of this recently identified groundwater contamination and plans to ameliorate it, as well as a discussion of how procedures for the safe handling, use, and disposal of hazardous substances and waste are to be improved prior to the basing of additional Growler aircraft at NASWI.

9. In addition to the groundwater contamination discussed in comment 8, above, at least eight wells have been found to be contaminated with perfluorinated compounds from fire-fighting foam (*Whibey News-Times*, January 28, 2017). The Navy is now drilling test wells in an effort to map the extent of the contamination. In view of this ongoing testing, the full scope of well contamination around both Ault Field and OLF cannot be determined at this time. Thus, the treatment of this matter in the DEIS (e.g., page 4-285) must be updated with current information on the extent of well and aquifer contamination, planned steps for remediation, and plans to compensate affected water users.
10. Section 3.9.2.1, "Groundwater" must also be updated to include discussion of recently discovered groundwater contamination in the vicinity of both Ault Field and OLF.

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11. Under the Navy's "A" and "B" scenarios, jet noise over Ebey's Landing National Historical Reserve would be substantial. The DEIS attempts to minimize this effect, stating at page 1-23, "In 2016, the National Park Service performed acoustical monitoring for the Ebey's Landing National Historic [sic] Reserve. . . . the report demonstrates that aircraft noise above 60 dB (normal conversation levels) occurred less than 1 percent of the time during the study period." Not only is this statement vague ("less than 1 percent" could be anything from zero to 0.999%), there is no information as to whether or not the time period in question was representative of OLF operations during 2016. Taking this statement on its face, under scenario A of any of the proposed alternatives, noise levels above 60 dB could occur up to 5-6% of the time, or 7 hours/week in a average year². The 7-hour figure is conservative insofar as "FCLP schedules are dictated by training and deployment schedules, occur with concentrated periods of high-tempo operations, and are followed by periods of little to no activity." (DEIS at 1-5.) The disruptive effects of such noise on visitors to the Reserve should be given greater consideration in the final EIS.
12. Further to comment 11, details of the National Park Service's acoustical monitoring are provided in Natural Resource Report NPS/EBLA/NRR--2016/1299, *Ebey's Landing National Historical Reserve Acoustical Monitoring Report* (the "NPS report"). Noise was monitored at two locations as shown at pages 3-4 of the report. One of these locations, the Ferry House (EBLA002), is located well outside the 60 dB noise contour for the No Action Alternative as well as the proposed Action Alternatives (DEIS at, e.g., Figs. 3.2-5 and 4.2-5). The second site (Reuble Farmstead, EBLA001) appears to lie between the 65- and 70-dB contours for the No Action Alternative. "The highest recorded SPL and SEL at EBLA001 were 113 and 117.2 and at EBLA002 were 85 and 96.6, respectively; both of these were from aircraft." (NPS report at p. 14.) Levels measured at EBLA001 are hazardous to human hearing; exposure to 115 dB should not exceed 30 seconds continuous under NIOSH and CDC guidelines (e.g., OSHA Technical Manual, Section III, Ch. 5, II.I.2). The measured DNL during the monitoring period at EBLA001 was 73.6, substantially above the level predicted in the DEIS. These data should be afforded more weight in the final EIS.
13. In general, the DEIS is dismissive of actual, on-site noise measurements. Measurements discussed in comments 11 and 12, above, were made by equipment meeting ANSI standards (NPS report at p. 6), and data were analyzed by trained technicians (NPS report at p. 7). Data were collected for 31 days (p. 7). The NPS results raise questions about the accuracy of the models used to prepare the DEIS and should not be treated dismissively.

² OLF flight data for 2016 are not provided in the DEIS. The calculation assumes approximately 6,000 FCLPs in 2016 as in 2014 and 2015, flights at OLF under Alternative 1A would increase to 35,100 (DEIS Table 2.3-2), and OLF operations are conducted weekdays only.

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Additional on-site acoustic sampling was conducted by JGL Acoustics, Inc. in 2013. A report on this monitoring is available at citizensofeyebysreserve.com/References/Files/JGL%20Noise%20Report.pdf and is cited in the DEIS at page C-124. A-weighted, 1-second Leq sound levels in excess of 115 dB were measured in residential areas near OLF. This report also shows measurement of 115.7 dBA at Position 3 (see page 2), the closest position to Coupeville Middle/High School. Given the allowed deviation from designated flight tracks (DEIS at page 3-7), Position 3 is a reasonable surrogate for establishing potential noise levels at the school. Measurements such as these should raise serious concerns about real noise impacts vs. modeled impacts.

The JGL Acoustics report is dismissed in a purely conclusory manner in the DEIS at page 1-23. Whatever “methodological flaws” exist in that report should be enumerated.

14. The DEIS is believed to rely too heavily on noise modeling in lieu of actual sound measurement. There is no indication in the DEIS that the models were ever tested against actual measurements made in the affected area. Given that reported measurements (comments 11 through 13, above) conflict with model-based predictions, the models should be tested and modified if necessary. Furthermore, the NOISEMAP software used for computer modeling appears to be an outdated version from 2008 or earlier (DEIS at A-21). A Department of Defense report prepared in 2010 states, “The acoustic environments in the vicinity of newer aircraft such as the . . . F/A-18E/F³ differ from those of most prior aircraft, with high noise levels associated with higher thrust engines. At those high levels, *acoustic propagation cannot be modeled using the same simple linear theories employed in the classic noise models.*” (<https://www.serdpestcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>; emphasis added).
15. The DEIS relies on A-weighted sound measurements. “A-weighting puts emphasis on the 1,000 to 4,000 Hz range.” (DEIS at p. A-142.) However, the Growler is known to produce substantial low-frequency sound. See, Department of the Navy, *Environmental Assessment for the Expeditionary Transition of EA-6B Prowler Squadrons to EA-18G Growler at Naval Air Station Whidbey Island, Oak Harbor, Washington*, Final, October 2012 (the “2012 EA”) at pages 38-39 of the included Wyle report WR 10-22. As stated therein, “NASWI has received complaints of building rattle/vibration due to Growler events . . . With its increased low-frequency content, the Growler takeoff events have higher potential to cause noise-induced vibration.” Frequency profiles, shown on page 39, indicate substantial sound levels at frequencies below 100 Hz. A-weighted sound levels are therefore an inaccurate measurement of Growler noise during FCLP operations and lead to underestimating perceived sound levels and effects on people and property. The final EIS should clearly convey the lack of correlation between A-

³ The EA-18G Growler is the fourth major variant of the F/A-18 family of aircraft (*Selected Acquisition Report (SAR) EA-18G Growler Aircraft (EA-18G)*, March 17, 2016).

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weighted measurements and the Growler sound spectrum or should adopt a different measurement standard. For example, Effective Perceived Noise Level, which takes into account tone components and duration, may be more appropriate than dBA. See, 14 CFR Appendix A to Part 36.

16. Values given in Fig. A-3 (DEIS at page A-154) for quiet urban nighttime (ca. 40 dB) and quiet urban daytime (ca. 50 dB) do not agree with those in Fig. 3.2-1 (30 dB and 40 dB, respectively). This discrepancy should be corrected or explained.
17. Figures A-3 and 3.2-1 should be amended to include day and night noise levels for rural areas. Much of the affected area around OLF is rural. Rural nighttime sound levels have been reported to be 25 dB vs. 40 dB in urban areas (Pennsylvania State University, noisequest.psu.edu/noisebasics-basics.html). Assuming a 10 dBA daytime adjustment (Noise Solutions, noisesolutions.com/resources/glossary/), daytime background noise in a rural area would be 35 dB, or about 20 dB below that experienced in urban areas. Using the quiet urban sound levels from DEIS Fig. 3.2-1 as a baseline, daytime rural background noise levels would be expected to be significantly lower than 35 dB.
18. The Navy has previously stated, "The primary factor considered in determining the significance of potential noise impacts includes the extent or degree to which implementation of the Proposed Action would affect the *baseline sound environment*." (*Final Environmental Impact Statement for Naval Weapons Systems Training Facility Boardman*, 2015 at p. 3.4-15; emphasis added). The importance of recognizing low background noise levels in rural areas is also set forth in *Department of Defense Instruction Number 4165.57* (2011, 2015) ("DoD 4165.57"). The low background noise in affected rural areas should be taken into consideration in the final EIS.
19. Tables throughout the DEIS express data for sound intensity, aircraft operations, and other variables as averages, without reporting ranges (e.g., standard deviation or standard error). See, for example, page 3-12 ("As part of the noise analysis, flight operations were modeled for an "average year" at Ault Field and OLF Coupeville.") An average is, by definition, a product of multiple measurements none of which is precise in itself. While individual values will, it is hoped, cluster about the average value, the average alone does not provide a true picture of the data. Of particular concern is the averaging of noise levels, which may vary due to a variety of atmospheric and operational conditions. Average noise levels may therefore underrepresent the actual noise to which a person will be exposed for significant periods of time. Examination of Navy records available online at cnic.navy.mil show that operations at OLF in 2016 were clustered into periods of a few days to a week, with breaks of up to a month or more between some blocks of activity. While averaging of noise levels may be appropriate to civilian airports where daily activity remains fairly constant, it is not appropriate for characterizing noise from sources with a high degree of both short- and long-term variability.

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The problem with a reliance on averages is also illustrated by the graph of flight operations on page 1-6. Over a 40-year period, total operations ranged from a low of approximately 63,000 in 2008 to a maximum of about 190,000 in 1990. An average of the annual numbers gives no indication of the actual range and the actual yearly impacts. The final EIS should provide ranges of values (e.g., standard deviation or standard error) in addition to averages in tables and graphs in keeping with standard practice for technical documents.

20. Under the Navy's own standards, existing development in the vicinity of OLF precludes the proposed action. The Navy has previously stated that APZ1 and APZ2 are "clearly incompatible" with housing and that Noise Zone 2, even in the absence of an APZ, is "normally incompatible" with housing (*Draft Environmental Impact Statement (EIS) for Development of Facilities to Support the West Coast Basing of the F/A-18E/F Aircraft*, 1997 (the "1997 EIS") at Fig. 3-1). Similarly, *Naval Weapons Systems Training Facility Boardman Final Environmental Impact Statement*, Department of the Navy, December 2015 (the "2015 EIS") at Table 3.4-1 states that Noise Zone III (>75 dBA) is incompatible with residential/noise-sensitive land uses, and that Noise Zone II is normally incompatible with such uses. Table 3.4-1 particularly points to residences, mobile home parks, transient lodging, schools, hospitals, and churches as being incompatible with Noise Zone II (65-75 dBA).

Proposed Alternative 1A for NASWI puts the local Kingdom Hall of Jehova's Witnesses; Centerpoint Christian Church; Ryan's House, a temporary shelter for homeless youth; and the Admirals Cove, Crocket Lake Estates, Shangri-la Shores, Race Road/Lagoon, Harrington Road, Harrington Lagoon, Snakelum Point, and Kineth Point neighborhoods inside the 75 dB DNL noise contour (i.e., in **Noise Zone III**; see Fig 4.2-5). Coupeville Middle/High School, the Pennington Hill neighborhood, and the Olympic View Mobile Home Park are all within the 65 dB contour (Noise Zone II). **These existing land uses are incompatible with the proposed action according to the Navy's own standards.** Alternatives 2A (Fig. 4.2-12) and 3A (Fig. 4.2-19) are similarly problematic. Alternatives 1B (Fig. 4.2-6), 2B (Fig. 4.2-13), and 3B (Fig. 4.2-20) would also put most of these areas in the same incompatible noise zones. Even the C alternatives render at least most of the Admirals Cove neighborhood uninhabitable under published standards. DoD 4165.57 states at page 27, "Existing residential development is considered as pre-existing, incompatible land uses."

Under land use compatibility guidelines shown in DoD 4165.57, APZ-I is incompatible with residential housing, and APZ-II is compatible with detached, single units at a maximum density of 2 units/acre. The "Conceptual" APZ I shown in Fig. 4.3-1 encompasses much of Admirals Cove, as well as the Ryan's House shelter. The "Conceptual APZs" shown in Fig. 4.3-2 further encompass residential developments along Race Rd., Harrington Rd., and Harrington Lagoon that exceed the compatible density limits for APZ-II in the DoD Instruction. The final EIS must describe what steps will be taken to mitigate the effects of APZs.

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21. The statement, "There are no schools located within the APZs at Ault Field and OLF Coupeville under any of the alternatives or scenarios; therefore, there is no disproportionate environmental health and safety risk to children as a result of possible aircraft mishaps" (p. ES-6) is disingenuous because only "Conceptual" APZs are shown and because certain proposed alternatives will require actual APZs under the Navy's criteria. The inclusion of detailed noise maps and flight activity predictions shows that the data needed to locate APZs are available at this time. The risk to children can be properly assessed only when the APZs are determined.
22. DoD 4165.57 states at page 11, "As a minimum, contours for DNL 65, 70, 75, 80, and 85 shall be plotted on maps for Air Force, Navy, and Marine Corps air installations as part of AICUZ studies." Maps in the main body of the DEIS do not include 80 and 85 dB contours, although the smaller-scale maps in Appendix A (which are difficult to read) include 80, 85, and 90 dB contours (e.g., Fig. 4-2 on p. A-39). These higher noise contours should be included within the main body of the final EIS so as to comply with the spirit, as well as the letter, of the regulations. The 80 dB corridor in Fig. 4-2 includes the Admirals Cove neighborhood and (perhaps) some residential areas north of OLF (again, the scale of the map prevents a clear reading). As discussed above, this level of noise is deemed, by the Navy, to be incompatible with a residential area.
23. When considering options for basing the F/A-18E/F, the Navy's evaluation of alternatives included analysis of effects on noise-sensitive areas where an increase of 1.5 or 3 dB would occur:
- "Noise-sensitive areas experiencing an increase in noise of DNL 1.5 dB or more into or within the DNL 65 dB noise exposure when compared to the No Action Alternative for the same timeframe (aerial maps of the areas were inspected for residences or other sensitive receptors within the 65 and 70 dB contours) were considered a significant change in the noise environment. . .
- "If noise-sensitive areas at or above DNL 65 dB showed an increase of DNL 1.5 dB or more, further analysis would be conducted to identify noise-sensitive areas between DNL 60 and 65 dB having an increase of DNL 3 dB or more due to the proposed action aerial maps of the areas that were inspected for residences or other sensitive receptors within the 60 and 65 dB contours." (1997 EIS at page 3.4-10.)
- This sort of analysis does not appear to have been conducted for the present DEIS. The proposed Action Alternatives increase the size of the relevant noise zones. An explanation of this discrepancy in analytical approaches is required.
24. At page ES-3 of the DEIS it is stated that "[t]he Navy recognizes that noise impacts to the community are an unavoidable adverse effect of the Proposed Action." However, there are no alternatives proposed in this DEIS that would reduce noise. This omission is

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contrary to the governing regulations, including 40 CFR 1502.1, which states that an EIS “shall inform decisionmakers and the public of the reasonable alternatives which would *avoid or minimize adverse impacts or enhance the quality of the human environment*” (emphasis added); and 40 CFR 1506.1, which states that, prior to the issuing of a record of decision, “no action concerning the proposal shall be taken which would: (1) have an adverse environmental impact; or (2) limit the choice of reasonable alternatives.” According to a memo from the President’s Council on Environmental Quality (CEQ) to all federal agencies, “Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, *rather than simply desirable from the standpoint of the applicant.*” (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>; emphasis added) See also, *A Citizens’ Guide to the NEPA: Having Your Voice Heard*, Council on Environmental Quality, Executive Office of the President, 2007. By not giving due consideration to alternative sites for FCLP, the Navy has, in effect, improperly limited itself to a range of actions that will have adverse environmental effects. The Action Alternatives presented in the DEIS merely provide for different distributions of the same flights between the two runways. This approach pits the north and central Whidbey communities against each other, as the runway that receives more flights becomes the “loser” among these communities. The instant EIS process has already created rifts in the community, with two Island County Commissioners (both outspoken NASWI boosters) retaliating against the Town of Coupeville after members of the Town Council made comments on the DEIS in a public meeting (*Whidbey News-Times*, February 11, 2017).

25. The problems discussed in comment 24, above, have been exacerbated by the failure to identify a preferred alternative in the DEIS. Under 40 CFR 1502.14(e) an EIS must “[i]dentify the agency’s preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement . . .” The only preference stated in the DEIS is for 100% of FCLP operations to be conducted at OLF (page ES-3), but that scenario is not among the proposed alternatives. Since the Navy has not identified a preferred alternative, **the DEIS is fatally defective under the applicable regulations.** Further, since the Navy has announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative.
26. Whidbey Health (formerly Whidbey General Hospital) should be added to the Points of Interest (Section 3.2.4.2 and elsewhere). The hospital is located in Coupeville at the intersection of State Highway 20 and North Main Street, approximately 2.5 miles northwest of the runway at OLF. In view of the flight tracks shown in the DEIS at, for example, Fig. 3.1-4 and given the Navy’s admission that “aircraft can be several miles left or right of the flight track” (DEIS at page 3-7), Growlers can be expected to fly directly over Whidbey Health at low elevation. Resultant noise levels at Whidbey Health and their effects on patients must be considered.

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27. Coupeville Middle/High School should be added to the Points of Interest (Section 3.2.4.2 and elsewhere). The school is located in Coupeville at the intersection of South Main Street and Terry Road, less than 2.5 miles northwest of the runway at OLF. As such, Coupeville Middle/High School is the closest school to OLF. In view of the flight tracks shown in the DEIS and the Navy's admission that "aircraft can be several miles left or right of the flight track", Growlers can be expected to fly directly over Coupeville Middle/High School at low elevation during FCLP. Maps of flight tracks on pages 3-8 and 3-9 show arrival and interfacility tracks that appear to pass directly over the school.

FCLPs at OLF are conducted at altitudes of 0 – 600 ft above ground level (p. 1-8). If a Growler deviates from the flight track and passes over Coupeville Middle/High School, the noise level could exceed 109 dBA (Table 3.1-2). Based on the "Typical FCLP Operation" shown in the brochure *Growler Aircraft Operations at NAS Whidbey Island and OLF Coupeville, 2015*, a jet deviating from the flight track could pass over the school at less than 500 feet above ground level. According to the DEIS, "One laboratory study (Ising et al. 1999) concluded that events with Lmax above 114 dB have the potential to cause hearing loss" (p. A-169).

28. Table 3.2-4 shows a maximum sound level at Coupeville Elementary School of 98 dB, corresponding to a Growler at 2,000 ft. (Table 3.1-2). Table 3.2-4 does not appear to account for allowed deviations of "several miles" from flight tracks (p. 3-7). See also note 1 to Table 3.2-4: "In addition, there is some variability in how close the aircraft operation itself is to the POI, as weather, other aircraft traffic, pilot proficiency, etc. can affect the position of an aircraft within the modeled flight track." Allowed deviations from the FCLP flight track could result in aircraft passing over the Elementary School at 1200 ft. or less above ground level. The effects of such deviations should be taken into account in calculating maximum sound levels. Such data should also be presented for Coupeville Middle/High School.
29. According to the National Institutes of Health, "In order to protect the most sensitive 8% of the population, NIOSH recommends that hearing protection be worn whenever noise levels exceed 85 dB(A) **regardless of duration.**" (<https://blogs.cdc.gov/niosh-science-blog/2016/02/08/noise/>; emphasis added). This document also shows that the maximum daily occupational noise dose is reached in 15 minutes at 100 dB(A), and that for every 3-dB increase in noise level, the allowable exposure time is reduced by half. Thus, max daily exposure to 109 dB(A) (i.e., Growler at 500 ft.) is less than 3 minutes. NIOSH continues, "Even without knowing your time-weighted average, if the readout shows a level of 85 dB(A) or higher, NIOSH recommends that you take precautions to protect your hearing by reducing the noise when possible, limiting your exposure time, and/or using appropriate hearing protection." Under these recommendations, Coupeville Elementary students, who may be exposed to 90 dB (e.g., Table 4.2-11), will need to wear hearing protection at recess.

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30. Some schools will be interrupted by jet noise dozens of times per week (e.g., Table 4.2-3), yet no mitigation steps are described beyond the belief that windows will be closed or air conditioning will be used. This sanguine approach ignores the fact that learning and school activities may take place out-of-doors (e.g., recess, physical education classes, sports practice, school garden, etc.). If mitigation measures are introduced in the final EIS, such measures would be new information, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's declared intention not to allow a comment period on the Final EIS would violate the NEPA process.
31. Coupeville Middle/High School should also be added to the Points of Interest (Section 3.2.4.2 and elsewhere) as an indicator of nearby residential development (Table 3.2-7, note 4). Neighborhoods adjacent to Coupeville Middle/High School include the Olympic View Mobile Home Park, Terry Mobile Park, and the SE Bainbridge Ln. area. A Boys and Girls Club is slated to be built on S. Main Street south of the Middle/High School campus, and a daycare center (Ebey Academy) is located across Terry Rd. from the Middle/High School. In view of the flight tracks shown in the DEIS and the Navy's admission that "aircraft can be several miles left or right of the flight track", Growlers can be expected to fly directly over this area at low elevation. Data for Coupeville Middle/High School should be included in all tables of noise impacts on residential areas.
32. The assumptions underlying discussions of residential noise impacts are not clear. For example, in the consideration of sleep disturbance at p. 3-37, what level of residential noise attenuation is assumed and is it reasonable in view of local conditions? Are the data reasonable in view of residential construction near OLF, including historic homes? Noise reduction standards discussed at page 3-65 appear to have been adopted in 2016, in which case only a small percentage of structures would be in conformance by 2021. The EIS needs to provide sufficient detail so that noise levels in actual, existing structures can be estimated.
33. The conclusion on page 4-236 that "[t]he Proposed Action would have negligible to minor to moderate impacts on the local and regional . . . housing market" is vague and unsupported by evidence. "Negligible to minor to moderate impacts" appears to this commenter to encompass a wide range of impacts, from essentially nothing to those that would be felt throughout the community. The brief discussion of property values in the DEIS avoids any meaningful analysis and attempts to obfuscate the issue by emphasizing variations between studies, despite the admission that "aircraft noise has a real effect on property values" (page 4-232). Despite this admission, the DEIS makes no attempt to show how the predicted declines in property values would translate into actual dollar losses.

The analysis of the effect of noise on property values based on the commercial value of property near airports is not relevant to property surrounding OLF. Studies at

commercial airports (e.g., DEIS at p. A-178) are confounded by the effects of airports on commercial property values. OLF is not a commercial airport and does not support high-value commercial activity. The only commercial properties adjacent to OLF are a storage facility and a depleted gravel pit that is serving as a disposal area for debris from land grading and clearing.

- 34. The brief discussion of impacts on property values in the DEIS omits any meaningful analysis of actual impacts, despite the admission that “aircraft noise has a real effect on property values” (p. 4-232). By the Navy’s own admission, studies have shown that property values can be expected to decrease by from 0.2% to 2.3% per dB increase. These studies, which were done around airports, probably underestimate the effect on values around the OLF due to the confounding effect of higher commercial property values around airports and the episodic nature of the FCLP operations, which create much higher noise levels than the DNL averaging algorithm would suggest.

Assuming, *arguendo*, that property values near OLF would decline by only 0.5% to 1.0% per dB of noise increase, loss of value in the area would still be substantial. Taking noise level predictions from Fig. 6-9, the following losses can be calculated for a home with a present value of \$300,000:

Location; Alternative	Increase in DNL	Decrease in Value 0.5%/dB	Decrease in Value 1.0%/dB
Admirals Dr. & Byrd Dr.; 1A	12 dB	\$18,000	\$36,000
Admirals Dr. & Byrd Dr.; 1B	9 dB	\$13,500	\$27,000
Race Lagoon; 1A	14 dB	\$21,000	\$42,000
Race Lagoon; 1B	13 dB	\$19,500	\$39,000

The effects shown in the table may underestimate actual losses from current value, because the data in Fig. 6-9 are presented relative to the No Action Alternative, not 2017 noise levels (and thus property values). These loss estimates are also conservative in being based on average-year data, rather than the higher, high-tempo year data (Fig. G.3-9).

Since the home is the largest asset for most home-owning families, these losses would be a tremendous financial burden on many residents. An examination of Fig. 6-9 shows that the greatest losses to homeowners would occur in the vicinity of OLF. The DEIS does not indicate how homeowners might be compensated for these losses. The final EIS should show projected aggregate

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losses under the various proposed alternatives, as well as plans for mitigating such losses.

35. Under "Housing Impacts" (p. 4-231), the DEIS states, "[N]early all these additional households are expected to reside off base." The DEIS seriously underestimates the impact of this added housing demand, citing 2015 data for housing availability. Island County already has a shortage of low-income housing. According to Rick Chapman, owner of Coldwell Banker Tara Properties in Oak Harbor, "Rents on North Whidbey have gone up in the last two years probably 30 to 40 percent in some cases, 25 percent average overall" (*Whidbey Daily*, whidbeydailynews.com, April 21, 2016). Homelessness in Island County has increased about 34% from 2014 to fall of 2016 (*Whidbey News-Times*, Oct. 4, 2016). As reported therein, "Stagnant wages, a hot housing market and skyrocketing rents are putting more people out of their homes." The lack of affordable housing on Whidbey Island is also affecting seniors. Some low-income seniors have been on a waiting list for affordable housing for a year and a half (*Whidbey News-Times*, Dec. 28, 2016). There is no basis for the assumption in the DEIS that the number of "acceptable housing units" available in 2015 will be available in 2021 (EIS at 4-232); this statement is conclusory in nature and contradictory to reported housing trends. DEIS Section 4.11, Environmental Justice, does not address the present lack of low-income housing and rapidly rising property values in Island County discussed above. The "Environmental Justice Conclusion" at page 4-262 makes no mention of housing. These deficiencies must be corrected in the Final EIS.
36. "[T]he City of Oak Harbor and the Town of Coupeville are the defined affected environment for the assessment of impacts to emergency services such as police and fire protection." (DEIS at page 4-226.) Unincorporated areas of Island County, which are within the affected area, are served by fire protection districts and the Island County Sheriff, not by municipal departments. The final EIS should reflect this fact.
37. According to the DEIS at page A-59, an average year is 130,000 total operations, and a high-tempo year is about 135,000 operations. In contrast, historical numbers for flight operations presented on page 1-6 show total flight operations over a 40-year period ranging from a low of about 63,000 to a peak of 190,000. Although it is difficult to calculate an average from the graph, flight operations did not exceed 100,000 in half of the years and reached 170,000 or more in only three years. The data for FCLPs show a similar pattern. In view of the historical data, the assertion that a high-tempo year will exceed an average year by less than 4% is not believable.
38. Historical data presented at page 1-6 show that for the 40-year period 1976 through 2015 the majority of FCLPs were conducted at Ault Field. These data are summarized in the following table. Values were taken from the graph and are approximate in view of the small scale of the graph.

	Ault	OLF	Total
Average	25,325	13,675	39,000
Range	6,000 – 56,000	3,000 – 33,000	12,000 – 85,000
% Increase, max. vs. average	121%	141%	118%

Over the 40-year period, about 65% of FCLPs were conducted at Ault and 35% at OLF.

At page ES-4 of the DEIS, the Navy describes the proposed Action Alternatives:

The increase in total annual airfield operations at the NAS Whidbey Island complex would range from approximately 40,100 (Alternative 3, Scenarios B and C) to 41,400 (Alternative 1). The increase in annual airfield operations at Ault Field would range from 12,300 (Alternative 1, Scenario A) to 38,700 (Alternative 1, Scenario C), while the increase in annual airfield operations at OLF Coupeville would range from 2,200 (Alternative 3, Scenario C) to 29,000 (Alternative 1, Scenario A). Airfield operations may include aircraft arrival and departure, interfacility flights, and closed-loop flights (such as FCLP). *These operational conditions would be similar to historic flight operations experienced in the 1970s, 1980s, and 1990s for the NAS Whidbey Island complex, as indicated in Section 1.4. (Emphasis added.)*

The characterization of these alternatives as “similar to historic flight operations” misrepresents the data. First, the numbers of operations are for an “average year” (see, e.g., DEIS at Table 6-2). The total *average year* FCLP operations at OLF would be as high as approximately 35,100 (combining the activity shown in Table 3.1-3 with the increases from p. ES-4). This figure is far in excess of the historical average of 13,675⁴, and even exceeds the historical maximum by 2,100 operations. Some alternatives would reduce FCLP operations at Ault Field to well below the historical average. Second, Scenarios A and B alter the historical distribution of FCLPs between OLF (35%) and Ault Field (65%). Under Scenario A 80% of FCLP would be conducted at OLF, and under Scenario B 50% would be at OLF. It is actually the No Action Alternative that approximates the historical distribution of FCLPs.

It is requested that the EIS be revised so that proposed aircraft operations are characterized in an objective manner that is consistent with the data.

- 39. **IF** the proposed “operational conditions would be similar to historic flight operations” then one must wonder why the Navy now feels a need to shift the bulk of FCLPs to OLF. The historical record demonstrates that Ault Field can accommodate 2/3 of FCLPs even in a year with 190,000 total operations (page 1-6). High levels of FCLP (up to 56,000) were conducted at Ault Field ca. 1990. The DEIS does not show any operational

⁴ Even for just the “1970s, 1980s, and 1990s” FCLPs at OLF ranged from a low of 7,000 to a peak of 33,000, with an average of 19,000.

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problems or training deficiencies arising from this historical pattern. The DEIS has simply not made a case for moving these operations to OLF and creating significant adverse effects on the Town of Coupeville, nearby residential areas, and Ebey's Landing National Historical Reserve. NASWI has consistently received strong support from the Oak Harbor community, which would not be expected to object to continuing the historical Ault Field vs. OLF distribution of FCLP operations.

40. According to the DEIS at page 3-68, "Maintaining land use compatibility with the NAS Whidbey Island complex is of paramount importance to the City of Oak Harbor. . . The City of Oak Harbor has adopted the 1986 AICUZ noise contours to implement the Aviation Environs Overlay Zone through the city's zoning ordinance and other elements of the municipal code. Land within the Aviation Environs Overlay Zone is designated for low-density development. . . The City of Oak Harbor has also adopted a lighting and glare ordinance, helping to ensure the safety of aircraft operations by placing limitations on lighting that can impair a pilot's vision, especially at night." In contrast, it does not appear that the town of Coupeville has taken such steps (page 3-69). As discussed above in comment 20, there is substantial development around OLF, development deemed *by the Navy* to be incompatible with the proposed action. In view of these facts, the most feasible option among the action alternatives is one of the "C" scenarios, whereby most FCLP operations will be conducted at Ault Field.

41. Regarding Accident Potential Zones, the DEIS states:

"Scenarios with high numbers of operations at OLF Coupeville may require the development of Accident Potential Zones (APZs) through the Air Installation Compatible Use Zone (AICUZ) update process . . . Conceptual APZs are presented for the purpose of analyzing potential land use impacts of the Proposed Action. *At this time, no decision has been made with regard to additional APZs.*" (Pages ES-5 – ES-6; emphasis added.)

The Navy's policy is to put APZs at runways in which there are 5,000 or more operations in one direction a year. Under the A Scenarios, that level would be exceeded for OLF runway 14 if 30% of FCLPs used that runway as is contemplated (e.g., page 4-17), and would certainly be exceeded for Runway 32 under any A or B Scenario. The statement at page 4-116, "APZs *could be warranted* at OLF Coupeville (see Table 4.3-1) under some operational scenarios" (emphasis added) is not correct. Under the majority of the Action Alternatives, **APZs would be warranted**, and the data needed to designate them are already in hand (e.g., flight tracks and noise contours presented throughout the EIS). At the very least, APZs are "reasonably foreseeable actions" and should be presented and analyzed as cumulative impacts.

42. The establishment of new APZs can be expected to reduce property values. APZs may also prevent development of property since they are deemed by the Navy to be "clearly incompatible" with housing. Will the Navy compensate property owners or will the

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burden of such compensation fall on local government? As of October 2011 the City of Virginia Beach and the State of Virginia had spent or committed to spend \$85 million on APZ mitigation, including property acquisition, incentives, and expenses. In addition, willing sellers had offered for acquisition more than \$19 million of other property. See, *Virginia LIS Report Document No. 337, 2011*. A later report (Vergakis, Brock, *The Virginian-Pilot*, April 18, 2016) indicates the cost to the city has risen to \$129 million. Island County's entire budget for FY 2017 is \$85.7 million, and the State of Washington is struggling with a court order to fully fund basic education, raising serious doubts that local or state government could cover the cost of mitigation.

In other publications the Navy has attempted to minimize the effects of the proposed action by pointing to F/A-18 operations at NAS Oceana where "the population density in the area is far greater than that of either Oak Harbor or Coupeville" ("Pacific Northwest Growler Training Essential for 21st Century Battles," *Currents*, Fall 2015, 54-65). What is missing from this discussion is the resultant financial costs to local government (above) and the Federal government (a \$34.4 million dollar settlement in 2007). The final EIS must address costs associated with noise and accident potential mitigation.

43. Most (81.6%) of NASWI personnel reside in Oak Harbor or the NASWI complex, compared to 3.7% residing in Coupeville (Table 3.10-2). The bulk of the economic impact of these residents (p. 3-151) can be assumed to accrue to Oak Harbor (e.g., ten times as many new households in Oak Harbor as in Coupeville; see p. D-3). Support for NASWI is strong in Oak Harbor, while opposition to FCLP operations at OLF is closer to the norm in the Coupeville area (see, e.g., *Whidbey News-Times*, Feb. 11, 2017, cited above). In view of these facts (and the decline in property values discussed above), the "C" scenario is the most just from a social and economic standpoint.

Table 4.2-1 shows much greater effects on the Coupeville population compared to Oak Harbor for sound levels of 70 dB and above (esp. >75 dB) for any Alternative 1 scenario. Table 4.2-3 also shows disproportionate affects on Coupeville area points (e.g., Admirals Dr. & Byrd Dr., Coupeville Elementary School) under alternatives 1A & 1B. Further disproportionate effects of the A Scenarios on the Coupeville area are shown in Table 4.2-25. Again, the "C" scenario is the most just from a social and economic standpoint.

44. The C scenario is also preferred when considering hearing loss. According to the DEIS at page A-17, "In terms of an Average NIPTS of at least 5 dB (item #4 above), the affected population would increase by a factor of 2 under the B-series of scenarios up to a factor 5 [sic] under the A-series of scenarios." For alternatives 1A, 2A, and 3A the burden falls disproportionately on the Coupeville area (e.g., Table 6-8a).
45. The C scenarios minimize other environmental effects.
- (a) The greatest impact on land use is under Scenarios A & B (p. 4-159).
 - (b) For each alternative, Scenario A produces the greatest increase in air pollution. See, Table 4.4-16 on p. 4-145. See also, Table 4.4-17 on p. 4-146, p. ES-6, p. 4-286.

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(c) The C scenarios minimize fuel use, as well as the noise and public safety effects of interfacility flights.

46. The OLF runway does not meet the Navy's own standards for the proposed actions. According to the 1997 EIS, a primary runway must be at least 9,000 feet long, and "[t]he minimum length acceptable for secondary runways is 6,500 ft" (page ES-4 and Section 2.2.3). When basing of all aircraft at NAF El Centro was under consideration in 1997, it was stated that such action "would require constructing a parallel runway at least 9,000 feet long . . . so that FCLP and routine operations could be conducted concurrently. *Both runways would have to be 9,000 feet long*" (page 2-21; emphasis added). Not only is OLF, at 5,400 feet, well below the requisite length, but Ault Field also fails to meet these standards as it comprises intersecting runways each 8,000 feet long. The deficiencies of OLF, the shortest FCLP runway in the Navy, are also discussed in DEIS Appendix H ("An EA-18G requires a Class B [8,000 ft.] runway"). The rationalization for use of OLF appears to be that it is close enough to Ault Field to divert there in an emergency, but diversion to a facility that was considered substandard 20 years ago hardly seems to be an adequate solution.
47. Throughout the DEIS, a lack of consensus in published studies is interpreted as evidence of no deleterious effects. The DEIS resolves all ambiguities and uncertainties in favor of the Navy with no justification for doing so. This unbalanced approach is unwarranted and unsupported, especially with regard to possible long-term effects on children. Examples of this problem can be found in the DEIS at page 1-19 ("There is no consensus within the scientific community that supports a relationship between aircraft noise exposure and nonauditory health impacts for residents living near military or civilian airfields."), page 3-20 (where physiological effects on children are essentially dismissed as needing further study), Section 4.3, and Appendix A. Comments made regarding effects on children, such as at pages 4-120 and 4-121, are particularly troubling. Increasing aircraft noise over schools to levels known to be deleterious (e.g., comment 29, above) and justifying this action by claiming a lack of consensus is tantamount to conducting scientific research on school children.

This treatment of possible effects on children is inconsistent with the Navy's own admission at Page A-176:

"While there are many factors that can contribute to learning deficits in school-aged children, there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning. This awareness has led WHO and a North Atlantic Treaty Organization (NATO) working group to conclude that *daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites.*" (Page A-176; emphasis added).

Effects of noise on children must be given greater consideration in the final EIS.

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48. Table 5.1 of the DEIS is deficient as follows:
- (a) The statement, “The Navy is proposing the installation of security blocks on the perimeter of OLF Coupeville” is believed to be incorrect. Such blocks are already in place. The same statement is made at page 5-8.
 - (b) Characterization of transition to the EA-18G Growler as “to be completed in 2015” needs to be updated. It is either complete at this time or will be completed sometime in the future.
 - (c) Table 5.1 says nothing about basing of additional Growlers. *Selected Acquisition Report, EA-18G Growler Aircraft (EA-18G)*, March 17, 2016 (“the SAR”) states that a total of 160 Growler aircraft are budgeted. This number is believed to constitute 42 aircraft in addition to those discussed in the DEIS. Although the SAR discloses an intent to sell some portion of these aircraft to the Australian Air Force, operating and support costs detailed in the report (p. 37) are explicitly directed to sustaining 160 aircraft. If the Navy is contemplating basing any of all of these additional Growlers at NAS Whidbey or operating them at NASWI for training purposes, such basing plans would be considered a reasonably foreseeable future action and must be addressed in Chapter 5 of the EIS.
49. The use of the terms “operations” and “FCLP” within the DEIS is confusing. An “operation” is defined in the notes to Table 6-2 as a single departure or arrival, thus “[c]losed pattern circuits consist of two operations.” A similar definition is provided at page 3-11 (“A flight operation refers to a single takeoff or landing associated with a departure or arrival of an aircraft.”). Table 6-2 shows that under Alternative 1A there would be 35,076 **operations** at OLF. In Table 6-3, the term “FCLP” is used to denote a “Type of Flight Operation,” so one **FCLP** would be equal to **one departure or one arrival**. However, on page 1-6 the lower graph displays “Total Airfield Operations” as a line and “FCLPs” as a series of bars. It is not clear if an “FCLP” in this graph represents one operation or two. The term “operation” appears to be used elsewhere in the document to mean something else, such as in Table 3.1-1, wherein the term appears to be used to denote aircraft in flight. At page 3-7, “operations” is used more generically in the context of aircraft operating in flight tracks, seemingly equating the term “operations” with “continuous approach, landing, and take-off events.” Further confusion arises from the use of these terms at page ES-4 (“Airfield operations may include aircraft arrival and departure, interfacility flights, and closed-loop flights (such as FCLP).”). The latter use implies that a single FCLP loop would be considered only one operation. It is requested that the terms “operation” and “FCLP” be clearly defined and used in a consistent manner.
50. At page 5-15, Section 5.4.3.4 the DEIS states, “This net increase in operations corresponds to a *net increase in a risk to public health and safety*, and BASH incidents” (emphasis added). The same paragraph continues, “[I]mplementation of the Proposed Action would not result in significant cumulative impacts to public health and safety.” These statements are contradictory. Explanation or revision is required.

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51. The DEIS does not give sufficient weight to the reduction of greenhouse gas (GHG) emissions. At page 5-33 the DEIS states:

“The potential effects of climate change and GHG emissions are, by nature, global and cumulative impacts. While individual sources of GHG emissions are not large enough to have an appreciable effect on climate change, the global accumulation of GHG emissions is resulting in global and local impacts on the climate. The cumulative totals of GHG emissions as described in Section 5.4.4 would not likely contribute to global warming to any discernible extent.” (Emphasis added.)

This statement is a classic example of “trying to have it both ways.” Under this reasoning, no individual, local action would ever be significant, so there is no reason to reduce emissions, despite that fact that “[g]lobal climate change threatens ecosystems, water resources, coastal regions, crop and livestock production, and human health” (DEIS at p. 5-33). The final EIS must give serious consideration to the reduction of GHG emissions.

52. The recent and future expansion of operations at NASWI has been dealt with in a piecemeal process. Such an approach allows the evaluation of relatively small environmental effects while avoiding an analysis of overall impact (or allowing public review of the overall impact). It also leads to justifying later pieces by looking to sunk costs from earlier pieces of the overall expansion. This approach, which avoids analyzing cumulative effects, is contrary to the NEPA (40 CFR 1508.25). To date, aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula have been broken out into at least six separate actions:

1. Basing of 42 P-8A Poseidon Multi-Mission Aircraft at NASWI. This action is particularly relevant to the DEIS because it is one reason given by the Navy for shifting FCLPs from Ault Field to OLF (DEIS at pp. 1-7 to 1-8)
2. 2005 EA (57 Growler jets) and 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers);
3. 2012 EA (26 Growlers including 5 from a reserve unit);
4. 2014 EA (Growler electronic warfare activity);
5. 2015 EIS discussing electronic warfare training and testing activity;
6. The current 2016-2017 DEIS (35 or 36 additional Growlers);

In addition, (a) 42 additional Growlers are in the pipeline, and some of those may be based or operated at NASWI; and (b) an AICUZ study to establish APZs will, in all likelihood, be necessitated by actions described in the current DEIS

It has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, a Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material.

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The number of Growler flights at OLF is projected to increase from approximately 3,000 per year in the mid-2000s to a proposed 35,100 in 2021. Despite this nearly 12-fold increase at OLF alone, Vice Admiral Mike Shoemaker has asserted that there would be "little impact on the surrounding community." The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers (and, perhaps additional aircraft from the 160 on order), but slices out 35-36 of them for an incremental analysis, and concludes that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomic, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts is contrary to the intent of the NEPA and avoids accountability.

53. The current comment period on the DEIS should not be the last chance for public input. A Federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if:

- “(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
- (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” (40 CFR 1502.9.)

Deficiencies in the DEIS include an analysis of seismic risk with no basis in fact, the lack of a preferred alternative, the exclusion of significant points of interest, outdated information on aquifer contamination, the use of a questionable noise model that has not been verified against (and is contradicted by) on-site noise measurements, a lack of information on possible weekend and/or 24-hour use of OLF and attendant environmental impacts, an incomplete consideration of effects on property values, the absence of actual APZs, and a lack of information on mitigation measures. Correction of any of these deficiencies would warrant a further public comment period under the regulations.

Respectfully Submitted,



cc: Senator Patty Murray
Senator Maria Cantwell
Representative Rick Larsen
Governor Jay Insley

[REDACTED]
[REDACTED]
Coupeville, WA 98239
[REDACTED]

1.a. Thank You
16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)

February 20, 2017

EA-18G Growler EIS Project Manager
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard
Norfolk, VA 23508
Attn: Code EV21/SS

Re: Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex
Public Comment

Dear Sir or Madam:

Further to my letter of February 17, 2017, I am writing to provide supplementary information that is pertinent to my comments on the draft EIS.

I wish to call your attention to Palmer et al., *Liquefaction Susceptibility Map of Island County, Washington*, Washington State Department of Natural Resources, 2004, which is available on-line at ftp://ww4.dnr.wa.gov/geology/pubs/ofr04-20/ofr2004-20_sheet29_island_liq.pdf. This map is of particular relevance to my earlier comment No. 4. An enlargement of the map showing the north end of Whidbey Island is below. The area of high liquefaction susceptibility shown on the map (the dark orange area) has a striking correspondence in location and shape to the runways at Ault Field as shown in Figure 1.2-2 of the draft EIS.



As noted in my earlier letter, earthquake hazards, including the danger of soil liquefaction, are believed to have been grossly underestimated in the draft EIS.

Respectfully Submitted,

A large black rectangular redaction box covering the signature area.

[REDACTED]
[REDACTED]
Coupeville, WA 98239
[REDACTED]

1.a. Thank You
4.o. Classroom Learning Interference
4.r. Nonauditory Health Effects

February 21, 2017

EA-18G Growler EIS Project Manager
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard
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Attn: Code EV21/SS

Re: Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at
Naval Air Station Whidbey Island Complex
Public Comment

Dear Sir or Madam:

The above-referenced draft environmental impact statement (DEIS) gives insufficient consideration to the detrimental effects of noise on children's learning, despite the fact that the Wyle Aircraft Noise Study (DEIS Appendix A) recognizes these effects:

"While there are many factors that can contribute to learning deficits in school-aged children, there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning. This awareness has led WHO and a North Atlantic Treaty Organization (NATO) working group to conclude that daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites." [DEIS at p. A-176; emphasis added.]

Substantial research has been done on the impact of high noise levels from aircraft and other sources on children's learning (and health), and there is a growing consensus in the scientific community that such noise adversely affects academic performance. For example, Cohen et al. (*American Psychologist* 35(3):231-243, 1980) found that children from noisy schools had higher blood pressure, were more likely to fail on a cognitive task, and were more likely to give up. Students in the study were exposed to peak noise levels as high as 95 dB, similar to peak noise levels shown for Whidbey Island schools in Chapter 4 of the DEIS. A later study by Hygge et al. (*Psychol. Sci.* 13(5):469-474, 2002) found impairment of long-term memory and reading in noise-affected children. In a 2008 review, Clark (Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008) stated that "evidence for the effects of noise on children's cognition is strengthening . . . with over twenty studies having shown detrimental effects of noise on children's memory and reading." Significantly, Clark points to "a linear exposure-effect relationship between chronic aircraft noise exposure and impaired reading

comprehension and recognition memory, after taking a range of confounding and socioeconomic factors into account." A 2013 review of more than 80 studies (Klatte et al., *Front. Psychol.* 4:578, 2013) found that noise exposure impaired children's abilities in speech perception, listening comprehension, short-term memory, reading, and writing. The authors state that these effects "have to be taken seriously in view of possible long-term effects and the accumulation of risk factors in noise-exposed children." **Not one** of the studies reviewed by Klatte et al. is cited in the DEIS (Ch. 7).

In view of the large body of research showing harmful effects of aircraft noise on learning, the EIS must give greater attention to noise levels in schools, including a frank discussion of the documented effects. Mitigation measures must also be presented as required by the applicable regulations (40 CFR §1502.14(f); 40 CFR §1502.16(h)).

Respectfully Submitted,



- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

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February 22, 2017

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Attn: Code EV21/SS

Re: Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex
Public Comment

Dear Sir or Madam:

After reading the above-referenced draft environmental impact statement ("DEIS"), I believe that it fails to give due consideration to providing an alternative site for FCLPs.

Applicable Federal laws and regulations require that an environmental impact statement consider a range of alternatives, including those that "may require additional Congressional appropriations" (DEIS at p. 2-18). In particular, 40 CFR 1502.1 states that an EIS "shall provide full and fair discussion of significant environmental impacts and *shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment*" (emphasis added). Consideration of alternatives cannot be limited merely to economic considerations as set forth in 40 CFR 1502.23, "For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and *should not be when there are important qualitative considerations*" (emphasis added).

The Navy should give serious consideration to constructing an outlying field (OLF) at Naval Weapons Systems Training Facility (NWSTF) Boardman in northeastern Oregon. Although this alternative would require the construction of a runway and support infrastructure, it is believed that the monetary cost is outweighed by the environmental, health, and social benefits of performing a substantial proportion of FCLPs at that remote setting. Data provided in the DEIS Appendix H indicate that a 6,500 foot runway (the length specified in the DEIS at p. ES-4 and Section 2.2.3) could be built for \$65 million, substantially less than the cost of a single Growler (*Selected Acquisition Report (SAR): EA-18G Growler Aircraft (EA-18G)*, December 2015; Balle, "About the EA-18G Program," 2016, <http://www.fi-aeroweb.com/Defense/EA-18G-Growler.html>).

NWSTF Boardman is described in *Final Environmental Impact Statement for Naval Weapons Systems Training Facility Boardman*, 2015 ("Boardman EIS") and related documents. Attributes of the facility that make it an attractive location for an OLF include:

- Has been used for military training for nearly 70 years.
- Has been owned by the Navy since 1958, so there would be no transfer of property or loss of local tax base.
- Is currently managed by Commander, NAS Whidbey Island.
- Presently supports NASWI EA-18G Growler training.
- Has "the capability and capacity to support the Services' current, emerging, and future military readiness activities" (Boardman EIS at 1-5).
- Provides restricted low-altitude training airspace that is currently used by NASWI-based student and Fleet aircrews.
- "[P]rovides distinctive conditions and an ideal setting for the Navy and National Guard to conduct mission-essential training activities." (NWSTF Boardman EIS Informational Video, available at: <http://nwstfboardmaneis.com/TrainingActivities/InformationalVideo.aspx> ("Boardman Video"))
- Has approximately 360 square nautical miles (490 square miles) of Special Use Airspace.
- Has more than 47,000 acres of land with at least 9,000 undeveloped acres available.
- Supports air-to-ground bombing exercises, air-to-ground gunnery exercises, and air-to-ground missile exercises, so there is currently a high level of training-related noise.
- Is capable of sustaining simultaneous training activities.
- Is below 1,000 feet in elevation as required for FCLPs.
- Has low ambient light levels at night.
- Is surrounded by sparsely developed land and does not have a large urban community nearby. Land surrounding NWSTF Boardman is zoned Exclusive Farm Use. The estimated population (2013) of the town of Boardman is 3,379 and of Morrow County is 11,190 (2015). In comparison, the 2013 estimated population of Island County is 78,801. (U.S. Census Bureau data.)
- Includes a \$1 million Operational Support and Medical Treatment building that opened in February 2015.

NWSTF Boardman is located approximately 225 miles southeast of NASWI. Although this distance exceeds the 50-mile criterion stated in the DEIS at page 2-17, the fact that NASWI crews currently train extensively at Boardman indicates that fuel constraints are not an insurmountable obstacle. The Navy also considers the NASWI-to-Boardman distance to be appropriate for limiting personnel tempo (Boardman EIS at 1-6). "Training close to home [NASWI] also reduces time away from families and fuel costs and usage" (Boardman Video).

At page 2-18 the DEIS states, "Significantly increasing FCLP detachments is not a reasonable alternative." However, NASWI-based Growler crews already travel to Boardman for training. Furthermore, an examination of training schedules for OLF reveals that training is conducted in blocks of consecutive days, with intervals of up to several weeks or more between blocks. It should be possible to minimize travel to and from NWSTF Boardman (and associated fuel consumption, wear on equipment, etc.) by coordinating training schedules.

NWSTF Boardman is heavily impacted by nearly seventy years of military training and is in the sparsely populated desert of northeastern Oregon. As such, construction and use of an OLF at Boardman would not “result in significantly more adverse impacts to the environment by result [sic] in significant new construction in another location” (DEIS at 2-18 to 2-19). There are no nearby national parks or wilderness areas.

Use of NWSTF Boardman would reduce noise-related impacts on people by shifting FCLPs to a relatively unpopulated area. Schools, residential areas, state parks, campgrounds, hospitals, and other noise-sensitive sites would not be subjected to impacts of additional FCLPs. Land use conflicts arising from noise zones or APZs would be non-existent at Boardman. The largest city in eastern Oregon, Hermiston (population about 17,000), is approximately 16 miles away. The nearest major population center, Tri Cities, WA, is approximately 35 miles away. Since Growlers would still be based at NASWI, there would be no significant adverse economic impacts on Whidbey Island. Coupeville’s tourism-based economy would be enhanced over any Action Alternative. In other words, use of an OLF at NWSTF Boardman would “enhance the quality of the human environment.”

OLF Coupeville is in the Puget Lowland, a “tectonically active region” (Johnson et al., *Bull Seismo Soc Amer* 94(6):2299-2316, 2004). The OLF is approximately 2.5 miles from the South Whidbey Island Fault zone according to the U.S. Geological Survey (map available at <http://earthquake.usgs.gov/earthquakes/eventpage/uw61251016#map>). This fault is believed to have been recently active and to be capable of producing an earthquake of magnitude 6.5 – 7.4 (<http://earthweb.ess.washington.edu/gomberg/ShakeMap/ShakeMapGeologicSummaries.html>). In contrast, there are no faults in the vicinity of NWSTF Boardman.

In view of the above facts, serious consideration should be given to locating a new OLF at NWSTF Boardman.

Respectfully Submitted,



- 1.a. Thank You
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.n. Alternatives Considered But Eliminated
- 3.e. Field Carrier Landing Practice Patterns

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February 23, 2017

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Re: Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex
Public Comment

Dear Sir or Madam:

The above-referenced draft Environmental Impact Statement ("DEIS") appears to indicate that, in order to increase FCLPs at OLF under the Action Alternatives, the flight pattern for OLF runway 14 will be altered. For example, at pages 3-11 and 4-9, the DEIS states:

"In recent years, however, due to a non-standard pattern on Runway 14, the utilization of Runway 14 has been significantly lower. *This narrower pattern* requires an unacceptably steep angle of bank for the Growler due to performance differences from the former Prowler flying the pattern." [Emphasis added.]

Fig. 4.1-1 shows the flight patterns proposed for OLF under the Action Alternatives as stated at page 4-9. The figure shows that a jet leaving Runway 14 would bank left, then proceed northward (downwind) along the eastern shoreline of Whidbey Island, then bank left again over the approximate location of Snakelum Point. This pattern would presumably be used day and night.

Figure 4.2-5 of the DEIS shows noise contours for Alternative 1A layered over those for the No Action Alternative. The area inside the 75 dB contour for Alternative 1A appears to coincide with the flight pattern shown in Fig. 4.1-1, with the downwind leg centered over the eastern shore of the island and turning back over land at Snakelum Point. Maps for the other eight Action Alternatives show similar patterns. The noise contours for the No Action Alternative appear to define a larger pattern, with the downwind leg and the subsequent left turn over water, then coming over land west of Long Point. This No Action Alternative "pattern" is essentially the same as the night pattern shown in the current NASWI operations manual.

This change in the flight pattern raises several questions:

1. Under the Action Alternatives, will there no longer be a difference between day and night patterns for Runway 14?
2. If the current "narrower pattern" is problematic for the Growler, why is the proposed pattern narrower than the current night pattern shown in the operations manual?
3. Why does the proposed pattern go directly over the shoreline on the downwind leg, when the current operations manual explicitly states that "flying down the beach . . . is strictly prohibited"?

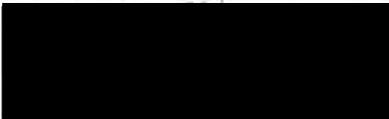
A further point of confusion is the use of three separate lines to denote the Runway 14 pattern in Fig. 4.1-1. No clarification comes from the figure legend; the dark blue lines are defined as simply "FCLP." From the description at page 4-9 there appear to be multiple patterns represented ("The proposed OLF Coupeville FCLP patterns (day and night) are depicted in Figure 4.1-1"), but which is which? Clarification is required.

The DEIS needs to be more clear in describing how the proposed flight patterns for the Action Alternatives differ from those for the No Action Alternative *and from current practice*. As can be seen from my choice of words above ("appears to indicate," "would presumably"), the details of these changes are extremely difficult for a layperson to glean from the diverse array of maps in the DEIS, many of which are not directly comparable due to the differences in scale and the amount and type of information depicted in each. As a consequence it is difficult to understand exactly how the Action Alternatives can be expected to affect the local environment. Moreover, such obfuscation is contrary to NEPA ("Environmental impact statements shall be written in plain language and may use appropriate graphics so that decisionmakers *and the public can readily understand them.*" 40 CFR 1502.8; emphasis added.).

Moving the Runway 14 night pattern onshore will magnify the already substantial impacts of increasing Growler flights to levels proposed in the "A" and "B" scenarios. There is substantial residential development of the shoreline from Race Road north to Snakelum Point. Putting the pattern directly over these houses will maximize noise impacts, including loss of property value (and possibly the right to develop property). Plans to mitigate these impacts must be included in the final EIS.

Finally, as part of the evaluation process required under NEPA, the Navy is directed to "identify and assess the reasonable alternatives to proposed actions that will *avoid or minimize adverse effects of these actions upon the quality of the human environment*" (40 CFR 1500.2(e)). An alternative that avoids flying over the shoreline (or "down the beach") between Race Road and Snakelum Point should be considered.

Respectfully Submitted,



Coupeville, WA 98239

The DEIS fails to properly consider seismic risks at OLF Coupeville. Section 3.14.2.3 makes a passing reference to the Southern Whidbey Island Fault, but goes on to state (erroneously), "The most recent apparent significant activity was approximately 18,000 years ago," citing a 1987 publication. Much has been learned about seismic activity in the Puget Lowland since 1987, including identification of fault scarps using LIDAR imaging (see, e.g., Johnson et al., Bull Seismo Soc Amer 94(6):2299-2316, 2004). The Southern Whidbey Island Fault (hereinafter "SWIF"; actually a fault zone) includes three parallel faults trending southeast to northwest, with the northern-most of the three faults passing across central Whidbey Island near Fort Casey, approximately 2.5 miles from OLF Coupeville (USGS map available at <http://earthquake.usgs.gov/earthquakes/eventpage/uw61251016#map>; see also, Mace and Keranen, J. Geophys. Res. 117:B03105, 2012). The SWIF is believed to have produced multiple earthquakes of magnitude >6 in the past 16,400 years, including a quake of approximate magnitude 7 around 900 A.D. (Mace and Keranen, ibid.). An additional discussion of seismic risks from the SWIF ("Geologists conclude that the SWIF is capable of producing a M6.5 to M7.4 earthquake") can be found at <http://earthweb.ess.washington.edu/gomberg/ShakeMap/ShakeMapGeologicSummaries.html>. The final EIS must evaluate seismic risks around NASWI (including OLF Coupeville) on the basis of current scientific knowledge, and must also consider measures to mitigate these risks.

1.a. Thank You

16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)

chimacum, WA 98325

I would like to join with my neighbors on the Olympic Penninsula to Object to the Growlers flying over residential, forest and National Park in the Olympics. For the first time in history we see the Navy turning our pristine area into a war zone, for whose interests?

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 7.d. Recreation and Wilderness Analysis and Study Area

sequim, WA 98382

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

The public needs 45 more days or more to comment adequately on your endless stream of bullshit. MORE TIME FOR PUBLIC COMMENT.

Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

Open House Comments

Fill in and Submit at the Open House

- 1. Name [Redacted]
- 2. Organization/Affiliation _____
- 3. Address [Redacted]
- 4. E-mail [Redacted] Lopez IS. WA 98261
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like your name/address kept private
- 7. Please check here if you would like to receive a CD of the Final EIS

Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

- ✓ 1. Evaluate impacts of the Growler at low frequencies (C-weighted, dBC).
- ✓ 2. Recognize the impacts of low frequency Growler noise on health.
- ✓ 3. Incorporate San Juan County noise reports in the EIS analysis.
- ✓ 4. Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.
- ✓ 5. Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.
- ✓ 6. Commit to Mitigation Measures and timelines in the Record of Decision.
- 7. Add your own comments here:

Please - we do not want more noise in our skies

(Continue on the back)

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

1.a. Thank You
4.t. Noise Mitigation

Anacortes, WA 98221

I flew fighters for 23 years, so I understand that minimizing noise is a very low priority when designing a combat aircraft (unlike airliners, which I also flew for 40 years). That said, there are two (2) very simple procedural changes to the Whidbey Island Growler operations that could greatly reduce their noise impact under their traffic pattern that overflies Anacortes, Washington. If the Navy could choose only one of these options, the problem would be dramatically reduced. Before I list the changes, let me just note that when the F/A 18s fly over my home, all conversation must cease for 30 seconds; TV programs must be paused because they are so loud nothing can be heard except for the exhaust sound from the jet. If the Navy would simply have Whidbey Approach vector the jets 2-3 miles further north on the downwind leg of their instrument arrival pattern, it would put the noise footprint out over the water instead of right over the city and all our housing neighborhoods. Commercial airports do this all the time. It is a simple fix. Or- For goodness sake, retrain the pilots to extend their landing gear and flaps when they are on final approach just like EVERY OTHER AIRPLANE IN THE WORLD. I have talked with many Naval Aviators (including Growler pilots in my neighborhood) who say it is "tradition" to leave the gear/flaps down for multiple approaches when they are landing on the aircraft carrier out at sea, so (to keep it simple) they do the same thing when they are training on land at Whidbey. Come on - these pilots are the most skilled highly trained pilots in the world - they can remember to put the gear up and down for multiple approaches just like every other pilot (except Navy) in the world. Besides dramatic noise reduction, think of the incredible fuel savings; these pilots can handle the difference between landing at sea and at Whidbey Island NAS. Using Safety Tradition is a weak excuse to drive around with the gear and flaps out under the guise of preventing a gear up landing.

February 23, 2017

EA-18G Growler EIS Project Manager
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard
 Norfolk, VA 23508
 Attn: Code EV21/SS

Re: Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station
 Whidbey Island Complex
 Public Comment

Dear Sir or Madam:

Thank you for extending the public comment period for the NAS Whidbey Draft Environmental Impact Statement (DEIS). As the draft EIS is more than 1,500 pages long and filled with complex information, the extended submission date has given me time to better understand the proposal and its possible impacts.

My husband and I have lived on Smith Prairie, less than one mile from OLF Coupeville, for 35+ years. In 1981 we moved to Whidbey Island and built our home. We love the Central Whidbey area and prefer to spend our time hiking, gardening, camping, biking, birding and pursuing outdoor activities. Our home is located in Ebey's Landing National Historic Reserve (ELNHR), which is a unit of the National Parks Service (NPS).

Local residents have worked tirelessly to preserve this unique and beautiful historic area. The economy of Central Whidbey Island is based on tourism and agriculture. Visitors come here to take a break from the noise, traffic, and rush of growing urban areas in the Puget Sound area and beyond.

How do visitors respond to Ebey's Reserve on their first visit? The Seattle Times ran an article today, February 23, 2017, that was written by a reporter visiting Central Whidbey and hiking the Ebey's Reserve bluff trail for the first time. Entitled: "**Worth the Trip: Soul-nourishing vistas at Ebey's Landing**" the author stated,

About two hours from Seattle, Ebey's Landing offers one of the state's best beach hikes and a look at early Washington history.

"Ebey's was such a joy I went back just two weeks later. The fun wasn't just in the hike, but in Ebey's Landing as a whole — all 22 square miles of land determinedly kept much the same as it was 150 years ago. Jointly managed by federal, state and local governments, Ebey's Landing was established in 1978 as the nation's first National Historical Reserve, designed, as one sign said, to provide "an unbroken historical record from nineteenth century exploration and settlement in Puget Sound to the present time."

"With the farmland to our back, we gazed over what some consider the most classic of Northwest landscapes, with Puget Sound, the Olympics, a rocky beach — and occasionally a white-and-green ferry chugging from nearby Keystone to Port Townsend."

People love it "Locals jogged along the trail, or followed their dogs on long leashes. Together, all of us formed a steady chain stretched out along the bluffs and the beach." "I've worked a lot harder for such a soul-filling vista, and we found ourselves stopping frequently to take it all in."

"As we drove the 25 miles back to the Mukilteo-Clinton ferry landing, I lamented I hadn't been visiting Ebey's Landing every winter — and summer, and spring. From now on, I will."

http://www.seattletimes.com/life/travel/worth-the-trip-soul-nourishing-vistas-at-ebey-landing/?utm_source=email&utm_medium=email&utm_campaign=article_title_1.1

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.l. Bird Migration
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 13.a. Environmental Justice Impacts
- 15.b. Potable Water and Wastewater Capacity
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 17.a. Hazardous Materials and Waste Impacts
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.i. Runway Operating Hours and Flight Schedules
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.j. Other Reports
- 4.l. Points of Interest
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 7.a. Regional Land Use and Community Character
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.g. Ebey's Landing National Historical Reserve

During the time we have lived here Navy aircraft have used OLF Coupeville at different levels of activity for FCLPs, search-and-rescue and parachute operations. Ebey's Reserve has been very quiet recently, as Growlers have flown only 1 day at OLF Coupeville since September 1, 2016. See Attachment 1. **OLF Coupeville – All Carrier Operations for 2016 & 2017**

Many people have told me over the years that Ebey's Reserve is their favorite place to go to get away from the stresses in their lives. This area is very special. In the boundaries of ELNHR we have:

- **Three State Parks, Fort Casey, Fort Ebey and Ebey's Landing**, where visitors can camp, hike, picnic and explore historic military buildings and structures from World War I and II. Fort Casey is also the home of the Admiralty Head Lighthouse, built in 1903 and staffed by knowledgeable docents. The Lighthouse is located approximately 2.9 miles to the west of OLF Coupeville. Fort Casey and Fort Ebey represent more than 1 million discreet visitors to Whidbey Island.
<http://www.whytourismmatters.com/regions/nwwashington/default.html>
- **Rhododendron County Park and Ball Fields**. Rhododendron Park is managed by Island County and offers camping, hiking and picnicking. The Ball Fields are home to Central Whidbey Little League. The Ball Fields are located 2,100 feet from the north end of the OLF Coupeville runway. The Campground is located approximately 1 mile from the north end of the OLF Coupeville runway.
- **Patmore Pit Off-Leash Dog Park**. Many people take their dogs to this park every day. The park is approximately 1,000 feet from the north end of the OLF Coupeville runway
- **Pacific Northwest Trail**. Pacific Northwest Trail Association website states: "Get away from the rain and take a hike on the Bluff Trail. This trail takes you through tall grasses overlooking the water and tidepools below. Hikers will enjoy views of the Olympic Mountains, and of course the Puget Sound. Be sure to stop by at the historic homestead just a short hike off the trail."
<http://www.pnt.org/trail/every-day-hikes/>
- **Island County Trails**. The Island County 2036 | 2016 Comprehensive Plan Update states: "Island County will position itself as a habitat and passive outdoor recreation provider, reflecting a desire to protect habitat and meet the community's outdoor, passive recreation needs." Page 29 "Combining their desire for protected habitat with public access, community members most desired nature trails." Page 43. https://www.islandcountywa.gov/Planning/2016CompPlan/2016_07-Parks.pdf

NOISE ASSOCIATED WITH INCREASED FCLP OPERATIONS

From 2000 to 2015 the average number of FCLP operations at OLF Coupeville was 5,688. See Attachment 2, NAS Whidbey FCLPs 2000-2015. FCLP operations were not scheduled on weekends. See Attachment 1, OLF Coupeville – All Carrier Operations for 2016 & 2017

This translates to quiet on the Reserve, punctuated by short periods of intensive jet noise, followed by quiet again. Rural quiet...the kind where you can hear bees, crickets and songbirds. **The Draft EIS outlines plans to increase EA-18G Growler Field Carrier Landing Practice operations at Outlying Field (OLF) Coupeville, which borders ELNHR to more than 35,000 per year and implies that FCLP operations could occur seven days a week.** "OLF Coupeville is available for use 7 days per week, 24 hours per day, although in recent years operations at OLF Coupeville have not been conducted on weekends." DEIS Page 3-11 **This increase and option for weekend flights is particularly significant given the importance of tourism to the local economy.**

"Therefore, the Proposed Action would have a significant impact on the noise environment as it relates to aircraft operations at Ault Field and OLF Coupeville." [emphasis added] DEIS Page ES-5

In 2015 Vice Admiral Mike Shoemaker, Commander, Naval Air Force, U.S. Pacific Fleet said of OLF Coupeville, "As it is in a low-density population zone, there is also little impact on the surrounding community." The number of Growler flights at OLF is projected to increase from a low of about 3,000 per year in the mid-2000s to a proposed 35,100 in 2021, a nearly 12-fold increase. This huge increase will have significant impacts on our community, where the economy is heavily dependent on tourism and links to its rural history.

Three to five Growlers flying overhead for 45 minutes in a racetrack pattern make ongoing conversations impossible outdoors, inside many homes and buildings in the Reserve, and interferes with sleep. Growlers emit low frequency "rumbling" that vibrates through your body and causes windows to rattle. To determine noise levels the Navy "averages" day/night recordings over 24-hours. Averaging doesn't represent the intensity of sound and vibrations experienced by residents, including children, and visitors.

"Aircraft noise levels are represented in the DEIS by various noise metrics that are generated by a computer model and not actual noise measurements at Ault Field or OLF Coupeville." DEIS Page 3-16

The DNL metric is the energy-averaged sound level measured over a 24-hour period, with a 10-dB nighttime adjustment. DNL does not represent a sound level heard at any given time but instead represents long-term exposure." "DNL values are average quantities, mathematically representing the continuous sound level that would be present if all of the variations in sound level that occur over a 24-hour period were averaged to have the same total sound energy." DEIS Page 3-17

The National Park Service (NPS) has stated that ELNHR has the highest man-made noise of any national park in the contiguous 48 states. https://en.wikipedia.org/wiki/Boeing_EA-18G_Growler

"Natural and cultural sounds are integral to ecosystem function and are one of the many resources and values that NPS managers are responsible for preserving and restoring. NPS evaluates federal actions that may impact the human and natural environment within our public lands. The acoustic environment of national park units, like air, water or wildlife, is a valuable resource that can quickly be substantially harmed by inappropriate sound levels and frequencies. Intrusive sounds are of concern to the management of the national park system because they can impede on the ability to accomplish the NPS mission of resource protection and public enjoyment. Anthropogenic noise may also disrupt ecosystem processes by interfering with predator prey relationships and the ability of wildlife to communicate, establish territory, reproduce, support and protect offspring (Siemers and Schaub, 2011; Schroeder et al., 2012; McClure et al., 2013). Visitors to many NPS units come with expectations of seeing, hearing, and experiencing phenomena associated with a specific natural or cultural environment, yet in many cases these environments are being increasingly impacted by anthropogenic noise altering their experience (Lynch, Joyce, and Frstrup, 2011)." <https://irma.nps.gov/DataStore/Reference/Profile/2233340>

Actual noise levels in the Reserve were recorded in a study done by the National Park Service. A 2015 NPS month-long study recorded noise levels at two ELNHR sites. **Decibel levels up to 117 and 96 were recorded at the two locations. The National Institutes of Health "recommends that hearing protection be worn whenever noise levels exceed 85 dB(A) regardless of duration."** <https://blogs.cdc.gov/niosh-science-blog/2016/02/08/noise/>.

The DEIS downplays the NPS findings, stating at Page 1-23, "In 2016, the National Park Service performed acoustical monitoring for the Ebey's Landing National Historic [sic] Reserve...the report demonstrates that aircraft noise above 60 dB (normal conversation levels) occurred less than 1 percent of the time during the study period." But if use of OLF increases six-fold, as in scenario A of any of the

proposed alternatives, noise levels above 60 dB could occur up to 5-6% of the time, or 7 hours/week in a average year (and more if OLF is used on weekends). **The disruptive effects of such noise on visitors to the Reserve should be given greater consideration in the final EIS.**

The National Park Service's acoustical monitoring is described in Natural Resource Report NPS/EBLA/NRR—2016/1299, *Ebey's Landing National Historical Reserve Acoustical Monitoring Report* (the "NPS report"). Noise was monitored at two locations as shown at pages 3-4 of the report. One of these locations, the Ferry House (EBLA002), is located well outside the 60 dB noise contour for the No Action Alternative as well as the proposed Action Alternatives (DEIS, e.g., Figs. 3.2-5 and 4.2-5). The second site (Reuble Farmstead, EBLA001) appears to lie between the 65- and 70-dB contours for the No Action Alternative. "The highest recorded SPL and SEL at EBLA001 were 113 and 117.2 and at EBLA002 were 85 and 96.6, respectively; both of these were from aircraft." (NPS report Page 14.) Levels measured at EBLA001 are hazardous to human hearing; exposure to 115 dB should not exceed 30 seconds continuous under NIOSH and CDC guidelines (e.g., OSHA Technical Manual, Section III, Ch. 5, II.1.2). **The measured DNL during the monitoring period at EBLA001 was 73.6, substantially above the level predicted in the DEIS.** These measurements were made by equipment meeting ANSI standards (NPS report at Page 6), and data were analyzed by trained technicians (NPS report, Page 7). Data were collected for 31 days (Page 7). **The NPS results raise questions about the accuracy of the models used to prepare the DEIS and should be given greater consideration in the final EIS.**

NOISEMAP software used for computer modeling in the DEIS appears to be an outdated version from 2008 or earlier (DEIS, Page A-21). A Department of Defense report prepared in 2010 states, "The acoustic environments in the vicinity of newer aircraft such as the . . . F/A-18E/F differ from those of most prior aircraft, with high noise levels associated with higher thrust engines. At those high levels, acoustic propagation cannot be modeled using the same simple linear theories employed in the classic noise models." [emphasis added] <https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>

The DEIS relies on A-weighted sound measurements, which "puts emphasis on the 1,000 to 4,000 Hz range." (DEIS, Page A-142.) However, the Growler is known to produce substantial low-frequency sound (Department of the Navy, *Environmental Assessment for the Expeditionary Transition of EA-6B Prowler Squadrons to EA-18G Growler at Naval Air Station Whidbey Island, Oak Harbor, Washington*, Final, October 2012 (the "2012 EA"). The included Wyle report WR 10-22 states on Pages 38-39, "NASWI has received complaints of building rattle/vibration due to Growler events . . . With its increased low-frequency content, the Growler takeoff events have higher potential to cause noise-induced vibration." The frequency profiles on Page 39 show that the Growler produces a substantial amount of noise at frequencies below 100 Hz. A-weighted sound levels are therefore an inaccurate measurement of Growler noise during FCLP operations and lead to underestimating perceived sound levels and effects on people and property. **The final EIS should acknowledge the lack of correlation between A-weighted measurements and the Growler sound spectrum or should use a different measurement standard. For example, Effective Perceived Noise Level, which takes into account tone components and duration, may be more appropriate than dBA** (14 CFR Appendix A to Part 36).

Figures A-3 and 3.2-1 should be amended to include day and night noise levels for rural areas, since the affected area around OLF is primarily rural. Rural nighttime sound levels have been reported to be 25 dB, compared to 40 dB in urban areas (Pennsylvania State University, noisequest.psu.edu/noisebasics-basics.html). Assuming a 10 dBA daytime adjustment (Noise Solutions, noisesolutions.com/resources/glossary/), daytime background noise in a rural area would be 35 dB, or about 20 dB below that experienced in urban areas. **Using the quiet urban sound levels from DEIS Fig.**

3.2-1 as a baseline, daytime rural background noise levels would be expected to be significantly lower than 35 dB.

In other documents the Navy has recognized that low background noise levels should be considered in analyzing effects of increased noise. "The primary factor considered in determining the significance of potential noise impacts includes the extent or degree to which implementation of the Proposed Action would affect the *baseline sound environment*." (*Final Environmental Impact Statement for Naval Weapons Systems Training Facility Boardman*, 2015 [emphasis added] Pages 3.4-15. The significance of low background noise levels in rural areas is also recognized in *Department of Defense Instruction Number 4165.57* (2011, 2015) ("DoD 4165.57"). **The low background noise in affected rural areas should be taken into consideration in the final EIS.**

The DEIS averages noise levels over an entire year, but aircraft operations at OLF (and the resulting noise levels) are quite variable over a year. Noise levels also vary with weather conditions. **Average noise levels given in the DEIS may therefore underrepresent the actual noise to which a person will be exposed for significant periods of time.** Examination of Navy records available online at cnic.navy.mil show that operations at OLF in 2016 were clustered into periods of a few days to a week, with breaks of up to a month or more between some blocks of activity. **See Attachment 1. OLF Coupeville – All Carrier Operations for 2016 & 2017. While averaging of noise levels may be appropriate to civilian airports where daily activity remains fairly constant, it is not appropriate for characterizing noise from sources with a high degree of both short- and long-term variability.**

Coupeville Middle/High School should be added to the Points of Interest (Section 3.2.4.2 and elsewhere). The school is located in Coupeville at the intersection of South Main Street and Terry Road, less than 2.5 miles northwest of the runway at OLF. As such, Coupeville Middle/High School is the closest school to OLF. A Boys and Girls Club is planned for a site on S. Main Street south of the Middle/High School and a daycare center (Ebey Academy) is located across Terry Rd. from the school. **In view of the flight tracks shown in the DEIS and the statement that "aircraft can be several miles left or right of the flight track" (DEIS, Page 3-7), Growlers can be expected to fly directly over Coupeville Middle/High School at low elevation during FCLP. Maps of flight tracks on Pages 3-8 and 3-9 show arrival and interfacility tracks that appear to pass directly over the school.**

FCLPs at OLF are conducted at altitudes of 0 – 600 ft above ground level (DEIS, Page 1-8). If a Growler deviates from the flight track and passes over Coupeville Middle/High School, the noise level could exceed 109 dBA (Table 3.1-2). Based on the "Typical FCLP Operation" shown in the brochure *Growler Aircraft Operations at NAS Whidbey Island and OLF Coupeville*, 2015, a jet deviating from the flight track could pass over the school at less than 500 feet above ground level. According to the DEIS, "One laboratory study (Ising et al. 1999) concluded that events with Lmax above 114 dB have the potential to cause hearing loss" Page A-169.

Coupeville Middle/High School should also be added to the Points of Interest as an indicator of nearby residential development, and data for Coupeville Middle/High School should be included in all tables of noise impacts on residential areas. Neighborhoods adjacent to Coupeville Middle/High School include the Olympic View Mobile Home Park, Terry Mobile Park, and the SE Bainbridge Lane area. **In view of the flight tracks shown in the DEIS and the Navy's admission that "aircraft can be several miles left or right of the flight track", Growlers can be expected to fly directly over this area at low elevation.**

Whidbey Health (formerly Whidbey General Hospital) should also be added to the Points of Interest (Section 3.2.4.2 and elsewhere). The hospital is located in Coupeville at the intersection of State

Highway 20 and North Main Street, approximately 2.5 miles northwest of the runway at OLF. In view of the flight tracks shown in the DEIS and the fact that “aircraft can be several miles left or right of the flight track”, **Growlers can be expected to fly directly over Whidbey Health at low elevation. Resultant noise levels at Whidbey Health and their effects on patients must be considered.**

According to the National Institutes of Health, “In order to protect the most sensitive 8% of the population, NIOSH recommends that hearing protection be worn whenever noise levels exceed 85 dB(A) **regardless of duration.**” [emphasis added] <https://blogs.cdc.gov/niosh-science-blog/2016/02/08/noise/> This document also shows that the maximum daily occupational noise dose is reached in 15 minutes at 100 dB(A), and that for every 3-dB increase in noise level, the allowable exposure time is reduced by half. The maximum daily exposure to 109 dB(A), which would result from a Crowler flying over at 500 feet, is less than 3 minutes. NIOSH goes on to say, “**Even without knowing your time-weighted average, if the readout shows a level of 85 dB(A) or higher, NIOSH recommends that you take precautions to protect your hearing by reducing the noise when possible, limiting your exposure time, and/or using appropriate hearing protection.**” Under these recommendations, Coupeville Elementary students, who may be exposed to 90 dB (e.g., Table 4.2-11), will need to wear hearing protection at recess. Allowed deviations from the flight track should also be considered for estimates of noise levels at the school.

Some schools will be interrupted by jet noise dozens of times per week (e.g., Table 4.2- 3), yet no mitigation steps are described beyond the belief that windows will be closed or air conditioning will be used. These charts do not account for the time that children are on the playground for recess which is two to three times a day, working and learning in the school garden, after 2:30pm when middle and high school students use the track at the Elementary School for sports practice and competitions or daily from 3:30 to 4:00pm Boys and Girls Club members use the Elementary School Playground. If mitigation measures are introduced in the final EIS, such measures would be new information, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy’s declared intention not to allow a comment period on the Final EIS would be contrary to NEPA regulations.

AIRCRAFT NOISE AND ITS EFFECTS ON CHILDREN’S LEARNING

The DEIS does not give proper consideration to the harmful effects of noise on children’s learning, despite the fact that the Wyle Aircraft Noise Study (DEIS Appendix A) recognizes these effects on page A-176:

“While there are many factors that can contribute to learning deficits in school-aged children, *there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning.* This awareness has led WHO and a North Atlantic Treaty Organization (NATO) working group to conclude that *daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites.*” (Emphasis added.)

A large amount of research has been done on the effects of loud noise from aircraft and other sources on children’s learning (and health), and there is a growing consensus in the scientific community that such noise adversely affects academic performance. For example, Cohen et al. (American Psychologist 35(3):231-243, 1980) found that children from noisy schools had higher blood pressure, were more likely to fail on a cognitive task, and were more likely to give up. Students in the study were exposed to peak noise levels as high as 95 dB, similar to peak noise levels shown for Whidbey Island schools in Chapter 4 of the DEIS. A later study by Hygge et al. (Psychol. Sci. 13(5):469-474, 2002) found impairment of long-term memory and reading in noise-affected children. In a 2008 review, Clark (Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008) stated that “evidence for the effects of noise on children’s cognition is strengthening . . . with over twenty studies

having shown detrimental effects of noise on children's memory and reading." Significantly, Clark points to "a linear exposure-effect relationship between chronic aircraft noise exposure and impaired reading comprehension and recognition memory, after taking a range of confounding and socioeconomic factors into account." A 2013 review of more than 80 studies (Klatte et al., *Front. Psychol.* 4:578, 2013) found that noise exposure impaired children's abilities in speech perception, listening comprehension, short-term memory, reading, and writing. The authors state that these effects "have to be taken seriously in view of possible long-term effects and the accumulation of risk factors in noise-exposed children." **Not one of the studies reviewed by Klatte et al. is cited in the DEIS (Ch. 7). In view of the large body of research showing harmful effects of aircraft noise on learning, the EIS must give greater attention to noise levels in schools, including a frank discussion of the documented effects. Mitigation measures must also be presented as required by the applicable regulations (40 CFR §1502.14(f); 40 CFR §1502.16(h)).**

ADDITIONAL GROWLERS BEYOND THE NUMBER LISTED IN THE DEIS

Table 5.1 says nothing about the possible basing of additional Growlers at NASWI. *Selected Acquisition Report, EA-18G Growler Aircraft (EA-18G)*, March 17, 2016 states that a total of 160 Growler aircraft are budgeted. This number appears to include 42 Growlers in addition to those discussed in the DEIS. Although some portion of these aircraft may be sold to the Australian Air Force, operating and support costs detailed in the report at page 37 are explicitly directed to sustaining 160 aircraft. **If the Navy is contemplating basing any of all of these additional Growlers at NAS Whidbey or operating them at NASWI for training purposes, those plans would be considered a reasonably foreseeable future action and must be addressed in Chapter 5 of the EIS.**

EARTHQUAKE POSSIBILITY **Earthquake that damaged CHS**

The assessment of earthquake risk in the DEIS is incorrect and not based on best available science.

In Section 3.14.2.3, the DEIS fails to describe major seismic events along the Cascadia Subduction Zone, the most recent of which is believed to have occurred in 1700. Evidence for the 1700 earthquake, estimated at magnitude 9, is presented in Atwater et al., *The Orphan Tsunami of 1700: Japanese Clues to a Parent Earthquake in North America*, 2nd ed., United States Geological Survey and University of Washington Press, 2015. The DEIS is therefore incorrect in stating (Page 3-187), "The most recent apparent significant activity was approximately 18,000 years ago." As described in the Atwater book, major Cascadia Fault earthquakes (up to magnitude 9) have occurred in the past with an average interval of about 500 years between quakes. It is estimated that there is a one-in-ten chance of such a major quake occurring in the next 50 years. Such an event would be "the costliest, and potentially deadliest, natural disaster in US history" according to the Washington State Emergency Management Division (*Seattle Times*, January 27, 2017).

A major, subduction-zone earthquake in the Puget Sound basin would be characterized by an extended period of ground shaking (measured in minutes), soil liquefaction, and ground subsidence, causing major structural damage to runways and other infrastructure. An earthquake of such magnitude, occurring without warning, could leave much of the Navy's Growler fleet grounded. Section 3.14.2.3 also mis-states the risks from other types of faults. **The Strawberry Point, Devil's Mountain, and Utsalady Faults are believed to have been active much more recently than 18,000 years ago and to have resulted in tsunamis affecting north Whidbey Island less than 1200 years ago** (Johnson et al., *Active Tectonics of the Devils Mountain Fault and Related Structures, Northern Puget Lowland and Eastern Strait of Juan de Fuca Region, Pacific Northwest*, USGS Professional Paper 1643, 2003. <https://pubs.usgs.gov/pp/p1643/>).

A major earthquake would very likely destroy the Deception Pass Bridge, restricting access to NAS Whidbey and cutting off its water supply. Ault Field, Oak Harbor, and much of north Whidbey Island get water from the City of Anacortes via pipes on the Deception Pass bridge (DEIS, Pages 3-179 to 3-180), which was built in the early 1930s. The Deception Pass bridge is in need of a seismic retrofit according to the *Seattle Times* article cited above. Ault Field has water storage equal to less than eight days of consumption (DEIS, Page 3-180), and storage tanks or reservoirs are also likely to be damaged.

See Attachment 3. Earthquake Faults NAS Whidbey

See Attachment 4-1 and 4-2. Liquefaction Map NAS Whidbey Ault Field

See Attachment 5. Utsalady Point Fault

See Attachment 6. Shake Map for the Utsalady Point Fault

See Attachment 7. Airports Damaged by Earthquakes

Additional information related to the Airports Damaged by Earthquakes Attachment: This document mentions the Nisqually earthquake (magnitude 6.8) of 2001. The air traffic control tower at Sea-Tac Airport was heavily damaged; it has since been replaced with a more earthquake-resistant tower. https://en.wikipedia.org/wiki/2001_Nisqually_earthquake

The risk of extensive damage to runways and structures, and the risk of an extended interruption of the water supply call into question the decision to base all Growlers at NAS Whidbey. It only takes a few seconds for an earthquake to cause extensive damage. **Alternative basing sites for at least a portion of the Growler fleet should be given more serious consideration. In addition, the Navy should consider steps to safeguard its water supply against earthquake risks, such as supporting a seismic retrofit of the bridge and water pipes, and increasing storage capacity.**

The final EIS should correctly describe the earthquake hazard at NAS Whidbey based on best available science. New tools such as LIDAR imaging and liquefaction studies have greatly expanded the knowledge available to everyone about faults and earthquakes. As the possibility of a major earthquake in the Pacific Northwest grows, Emergency Management Teams are preparing for how they will respond. The final EIS must also explain how the Navy will mitigate earthquake hazards.

SOUTH WHIDBEY ISLAND FAULT

The DEIS fails to properly consider seismic risks at OLF Coupeville. Section 3.14.2.3 makes a passing reference to the Southern Whidbey Island Fault, but goes on to state (erroneously), "The most recent apparent significant activity was approximately 18,000 years ago," citing a 1987 publication.

The Southern Whidbey Island Fault (SWIF) actually a fault zone, includes three parallel faults trending southeast to northwest, with the northern-most of the three faults passing across Central Whidbey Island near Fort Casey, approximately 2.5 miles from OLF Coupeville. USGS map available at: <http://earthquake.usgs.gov/earthquakes/eventpage/uw61251016#map> (see also, Mace and Keranen, *J. Geophys. Res.* 117:B03105, 2012).

The SWIF is believed to have produced multiple earthquakes of magnitude >6 in the past 16,400 years, including a quake of approximate magnitude 7 around 900 A.D. (Mace and Keranen, *ibid.*). An additional discussion of seismic risks from the SWIF, "Geologists conclude that the SWIF is capable of

producing a M6.5 to M7.4 earthquake” can be found at:
<http://earthweb.ess.washington.edu/gomberg/ShakeMap/ShakeMapGeologicSummaries.html>

The final EIS must evaluate seismic risks around NASWI (including OLF Coupeville) on the basis of current scientific knowledge, and must also consider measures to mitigate these risks.

See Attachment 8. South Whidbey Island Fault

ESTABLISHMENT OF ACCIDENT POTENTIAL ZONES

Regarding Accident Potential Zones, the DEIS states:
 “Scenarios with high numbers of operations at OLF Coupeville may require the development of Accident Potential Zones (APZs) through the Air Installation Compatible Use Zone (AICUZ) update process . . . Conceptual APZs are presented for the purpose of analyzing potential land use impacts of the Proposed Action. *At this time, no decision has been made with regard to additional APZs.*” [emphasis added]
 Pages ES-5 – ES-6.

The Navy’s policy is to put APZs at runways in which there are 5,000 or more operations in one direction a year. Under the A Scenarios, that level would be exceeded for OLF runway 14 if 30% of FCLPs used that runway as is contemplated (e.g., Page 4-17), and would certainly be exceeded for Runway 32 under any A or B Scenario. The statement at page 4-116, “APZs *could be warranted* at OLF Coupeville (see Table 4.3-1) under some operational scenarios” [emphasis added] is not correct. Under the majority of the Action Alternatives, **APZs would be warranted**, and the data needed to designate them are already in hand (e.g., flight tracks and noise contours presented throughout the EIS). At the very least, APZs are “reasonably foreseeable actions” and should be presented and analyzed as cumulative impacts.

Under the Navy’s own standards, existing development in the vicinity of OLF precludes the proposed action. In Naval Weapons Systems Training Facility Boardman Final Environmental Impact Statement, Department of the Navy, December 2015, Table 3.4-1 states that Noise Zone III (>75 dBA) is incompatible with residential/noise-sensitive land uses, and that Noise Zone II (65-75 dBA) is normally incompatible with such uses. Table 3.4-1 particularly points to residences, mobile home parks, transient lodging, schools, hospitals, and churches as being incompatible with Noise Zone II. In addition, the Navy has previously stated that APZ1 and APZ2 are “clearly incompatible” with housing and that Noise Zone II, even in the absence of an APZ, is “normally incompatible” with housing (Draft Environmental Impact Statement (EIS) for Development of Facilities to Support the West Coast Basing of the F/A-18E/F Aircraft, 1997 at Fig. 3-1).

Proposed Alternative 1A in the DEIS puts the local Kingdom Hall of Jehova’s Witnesses; Centerpoint Christian Church; Ryan’s House, a temporary shelter for homeless youth; and the Admirals Cove, Crocket Lake Estates, Shangri-la Shores, Race Road, Race Lagoon, Harrington Road, Harrington Lagoon, Snakelum Point, and Kineth Point neighborhoods inside the 75 dB DNL noise contour (i.e., in Noise Zone III; see Fig 4.2-5). Coupeville Middle/High School, the Pennington Hill neighborhood, and the Olympic View Mobile Home Park are all within the 65 dB contour (Noise Zone II). These existing land uses are incompatible with the proposed action according to the Navy’s own standards (“Existing residential development is considered as pre-existing, incompatible land uses.” Department of Defense Instruction Number 4165.57, 2011, 2015, Page 27). Proposed alternatives 2A (Fig. 4.2-12) and 3A (Fig. 4.2-19) are similarly problematic. Alternatives 1B (Fig. 4.2-6), 2B (Fig. 4.2-13), and 3B (Fig. 4.2-20) would also put most of these areas in the same incompatible noise zones. **Even the C alternatives render at least most of the Admirals Cove neighborhood uninhabitable under published standards.**

Under land use compatibility guidelines shown in DoD Instruction No. 4165.57, APZ-I is incompatible with residential housing, and APZ-II is compatible only with detached, single units at a maximum density of 2 units/acre. The “Conceptual” APZ I shown in Fig. 4.3-1 encompasses much of Admirals Cove, as well as the Ryan’s House shelter. The “Conceptual APZs” shown in Fig. 4.3-2 further encompass residential developments along Race Rd., Harrington Rd., and Harrington Lagoon that exceed the density limits for APZ-II in the DoD Instruction. The final EIS must describe what steps will be taken to mitigate the effects of APZs.

DEPRECIATION OF PROPERTY VALUES

The establishment of new APZs can be expected to reduce property values. APZs may also prevent development of property since they are deemed by the Navy to be “clearly incompatible” with housing. Will the Navy compensate property owners or will the burden of such compensation fall on local government? As of October 2011 the City of Virginia Beach and the State of Virginia had spent or committed to spend \$85 million on APZ mitigation, including property acquisition, incentives, and expenses. In addition, willing sellers had offered for acquisition more than \$19 million of other property. See, *Virginia LIS Report Document No. 337, 2011*. A later report (Vergakis, Brock, *The Virginian-Pilot*, April 18, 2016) indicates the cost to the city has risen to \$129 million. Island County’s entire budget for FY 2017 is \$85.7 million, and the State of Washington is struggling with a court order to fully fund basic education, raising serious doubts that local or state government could cover the cost of mitigation.

In other publications the Navy has attempted to minimize the effects of the proposed action by pointing to F/A-18 operations at NAS Oceana where “the population density in the area is far greater than that of either Oak Harbor or Coupeville” (“Pacific Northwest Growler Training Essential for 21st Century Battles,” *Currents*, Fall 2015, 54-65). **What is missing from this discussion is the resultant financial costs to local government (above) and the Federal government (a \$34.4 million dollar settlement in 2007).** The final EIS must address costs associated with noise and accident potential mitigation.

The brief discussion of impacts on property values in the DEIS omits any meaningful analysis of actual impacts, despite the admission that “aircraft noise has a real effect on property values” Page 4-232. By the Navy’s own admission, studies have shown that property values can be expected to decrease by from 0.2% to 2.3% per dB increase. These studies, which were done around airports, probably underestimate the effect on values around the OLF due to the confounding effect of higher commercial property values around airports and the episodic nature of the FCLP operations, which create much higher noise levels than the DNL averaging algorithm would suggest.

Assuming that property values near OLF would decline by only 0.5% to 1.0% per dB of noise increase, loss of value in the area would still be substantial. Taking noise level predictions from Fig. 6-9, the following losses can be calculated for a home with a present value of \$300,000:

Location; Alternative	Increase in DNL	Decrease in Value 0.5%/dB	Decrease in Value 1.0%/dB
Admirals Dr. & Byrd Dr.; 1A	12 dB	\$18,000	\$36,000
Admirals Dr. & Byrd Dr.; 1B	9 dB	\$13,500	\$27,000
Race Lagoon; 1A	14 dB	\$21,000	\$42,000
Race Lagoon; 1B	13 dB	\$19,500	\$39,000

The effects shown in the table may underestimate actual losses from current value, because the data in Fig. 6-9 are presented relative to the No Action Alternative, not 2017 noise levels (and thus property

values). These loss estimates are also conservative in being based on average-year data, rather than the higher, high-tempo year data (Fig. G.3-9).

Since the home is the largest asset for most home-owning families, these losses would be a tremendous financial burden on many residents. An examination of Fig. 6-9 shows that the greatest losses to homeowners would occur in the vicinity of OLF. The DEIS does not indicate how homeowners might be compensated for these losses. The final EIS should show projected aggregate losses under the various proposed alternatives, as well as plans for mitigating such losses.

OLF COUPEVILLE RUNWAY LENGTH

OLF Coupeville was commissioned in 1943 OLF to give pilots flying WWII propeller planes a practice landing field. **The OLF Coupeville runway is 5,400 ft. long. According to the 1997 EIS, a primary runway must be at least 9,000 feet long, and “[t]he minimum length acceptable for secondary runways is 6,500 ft”** (Page ES-4 and Section 2.2.3). When basing of all aircraft at NAF El Centro was under consideration in 1997, it was stated that such action “would require constructing a parallel runway at least 9,000 feet long . . . so that FCLP and routine operations could be conducted concurrently. *Both runways would have to be 9,000 feet long*” [emphasis added] Page 2-21. Not only is OLF, at 5,400 feet, well below the requisite length, but Ault Field also fails to meet these standards as it comprises intersecting runways each 8,000 feet long. **The deficiencies of OLF, the shortest FCLP runway in the Navy, are also discussed in DEIS Appendix H (“An EA-18G requires a Class B [8,000 ft.] runway”).**

NORTH WHIDBEY AGAINST CENTRAL WHIDBEY

By not giving due consideration to alternative sites for FCLP, the Navy has, in effect, improperly limited itself to a range of actions that will have adverse environmental effects. The Action Alternatives presented in the DEIS merely provide for different distributions of the same flights between the two runways. This approach pits the north and central Whidbey communities against each other, as the runway that receives more flights becomes the “loser” among these communities. The instant EIS process has already created rifts in the community, with two Island County Commissioners (both outspoken NASWI boosters) retaliating against the Town of Coupeville after members of the Town Council made comments on the DEIS in a public meeting (*Whidbey News-Times*, February 11, 2017).

“In a move highlighting growing tension between North and Central Whidbey, two Island County commissioners are refusing to approve a grant for a community greens project in Coupeville because they believe the community is anti-Navy.”

Commissioners Rick Hannold and Jill Johnson, whose districts are in North Whidbey, said they took offense to a series of actions by the Town of Coupeville and Central Whidbey citizens in recent months.

The last straw, they said, was a Coupeville council workshop last week in which council members spoke bluntly about their concerns with the Navy’s plans to increase the number of EA-18G Growlers that conduct touch-and-go landings at the Outlying Field outside of town.

Johnson doesn’t deny that her decision was political, nor that it will increase the acrimony between Oak Harbor and Coupeville, but she blames Coupeville for starting it.

Commissioner Helen Price Johnson, whose district covers South and Central Whidbey, argued against the decision.

“Denying access to local economic development funds shouldn’t be used as a tool to punish people who may have a different perspective on a federal issue,” Price Johnson said, adding that decisions regarding two completely separate issues should be kept separate.

COUPEVILLE MAYOR Molly Hughes said she is shocked by the action.

"I feel it's inappropriate to mix their personal feelings about one subject with a funding decision in a completely different matter," she said, adding that she may look into taking legal action.

The plan for the community green includes the addition of a public bathroom, lighting, increased parking and other improvements to a 3.9-acre open space in the center of town.

The town applied for a \$600,000 grant from the rural county economic development funds.

Under the program, the state credits the county back 0.09 in state sales tax. The funds are administered by the county commissioners."

THE COMMUNITY GREENS project was approved by an economic development group that reviewed grant applications as well as the Council of Governments. Hughes said the project received nothing but positive comments. <http://www.whidbeynewstimes.com/news/commissioners-deny-grant-calling-coupeville-anti-navy/> - comments

Most (81.6%) of NASWI personnel reside in Oak Harbor or the NASWI complex, compared to 3.7% residing in Coupeville (Table 3.10-2). The bulk of the economic impact of these residents (Page 3-151) can be assumed to accrue to Oak Harbor (e.g., ten times as many new households in Oak Harbor as in Coupeville; see p. D-3). Support for NASWI is strong in Oak Harbor, while opposition to FCLP operations at OLF is closer to the norm in the Coupeville area (see, e.g., *Whidbey News-Times*, Feb. 11, 2017, cited above). In view of these facts (and the decline in property values discussed above), the "C" scenario is the most just from a social and economic standpoint.

Table 4.2-1 shows much greater effects on the Coupeville population compared to Oak Harbor for sound levels of 70 dB and above (esp. >75 dB) for any Alternative 1 scenario. Table 4.2-3 also shows disproportionate affects on Coupeville area points (e.g., Admirals Dr. & Byrd Dr., Coupeville Elementary School) under alternatives 1A & 1B. Further disproportionate effects of the A Scenarios on the Coupeville area are shown in Table 4.2-25. Again, the "C" scenario is the most just from a social and economic standpoint.

The DEIS Does Not State a "Preferred Alternative"

Under 40 CFR 1502.14(e) an EIS must "[i]dentify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement . . ." The only preference stated in the DEIS is for 100% of FCLP operations to be conducted at OLF (Page ES-3), but that scenario is not among the proposed alternatives. Since the Navy has not identified a preferred alternative, the DEIS is fatally defective under the applicable regulations. Further, since the Navy has announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative.

LACK OF AVAILABLE OFF-BASE HOUSING FOR ADDITIONAL NAVY PERSONNEL AND FAMILIES

Under "Housing Impacts" (Page 4-231), the DEIS states, "[N]early all these additional households are expected to reside off base." The DEIS seriously underestimates the impact of this added housing demand, citing 2015 data for housing availability. Island County already has a shortage of low-income housing. According to Rick Chapman, owner of Coldwell Banker Tara Properties in Oak Harbor, "Rents on North Whidbey have gone up in the last two years probably 30 to 40 percent in some cases, 25 percent average overall" (*Whidbey Daily*, whidbeydailynews.com, April 21, 2016). Homelessness in Island County has increased about 34% from 2014 to fall of 2016 (*Whidbey News-Times*, Oct. 4, 2016). According to the *News-Times*, "Stagnant wages, a hot housing market and skyrocketing rents are putting more people out of their homes." The lack of affordable housing on Whidbey Island is also affecting seniors. Some low-income seniors have been on a waiting list for affordable housing for a year and a half (*Whidbey News-Times*, Dec. 28, 2016). There is no basis for the

assumption in the DEIS that the number of “acceptable housing units” available in 2015 will be available in 2021 (Page 4-232); this statement is inconsistent with reported housing trends. **DEIS Section 4.11, Environmental Justice, does not address the present lack of low-income housing and rapidly rising property values in Island County discussed above. The “Environmental Justice Conclusion” on Page 4-262 makes no mention of housing. These deficiencies must be corrected in the Final EIS.**

INCREASE IN FCLP OPERATIONS AT OLF COUPEVILLE COMPARED WITH HISTORIC FLIGHT OPERATIONS

IF the proposed “operational conditions would be similar to historic flight operations” then why does the Navy now feel a need to shift the bulk of FCLPs to OLF? The historical record demonstrates that Ault Field can accommodate 2/3 of FCLPs even in a year with 190,000 total operations as shown in the graph on page 1-6of the DEIS. High levels of FCLP (up to 56,000) were conducted at Ault Field ca. 1990. The DEIS does not show any operational problems or training deficiencies arising from this historical pattern. The DEIS has simply not made a case for moving these operations to OLF and creating significant adverse effects on the Town of Coupeville, nearby residential areas, and Ebey’s Landing National Historical Reserve. NASWI has consistently received strong support from the Oak Harbor community, which would not be expected to object to continuing the historical Ault Field vs. OLF distribution of FCLP operations.

	Ault	OLF	Total
Average	25,325	13,675	39,000
Range	6,000 – 56,000	3,000 – 33,000	12,000 – 85,000
% Increase, max. vs. average	121%	141%	118%

WELL WATER CONTAMINATION

According to the DEIS (Page 3-179), “Island County has 229 public water systems serving over 78,000 individuals.” This statement is incorrect. According to Douglas J. Kelly, Island County Hydrogeologist (email to me, February 1, 2017), Island County has 284 Group A water systems and 590 Group B water systems, for a total of 874 systems. In addition, there are 450 two-party systems. The EIS should be revised to include correct data on public water systems in Island County.

At page ES-10, under “Hazardous Waste and Materials” the DEIS states, “The existing practices and strategies would successfully manage the use and disposal of these materials.” Similarly, Page 4- 285 asserts, “Hazardous waste management activities would follow existing procedures for the safe handling, use, and disposal of hazardous substances and waste.” **However, a mile-long plume of 1,4- dioxane, a likely carcinogen, has recently been found in groundwater emanating from a dump site at Ault Field (Whidbey News-Times, January 21, 2017). The existence of this plume suggests that “existing practices” for handling of hazardous waste are insufficient.**

DEIS Page 3-62 the DEIS asserts, “Remediation construction was completed in September 1997, *human exposure and contaminated groundwater exposures are under control*, and the [operating units] at Ault Field and the Seaplane Base are ready for anticipated use.” *[emphasis added]* **In view of the recent reports of groundwater contamination, this statement is clearly not correct. The DEIS must be revised to include a discussion of this recently identified groundwater contamination and plans to ameliorate it, and must describe how procedures for the safe handling, use, and disposal of hazardous substances and waste will be improved prior to the basing of additional Growler aircraft at NASWI.**

In addition to the groundwater contamination discussed in comment 8, above, at least eight wells have been found to be contaminated with perfluorinated compounds from fire-fighting foam (*Whibey News-Times*, January 28, 2017). The Navy is now drilling test wells in an effort to map the extent of the contamination. In view of this ongoing testing, the full extent of contamination around Ault Field and OLF cannot be determined at this time. **The discussion of this matter in the DEIS (e.g., Page 4- 285) must be updated with current information on the extent of well and aquifer contamination, planned steps for remediation, and plans to compensate affected water users.**

IMPORTANT BIRD AREAS AND BIRD STRIKES – A SIGNIFICANT HAZARD TO FLIGHT OPERATIONS

See Attachment 9-1, 9-2, 9-3, 9-4. Bird Strikes - A Significant Hazard to Flight Operations
See Attachment 10-1,10-2,10.3,10.4. NAS Whidbey Draft EIS and Bird Management Plans

DEIS needs to address spring migrations, specifics of the BASH programs for the NAS Whidbey.

NAVAL WEAPONS SYSTEMS TRAINING FACILITY (NWSTF) BOARDMAN AS AN ALTERNATIVE OLF SITE

To use NWSTF Boardman as an alternative site for FCLPs, the Navy would need to build a runway and other infrastructure.* As the Boardman area is relatively undeveloped and likely to stay that way, and the Puget Sound region is experiencing rapid growth and development, it seems that this could be a good investment for the future. In addition, there is the possibility of a major earthquake occurring in the Puget Sound area according to the US Geological Survey and Washington State Emergency Management Division. There are no earthquake faults in the area surrounding NWSTF Boardman. The cost of one EA-18G Growler is about \$80 million dollars. Building an OLF at NWSTF Boardman could cost less than one Growler aircraft and would seem to be a good investment for the future after all we have learned about liquefaction at Ault Field and earthquake faults that run through Whidbey Island such as the South Whidbey Island Fault (SWIF).

See Attachment 11 Naval Weapons Systems Training Facility Boardman- an Alternative OLF

* Federal laws and regulations require that an environmental impact statement consider a range of alternatives, including those that “may require additional Congressional appropriations” (DEIS at p. 2-18).

In particular, 40 CFR 1502.1 states that an EIS “shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 CFR 1502.23 states, “For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative consideration

ADDITIONAL COMMENTS SHOULD BE PERMITTED

The current comment period on the DEIS should not be the last chance for public input.

A Federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if:

- “(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
- (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” (40 CFR 1502.9.)

Deficiencies in the DEIS include an analysis of seismic risk with no basis in fact, the lack of a preferred alternative, the exclusion of significant points of interest, outdated information on aquifer contamination, the use of a questionable noise model that has not been verified against (and is contradicted by) on-site noise measurements, a lack of information on possible weekend and/or 24-hour use of OLF and attendant environmental impacts, an incomplete consideration of effects on property values, the absence of actual APZs, and a lack of information on mitigation measures. Correction of any of these deficiencies would warrant a further public comment period under the regulations.

In summary, Ebey's Reserve in Central Whidbey Island is truly special and beautiful place...

Colonel Isaac Ebey (namesake of Ebey's Landing National Historic Reserve) stated in a letter to his brother, W.S. Ebey, on April 25, 1851: "To the north down along Admiralty Inlet . . . the cultivating land is generally found confined to the valleys of streams **with the exception of Whidbey's Island . . . which is almost a paradise of nature.** Good land for cultivation is abundant on this island." "Today some farmers of Central Whidbey still plow donation land claims established by their families in the 1850s. Their stewardship of the rich alluvial soil preserves a historic pattern of land use centuries old."

Respectfully Submitted,

[Redacted Signature]

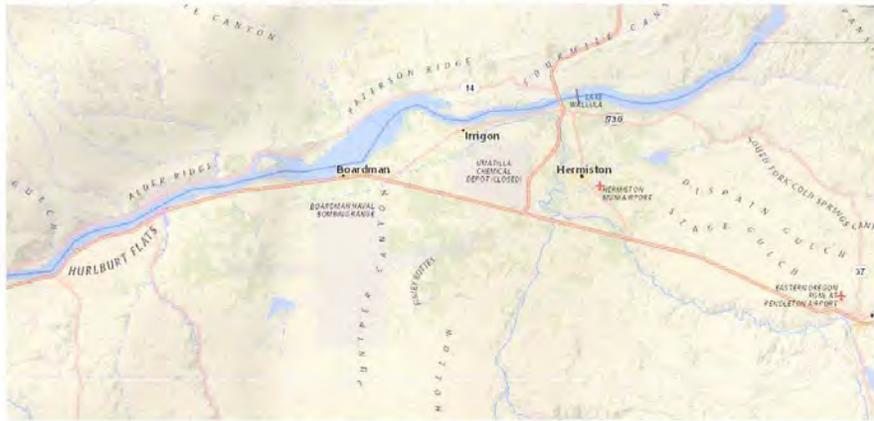
- cc: Senator Patty Murray
- Senator Maria Cantwell
- Representative Rick Larsen
- Governor Jay Insley

NAS Whidbey – Total FCLPs at Ault Field and OLF Coupeville from 2000 to 2015

NAS Whidbey FCLPs 2000-2015			
Year	Ault Field	OLF Coupeville	Total
2000	17,000	7,000	24,000
2001	16,000	4,000	20,000
2002	18,000	4,000	22,000
2003	23,000	8,000	31,000
2004	30,000	4,000	34,000
2005	13,000	3,000	16,000
2006	12,000	3,000	15,000
2007	13,000	4,000	17,000
2008	9,000	3,000	12,000
2009	11,000	5,000	16,000
2010	9,000	6,000	15,000
2011	6,000	10,000	16,000
2012	10,000	11,000	21,000
2013	16,000	7,000	23,000
2014	12,000	6,000	18,000
2015	17,000	6,000	23,000
Average	14,500	5,688	20,188

Data used to develop chart is from NAS Whidbey Draft Environmental Impact Statement Page 1-6

Maps Showing North Whidbey Island Earthquake Faults and No Faults in the Boardman Oregon Area



U.S. Geological Survey Maps

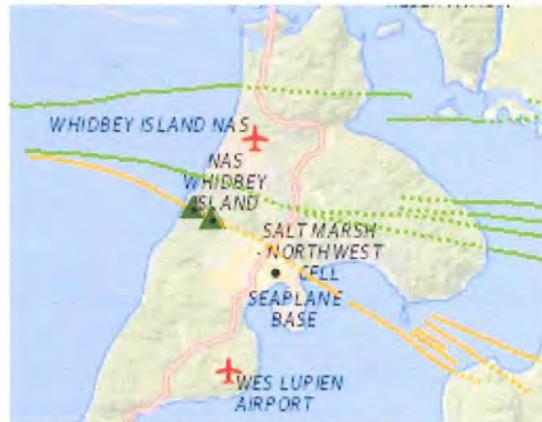
The map above shows NWSTF Boardman and the area surrounding it. There are no faults nearby.

The map to the left shows several faults that run through north Whidbey Island near NAS Whidbey as well as faults near OLF Coupeville.

The map below shows a gold line that traces the Utsalady Point fault. Geologists believe that this fault was active twice within the last 2,200 years, that the earthquakes were magnitude 6.7 or greater, and may have produced tsunamis.

Four tsunami deposits have been found in the Swantown Marsh on Whidbey Island, all of which occurred between 2200 and 1100 years ago, coinciding with the earlier of the two earthquakes on the Utsalady Point fault.

Geologists consider the Puget Lowland to be a complex, tectonically active region.*

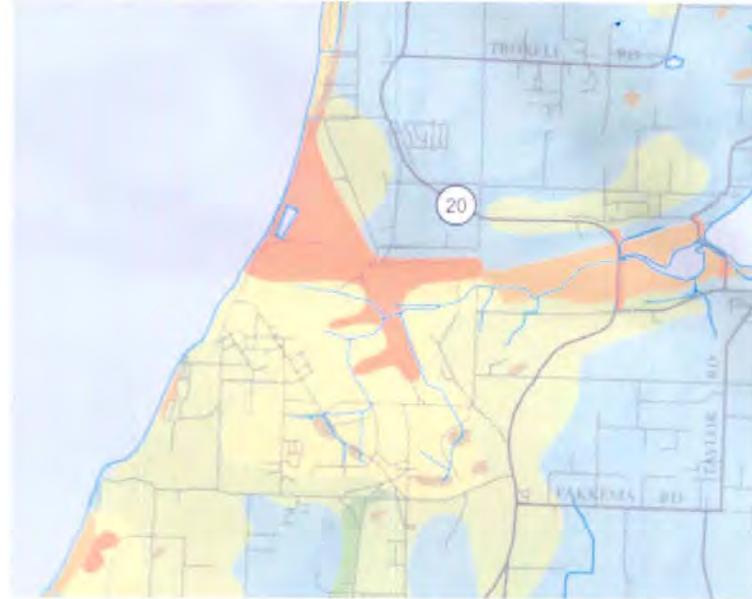


<http://earthquake.usgs.gov/earthquakes/eventpage/uw61251016#map>

* http://cascadiageo.org/documentation/literature/cascadia_papers/johnson_et_al_204_utsalady_puget_lowland.pdf

Island County Liquefaction Map 2004 & NAS WHIDBEY Draft EIS Map: Figure 1.2.2

Figure 1.2-2 General Location Map, Aerial, Ault Field

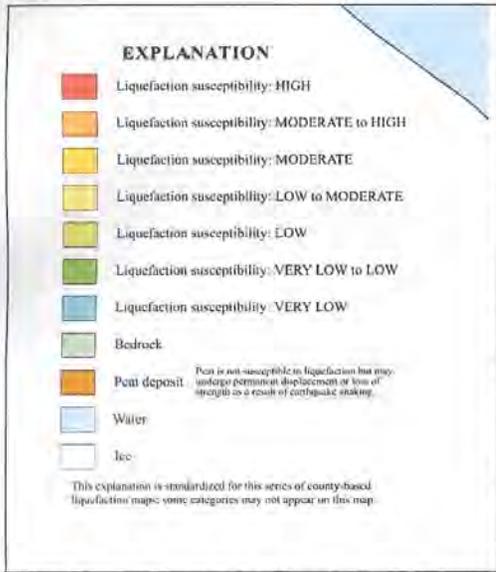


Map from the NAS Whidbey Draft EIS Figure 1.2.2
<http://whidbeyeis.com/Documents/Whidbey%20Island%20for%20posting/Whidbey%20Island%20EIS%20volume%201%20Chapter%201.pdf>

Section of the: Island County Liquefaction Map 2004
https://www.islandcountywa.gov/DEM/Documents/Liquifaction%20-%20ofr2004-20_sheet29_island_liq.pdf

This map is based solely on surficial geology published at a scale of 1:100,000 by the Washington State Department of Natural Resources, Division of Geology and Earth Resources (Washington Division of Geology and Earth Resources staff, 2001). We have assigned liquefaction susceptibility based on published geologic correlations (Youd and Perkins, 1978) and similarity of the geologic units in the map area to units that have been subjected to a quantitative susceptibility analysis (Grant and others, 1998; Palmer, 1995; Palmer and others, 1994, 1995; 1999, 2002, 2003; *in press*). The assignment of liquefaction susceptibility represents our best professional judgment.

Island County Liquefaction Map 2004 & NAS WHIDBEY Draft EIS Map: Figure 1.2.2



Island County Liquefaction Map: Explanation

WHAT IS LIQUEFACTION?

Liquefaction is a phenomenon in which strong earthquake shaking causes a soil to rapidly lose its strength and behave like quicksand. Liquefaction typically occurs in artificial fills and in areas of loose sandy soils that are saturated with water, such as low-lying coastal areas, lakeshores, and river valleys. When soil strength is lost during liquefaction, the consequences can be catastrophic. Movement of liquefied soils can rupture pipelines, move bridge abutments and road and railway alignments, and pull apart the foundations and walls of buildings. Ground movement resulting from liquefaction caused massive damage to highways and railways throughout southern Alaska during the 1964 Good Friday earthquake.

WHAT IS A LIQUEFACTION SUSCEPTIBILITY MAP?

A liquefaction susceptibility map provides an estimate of the likelihood that soil will liquefy as a result of earthquake shaking. This type of map depicts the relative susceptibility in a range that varies from very low to high.

HOW CAN THIS MAP BE USED?

Liquefaction susceptibility maps such as this can be used for many different purposes by a variety of users. For example:

- Emergency managers can determine which critical facilities and lifelines are located in hazardous areas
- Facilities managers can assess the vulnerability of corporate and public facilities, including schools, and recommend actions required to maximize public safety and minimize earthquake damage and loss.

Utsalady Point Fault

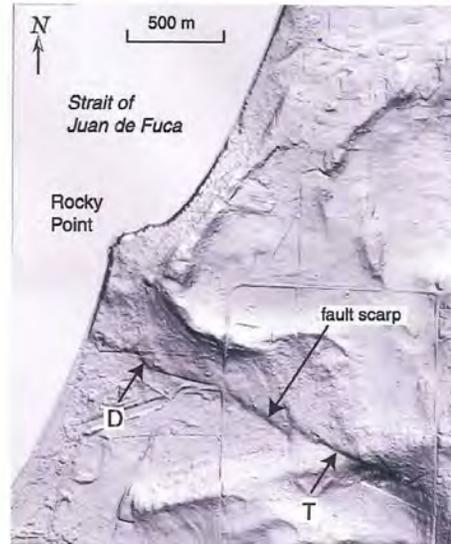


Figure 3. ALSM "bald-earth" image of Utsalady Point fault scarp on northwest Whidbey Island (Fig. 2), showing locations of the Duffers (D) and Teeka (T) trenches.

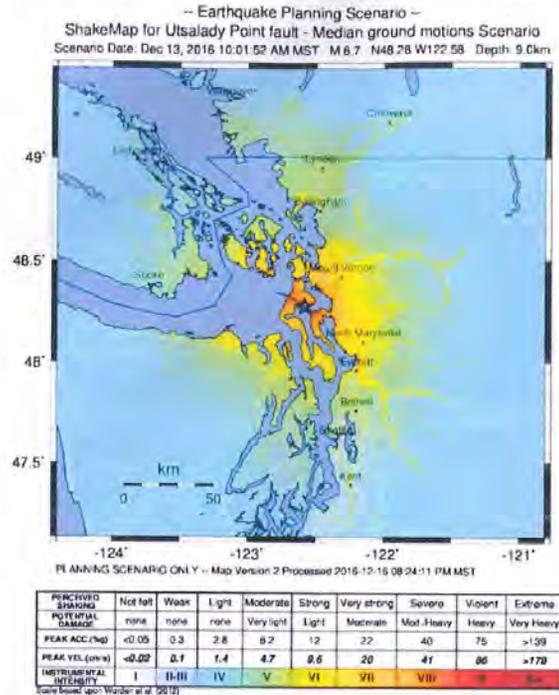
From Oak Harbor Quadrangle, U.S. Geological Survey 7.5 Minute Series, 2014.

From Johnson, Samuel Y. et al., *Bull. Seismo. Soc. Amer.* 94(6):2299-2316, 2004.

According to Johnson et al., the deformation at Duffers ("D" in Figure 3, above) is most likely from two earthquakes that occurred between 100 to 500 and 1100 to 2200 calendar years B.P. (before the present). Evidence indicates the earthquakes (a) were at least about magnitude 6.7 and (b) may have produced tsunamis. The authors state, "Based on this investigation and related recent studies, the maximum recurrence interval for large ground-rupturing crustal-fault earthquakes in the Puget Lowland is about 400 to 600 years or less."

http://cascadiageo.org/documentation/literature/cascadia_papers/johnson_etal_204_utsalady_puget_lowland.pdf

Shake Map for the Utsalady Point Fault



WHEN SOIL ACTS LIKE A LIQUID:

Liquefaction is one of the most damaging effects of ground shaking. Certain soils, such as water-saturated silt and sand, can become dangerously unstable during an earthquake. The shaking increases water pressure, forcing the water to move in between the individual grains of soil; as the grains lose contact with each other, the soil begins to act like a liquid. Overlying layers of sediment can slump and spread laterally. Structures built on such soils may shift position or sink, while buried pipes and tanks become buoyant and float to the surface. Liquefaction-prone soils are common in river valleys, along waterfronts, and in places covered with artificial fill. Unfortunately, these sites are often prime locations for important structures, including bridges, ports, airports, and industrial facilities.

http://earthquake.usgs.gov/scenarios/eventpage/bssc2014573_m6p69_se#shakemap

EXAMPLES OF GREAT SUBDUCTION ZONE (INTERPLATE) EARTHQUAKES					
Location	Date	Size	Duration Shaking Was Felt	Tsunami	Aftershocks (M6.0 or Greater)
Cascadia subduction zone, Pacific Northwest (northern CA to B.C.)	Jan. 26, 1700	M9.0 (approx.)	Unknown	Yes	Suspected (details unknown)
Prince William Sound, Alaska	March 27, 1964	M9.2	3-4 minutes	Yes	11 within the first day
Aceh-Andaman, Sumatra	Dec. 26, 2004	M9.1	3-4 minutes	Yes	13 within the first four days
Maule, Chile	Feb. 27, 2010	M8.8	2-3 minutes	Yes	21 within the first two months
Tohoku, Japan	March 11, 2011	M9.0	3-6 minutes	Yes	59 within the first three months
Compare Washington's recent Nisqually earthquake, an example of a deep (intraplate) quake.	Feb. 28, 2001	M6.8	Up to 40 seconds	No	Few aftershocks felt (the largest measured M4.3)

Table from: *Cascadia Subduction Zone Earthquakes: A Magnitude 9.0 Earthquake Scenario**, Page 5
 ger_ic116_csz_scenario_update.pdf

*This publication was produced by the *Cascadia Region Earthquake Workgroup (CREW)*

CREW is a non-profit coalition of business people, emergency managers, scientists, engineers, civic leaders, and government officials who are working together to reduce the effects of earthquakes in the Pacific Northwest. Support for this publication was provided by FEMA, Department of Homeland Security, under the National Earthquake Hazard Reduction Program (NEHRP) State Cooperative Agreements.

Airports Damaged by Earthquakes



Northway Airport, Alaska. 40 miles from the eastern edge of the November, 2002, Denali earthquake, magnitude 7.9.*



"In 1964, a 9.0 magnitude earthquake in Anchorage, Alaska (pictured above) caused a 60-foot, 7-story control tower made of reinforced concrete to collapse, killing the 1 air traffic controller inside."***



Damage to the control tower at Sea-Tac Airport, 2001 Nisqually magnitude 6.8 earthquake.***

1989 Loma Prieta Earthquake

"6.9 magnitude Loma Prieta earthquake of 1989, San Francisco."

"Some airport support structures were moved from their original positions due to an effect called liquefaction."

"Liquefaction occurs when wet soils and sands underground temporarily behave like liquid during the violent shaking of an earthquake – and it can be very dangerous to runways built above these kinds of beds.

Liquefaction in the Loma Prieta quake caused more immediate damage at Oakland International Airport, despite OAK being even further from the epicenter than SFO. Nearly a third of the 10,000 foot main runway became riddled with numerous deep cracks up to a foot wide – the ground directly next to the runway suffered from similar cracks up to 3 feet wide. The adjacent taxiway was damaged by the same process.

In addition, both the runway and taxiway were damaged by "sand volcanoes" that appeared on the runway and taxiway, several of which spread as wide as 40 feet. These short mound-like formations sometimes bubble out of the ground when water is forced upward by building pressure; bringing soil, rocks, and even underground debris with it (sand volcanoes from the 1989 Loma Prieta quake famously brought up debris from the 1906 San Francisco earthquake.***



SURIGAO CITY, Philippines

2/10/2017 (photo at left)

"The damaged runway of Surigao Airport after a 6.7 magnitude earthquake hit Mindanao region."

(Photoville International/CERILLO EBRANO)

<https://www-eu.univweb.com/news/surigao-earthquake-damage-estimated-p500-m/>

1989 Loma Prieta Earthquake The photo below "shows a "sand volcano" created when liquefied sand "erupted" to the surface,"



When shaken strongly, unconsolidated sandy deposits that are saturated with water can liquefy and form a slurry. This process is called "liquefaction." Slurries have little ability to support the weight of man-made structures or to resist flowing downslope, even on nearly flat ground.

<https://pubs.usgs.gov/fs/1999/fs151-99/>

* The Denali Fault Earthquake of 2002, <https://pubs.usgs.gov/fs/2003/fs014-03>
<https://pubs.usgs.gov/fs/2003/fs014-03/>

** (Source/Picture from AOPA Online)

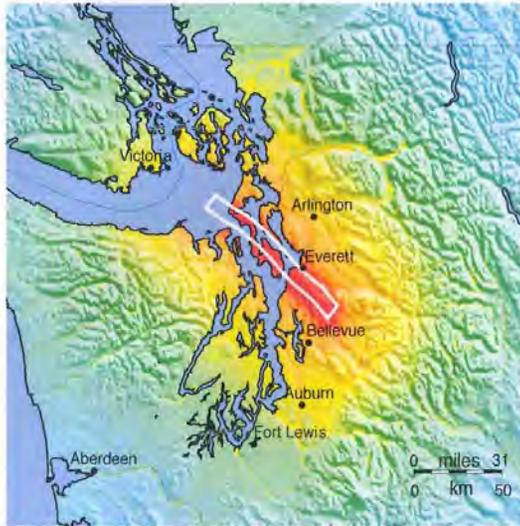
*** <http://airmedical.net/2011/03/28/earthquakes-affect-aircraft-airports-runways/>

*** <http://www.djc.com/news/co/11130873.html>

Credit Photo courtesy of ABS Consulting

South Whidbey Island Fault Zone

"Much of the Southern Whidbey Island fault zone (SWIF), which runs in a north-westward direction from Woodinville to near Port Townsend, Washington, remains mostly hidden. Geologists conclude that the SWIF is capable of producing a M6.5 to M7.4 earthquake (Kelsey et al., 2004). The ground shaking expected for a M7.4 earthquake is shown in the ShakeMap below. As with other crustal faults, any moderate or large earthquake on the SWIF will likely be followed by numerous felt aftershocks, some that could be damaging, and hundreds to thousands of smaller ones detectable only by sensitive instruments."



'ShakeMap' showing the intensity of ground shaking (colors) expected for a M7.4 earthquake on a segment of the South Whidbey Island fault (white line indicates intersection of the causative fault with the surface), overlain on topography.



The South Whidbey Island Fault (SWIF) Crosses Central Whidbey Island Very Near OLF Coupeville

"Marine seismic reflection surveys show it (SWIF) striking northwest across the eastern end of the Strait of Juan de Fuca. Just south of Victoria, British Columbia it intersects the west-striking Devils Mountain Fault (reviewed above), and either merges with it, or crosses (and possibly truncates) it to connect with the Leech River Fault."

"To the southeast the SWIF passes through Admiralty Inlet (past Port Townsend) and across the southern part of Whidbey Island, crossing to the mainland between Mukilteo and Edmonds." *

"Subsequent studies showed that numerous fault strands comprise the SWIF, located within a 6-11 km (3.7-6.8 mile) wide band."

"Evidence that the SWIF has been recently active comes from high-resolution seismic images and measurements documenting uplift of the shorelines that straddle the faults, along two coastal marshes on Whidbey Island, at Hancock Lake on the south side of the SWIF and Crockett Lake on the north side (Kelsey et al., 2004)." [emphasis added]

"If no movement on the fault strand occurred in the latter part of the last 10,000 years (Holocene epoch) both sites should have comparable sea-level histories. However, stratigraphic observations and radiocarbon dates used to construct relative sea level curves for each site diverge between 2800 and 3200 years ago, suggesting uplift of about 1 to 2 m (3.3 to 6.6 feet) along the north side of the fault strand. This amount of uplift was likely generated by a M6.5 to M7.0 earthquake, according to empirical relationships between vertical displacement versus magnitude for historical earthquakes (Kelsey et al., 2004)."

<http://earthweb.ess.washington.edu/gomberg/ShakeMap/ShakeMapGeologicSummaries.html>

<https://goo.gl/images/FCfL3B>

<http://geology.gsapubs.org/content/32/6/469/F1.large.jpg>

* https://en.wikipedia.org/wiki/Puget_sound_faults

Important Bird Areas and Bird Strikes – A Significant Hazard to Flight Operations

NATIONAL AUDUBON

Important Bird Areas Washington

Ornithological Summary

“Crockett Lake supports extraordinarily large numbers of shorebirds during autumn migration. The lake is a critically important migration staging area for 17 species of shorebirds, and for raptors such as Peregrine Falcon and Merlin that follow the migration south. The lake provides winter habitat for Bald Eagles and nine species of ducks. Whidbey Audubon Society has observed 213 species at the site. The largest concentration of Least Sandpipers ever recorded in Washington (5,000) occurred here in 1999. The lake also provides a rich foraging site for Great Blue Herons during the breeding season.”

<http://www.audubon.org/important-bird-areas/state/washington>



Crockett Lake Important Birding Area Map from the National Audubon Society

- ← Large green area is Penn Cove (water & shoreline)
- ← Fort Ebey State Park is outlined in green on the west shoreline
- ← Town of Coupeville limits are outlined in a purple dashed line
- ← NAS Whidbey OLF Coupeville is shown in light red with red diagonal lines
- ← Crockett Lake is the small green area along the southern shore (next to WA HWY 20 to the ferry)
- ← Fort Casey State Park is outlined in green to the left of Crockett Lake

<http://www.audubon.org/important-bird-areas/state/washington> ↑ “Coupeville Airpark” is a private grass landing strip

SEATTLE AUDUBON SOCIETY

Crockett Lake

“Crockett Lake is a major stopover for an extraordinary number of shorebirds during northbound (April/May), and southbound (early July/October) migrations, the best times to visit. At least 17 species of shorebirds have been recorded here, including Western, Least, Baird's, Pectoral, and Semi-palmated Sandpipers, Black-bellied and Semi-palmated Plovers, and both Greater and Lesser Yellowlegs. This cornucopia acts as an attractor for Peregrine Falcons and Merlins, and Bald Eagles and Northern Harriers are also usually added to the mix. The surrounding grasslands and marshes have Savannah, Song and White-crowned Sparrows, Red-winged Blackbirds, Marsh Wrens, and American Goldfinches. Great Blue Herons use the lake as a foraging site during the breeding season. Ducks and gulls round out the mix.”

Important Bird Areas and Bird Strikes – A Significant Hazard to Flight Operations

"Fed by runoff from the surrounding area and by inflow through the tidegate, the water levels can fluctuate greatly. When water levels are low, extensive mud flats are exposed. This mixture of marsh, open water, grasslands, and mudflats is rich with the kinds of small invertebrates that are eagerly fed upon by a variety of birdlife. As a result, **Crockett Lake attracts many birds throughout the year and is one of the most productive birding areas in the Puget Sound lowland.**" *[Emphasis added]*

Information from the Seattle Audubon website: http://birdweb.org/birdweb/site/crockett_lake/3

Penn Cove

Penn Cove is a sheltered, shallow bay on the east side of Whidbey Island, consisting primarily of marine waters and tidelands, tidal mudflats, and some estuarine habitat. The 19-kilometer shoreline includes sand and gravel beaches, rocky shore, and bluffs. Some of the beaches are spawning areas for surf smelt and sand lance.

Ownership County, city, private, federal

Penn Cove includes eight sub-tidal aquatic beds, including eelgrass, and supports a rich population of benthic invertebrates, including extensive mussel beds and numerous clam species. **The cove's main importance is as a winter foraging area for aquatic birds.** The site supports an assemblage of species associated with marine foraging areas, including 26 species of ducks, loons, and grebes. The area is used by wintering Black Turnstones, feeding and resting Surfbirds, Peregrine Falcons, Merlins, nesting Bald Eagles, and nesting Great Blue Herons. In some years, Black Turnstone counts have been the highest of all the U.S. Christmas bird counts.

Information from the Seattle Audubon website: <http://www.audubon.org/important-bird-areas/penn-cove>

Whidbey Camano Land Trust - An invaluable natural area is protected

"The Land Trust's long-term goal has been to safeguard the rich habitats of Crockett Lake to permanently protect the breeding, nesting, feeding, and resting areas for wildlife.

This area is particularly critical for migratory birds that rely on the rich feeding grounds during their fall and spring migrations.

In 2012, the Land Trust protected 148-acres — most all of the easternmost part of the **Crockett Lake wetlands.**

We worked with four separate property owners and secured a variety of funding sources, including donations of land by two owners, donation of money from a generous donor, Land Trust funds, and **grant funding from the U.S. Fish and Wildlife Service and Washington Department of Ecology (USFWS/DOE) and the U.S. Navy.**

In March 2012, the Land Trust purchased 92-acres of tax foreclosure property. News of that effort inspired Mary Bicknell to donate her 17-acres of freshwater wetlands adjacent to this purchase. Then, in October, brothers Dixon and Kelle Burgess donates 5-acres adjacent to Mary's property. In November, the Land Trust completed the purchase of 34-acres that was a significant missing piece in the new preserve using a combination of **USFWS/DOE, Navy grants** and a generous private donor."

"In the years to come, we will be working with numerous partners to remove noxious weeds, enhance the natural functioning of the wetland system, and plant trees to restore forest edges. We will also work to complete the main part of the Crockett Lake project area using USFWS/DOE grant funds as well as **Island County Conservation Futures Funds.**" *[See Whidbey News Times below]*

<http://www.wclt.org/projects/crockett-lake-2/>

Whidbey News Times: Saturday, February 10, 2017

Commissioners deny grant, calling Coupeville 'anti-Navy'

"The Stance on Coupeville taken by *[Island County Commissioners]* Johnson and Hannold has the potential for impacts beyond the town's grant request."

"Councilwoman Pat Powell is also the director of the Whidbey Camano Land Trust, which has a history of partnering with the county and has received grants in the past through the county's **Conservation Futures Fund.** The fact that Powell is part of the Coupeville council won't be lost on him when grant applications come around again, Hannold said." "I would be lying if I said it wouldn't be in the back of my mind," he said. Page A13

A13

<http://www.whidbeynewstimes.com/news/commissioners-deny-grant-calling-coupeville-anti-navy/>

Important Bird Areas and Bird Strikes – A Significant Hazard to Flight Operations

Air Installations Compatible Use Zones Study for NAS Kingsville and NALF Orange Grove FINAL, February 2013

Airfield Safety

5.1.2 Flight Hazards

Bird/Animal Aircraft Strike Hazard (BASH)

"Wildlife represents a significant hazard to flight operations. Birds, in particular, are drawn to different habitat types found in the airfield environment including hedges, grass, brush, forest, water, and even the warm pavement of the runways." Page 5-6

"Although most bird and animal strikes do not result in crashes, they cause structural and mechanical damage to aircraft as well as loss of flight time.

Most collisions occur when the aircraft is at an elevation of less than 1,000 feet. Due to the speed of the aircraft, collisions with wildlife can happen with considerable force. To reduce the potential of a bird/animal aircraft strike hazard (BASH), the FAA and the military recommend that land uses that attract birds be located at least 5 miles* from the airfield's active movement areas. These land uses include transfer stations**, landfills, golf courses, wetlands*, stormwater ponds, and dredge disposal sites." Page 5-6

"The current BASH management strategies focus on modifying or reducing favorable bird habitat surrounding airfields and initiating 'bird avoidance behavior' from specified areas." Page 5-6

"Flight operations are scheduled to avoid known bird migration patterns." Page 5-6

"Three NAS Kingsville aircraft have been destroyed over the past 10 years from large bird strikes. Small bird collisions also cause costly repair damage, accounting for approximately 55 percent of reworked engines (Earwood [Installation BASH Coordinator] 2010)." Page 5-7 (*bold text indicates emphasis added*)

www.cnmc.navy.mil/content/cnmc/cnmc_hq/regions/cnrse/installations/nas_kingsville/om/community-planning/_jcr_content/par1/pdfdownload_1/file.res/Final_NASK%20AICUZ_2013.pdf

Air Installations Compatible Use Zones Report Naval Air Station Lemoore, California, Final Lemoore AICUZ & APZ, November 2010

Airfield Safety

5.3.1 Bird/Animal Strike Hazard

"To reduce bird and animal strike hazards (BASH), the FAA and the military recommend that land uses that attract birds be located at least 10,000 feet* from the airfield. [*emphasis added*]

These land uses include:

- Waste disposal operations
- Wastewater treatment facilities***
- Landfills
- Golf courses
- Wetlands
- Dredge disposal sites
- Seafood processing plants
- Storm water ponds." DEIS Page 5-14

<https://www.google.com/search?q=Air+Installations+Compatible+Use+Zones+Report+Naval+Air+Station+Lemoore%2C+California&oq=Air+Installations+Compatible+Use+Zones+Report+Naval+Air+Station+Lemoore%2C+California&aqs=chrome..69i57.59765j0j7&sourceid=chrome&ie=UTF-8>

*Crockett Lake is located approximately 6,500' or 1.23 miles from the south end of the OLF Coupeville runway.

**The Island County Transfer Station is located approximately 6,400' or 1.2 miles from the north end of the OLF Coupeville runway.

Important Bird Areas and Bird Strikes – A Significant Hazard to Flight Operations

***The Town of Coupeville's Wastewater Treatment Facility is located 2.6 miles from the north end of the OLF Coupeville runway.

Distances calculated from Google Earth, May 2015

BASH PROGRAM *[This information came from a separate Navy document, NOT the DEIS]*

"Strikes involving military aircraft cause in excess of \$75 million in damage every year. Yet only an estimated 20 percent of actual bird strikes are reported. Because pilots and crews use the same low altitude airspace as large concentrations of birds, the prevention of bird strikes is of serious concern to the military."

"Knowing what types of birds and animals are using the airfield environment throughout the year is critical to reducing BASH risks. A Wildlife Hazard Assessment will identify areas of the airfield that are attractive to wildlife and provide recommendations to remove or modify the attractive feature."

"In knowing the species of bird involved in a birdstrike event, managers can investigate its habitat and food habits, and begin the process of reducing or eliminating the attractants."

Navy Natural Resources and Land Management Program

"The Navy and Marine Corps manage more than four million acres worldwide. Much of this land is located in sensitive wetlands along valuable coastlines, some of the most ecologically significant areas in the world."

"It is a Department of the Navy goal to promote an environmental protection ethic within the Navy workforce."

"The Department of the Navy supports numerous partnerships with other Federal, state, local and private resource groups to promote[s] such programs as the North American Waterfowl Management Plan, Neotropical Migratory Bird Conservation, Wetlands Protection and Enhancement, and Watchable Wildlife."

"To succeed in its mission, and to earn public confidence, the Navy must emphasize natural resources stewardship in every aspect of its land use. It does. Come see for yourself and discover our resources."

https://cnic.navy.mil/regions/cnrse/installations/nas_kingsville/om/operations/air_operations/bash.html

NAS Whidbey Draft EIS and Bird Management Plans

NAS WHIDBEY DRAFT ENVIRONMENTAL IMPACT STATEMENT

Biological Resources

Wildlife inhabiting the study area throughout the year increase the risk of a strike, but with the continued implementation of a bird-animal aircraft strike hazard [BASH] plan, the Proposed Action would not significantly impact local wildlife populations. Page ES-8

Migratory Bird Treaty Act and Executive Order 13186

"EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds (January 10, 2001), requires that all federal agencies undertaking activities that may negatively impact migratory birds take a prescribed set of actions to further implement the MBTA." DEIS Page 3-104

"The Final Rule authorizing the DoD to take migratory birds during authorized military readiness activities requires that **the armed forces confer with the USFWS to develop and implement appropriate conservation measures to minimize or mitigate adverse effects of the Proposed Action if the action will have a significant negative effect on the sustainability of a population of a migratory bird species.** An activity has a significant adverse effect if, over a reasonable period of time, it diminishes the capacity of a population of a migratory bird species to maintain genetic diversity, to reproduce, and to function effectively in its native ecosystem." DEIS Page 3-104

3.8.1.3 Island County Critical Areas Ordinance

The Island County Critical Areas Ordinance (17.02) provides for the protection of habitat for deserving flora and fauna, as recognized by Island County. Protected species include those listed by the federal government or the State of Washington as endangered, threatened, or sensitive. Protected species also include species of local importance, which are not listed by federal or state regulation, but are designated by Island County for their uniqueness in the county and worthiness of protection. DEIS Page 3-106

4.8 Biological Resources

4.8.2 Biological Resources Potential Impacts, Alternatives 1 through 3

"In light of the similarities between Alternatives 1 through 3, they are discussed collectively." DEIS Page 4-200

The biological resources (i.e., habitat and species) present in and around Ault Field and OLF Coupeville are similar. DEIS Page 4-200

4.8.2.1 Effects on Terrestrial Wildlife

Birds

"Bird responses to aircraft disturbances vary by species and may vary by situation (Grubb and Bowerman, 1997; Goudie, 2006). For example, nesting birds or those caring for eggs or young would presumably be more sensitive to disturbances than birds that are not caring for eggs or young. **In general, aircraft disturbances are not likely to disrupt major behavior patterns, and impacts are not expected to have an adverse impact at the population level.**"

"This section addresses these impacts in detail for bird groups that potentially occur in the study area." DEIS Page 4-203

NAS Whidbey Draft EIS and Bird Management Plans

Waterfowl

"The Navy examined Crockett Lake Important Bird Area (IBA) as an indicator of potential aircraft disturbance impacts on breeding waterfowl between the various alternatives and scenarios. Crockett Lake IBA is known to support breeding waterfowl, including Canada geese (*Branta canadensis*), mallards, and gadwalls (*Anas strepera*) (eBird, 2015a). Assuming the Crockett Lake IBA supports higher concentrations of breeding waterfowl than other areas near Ault Field and OLF Coupeville, there would be a greater potential for aircraft disturbance impacts at this location. While potential impacts on breeding waterfowl at Crockett Lake IBA would be similar under Alternatives 1 through 3, the potential for impacts at the IBA would increase with increased aircraft operations at OLF Coupeville, with Scenario A having the highest potential (refer to Table 4.1-5). However, **under all scenarios, the Proposed Action is not expected to have significant impacts on breeding waterfowl.**" DEIS Page 4-203

Raptors

Research indicates that wintering and migrating birds could be disturbed by aircraft (Ward et al., 1999; Komenda-Zehnder, Cevallos, and Bruderer, 2003). **The Penn Cove and Skagit Bay IBAs are important for wintering and migratory raptors** (refer to "Important Bird Areas" in Section 3.8.2.2 for more information). Assuming Penn Cove IBA and Skagit Bay IBA support higher concentrations of wintering and migratory raptors than other locations in the study area, there would be a greater potential for aircraft disturbance impacts at these locations. For this reason, the Navy examined these two IBAs as indicators of potential aircraft disturbance impacts on raptors during non-breeding seasons between the various alternatives and scenarios." Page 4-207

"The potential for impacts on wintering and migrating raptors at Skagit Bay IBA would increase with increased aircraft operations at Ault Field, with Scenario C having the highest potential for impacts (refer to Table 4.1-5). Conversely, Penn Cove IBA would increase with increased aircraft operations at OLF Coupeville, with Scenario A having the highest potential (refer to Table 4.1-5). However, like breeding raptors, migrating and wintering raptors in the study area have presumably habituated to the already high levels of aircraft operations and other human-made disturbances. The Proposed Action is not expected to have significant impacts on raptors using the study area during the migratory and wintering seasons." DEIS Page 4-207

Migratory Birds

"As described in Section 3.8.2.1, nearly all bird species that occur in the study area are protected under the MBTA. For military readiness activities, including aircraft operations, DoD installations are exempt from "take" of migratory birds, unless the activities may result in a significant adverse effect at the population level." DEIS Page 4-211

Bald and Golden Eagles

"It is also important to note that breeding bald eagles have been documented at Ault Field (NAS Whidbey Island, 2012) and increased aircraft operations would increase potential for impact on nesting eagles. **The potential for impact to Penn Cove IBA would increase with increased aircraft operations at OLF Coupeville, with Scenario A having the highest potential for impacts.**" DEIS Page 4-211 and 4-212

"Disturbances associated with aircraft operations would not significantly impact breeding bald eagles in the study area." DEIS Page 4-212

NAS Whidbey Draft EIS and Bird Management Plans

Wildlife Strike Effects

“The Air Force and Navy/Marine Corps report at least 3,000 bird strikes at their installations each year (DoD and Partners in Flight, 2010). However, **the actual number of bird strikes is likely higher because only an estimated 20 to 47 percent are reported, and collisions with small birds (i.e., passerines) may go unnoticed** (DoD and Partners in Flight, 2010; Dolbeer, 2015). The NAS Whidbey Island complex reported 279 wildlife strikes between November 2005 and November 2015 (Naval Safety Center, 2015a, 2015b)” DEIS Page 4-212

Birds

“At the NAS Whidbey Island complex, birds comprised 275 of the 279 reported strikes (98.6 percent) from 2005 through 2015 (Naval Safety Center, 2015a, 2015b). Songbirds, raptors, and shorebirds comprised 89 percent²⁴ of all bird strikes identified to species group at the NAS Whidbey Island complex from 2005 through 2015 (Naval Safety Center, 2015a, 2015b).” DEIS Page 4-213

“At the NAS Whidbey Island complex, more than 56 percent of reported bird strikes occurred between July and October (Naval Safety Center, 2015a, 2015b). Relatively few bird strikes—8 percent of total reports—were reported in winter (November through February). Fall migration occurs between July and October, and bird populations are at their highest point of the year because the breeding season has just ended. **Under each of the action alternatives, the number of operations would not vary by season, but based on the trends described above, the risk of wildlife, particularly bird, strikes would increase from July through October.**” DEIS Page 4-213

“Under all three alternatives, most of the operations would be conducted from 7:00 a.m. to 10:00 p.m. at both Ault Field (88 percent) and OLF Coupeville (82 percent) (refer to Section 3.1.2). **This suggests that birds would be at an increased risk of strikes because they are more susceptible to strikes during daylight hours** (Dolbeer et al., 2014).” DEIS Page 4-213

“The increase in operations would result in an increase in the potential for aircraft-wildlife strikes, and the potential increase would be similar under all three alternatives because the increase in air operations is similar. However, impacts would vary by scenario. **Assuming the IBAs supports higher concentrations of birds than other parts of the study area, there would be a greater potential for aircraft-bird strikes at these locations.**” DEIS Page 4-213

“153 of 275 (56 percent) reported bird strikes at the NAS Whidbey Island complex were identified as “Unknown Bird”. Of the remaining 122 bird strikes, songbirds, **raptors**, and shorebirds comprised 108 (89 percent).” DEIS Page 4-213

“The NAS Whidbey Island would continue to implement the measures outlined in the installation’s BASH plan to minimize the risk of a strike occurring. Therefore, it is expected that the number of bird-aircraft strikes at the NAS Whidbey Island complex would remain relatively low compared to the high number of operations. In general, bird populations consist of hundreds or thousands of individuals, ranging across a large geographical area. In this context, the loss of several or even dozens of birds due to physical strikes may not constitute a population-level impact for abundant species. **Aircraft strikes would not have significant impacts on local bird populations.**” DEIS Page 4-214

<http://www.whidbeyeis.com/>

NAS Whidbey Draft EIS and Bird Management Plans

ENVIRONMENTAL ASSESSMENT

NAVAL AIR STATION WHIDBEY ISLAND, REVISED INTEGRATED NATURAL RESOURCES
MANAGEMENT PLAN, ISLAND COUNTY, WASHINGTON, December 2013

3.4.2.6 Birds

“Over 200 species of birds, including neotropical migrants, are known to frequent the variety of habitats at NAS Whidbey Island. A comprehensive list of bird species observed at the station was compiled by the Whidbey Island Chapter of the National Audubon Society and is in the revised INRMP, Appendix D. All major taxonomic groups are represented on this list.

Neotropical migrants are bird species that migrate from summer breeding areas in North America to wintering areas in the tropics. Many of these migratory bird species have experienced alarming population declines in recent years, largely because of fragmentation and destruction of their habitats in North America and the Neotropics. Neotropical migratory bird species commonly observed at NAS Whidbey Island are presented in Table 3-6. The large number of bird species occurring at NAS Whidbey Island is due primarily to the diversity of habitat found at the station, coupled with its location along the Pacific Flyway.

Andelman and Stock (1994) identified and rated habitats that are important for neotropical migratory birds based on the extent of loss. None of the high rated habitats for loss or conversion occurs at NAS Whidbey Island. Table 3-7 lists significant habitats for neotropical migratory bird species occurring at NAS Whidbey Island and their corresponding moderately rated habitats in Washington State.

Bird aircraft strikes are a safety hazard of high concern at NAS Whidbey Island. Large numbers of birds utilize habitats on and around Ault Field including wetlands, water-bearing ditches, marine shorelines, perch sites, tall brush, and short grasses.” Page 37

https://www.navfac.navy.mil/content/dam/navfac/NAVFAC%20Atlantic/NAVFAC%20Northwest/PDFs/About%20Us/NASWI%20-%20INRMP/nwNASWI_INRMP_FINAL_EA_DEC13_rev_10JAN14.pdf

NWSTF Boardman Alternative to Increasing FCLPs at OLF Coupeville - Overview

The Navy Draft Environmental Statement concludes: "No commenter has suggested what location would be suitable for an OLF that would provide for lessened environmental impacts to the community." DEIS 2-19.

This document suggests using NWSTF Boardman as an alternative OLF FCLP site to accommodate the increased number of EA-18G Growler aircraft planned for NAS Whidbey. This alternative would result in no new environmental impacts for Ebey's Landing Historic Reserve and the Central Whidbey Island community, now, and in the future when additional aircraft are added to the NASWI fleet. This alternative could also decrease FCLPs at Ault Field while retaining the economic benefits of the Growler community in Oak Harbor.

NWSTF Boardman is mentioned in the DEIS:

Proximity to training ranges and Special Use Airspace [SUA]

The northern Puget Sound region of the Pacific Northwest has uniquely unencumbered SUA and military training routes (MTRs) due primarily to the relatively low volume of commercial air traffic. This limited air traffic and clear airspace allows this SUA and MTRs to support Growler training, including the current and future training requirements. Numerous other SUAs and MTRs that support larger installations and aviation communities are at or near capacity due in part to highly congested airspace. Additionally, through more than 40 years of operating in the Pacific Northwest, the Navy's Electronic Attack community obtained unparalleled access to electromagnetic frequency bands critical to electronic attack training. Unique training areas near Ault Field support the Growler community and include:

Naval Weapons System Training Facility (NWSTF) Boardman/Restricted Area 5701/Boardman MOA

This range provides more than approximately 47,000 acres of land and approximately 360 square nautical miles (nm²) of SUA. The property was formally transferred from the Air Force to the Navy in November 1960. NWSTF Boardman is the principal regional air-to-ground range, providing the only terrestrial impact area and restricted low-altitude training airspace for use by NAS Whidbey Island-based student and Fleet aircrews. NWSTF Boardman and its associated airspace also support occasional training requirements of other DoD [Department of Defense] units, and the SUA is used by DoD offices to conduct Unmanned Aircraft System testing and training. DEIS 2-14
<http://whidbeyeis.com/Documents/Whidbey%20Island%20for%20posting/Whidbey%20Island%20EIS%20volume%20I%20Full%20Document.pdf>

NWSTF Boardman:

- Has been owned by the Navy since 1958
- Is administered by NAS Whidbey Island and the Oregon National Guard
- Is the closest training site available for Naval Air Station Whidbey
- Presently supports NAS Whidbey EA-18G Growler training
- Provides training close to home (Whidbey) and reduces time away from families and fuel costs and usage
- Provides restricted low-altitude training airspace for use by NAS Whidbey Island-based student and Fleet aircrews
- Provides distinctive conditions and an ideal setting for the Navy and National Guard to conduct mission essential training activities
- Has approximately 360 square nautical miles or 490 square miles of Special Use Airspace
- Has more than 47,000 acres of land with at least 9,000 undeveloped acres available
- Has unparalleled access to electromagnetic frequency bands
- Supports Air-to-Ground Bombing Exercises, Air-to-Ground Gunnery Exercises, and Air-to-Ground Missile Exercises
- Is below 1,000 feet in elevation

NWSTF Boardman Alternative to Increasing FCLPs at OLF Coupeville - Overview

- Has low ambient light levels at night
- Is used for aerial gunnery practice
- Is capable of sustaining simultaneous training activities
- Is not surrounded by heavily developed areas and does not have a large urban community nearby
- _____miles from Pendelton _____
- Opened a \$1 million Operational Support and Medical Treatment building in February, 2015
- Is less than 6 miles from the Army's Umatilla Ordnance Depot

The EIS for NWSTF Boardman was approved in March of 2016. Some of the improvements included:

- Reduced the Military Operations Area floor altitude to 500 feet Above Ground Level
- Increased total flight time from 5,255 hours to 9,781 hours
- A paved runway approximately 50 ft. (15.2 m) wide and 1,000 ft. (304.8 m) long. The runway would be oriented east to west, the direction of the prevailing winds.

The NWSTF Boardman EIS received comments from a total of 16 citizens during the public comment period from September 7, 2012 through December 6, 2012, which included a 30-day comment period extension

Building an OLF at NWSTF Boardman for FLCs would eliminate the need to increase the number of FCLPs at OLF Coupeville. This would reduce environmental impacts to the Central Whidbey community such as:

- Increased noise over Ebey's Landing Historic Reserve, Coupeville Elementary School, Coupeville High School, Whidbey Health Hospital, Fort Casey State Park, Rhododendron Campground
- Increased accident potential and creation of Accident Potential Zones (APZs) with resultant devaluation of private property values and possible building restrictions
- Increased interruption of sleep during night FCLPs
- Increased noise affecting children outdoors at the schools, Rhododendron Ball Park, Ft Casey State Park and throughout Ebey's Landing National Historic Reserve
- Increased noise causing economic impact on tourism and affecting local businesses

King County, WA 98177

- 1.a. Thank You
- 4.d. Day-Night Average Sound Level Metric
- 4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance

Lopez Island, WA 98261

1.a. Thank You

7.a. Regional Land Use and Community Character

The Navy's activities amount to an expansion of a non-conforming use. The Navy's activities also amount to a taking of property rights without due process. It's simply an inappropriate activity in a residential area. The EIS checklist (topics including noise for comment) requires an assurance of conformity with land use law now in place.

Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

Open House Comments

Fill in and Submit at the Open House

1. Name [Redacted]

2. Organization/Affiliation American

3. Address [Redacted] Lopez

4. E-mail [Redacted]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like your name/address kept private

7. Please check here if you would like to receive a CD of the Final EIS

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

- 1. Evaluate impacts of the Growler at low frequencies (C-weighted, dBC).
- 2. Recognize the impacts of low frequency Growler noise on health.
- 3. Incorporate San Juan County noise reports in the EIS analysis.
- 4. Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.
- 5. Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.
- 6. Commit to Mitigation Measures and timelines in the Record of Decision.
- 7. Add your own comments here:

It's not so much the what as the where and how we all have to work together

(Continue on the back)



Public Meeting Comment Form

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]

2. Organization/Affiliation _____

3. Address [REDACTED] Lopez Island WA 98261

4. E-mail _____

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

① Do real time, on the ground noise measurements.
The noise is not averaged over days w/o noise

② Include WHO study of health effects of noise

③ Include San Juan Co noise studies

Please print • Additional room is provided on back
Please drop this form into one of the comment boxes here at the public meeting or mail to:
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
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1. Name [REDACTED]
2. Organization/Affiliation _____
3. Address [REDACTED] LOPEZ ISLAND WA 98261
4. E-mail _____
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

- ① Evaluate the low frequency noise characteristics
- ② Acknowledge with "burdens on community noise"
- ③ Incorporate San Juan Co. noise reports
- ④ We deserve a real time on the ground noise measurement.
- ⑤ Evaluate impacts on SJI National Monument & remove language stating Monument is exempt from NEPA.
- ⑥ Commit to mitigation measures with timeliness in the record of decision

Please print - Additional room is provided on back

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YOUR INPUT MATTERS

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
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- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name [REDACTED]

2. Last Name [REDACTED]

3. Organization/Affiliation _____

4. City, State, ZIP LOPEZ ISLAND WA 98261

5. E-mail [REDACTED]

6. Please check here if you would NOT like to be on the mailing list

Already on your email list

7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
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Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.

Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).

2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.

Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.

3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.

Action: Redo the noise simulation using the more recent Advanced Acoustic Model.

4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.

Action: Noise levels should only be averaged over active flying days.

5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.

Action: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."

6. The Draft includes some independent noise measurements and ignores others.

Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

- 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

- 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

- 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

- 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

- 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:

We should not be impacted from increased/increases in training FOREIGN buyers of growlers. They should train (and impact) their own citizens.

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:
EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name _____

2. Last Name _____

3. Organization/Affiliation _____

4. City, State, ZIP Anacortes, WA

5. E-mail _____

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Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:

There are times when the noise is unbearable now; this increase would be horrible.

1.a. Thank You

Anacortes, WA 98221

The Growlers are vital to our national security and should be allowed to expand and fly in Whidbey Island. I support the Growler program and the Navy.

Oak Harbor, WA 98277

- 1.a. Thank You
- 2.m. Record of Decision/Preferred Alternative

I vote for Scenario A

Oak Harbor, WA 98277

Scenario A

- 1.a. Thank You
- 2.m. Record of Decision/Preferred Alternative

Coupeville, WA 98239

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.j. Property Values

The proposed increase in Growler flights over Whidbey Island is out of the question! Too high loss of property values and business income for merchants in this rural tourist attraction

1.a. Thank You

Anacortes , WA 98221

Navy should continue and grow all existing EA-18G Growler operations at the NAS Whidbey Island complex, to include FCLP by Growler aircraft at Ault Field and OLF Coupeville. Anacortes supports the Navy's positive economic impact.

Oak Harbor, WA 98277

Scenario A

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

Oak Harbor, WA 98277

I prefer Scenario A

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

Hillsborough, WA 94010

February 23, 2017 EA-18G Growler EIS Project Manager Naval Facilities Engineering Command Atlantic 6506 Hampton Boulevard Norfolk, VA 23508 Attn: Code EV21/SS
 This letter regards the draft Environmental Impact Statement (EIS) for EA-18G Growler airfield operations at Naval Air Station (NAS) Whidbey Island Ault Field and Outlanding Field Coupeville. I understand that comments on the draft EIS may note areas for clarification to be incorporated in the Final EIS. I previously submitted to the Navy (in January, 2014) recommendation on specifics to be considered in the EIS process. My original comments are repeated below (in italics), followed by my current requests for further clarification. These current comments are based on review of the Draft Wyle Laboratories WR 16-02 Aircraft Noise Study for Naval Air Station Whidbey Island Complex, Washington (2), included as Volume II Appendix A in the draft EIS. The Navy, in its 2012 Environmental Assessment report for NASWI (1), presented theoretical NOISEMAP model predictions that flight operations with the new EA-18G Growlers would be no louder than those with the EA-6B Prowlers being replaced. These theoretical conclusions have been challenged by many community residents whose subjective, real-world impressions are that EA-18G Growlers are in fact louder than the older Prowlers. The Navy has an opportunity in the EIS process to collect additional data that will help it persuade the community that the model's predictions are accurate, and the community's experiences of the new planes are different for specific reasons that can be supported with actual evidence. The Navy should, as part of the EIS, institute a program of community noise monitoring to obtain extensive real-world data to validate the theoretical NOISEMAP predictions. It is, however, also possible that the predictions of the NOISEMAP model were inaccurate for a number of reasons, all of which the Navy should address explicitly in their EIS. 1) The 2012 NASWI EA appendix C Noise study (2) did not use available weather data specific to Oak Harbor, WA. The 2012 NASWI EA report says local average monthly weather data was "not available" (10), so unrealistic "standard" conditions were used instead. In fact, the necessary temperature, pressure, and dew point data (from which can be calculated the relative humidity) specific to Oak Harbor, WA are publicly available from at least 2 sources <http://www.wrcc.dri.edu/summary/nuw.wa.html>, or <http://www.weatherbase.com/weather/weather.php3?s=579727&cityname=Oak-Harbor-Washington-United-States-of-America>. These local data support the conclusion that the 2012 EA calculations overestimated the atmospheric sound absorption coefficient "alpha", and therefore underestimated the range of noise propagation at all frequencies, by 10-15%. The EIS should use the available local weather to more accurately predict sound propagation. We recognize and appreciate that the current draft EIS has incorporated this suggestion, and uses median annual atmospheric temperature and humidity values, as recorded by NASWI. [draft EIS, p. A-32] 2) The noise model uses abstract flight path data that does not correctly describe the real flight path data. The flight path profiles used to calculate the noise contours should be verified against actual flight data (either from aircraft GPS or radar). The Navy should cooperate to provide this data. In Europe, commercial airline flights near major airports are monitored for conformance to proposed flight paths. Not surprisingly, the two often differ. The NOISEMAP AAM software can accommodate calculations based on multiple flight paths.

- 1.a. Thank You
- 2.k. Range of Alternatives
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The Navy EIS should document that the model calculations represent the variations found in actual flight paths. We recognize and appreciate that the current draft EIS has incorporated this suggestion, and has made some effort to confirm the flight paths used by aircraft operating from NASWI. [draft EIS, p. A-20] 3) The noise model uses incomplete or inaccurate aircraft noise source data. The Navy should document exactly the data used to generate the NOISEMAP output. Remarkably, the Navy's official 2012 EA NASWI on potential aircraft noise impact does not accurately describe the aircraft subject of the study. The 2012 NASWI EA report (Figure 1-2, Section 1 page 4) indicates that the EA-18G aircraft has a wingspan of 36.5 ft, is 56 ft long, has 2 engines, each F404-GE-400, producing "16,000 pounds/engine" thrust. This is a description of the F/A-18A aircraft (at afterburner thrust) rather than the actual aircraft to be deployed. The EA-18G Growler has a wingspan of 44.9 ft, is 60 ft long, has 2 F414-GE-400 engines, each producing 22,000 ft-lbs thrust (37.5% more than the F/A-18A; more than twice the thrust of the older Prowler (10, 11). The EIS should correctly identify the aircraft by name and by design specifications (including engines and thrust). The Navy has apparently deleted from the draft EIS any specific information about the engines and thrust produced by the EA-18G. Section 4.3 of the 2012 NASWI EA says, "For the noise generated by specific aircraft, the DOD draws on a vast aircraft noise library. This library contains acoustic information on aircraft in the military inventory measured under controlled conditions. Aircraft noise characteristics from the noise library are used in NOISEMAP, adjusting the characteristics to local environmental conditions, to accurately predict the noise environment." The report does not say exactly which data were used to calculate the NOISEMAP output. The EIS should document clearly the source data for any noise modeling. That noise data should include unweighted data with frequencies as low as 8 Hz. Current Noisefile data includes no frequencies below 50 Hz. The Noisefile data for use in the AAM noise model is different than that used in the simpler older model. The necessary data should be obtained from measurements made in flight testing (7). No documentation of noise source file parameters is presented in the draft EIS. As a consequence, independent review of the data input to the NOISEMAP model is not possible. Without knowing what source noise parameters were used to calculate the community noise exposure, no conclusions can be made about the reliability of the results. The Navy can neither defend itself from nor refute criticism that the many tables, maps and graphs supporting this analysis have any relevance to the actual noise experienced by the communities affected. Recommendation: The Navy should publish all necessary details of the noise source file parameters used in the draft EIS that would allow an independent reader to verify the accuracy and suitability of those parameters. 4) The default NOISEMAP noise prediction model is simplistic; more capable models are available but were not used; a) The October, 2012 NASWI EA (1), appendix C, Wyle report WR10-22 (3) describes the use of NOISEMAP software, though the software version is not specified in the report. The Draft EIS clarifies that the current NOISEMAP analysis used version 7.2.2 of the core NMAP software, with the exception that "A prototype version of NMAP, called "nmap72na3", was used to compute the NA and Lmax metrics due to Version 7.2 not having the capability to compute them (USAF 2015)." [draft EIS, p. A-21]. The citation "USAF, 2015" specifies "Electronic mail from [REDACTED] CIV NAVFAC LANT, AM, to [REDACTED], Wyle Laboratories, Inc. and [REDACTED] GS-13 USAF AFCEC AFCEC/PPR, re: "NA metric and Growler EIS", 4 November." [draft EIS, p A-144]. According to the draft EIS, NA is "provides the total number of noise events greater than or equal to the selected noise level threshold during

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in the draft EIS. In fact, the NOISEMAP model has known limitations that make its application to EA-18G noise prediction unreliable. The following text, from a WYLE Laboratories overview of the WP-1304-TR document, "Advanced Acoustic Models for Military Aircraft Noise Propagation and Impact Assessment (WP-1304)", makes this point clearly (added bold emphasis is mine): "A number of aircraft noise models have been developed over the past several decades to estimate noise levels and assess the potential for community and environmental impacts from current and proposed flight operations near airbases, along training routes, and within special use airspaces. Classic Department of Defense (DoD) noise models are based on NOISEMAP technology, using linear acoustics and an integrated formulation. They use a common source noise database, NoiseFile, which is maintained by the Air Force Research Laboratory (AFRL), and contain basic assumptions which simplify their computational requirements while maintaining appropriate accuracy. The acoustic environments in the vicinity of newer aircraft such as the F-35, F-22, and the F/A-18E/F [the fighter version of the EA-18G aircraft] differ from those of most prior aircraft, with high noise levels associated with higher thrust engines. At those high levels, acoustic propagation cannot be modeled using the same simple linear theories employed in the classic noise models.... Moreover, the segmented flight path modeling approach typical of integrated noise models do not properly account for the complex operational and noise characteristics of the new aircraft. New models, which take advantage of today's computer computational capabilities, were needed to provide legally defensible noise assessments of current and future aircraft operations in protecting bases and airspace for training purposes, and minimizing restrictions based on noise. The objective of this project was to provide environmental specialists with tools, based on the latest technology, for assessing and mitigating the noise impact around bases and on ranges of the new generation of fighter aircraft operating under all possible weather and terrain conditions.... The information developed under this study represents a significant advance in the understanding of nonlinear propagation from high level noise sources and in the measurement of aircraft source noise levels. This will allow DoD to more accurately estimate the noise environment from aircraft operations and provide a scientific foundation for installation commanders in responding to criticisms from knowledgeable citizens on the appropriateness of these estimates. The tools developed will assist DoD in being responsive to the requirements of the National Environmental Policy Act of 1969 (NEPA) while protecting operational readiness from unreasonable restrictions based on prior limited knowledge of nonlinear noise effects." Note that this document is from the same organization (Wyle Laboratories) that the Navy contracted to write the Noise Study included in the draft EIS appendix A. The AAM model has been available since 2010. It is unclear why the Navy chose not to use the more capable AAM model in the current draft EIS. Recommendation: a) The Advanced Acoustic Model" ("AAM") as detailed in Wyle Laboratories technical report WP-1304-TR (7), should be used for theoretical noise calculations, rather than the outdated NOISEMAP model; if not, the EIS should explain why the AAM model was not used; b) The Navy should, as part of the final EIS, institute a program of community noise monitoring to obtain extensive real-world data to validate the theoretical (whether from the AAM or NOISEMAP model) predictions. Finally, the EIS should explore alternative basing scenarios for the E/A-18G squadrons. Similar aircraft types are based at more remote locations, including the NAS at Lemoore, CA. If alternative sites are not suitable the draft EIS should clearly explain and defend that conclusion. (1) "Environmental Assessment for the Expeditionary Transition of EA-6B Prowler Squadrons to EA-18G

Growler at Naval Air Station Whidbey Island at Oak Harbor, Washington Final,” (October, 2012). (2) Joseph J. Czech, P.E., Brandon Robinette and Patrick H. Kester, “Aircraft Noise Study for Naval Air Station Whidbey Island Complex, Washington,” Draft Wyle Report WR 16-02. (3) Patrick Chester and Joseph Czech, “Aircraft Noise Study for Naval Air Station Whidbey Island and Outlanding Field Coupeville, Washington,” Wyle WR 10-22, Appendix C Noise Report. (4) Ibid., p. 7-12. (5) Fred Wasmer and Fiona Maunsell, “BaseOps 7.358 User’s Guide,” Wasmer Consulting, 2013, p. 82, <http://wasmerconsulting.com/baseops.htm> (accessed Dec. 31, 2013). (6) Kenneth Plotkin, Advanced Acoustic Models for Military Aircraft Noise Propagation and Impact Assessment (WP-1304), [https://www.serdp-estcp.org/index.php/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304/WP-1304/\(language\)/eng-US](https://www.serdp-estcp.org/index.php/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304/WP-1304/(language)/eng-US) (accessed Jan., 2014). (7) Juliet Page et al., Advanced Acoustic Model Technical Reference and User Manual, SERDP Project WP-1304, <http://www.serdp.org/content/download/9133/109364/file/WP-1304-TR.pdf> (accessed Jan., 2014). (8) http://www.fican.org/pdf/Roadmap2011/2011_0900_Plotkin_Advanced_Acoustic_Model-3-Dimension_Noise_Sources.pdf (9) Kathleen Hodgdon et al., “Low Frequency Noise Study” Partnership for AiR Transportation Noise and Emissions Reduction An FAA/NASA/Transport Canada sponsored Center of Excellence, 2007, p. 39 ff.. (10) Chester and Czech, Wyle WR 10-22, Appendix C Noise Report, p. 12. (11) <http://www.boeing.com/boeing/defense-space/military/ea18g/index.page?> accessed Jan., 2014. (12) <http://www.navair.navy.mil/index.cfm?fuseaction=home.display&key=C8B54023-C006-4699-BD20-9A45FBA02B9A> accessed Jan., 2014. (13) Joint Communications Release JSF Program Office & Lockheed Martin F-35 Acoustics Based on Edwards AFB Acoustics Test (April, 2009) <http://www.foia.af.mil/shared/media/document/AFD-091124-030.pdf> , accessed Jan., 2014. Regards, [REDACTED]

February 23, 2017

EA-18G Growler EIS Project Manager
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard
 Norfolk, VA 23508
 Attn: Code EV21/SS

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- (4) Ibid., p. 7-12.
- (5) Fred Wasmer and Fiona Maunsell, "BaseOps 7.358 User's Guide," Wasmer Consulting, 2013, p. 82, <http://wasmerconsulting.com/baseops.htm> (accessed Dec. 31, 2013).
- (6) Kenneth Plotkin, Advanced Acoustic Models for Military Aircraft Noise Propagation and Impact Assessment (WP-1304), [https://www.serdp-estcp.org/index.php/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304/WP-1304/\(language\)/eng-US](https://www.serdp-estcp.org/index.php/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304/WP-1304/(language)/eng-US) (accessed Jan., 2014).
- (7) Juliet Page et al., Advanced Acoustic Model Technical Reference and User Manual, SERDP Project WP-1304, <http://www.serdp.org/content/download/9133/109364/file/WP-1304-TR.pdf> (accessed Jan., 2014).
- (8) http://www.fican.org/pdf/Roadmap2011/2011_0900_Plotkin_Advanced_Acoustic_Model-3-Dimension_Noise_Sources.pdf

- (9) Kathleen Hodgdon et al., "Low Frequency Noise Study" Partnership for Air Transportation Noise and Emissions Reduction An FAA/NASA/Transport Canada sponsored Center of Excellence, 2007, p. 39 ff..
- (10) Chester and Czech, Wyle WR 10-22, Appendix C Noise Report, p. 12.
- (11) <http://www.boeing.com/boeing/defense-space/military/ea18g/index.page?> accessed Jan., 2014.
- (12) <http://www.navair.navy.mil/index.cfm?fuseaction=home.display&key=C8B54023-C006-4699-BD20-9A45FBA02B9A> accessed Jan., 2014.
- (13) Joint Communications Release JSF Program Office & Lockheed Martin F-35 Acoustics Based on Edwards AFB Acoustics Test (April, 2009) <http://www.foia.af.mil/shared/media/document/AFD-091124-030.pdf> , accessed Jan., 2014.

Regards,



Greenbank, WA 98253

Greetings: I am responding to the Navy DEIS for OLF/Coupeville WA. The below are my concerns about this draft EIS: The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP). The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupported, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data. The DEIS misconstrued important finding of the National Park Service’s 2015 noise study at Ebey’s Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconception has to be credibly revised to properly characterize the real impacts. Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature. The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy’s defined “hazardous noise zone” threshold (i.e., an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month). Island County has unconscionably ignored the Navy’s 2005 AICUZ land-use directives for Outlying Field Coupeville, especially as reflected by construction permits issued in Noise Zone 2 areas, where the AICUZ stipulates no residences should occur, as well as other land uses. Whether due to the County’s willful intent to ignore or due to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and similar land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should immediately advocate that the County place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved. The two most dangerous aspects of flying are the approach, landing and takeoff — in other words most of the OLFC flight path. The risks are significant (a) because of unrestrained and major encroachment problems, (b) because OLFC is about 49,000 acres below and the runway about 3000 feet short of FCLP standard for Growlers, (c) because the pilots are mostly students flying the F-18 airframe which is 5.5 times more likely to crash than its EA-6B (Prowler) predecessor, and (d) FCLP operations occur at low elevations that increase likelihood of bird strikes exacerbated by the significant shoreline bird population. These risks cannot be mitigated other than by moving the FCLPs to a suitable 21st century off-Whidbey site. Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 11.d. Per- and Polyfluoroalkyl Substances
- 13.a. Environmental Justice Impacts
- 2.f. Use of Public Comments
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 4.a. General Noise Modeling
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.j. Other Reports
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

affected by overhead Growler noise. Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the related past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of the impacted wells. Leakage of PFAS in storage or their use in a crash event is a hugely relevant environmental impact that must be addressed. And the public must be given the opportunity to comment. The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was relatively complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% use projection of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected. The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the “percent probability of awakening for all scenarios...” While music torture is still permitted under US law, the United National Convention against Torture defines torture as “any act by which severe pain of suffering, whether physical or mental...” Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations. The DEIS obfuscates the effects of FCLP jet noise on classroom interruptions by averaging interruptions with periods when jets are not practicing. The average understates interruption events compared with event frequency during FCLP sessions, which are as frequent as an interruption every 1-2 minutes. Interruptions of such frequency complicate teaching and thwart student concentration and break the focus of teacher and student. In addition the EPA states, “Noise can pose a serious threat to a child’s physical and psychological health, including learning and behavior,” but the DEIS has not recognized the contemporary research. These oversights and failings must be properly addressed and reanalyzed. The DEIS fails to address the effects of noise on hearing and tinnitus and consequential medical costs associated with hearing loss by stating that civilians would need to be exposed to noise emitted by the Growlers for 40 years before there is a permanent shift in hearing. This defies all scientific and audiological evidence to the contrary, even by the US military itself. Hearing loss and tinnitus are the MOST compensated injuries in the military and increasing annually (US Dept. of Veteran Affairs.) That and failure to address the effects of impact or sudden noise must be more fully delineated. The DEIS fails to adequately address the effects of high noise levels during pregnancy that provoke significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss. In 2010, I moved to Greenbank high bluff where I thought I could spend some quiet retirement years. No one told me that the OLF/Coupeville was active. I am 3 air miles distance to the field and the sleep disturbance is hellish for me and my children. The Growlers sometimes fly from 5 pm to midnight! We cannot hold a normal conversation even in our house! My children can’t sleep until the Growlers are done, and that means they don’t go to sleep until midnight. It is not healthy for them and their fatigue shows in their school progress. I notice that you have not tested or met with any of the residents who are experiencing problems. I have personally called the Officer of the Day

many times, and asked to be called back. Not once was I called. The Growlers can fly elsewhere, they are ruining a pristine environment and do not belong. Sincerely, [REDACTED]

[REDACTED]



Public Meeting Comment Form

1.a. Thank You
12.h. Tourism

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name

[Redacted Name]

2. Organization/Affiliation

Beachcomber Cafe at Fort Puyler

3. Address

[Redacted Address] Chimacum WA 98325

4. E-mail

[Redacted Email]

5. Please check here

if you would NOT like to be on the mailing list

6. Please check here

if you would like to receive a CD of the Final EIS when available

Peace and quiet are golden
and are an economic value for
~~the~~ businesses on our Olympic
Peninsula. People come here to
enjoy our peace and quiet

Can you not go use your
"Mountain Home" property for
your training?
Please do not shred our eco-tourism
it's all we got.

Please print - Additional room is provided on back
Please drop this form into one of the comment boxes here at the public meeting or mail to:
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

1.a. Thank You
19.c. Olympic Peninsula, Olympic National Park, and at-Sea
Training
2.n. Alternatives Considered But Eliminated

1 UNITED STATES NAVY
2 PUBLIC MEETING
3 FORT WORDEN STATE PARK CONFERENCE CENTER
4 USO HALL
5 200 BATTERY WAY
6 PORT TOWNSEND, WASHINGTON
7 DECEMBER 5, 2016

8
9
10
11
12 ENVIRONMENTAL IMPACT STATEMENT (EIS)
13 FOR EA-18G "GROWLER" AIRFIELD OPERATIONS
14 AT THE NAVAL AIR STATION (NAS)
15 WHIDBEY ISLAND COMPLEX

16
17
18
19
20
21 Court Reporter: Nicole Johnson
22 Olympic Court Reporting Services
Chimacum, Washington 98325
23 (360) 732-4600
24
25

1 ██████████: I am -- well, I have two
2 public faces. I'm on the OlyCAP board, which is the
3 Olympic Peninsula community action for Clallam and
4 Jefferson. I've been on there since 1999. I'm a board
5 member. We do a lot of good stuff. I've got a real
6 leading part, liberal, in economic woes and we've -- on
7 our Olympic Peninsula, we have been facing more and more
8 job loss. We don't have fish. We don't have woods and
9 lumber. A lot of the big paying jobs where you can
10 support a family have evaporated.

11 So being resilient people, my second persona is
12 that I own the camp store, the ██████████ at Fort Flagler.
13 It's a summer job. I'm not there now. And that is an
14 economic job which is part of what I'm trying to implore
15 the Navy, because I love you guys. We're all in it
16 together. We're all in here together. Your job is to
17 protect us.

18 Well, I'm telling you that by taking and
19 shredding our golden peace and quiet of the
20 Olympic Peninsula, you're not really protecting us.
21 You're really shredding a lot of ecotourism jobs, which is
22 what we have figured out to do to make some jobs for
23 folks -- waitresses, hotels, inviting people from Germany
24 to go to the square inch of silence.

25 And that's where I think you might have some win

1 and buy-in with me is that money is hard to come by. New
2 Growlers can be in Mountain Home doing your training. We
3 cannot replace the silence that has been shredded with
4 noise that isn't that necessary to protect us, like
5 shredding our ecotourism jobs.

6 When they scream across Port Townsend, Sequim,
7 my whole thing on Fort Flagler, Marrowstone Island, is all
8 that necessary? Is there not some compromise where you
9 can go and train at Mountain Home? I'm sorry, but the
10 lizards probably are not so dependent on peace and quiet
11 as we are here.

12 It's our last thing. Don't take that away from
13 us. Peace and quiet is of economic value to our area.
14 I-5 is noisy over there. They come over here for what?
15 The travel, the raw wilderness, and the peace and quiet.
16 You want to come camping? Come to my store. I'll serve
17 you an ice cream cone. I'm done.

Victoria, British Columbia V8T 2R6

Good morning, I am writing to let you know that the reverberations from the Growlers is disturbing to me. I live across the Strait in Victoria. The rumbles are very noticeable during daytime hours and moreso at night, when the city is quiet. Every time I hear these sounds, my first thought is that we're having an earthquake. I grew up on Air Force bases and was used to the sounds of aircraft. But the rumbles from the Growlers are disturbing. I hope a way to reduce the noise or change the flight paths is found. Thanks very much!

1.a. Thank You

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.t. Noise Mitigation

seattle, WA 98108

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Hi, I would like to add my voice and vote to the protection of wildlife and marine mammals over the increase in Navy activity in Washington State. Our State is NOT immediately threatened by foreign attacks BUT OUR wilderness and wildlife IS threatened by our own lack of protection. Please do more to decrease military activity in our State for the betterment of our natural environment. Sincerely, [REDACTED]

Bow, WA 98232

2/20/17 RE: Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station (NAS) Whidbey Island Dear Navy, It is a question of volume, in every sense of the word. Over the years, the Whidbey Naval Air Station has grown in volume. The types of planes have gotten louder. And there are way more planes making way more flights every day. Having been born in Washington because my dad finished out WWII at Whidbey, I have experienced the growth in volume from the base over the past 5 decades. It seems to me we have reached the point where a whole bunch of us are starting to wonder how much more Navy jet noise do we want to live with in our area. Not just newcomers are bugged by the dramatic increases in noise from louder planes that are flying over way more often. Growing up in Anacortes, our house would occasionally shake as Navy jets flew over. Used to be you couldn't speak to another person while outside with the Navy jets overhead, now it is inside too. In the last few years, my Father-in-Law's house in Anacortes is not only frequently rattled, there are also times when you are inside and cannot hear another person speaking loudly while the plane/s are overhead. A dozen years ago, when I moved to Bow, the Navy jets flying over were loud but they didn't shake the house. The last few years, my house shakes when they fly over. Understanding that the base was there before I was here, does not mean that the base can expand forever. Nobody agreed to that then, nor would the area communities agree to that now. Now the Navy wants to expand into a much larger area, including even dramatic increases in our Parks and Wilderness on the Olympic Peninsula. The Draft Environmental Impact Statement (DEIS) does not thoroughly address any impacts from jet noise on all the areas they currently fly, let alone the proposed Olympic Peninsula areas. In fact, last week when two Growlers in formation did a low (maybe 1200'?) turn over/around my house, the shaking and noise was pretty intense. Intense enough that the livestock spooked (and they are near the coal and oil trains so are used to big/loud noises). No actual sound measuring has occurred, and no current modeling has been attempted. Any DEIS is supposed to try to evaluate actual, potential, and cumulative effects of the proposed project. In this case, where the issue is about volume, the DEIS falls way short of meeting requirements therefore it should not be accepted. Thank you for your consideration, [REDACTED] Bow, WA

- 1.a. Thank You
- 2.c. Compliance with the National Environmental Policy Act
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area

Lopez Island, WA 98261

Local Impact of Naval maneuvers on Whidbey Island After examination of the handout pamphlet and additional papers and the displays at the latest public meeting on Lopez Island I have come to several disturbing conclusions. It is very obvious that the Navy is absolutely not concerned with their impact on the local communities of both Whidbey Island and San Juan County. Outside of the supposed augmentation of the economy there is no mention whatsoever of any efforts to address the serious impacts of the noise or environmental impacts of their practices. I have found glaring misleading statements, actual contradictions, unsubstantiated measurements and general assumptions in all the information presented by the navy. Furthermore, there are several important areas that are not even addressed in any of the presentations I have seen or heard. Why is the Navy proposing this action? "...increase electronic attack capabilities in order to counter increasing sophisticated threats..." This is known as a vicious cycle and, despite the assurances of the Navy that there will be no future escalation of forces a vicious cycle necessitates continuing increases. Why NAS Whidbey Island? To me the number one misconception is that the navy is here to protect us. Basic common sense tells one that just the opposite is true in that the large and increasing presence of the Navy in this region, which would otherwise be of little significance to an aggressor; we are now a large target. Consolidating and enlarging bases makes ("...supporting every (italics mine) aspect of the Navy's airborne Electronic Attack mission...") A prime role means a prime target and this area has a big bull's eye over it. This creates a scenario whereas the military makes itself more vulnerable as well. This fact is one the navy seems loath to admit and it obviously has not learned the lesson of Pearl Harbor. The presence of a military especially one as heavy handed as ours is not about freedom; it is about fear!

- Citizens' Rights One of the very important missions of the navy should be to protect the rights of the citizens; after all, isn't that what protecting our democratic system all about? Protecting the citizens' rights should be a part of the navy's mission not apart from it as is now practiced and in fact the Navy states: "It is a priority for the Navy to promote the well-being of individuals residing in the communities surrounding its installations." This has been heretofore a false statement as the Navy has proven, time and time again, it will do everything it can to minimize the concerns of the community not in actual action but obfuscation and diminishment of those concerns. In fact the way the Navy operates today shows our military the same as any other military world-wide; it's mission makes it above all other concerns.
- Noise "Noise menace threatens man' – Noise, forever bombarding urban and suburban man, is becoming an increasing menace to his psychological and physical well-being. Little cars with oversized engines ...and jet planes are extracting high prices in frazzled nerves and poor hearing." "...acceptable noise level for a restaurant was 55 dB..." (Science News 10/15/1966) Another area of misleading information is the practice of averaging sound levels over a 24 hour period. This is covered several times in the December 2016 guide and several charts are shown. A typical misleading statement is: No designated wilderness areas and BLM owned lands with wilderness characteristics are within the 65 dB day-night average sound level (DNL) noise contours under all alternatives: no impacts!! This is an incredible statement as we all know all these areas experience short term noise levels far in excess of 65dB! The use of average is obviously a ploy to minimize the real impacts of the extreme noise

- 1.a. Thank You
- 1.d. General Project Concerns
- 1.e. Risk of Terrorist Attack
- 10.b. Biological Resources Impacts
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.m. Impacts to Marine Species and Habitat
- 14.a. Transportation Impacts
- 15.a. Infrastructure
- 18.a. Climate Change and Greenhouse Gases
- 18.d. Washington State Greenhouse Gas Goals
- 19.d. Electronic Warfare
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.f. Use of Public Comments
- 3.a. Aircraft Operations
- 4.d. Day-Night Average Sound Level Metric
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 6.a. Air Quality Impacts from Mobile Source Emissions (Jet Engine and Vehicle)

levels produced by the navy. It's like saying just because one stands near a canon that goes off periodically one doesn't have to worry about hearing loss!!

- Health To the Navy the only issue seems to be the noise generated by its jets. The electromagnetic radiation (EMR) produced by the jets should also be of serious concern. This area has been heavily studied and it has been determined EMR can and do produce a host of serious problems including brain tumors. There is a type of brain tumor Anaplastic Astrocytoma which is caused by a non-inherited genetic disrupter. The actual cause has yet to be found but EMF are suspected. Another issue is PTSD. This can occur outside of war conditions and it wouldn't be at all surprising if those who constantly deal with stressful conditions could develop symptoms of PTSD. Constant bombardment to loud noise is one such very stressful situation and, in fact, the military uses it against enemy forces. It now seems the residents of the area are considered the enemy!!
- Environment In the handout under Environmental Consequences there are 16 areas mentioned. Instead of dealing with them in total they should cover one at a time. A lot of misleading wording is used in this portion of the most recent navy hand-out. "Operations would increase stationary and mobile emissions sources." However the following paragraph states "Increases in mobile emissions may effect compliance..." They go from would to may with no quantifiers. Later it is stated "No significant impact on Climate Change or greenhouse gas emissions..." (pg. 18) but the word significant becomes nebulous and we are left to leave it to the navy to determine the level of significant. Again, the phrase "NAS Whidbey island has implemented many sustainability strategies and programs..." but the very idea of asking for a large increase in operations and material and claiming it is sustainable is laughable. Under Biological Resources it is stated: "Minimal habitat loss" and "No significant risk of striking avian wildlife". Again the word significant and in light of more aircraft and practice sessions the word significant becomes another very questionable term. Any sane person would understand when flights are increased so will avian strikes so the statement is obviously false. In the 12/27/2016 of 'The Islands Weekly' appeared a report "Orca from Salish Sea found dead in Canada". "Threats to the Orcas...are a lack of food from reduced salmon populations, compromised immune systems from toxins...loud sounds from urban areas that prevent the Orcas from communicating with each other and echolocating food." The last paragraph states: "...local wildlife are already exposed to noise from air operations and have presumably (*italics mine*) habituated to it, they would not be significantly impacted" (again pg. 18). There is the word 'significant' again! To me this is analogous to the boiling frog syndrome. Unfortunately, at some point the frog is boiled to death! We are also reaching that point!
- 3rd Party I would ask is there no independent, third party research group that can actually look at these claims and put a real meaning to the word significant'? Why is most of the information about the naval effects on our community only coming from the navy itself? And why must we submit comments to the navy and not directly to a third party group? This is clearly a conflict of interest scenario. Without an open, independent, scientific group to make final decisions we will get nowhere and, once again, our lifestyle will be sorely eroded.
- Local infrastructure One area briefly mentioned is the proposed expansion's impact on the local infrastructure but, but except for the supposed economic gain for the local businesses that is as far as it goes. The large increase in personnel will create more road congestion and the need for more services as police, licensing, food, water and on and on. This will obligate yet another burden for the local citizenry both on our tax base and also on our way of life. It will create a need for an increase in infrastructure cost of which most of the country already has a grade of D-!
- Mission It is

and has been obvious to this resident the navy simply puts their perceived mission above all other concerns. This way of thinking seems endemic to militaries the world over and one thing that should protect the civilians in which our military is supposed to support is the Constitution and the rule of law. It seems sorely lacking at this time and place. A recent article in 'The Atlantic' discussed the recent problems with China, "China's Great Leap Backward." The article discussed the "Tucydides Trap". It said "no sane American leader would chose confrontation with China." Yet our constant escalation of forces sends a clear message to our adversaries that we are preparing ourselves to a level beyond simply defense. Our adversaries, of course, respond in kind so we end up with a constant desire to escalate. The present requests to do just that proves my point. Despite the words of the Navy that they don't see any foreseeable additional increase. Any normal, sane person would see just the opposite. The scams used by our own military are analogous to those practiced by the gun, gambling and tobacco industries. In the end it is about the rights of the few over those of the many. Unfortunately, many are gullible enough to believe the present claims by the navy and it says little of the navy to make such one-sided, self-serving claims. The very survival of much of the LIFE (writ large) on this planet is dependent on the viability of those claims which is vacuous at best. Obviously the permanent residents of the area need to continue our fight for better public health standards. It has been clearly demonstrated our health and wellbeing is not a concern of the navy and, in fact, I suspect a concerted effort by the military to cover up the real impact of their practices. This is the standard modus operandi of large, powerful organizations that find themselves having to deal with a small but impacted group. When our military makes claims that are suspect or even fraudulent it not only makes the military (Navy) look bad but destroys the citizens' confidence in a force we not only subsidize with our taxes but depend on to adhere to our democratic way of life. It is too bad that this basic idea is completely foreign to the military mind!!

██████████ Lopez Island, WA 98261

1.a. Thank You

Victoria BC, British Columbia V8N 6L2

Noisest plane I've ever heard, 30 miles away here in Victoria BC

Admiral's Cove, WA 98239

My concerns about the EIS are: 1. The Navy Medical Department Hearing Conservation Program Procedures - TM 6260.51.99-2 - book tells commanders to use "noise measurement and analysis" in their Hearing Conservation Program but the Navy has not done any actual noise measurements in Admiral's Cove. 2. The Navy says it needs to use the Coupeville OLF for Field Carrier Landing Practice (FCLP) because it is realistic. But it isn't. All landings on an aircraft carrier are done on a runway that is moving around 25 MPH and might have up and down motion as well - the OLF runway doesn't move. All landings on aircraft carriers utilize an Optical Landing System that help the pilot stay on the glidescope. The OLF doesn't have a Optical Landing System. 3. No considerations have been given to alternatives - building a new runway at the OLF oriented on a different heading would move the flight path away from residential areas. 4. Recent navy claims that budget cuts have impacted the availability of properly maintained aircraft has contributed to an increase in F-18 accidents in recent years. As an example, look at the crash near NAS Oceanna a few years ago that crashed into a residential neighborhood. 5. The Navy did not include the possibility of contaminating our aquifer. The PFOA and PFOS contamination of Whidbey Island's drinking water was not mentioned in the EIS. They knew about it, and recent tests show that testing of wells near the OLF show contamination levels in excess of EPA guidelines. Increasing the number of FCLPs at the OLF also increases the chance that the use of toxic Aqueous Film Forming Foam (AFFF) would lead to further contamination of our drinking water. Thanks for your time.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 2.k. Range of Alternatives
- 3.a. Aircraft Operations
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

Maple Falls, WA 98266

Please consider the following flaws with the Navy's DEIS, 1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its "study area" is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because all flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects. 2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as "normally unacceptable" and above 75 as being "unacceptable." (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). 3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions: 1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft; 2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers); 3. 2012 EA (26 Growlers including 5 from a reserve unit); 4. 2014 EA (Growler electronic warfare activity); 5. 2015 EIS discussing electronic warfare training and testing activity; 6. The current 2016-2017 DEIS (36 Growlers); 7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160. Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville alone went from 3,200 per year to a proposed 35,100 in 2017. That's

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.a. Scope of Cumulative Analysis
- 19.b. Revised Cumulative Impacts Analysis
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.h. Cumulative Impacts on Biological Resources
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomics, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability. 4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water. 5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is “turning out fully trained, combat-ready Electronic Attack crews.” 6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The “30-day waiting period” proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts. 7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, “...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives.” According to a memo from the President’s Council on Environmental Quality (CEQ) to all federal agencies, “Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against

each other, as the runway that receives more flights will determine the “loser” among these communities. 8. The Navy has exacerbated the problem stated in #7 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, “[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to “identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . .” Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative. 9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are “tiered” for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula. 10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the “Affected Noise Environment” around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy’s ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas. 11. The Navy’s claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the “library” of sounds that comprise the basis for the Navy’s computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS that wildlife are “presumably habituated” to noise do not apply when that noise is sporadic and intense. 12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and

do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy's benefit, but does not benefit the public. 13. The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers. 14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible.

(<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>) 15. The Navy describes its activities using the term "event," but does not define it. Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them. 16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service's draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with "...opening day and associated opening weekend of Washington State's Big Game Hunting Season for use of rifle/guns." While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control. 17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed. 18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on

page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets. 19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, "...but may be developed and altered based on comments received." Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's proposal to not allow a comment period on the Final EIS would be unlawful. 20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period. 21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable. 22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant. 23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls "historic" use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of "identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam]." Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: "Remediation construction was completed in September 1997, human exposure and

contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e)." The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word "perfluoroalkyl" or "PFAS" is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>) 24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water. 25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft's flight operations and say that's all you're looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy's study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual "events," which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted. 26. Pages of boilerplate language do not constitute analysis of impacts to wildlife: Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is "greatest during flight operations." However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is "highly unlikely," largely because "no suitable habitat is present." This begs the question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area. 27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and

wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB. (<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds," (<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test. Thank you for considering these complexities as you complete the Final EIS; I, along with many other citizens care deeply about public health of all who will be affected and preserving the unique and interconnected bio-diversity of the Olympic Peninsula. Sincerely, [REDACTED]



Public Meeting Comment Form

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name
2. Organization/Affiliation
3. Address COUPEVILLE, WA 98239
4. E-mail
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

I AM A PROPERTY OWNER SOUTH OF THE OLF
 COUPEVILLE. I AM CONCERNED ABOUT NOISE POLLUTION,
 HEALTH RISK, AND FALLING PROPERTY VALUES. I THINK
 IT IS UNFORTUNATE FOR THE COMMUNITY THAT THERE
 IS A PROPOSED INCREASE IN NAVY PERSONEL AND AIRCRAFT
 ON WHIDBEY ISLAND. IT SEEMS THAT TRAINING EXERCISES
 COULD BE CONDUCTED IN UNPOPULATED AREAS.
 BUT IF THAT IS UNAVOIDABLE THEN I RECOMMEND
 THAT THE NAVY SELECT SCENARIO C OF ANY OF THE
 THREE ALTERNATIVES PRESENTED. OLF COUPEVILLE IS

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.e. Field Carrier Landing Practice Patterns
- 3.h. Runway Usage, Flight Tracks, and Altitudes

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

SURROUNDED BY MANY RESIDENTS THAT ARE ALREADY SUFFERING FROM THE CURRENT USE OF OLF COUPEVILLE, INCREASING THE GROWLER PRESENCE AT THE OLF COUPEVILLE LOCATION WILL PRESENT AN UNBEARABLE IMPACT ON INDIVIDUALS' QUALITY OF LIFE AND HEALTH FROM NOISE POLLUTION AND POSSIBLE HEALTH RELATED PROBLEMS.

PLEASE CONSIDER SELECTING AN ALTERNATIVE WITH MINIMUM IMPACT ON THE AREA AROUND OLF COUPEVILLE.

I ALSO RECOMMEND THAT ALL FLIGHT PATTERNS AT OLF COUPEVILLE INCORPORATE PATTERNS THAT MINIMIZE OYER LAND ROUTES AND INCREASE OYER WATER ROUTES. GOING TO A TWO LOOP PATTERN AT OLF COUPEVILLE RATHER THAN THE SINGLE PATTERN CURRENTLY USED WOULD ALSO DECREASE THE IMPACT FOR RESIDENTS LIVING UNDER THE FLYING ROUTES.

I APPRECIATE THE OPPORTUNITY TO OFFER INPUT AND SINCERELY HOPE THAT MY SUGGESTIONS ARE CONSIDERED.

RESPECTIVELY SUBMITTED,



For more information, please visit the project website at whidbeyeis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Coupeville, WA 98239

A main concern of PRI is the number of flights at the Outlying Field. When the jets are flying we are unable to effectively communicate with our staff and volunteers on the prairie or in our greenhouse or native plant center. We therefore shift our work during flying times to something else that does not require active or ongoing communication, that can be accomplished during the high noise level period. Should the flight operations be increased from ~5,000 to ~35,000 per year, we believe it would significantly hamper our ability to conduct our business including native plant propagation, running college courses in the summer, and prairie restoration. It would also greatly reduce and restrict the events we could have at our site for education and fundraising, both critical to our operation and mission. We greatly appreciate the sacrifice and service of the men and women who serve our country in the US Navy, and hope that a viable resolution can be found. Should the flights be increased to the proposed numbers, we doubt we could continue operations at this site, which is in itself, critical and central to our mission. Other concerns include the effect on wildlife, especially birds and the effect on people's hearing from the increased amount of noise at these frequencies and decibel levels.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

February 24, 2017

EA-18G Growler EIS Project Manager
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard
 Norfolk, VA 23508
 Attn: Code EV21/SS

1.a. Thank You
 4.n. Speech Interference (Indoor and Outdoor)
 4.o. Classroom Learning Interference
 8.b. Section 106 Process
 8.c. Noise and Vibration Impacts to Cultural Resources
 8.f. Cultural Landscape and Impacts to Ebey's Landing National
 Historical Reserve

RE: NAS Whidbey Island Complex EA 18-G Growler Draft Environmental Impact Statement,
 November 2016 Comments on the *Review under Section 106 of the National Historic Preservation Act (NHPA) and Implementing Regulations 36CFR800*

Thank you for the opportunity to comment on the Draft EIS for the continuation and expansion of Growler aircraft operations at Whidbey Island Naval Air Station in Washington state. I am a resident of Whidbey Island with a thirty-five year career in Historic Preservation. The last twenty-five years of my career were spent reviewing federal projects under Section 106 of the National Historic Preservation Act and 36CFR800. Fifteen of those years, I served as Deputy SHPO for the State of Idaho. As you can imagine, I know the Section 106 Review rather well.

1. Coordination of Processes: The letter of August 31, 2016, to John Fowler, Executive Director of Advisory Council on Historic Preservation from Kendall Campbell, NASWI Cultural Resource Program Manager, states that the Navy plans on coordinating the review processes under NHPA and the National Environmental Protection Act (NEPA). The letter then lays out the standard review process under 36-CFR800. The two processes cannot be fully coordinated without a Programmatic Agreement (PA) specific to this project. If all effects are not known and, if necessary mitigation planned and agreed upon by all consulting parties prior to the Record of Decision (ROD), the Navy is open to litigation.

The need for a PA is especially needed when one considers how much is unknown about potential effects on archaeological sites at Ault Field (see below). In other words, the Navy cannot conclude that the project will have no adverse effect on historic properties without archaeological investigations or archaeological monitoring at Ault Field. Such work can be phased in a Programmatic Agreement. Otherwise, all effects will have to be known and mitigation planned prior to signing the ROD.

2. Archaeological Sites: Page 4-189 of the DEIS states that "the Navy anticipates minimal to no impact to known or intact archaeological sites within Ault Field during construction...of the Proposed Action." The Navy bases this anticipation on the belief that all archaeological sites within the

Comments on the EA 18-G Growler Draft Environmental Impact Statement

██████████
 ██████████
 Greenbank, WA 98253

construction footprint of Ault Field were heavily disturbed during agricultural use prior to the 1942 construction of the base and during base construction. One only needs to look at the Graving Yard at Port Angeles or downtown Oak Harbor to know that intact archaeological resources may still be present, especially on the margins of past disturbance.

No archaeological review was completed prior to the 1942 base construction, and none was required at that time. Considering the environmental setting of the base, archaeological resources, including burials, were likely uncovered during that work but never recorded. Without project-specific archaeological investigations conducted according to current standards, the Navy cannot anticipate minimal to no impact on archaeological resources at Ault Field.

3. Assessment of Adverse Effects (36CFR800.5): Page 4-195 of the document states that the undertaking will have *no adverse effect* on historic properties. 36CFR800.5(a) states: *An adverse effect is found when an undertaking may alter...any characteristics of a historic property that qualify it for inclusion in the National Register in a manner that would diminish the integrity of the property's location design, setting materials, workmanship, feeling and association.*

The flight path goes directly over Ebey's Landing National Historic Reserve (EBLA) and the Central Whidbey Island Historic District, a historic district listed in the National Register of Historic Places. The Central Whidbey Island Historic District (H.D.) is listed for its significance as a rural community and landscape with a rare combination of historical and architectural properties. Ebey's Landing National Historical Reserve, centered on the Central Whidbey Island H.D., was established in 1978 as the first "Historical Reserve" within the National Park Service. Some 1 million visitors come to Ebey's annually to experience this *rural community which provides an unbroken historical record from nineteenth century exploration and settlement in Puget Sound to the present time* (Public Law 95-625).

The Navy's conclusion is erroneous that such a substantial increase (50%, 80%) in Field Carrier Landing Practice(s) (FCLP) at the OLF will have *no adverse effect* on historic properties, specifically on the Central Whidbey Island Historic District. The Navy falls back on the Navy's place in that history, which is interesting and compelling, but mid-twentieth century aircraft operations cannot be compared to the noise and vibration caused by twenty-first century aircraft.

Table 4.207 of the noise analysis for enlarged Growler fleet states that, at EBLA, outdoor speech is interrupted 1-3 times per hour in the average year. This type of averaging completely misrepresents one's actual experience while visiting EBLA when the jets were flying. The reality is that outdoor (or indoor) speech is interrupted every 5-7 minutes while the jets are flying. While attending a presentation at the Rueble Farmstead not long ago, the jets began flying and, not only were the presenters unable to complete their presentations, but also *car alarms were going off in the parking lot*. The next day's meeting at the same location was cancelled due to the jet noise. These are real life experiences for visitors, or residents, at Ebey's.

Increased jet noise will clearly have an *adverse effect* on the feeling and association of the Central Whidbey Island National District. That is, *the undertaking will introduce [more] visual, atmospheric,*
 Comments on the EA 18-G Growler Draft Environmental Impact Statement

and audible elements that diminish the integrity of the property's significant features
(36CFR800.5(a)(1)v). Physical effects on archaeological properties may also occur but are yet unknown.

I appreciate the Washington SHPO's (DAHP) comments of October 23, 2014, which also point to the long-term, or cumulative, effects. DAHP's concern is the how *"the increased and frequent noise levels [will affect] the long-term viability of historic resources as places to live, work, and recreate.*

It is incumbent upon the Navy to seek ways to avoid effects on historic properties. If effects cannot be avoided, the Navy needs to develop measures to reduce or mitigate those effects, in consultation with the Advisory Council on Historic Preservation, the Washington SHPO (DAHP), and other consulting and concurring parties.

I appreciate your consideration of these matters. If you have any questions, please contact me at [REDACTED] or [REDACTED]

Sincerely,

[REDACTED]

[REDACTED]

[REDACTED]

Greenbank, WA 98253

Cc: Allyson Brooks, Washington SHPO (DAHP)
Thomas McCulloch, Advisory Council on Historic Preservation
Stephanie Toothman, Chief of Cultural Resources, NPS, Washington D.C.

Seattle, WA 98115

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

Please extend the comment period for an additional 45 days. People in my area are only just starting to become aware of the proposal.

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to: EA-18G EIS Project Manager NAVFAC Atlantic Attn: Code EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508

1. First Name [redacted]
2. Last Name [redacted]
3. Organization/Affiliation [redacted]
4. City, State, ZIP Lopez Island WA 98261
5. E-mail [redacted]

6. Please check here [] if you would NOT like to be on the mailing list

7. Please check here [] if you would like your name/address kept private

- 1.a. Thank You
1.b. Best Available Science and Data
12.a. Socioeconomic Study Area
12.f. Economic Hardship and Impacts
12.h. Tourism
12.j. Property Values
2.b. Scope of the Environmental Impact Statement and Analysis Conducted
2.c. Compliance with the National Environmental Policy Act
2.e. Public Involvement Process
2.k. Range of Alternatives
2.n. Alternatives Considered But Eliminated
4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
4.c. Advanced Acoustic Model
4.d. Day-Night Average Sound Level Metric
4.f. Noise Measurements/Modeling/On-Site Validation
4.g. Average Annual Day/Average Busy Day Noise Levels
4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
4.j. Other Reports
4.r. Nonauditory Health Effects
4.t. Noise Mitigation
7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.

Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).

2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.

Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.

3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.

Action: Redo the noise simulation using the more recent Advanced Acoustic Model.

4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.

Action: Noise levels should only be averaged over active flying days.

5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.

Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."

6. The Draft includes some independent noise measurements and ignores others.

Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.”

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

My business is already adversely affected by jet noise.

Please pursue 'meaningful analysis' of the information available to ensure citizens meaningful protection under the regulations as they exist

1.a. Thank You

Oak Harbor, WA 98277

Growlers need to be able to fly as much as possible. Simulators are not enough to mimic the experience gained from actually flying. The pilots need all the time airborne they can to be masters of their craft and continue being the best at what they do.

January 21, 2017

To:

EA-18G EIS Project Manager
 Naval Facilities Engineering Command (NAV FAC Atlantic)
 Attn: CODE EV21/55
 6506 Hampton Blvd.
 Norfolk, VA 23508

Please find my response to the Environmental Impact Statement (EIS) for EA-18G "Growler" Airfield Operations at Naval Air Station, Whidbey Island Complex, Washington State, November 2016.

Purpose and Need for the Proposed Action

The purpose as stated in the EIS is to augment the Navy's existing Electronic Attack community at NAS Whidbey Island. I take issue with the purpose. Couldn't Growler operational readiness to support national defense requirements be accomplished at a different location, one that is less environmentally sensitive and populated? No mention is made of the other current or potential locations that could also support the need.

"Growlers" are modified Super Hornet jets. Communities near NAS Whidbey Island are well aware of the low level take off and landing training needed to mimic Navy carrier operations. Currently there are approximately 88,600 carrier landing practice flights per year from NAS Whidbey Island. The proposed action would increase the number of flights nearly 50%.

Alternatives Considered

In my nearly thirty year career with the US Forest Service we used NEPA for all projects. I am surprised that the analysis for this EIS is so limited. It basically has four alternatives, though the No Action Alternative is simply not addressed.

The remaining three alternatives have a narrow range of additional personnel and organizational choices to support the addition of 35 or 36 aircraft at the Naval Air Station on Whidbey Island. The only choice of consequence is how many additional personnel should be hired, and which airports (Ault Field near Oak Harbor, or OLF Coupeville just south of Coupeville) should be used for the additional flights.

The list of considerations used to generate the four alternatives made no mention of the significant impact to communities including those located north and south of the air bases - from Anacortes on Fidalgo Island (north) to Port Townsend, Port Hadlock and Marrowstone Island (south). The noise pollution from Growler training exercises can be excessive in Port Townsend where I live.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.d. General Project Concerns
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.m. Impacts to Marine Species and Habitat
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.j. Property Values
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.k. Range of Alternatives
- 2.l. No Action Alternative
- 2.n. Alternatives Considered But Eliminated
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.m. Supplemental Metrics
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones
- 7.e. Impacts to Recreation from Noise/Operations
- 7.g. Ebey's Landing National Historical Reserve
- 7.i. Deception Pass State Park and Other State Parks

The identification, consideration and analysis of alternatives are key to the NEPA process and objective decision-making. Each alternative should have a comparable level of detail to avoid any indication of bias. In my years of using NEPA, I found it to be an insightful process. Using a wide range of alternatives helped project managers to identify new considerations and ultimately to make the best considered decisions. The No Action Alternative is sometimes the best choice, and I saw it selected many times in my career. In the EA-18G analysis, the No Action Alternative is almost completely forgotten, leaving only the narrow range of “action” alternatives to be evaluated.

Environmental Resources Evaluated

Noise Associated with Aircraft Operations – The EIS states “...the Proposed Action would have a significant impact on the noise environment as it relates to aircraft operations at Ault Field and OLF Coupeville.” It further states that the annual airfield operations at NAS Whidbey Island would increase by approximately 46 to 47 percent. The only noise abatement plan for the increase will be training of personnel and a responsibility for each aircrew to “minimize noise impacts without compromising operational and safety requirements.”

The EIS considers a range of individuals who would be impacted by the nearly 50% increase in training flights. It states an additional 1,651 to 2,514 people from the entire “Whidbey Island complex” would be “highly annoyed by outdoor sound levels.” I suggest that the number of people annoyed would be much higher. In Port Townsend the current Growler flight noise levels can be loud and distracting inside our house with all the windows shut.

State and federal outdoor recreational treasures are not mentioned in the EIS. Ebey’s Landing National Historical Reserve, part of the National Park Service, preserves and protects historic farms and rural history near Coupeville. Several incredible state parks are nearby: Deception Pass, Fort Casey, Fort Ebey, Fort Flagler and Fort Worden.

My husband and I have visited Deception Pass State Park several times when the noise level from Growler training was so high that we could not shout at one another and be heard. The sequencing of the training is persistent; one flight after another occurs at very low level continuing for many hours. One time we had reservations for three nights at Deception Pass State Park campground and the first night was so horrible that we checked with the Park Host the next morning to find out if the training would continue for the next two nights. He said the problem with the Navy exercises is that they give no indication when they will occur. We left the campground, not wanting our vacation to be further ruined.

Land Use – The EIS acknowledges that each of the action alternatives would result in an increase in the land area affected by noise pollution. The EIS states “Due to increased noise exposure from Growler operations, a range of impacts from long-term minor to long term moderate would be expected at the federal, state and local recreation areas.” It is certainly true that a 50% increase in training flights will have a big affect upon outdoor recreational areas and experiences. The recreational public has a choice of where they go. After one experience of Growler training few will return for more.

Public Health and Safety - Growler aircraft are known to have a high rate of aircraft mishaps. The EIS mentions an increased potential for bird-animal aircraft strike hazards. Might a location away from known bird migration be better suited? The EIS suggests that there may be a need for more Accident Potential Zones (APZs), though none are currently planned. How APZs help local communities at risk is uncertain? The EIS further indicates that between 426 and 678 more school children will be subjected to noise pollution described as causing them to be “highly annoyed by outdoor sound levels.” However, no “proven” research indicating a “positive correlation between noise-related events and physiological changes in children” could be found. No mention is made of health impacts to adults who would be negatively affected.

Biological Resources – No scientific studies were used to evaluate the noise pollution impact upon terrestrial or marine habitat. The EIS states: “Animals in the study area are already exposed to a high level of long-term aircraft operations and other human-made disturbances to which they have presumably habituated.” That statement seems lame for an EIS. Clearly there must be research in this area if more effort was made to find it.

Socioeconomics – The EIS implies that new building construction, new employment, new tax receipts and increased school enrollment from an influx of Navy personnel will provide a benefit to the area. No mention is made of the economic affects the area would experience from loss of recreational income and reduced property values because fewer people would be willing to live and work there. These affects could reach from Anacortes in the north to Port Townsend in the south. Recreational use can have many auxiliary economic benefits. The value of recreation locally and in the wider NW Washington area should be addressed in the EIS.

Summary

The EIS for EA-18G “Growler” Airfield Operations at Naval Air Station Whidbey Island Complex appears poorly conceived and incomplete. The EIS does not paint a true picture of the effects of the Proposed Action.

The Navy did not provide peer reviewed studies to determine the negative impact upon property values, tourist economy, quality of life in the affected area, short and

long term health impacts from noise pollution to people living or recreating, or the impact upon aquatic and terrestrial animals. More importantly, the EIS gave no alternative locations where Growler training could be accomplished more safely, and with fewer anticipated adverse effects.

Sincerely,

[Redacted signature]

[Redacted name]

[Redacted address]

Port Townsend, WA 98368

CC:

Representative Derek Kilmer
<https://kilmer.house.gov>

Senator Patty Murray
www.murray.senate.gov

Senator Maria Cantwell
www.cantwell.senate.gov/public/index.cfm/email-maria

victoria, British Columbia V8V 2N6

1.a. Thank You
4.t. Noise Mitigation

sound of the jets is surprisingly loud in the Douglas/Dallas Streets area of Vixtoria. Generally one gets used to the roar other than in constant 24-hour operations which become significantly harder to take. If there is some way to reduce take offs and landings to cut this intensity it would be very helpful. I do not believe, however, that this should come at the expense of the Navy's proficiency.

Seattle, WA 98178

I am against ANY activities by the U.S. Navy in the air, water, or land of the Olympic Peninsula, whether or not it has to do with Growler operations on Whidbey Island. The plans, which impact several Native American reservation tracts, and will cause immeasurable harm to wildlife in and out of our national parks, should be cancelled, as they cannot possibly pass an Environmental Impact Report.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 9.a. Consideration of Tribes

Greenbank, WA 98253

Noise levels in Coupeville are already unacceptable, particularly near the hospital, recycling center, and schools. Stability of the bluffs and effects on groundwater have not been addressed.

1.a. Thank You

11.a. Groundwater

16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)

Coupeville, WA 98239

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.m. Record of Decision/Preferred Alternative

I wanted to give my input and comments with regards to the options presented by the US Navy EIS study. I feel that it generally gives me very little choice to mitigate the effect on the effect of an increase in Growler flights at OLF on my family and property. It is mostly just a selection of "the best of the the worst case scenarios". Obviously the Navy is going to increase its presence on the island quite a bit. I'm afraid that the past flying that we have experienced over the past 26 years(or lack thereof in comparison to where we are heading) will be a fond memory. I'm sure the options are there to divert the planes to another touch & go field, but \$\$\$ will appear to be a factor in the Navy's decision on this particular item. If I need to choose an option, besides seeing any increase at all, then I would prefer Scenario C with less future traffic on OLF. It's a selfish choice of course, but it seems to me that 21,000 - 35,100 touch and go Grolwer flights at OLF is a bit over the top for an area like Central Whidbey Island. I have never considered selling my house and moving, but honestly thought about it the other day when I read the EIS study. It's the way of the world I suppose and time will tell. The opening of previously lesser used flight patterns is also a disappointing development as one of them runs right over my house in Coupveille No. 14 I believe - which is actually a fair distance from the OLF field. Having given my input, I would hope that my comments and scenario choice are taken into consideration in the determination of what the US Navy and its planes will do at the end of the day. However, I expect that the majority of this activity was predetermined and planned a long time ago and what we are experiencing now, and most recently in the past few years, is a bit of window dressing to try and calm the waters. It is what it is, and at the end of the day I'll still say - "Go Navy !!" Sincerely, [REDACTED] Coupeville, WA

Greenbank, WA 98253

Dear Sir: WhidbeyHealth Medical Center in Coupeville is Whidbey Island's only full service hospital. I understand that NASWI has decommissioned its ER, so I suppose WhidbeyHealth must now be the venue for ER services for our Naval personnel also. I understand that the DEIS has not delineated APZ zones, but that it is possible that WhidbeyHealth would be in an extended APZ zone, and that hospitals and other medical facilities are incompatible uses in APZ zones. I also understand that the DEIS did not do sound modeling for WhidbeyHealth because it was considered to be close enough to Coupeville Elementary School for the same sound modeling to cover both. I understand that sound modeling showed that sound levels at Coupeville Elementary could reach as high as 98 dBI at least once per day. This is disconcerting since I understand that OSHA considers sounds over 85 dBI to be harmful to human health. If these understandings are incorrect, I would request that the Final Environmental Impact Statement spell out why and how these assertions have been determined to be incorrect. I have a grandson who spent most of a year in the hospital, including weeks in the ICU, with a diagnosis of Leukemia. He beat overwhelming odds by surviving. He assures me that it was very touch and go and that a tranquil environment was an important factor in his survival. No family should ever have to wonder whether noise was a straw that broke the camel's back in a life-or-death struggle, and no airman should ever have to wonder about that either. Please give the utmost consideration to insuring that the quality of care at WhidbeyHealth will not be affected by the proposed Growler expansion. Thank you.

- 1.a. Thank You
- 12.l. Community Service Impacts
- 4.l. Points of Interest
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones

Greenbank, WA 98253

I have attended birding classes in the area of the propose OLF expansion. Bird song and sound are an integral part of this experience. I know that some make a living from catering to birders in the area. I am aware that there are many studies demonstrating that noise impacts the ability of birds and other wildlife in their behavior, including prey finding or avoidance and mating. I understand that the DEIS does not address the impact of the proposed significant increase in flight operations and noise on avian migration and habitat, particularly regarding wetland and shoreline species. The whales in our waters are very important to us, for pleasure, tourism, and research. I am aware that most noise impact studies on marine mammals have focused on shipping, sonar, and seismic testing. However, it has also been shown that noise can affect the behavior of humpback whales more than 120 miles from the noise source, and that noise has been shown to increase stress hormones in right whales. I ask that in preparing the FEIS, inquiry be made of the New England Aquarium, a leader in research in this area, about potential marine mammal impacts of the proposed great increase in FCLPs at the OLF. The economic value of wildlife and wildlife viewing would be hard to replace in the limited economy of central Whidbey Island. The intangible and way of life benefit is irreplaceable. The No Action alternative is the only option that will preserve both the economy and intangible values of central Whidbey.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.l. Bird Migration
- 10.m. Impacts to Marine Species and Habitat
- 12.o. Cost-Benefit Analysis
- 2.l. No Action Alternative
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Greenback, WA 98253

1.a. Thank You
12.a. Socioeconomic Study Area
12.d. Population Impacts

It is my understanding that the OLF runway is presently inadequate for safely and efficiently handling the Growlers, and that one of the two "racetracks" at the OLF is also ill tailored to use by the Growler aircraft. I also understand that weather characteristics, such as a strong south wind, will cause cancellation of FCLPs on many days. Further, the possibility of "high tempo FCLP years" is contemplated as a possibility. I assume this would be because military events might require expedited and intensive training. I certainly have no military or aviation expertise, but even as a layman I must question the wisdom, in view of the above factors, of siting almost all Growlers and all Growler FCLP training on an island that is in a potential catastrophic earthquake zone. Surely it would be militarily prudent to have more than one site for training and maintaining such critical aircraft? I ask that the final Environmental Impact Statement address these concerns.

Greenbank, WA 98253

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

If there must be an expansion of FCLPs on Whidbey Island, I would ask that a commitment be made to neither store nor use fire fighting foams containing PFOA and PFOS on the Island. Keep this stuff on the ships! I do not believe my well is at risk, but I know many who are—including the Whidbey Island Nordic Lodge, of which I am a member. We have very limited water resources here and there is no alternative water source for our aquifers and wells. It should be mandatory for the Navy to take every possible step to avoid contaminating it.

Greenbank, WA 98253

I am a member of Whidbey Island Nordic Lodge, a recognized affiliate of the Sons of Norway, a non-profit cultural and community service organization. I am very familiar with the needs and operations of the Lodge because I am on the Board. With a bequest by a member, a building of approximately 3000 square feet, toilets, and a full commercial-level kitchen was constructed near the intersection of Jacobs Road and Highway 20. We also have an outdoor trail and outdoor game space such as a horseshoe pit. Our activities include speakers on various topics, movies, a book club, a singing group, music programs, banquets, a language study group, craft classes, cooking classes, and presentations by local school students. As anyone who has been present when the OLF is in use can attest, none of these activities can be carried out without stopping all conversation until the jet has left the area. Where flights are not excessive, particularly if announced in advance, our functions can continue. According to the the Navy's December 2016 guide to the draft EIS, expansion of OLF flights of up to 575% is being proposed. Even if evenly distributed, that would be approximately 675 flights per week. Such a massive expansion would make all of our activities difficult or impossible. The Lodge building is maintained by renting out the facilities. Our renters have included Yoga and Tai Chi classes, wedding rehearsals and dinners, the Saratoga Symphony, Christian Congregation (monthly—as a church), Dances, the Lions, the Soroptomists, the Whidbey Island Conservation District, Island County Health septic classes, high school reunions, the Girl Scouts, and numerous groups for holiday or fundraiser dinners. All of these renters are subject to noise disruption, and some, such as the Saratoga Symphony, are simply unthinkable under the proposed OLF expansion. The loss of rentals that would likely accompany a massive increase in OLF flights would leave Whidbey Island Nordic Lodge unable to raise funds to maintain our building. According to the the Navy's draft EIS, pp 3-44 and 4-118, the proposed expansion would put the building in the conceptual APZ1. Besides further eliminating rental income—certainly no County agency is likely to be foolish enough to rent from us in an APZ1 zone— this brings into doubt our ability to obtain insurance, and subjects us and our parent organization, The Sons of Norway, to very substantial potential liabilities. We note that the Navy's own 2013 AICUZ brochure proposes that our building and all of its uses are incompatible with an APZ1 designation. We ask that when considering the expanded use of the OLF that the Navy recognize that it would likely result in the effective destruction of the Whidbey Island Nordic Lodge. We would also note the presence of an outstanding charitable organization, Ryan's House, which would be equally or more severely affected by the proposed expansion. Ryan's house provides housing for homeless or at risk youth on Whidbey Island. The Nordic Lodge is currently talking to Ryan's House about how we could help them. Please also consider the interests of Ryan's House in making your determinations.

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 4.i. Points of Interest
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference

Greenbank, WA 98253

I have had a grandson play and practice for Little League baseball at Rhododendron Park, which is near the OLF. I understand that last year a 130 db level was recorded at these fields for a cumulative 2.5 minutes, during a game, well over the level the EPA says is enough to cause permanent hearing loss. I would never allow a child or grandchild to be outdoors in such noise, and I can't imagine that either a game or practice for a game would be beneficial under regular noise at a much lower level than that. I have another grandson who participated in Soccer camp at Ft. Casey, one of the activities enjoyed annually by hundreds of children at Ft. Casey. I would not consider enrolling a child in one of these camps if there is to be regular, intrusive noise there. Please note that an extensive bike path has been installed from Coupeville to Rhododendron Park, enjoyed by locals and visitors alike, bringing money into the community. The loss of money, enjoyment, and activities that the proposed Growler expansion would bring are very real to us. Please take our interests into consideration in determining whether to do ALL Growler FCLPs on Whidbey Island. Thank you.

1.a. Thank You

12.h. Tourism

4.l. Points of Interest

4.n. Speech Interference (Indoor and Outdoor)

4.q. Potential Hearing Loss

1.a. Thank You
12.j. Property Values

Greenbank, WA 98253

The DEIS recognizes that the jet noise at NASWI and the OLF reduces property values. The .5% per decibel the DEIS reaches is the lowest figure I've seen, others ranging from .6% to up to 2.3%. We once made an offer for a piece of property in the Coupeville area. We received the airport noise notice, but we thought we could tolerate a little airport noise for a great view. The deal fell through, and later we revisited the area looking for other property. The jets were flying that day and we were astonished by the level of noise. We can assure you that for us the loss of value in the OLF noise zone was 100%, because we would not care to live with that level of noise for free if we could avoid it. We feel quite certain that the proposed OLF expansion will cause very serious property value losses. We hope the FEIS will take full account of the financial losses the Coupeville community is going to suffer. The loss of property value in the Coupeville area will adversely affect every property owner in the county. I am very well aware that the sum to be raised by property taxes is fixed and is apportioned among property owners by the value of their property. Right now our family spends approximately the same amount for property taxes and food. This is surely enough. If property values in Coupeville go down, our property taxes, and those of our neighbors, will go up. Please reconsider the apparent decision to site virtually the entire Growler fleet in Island County. Such an action would cause economic harm to every landowner in the county, even those that live or have businesses far from NASWI and the OLF. Thank You.

Greenbank, WA 98253

Dear Sir: I believe the Draft Environmental Impact Statement recognizes that noise has a negative effect on children's learning and cognitive abilities and that if the Growler expansion at OLF goes through, over 3000 children will be living in areas that by the Navy's own standards are not suitable for residential use. These children are not statistics. They have names and faces. My grandson was once one of them. I understand that the sound modeling produced by the Navy for the DEIS showed that sound levels at the elementary school could reach as high as 98 dBI at least once per day. This is disconcerting since I understand that OSHA considers sound over 85 dBI to be harmful to human health. It is my understanding that the World Health Organization has determined that background noise during school teaching sessions should not exceed 35 dBI. I have heard it alleged that the proposed Growler expansion might involve hundreds of interruptions at levels that not only exceed 35 dBa but at levels that effectively impede conversation. If this is not so, the Final Environmental Action Statement should say so and should spell out how this determination was made. I live in the Coupeville School District. The schools get part of their funding from mandatory property taxes and part from additional taxes that must be approved by the School District voters. I no longer have family attending the Coupeville schools but I always vote in favor of the extra taxes, because I believe that just like our airmen, our children deserve the best training possible. If the Coupeville Schools will no longer be able to provide such a level of training because of the Growler expansion, I would ask that the Navy consider furnishing the funds necessary to open a school at a better location and bus children to that location. Our community could never afford to carry out such a transfer unassisted—the entire annual county budget is less than the cost of a single Growler. Thank you.

- 1.a. Thank You
- 12.m. Education Impacts
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects

Greenbank, WA 98253

- 1.a. Thank You
- 2.a. Purpose and Need
- 2.n. Alternatives Considered But Eliminated

Dear Sir: I would like to make a comment on why I think it would be a public relations mistake, and possibly a major mistake, for the Navy to continue with its plans, as set forth in the DEIS, of greatly expanding the use of NASWI for the Growlers. I attended one of the public meetings for the DEIS. The naval personnel at the meeting were mostly young and were unfailingly polite and attentive. Any family, community, or commander would be proud of them. The same cannot be said for some of our local politicians. We are at a state of near civil war on this island. Perhaps those local politicians are banking on the deep and passionate support that the Navy enjoys in much of the community. I have seen this kind of deep and passionate support before. After the Iraq war began, the island, particularly Oak Harbor, exploded with "Support Our Troops" signs and yellow-ribboned themed bumper stickers. It was difficult for anybody to get a hearing on a comment not supportive of the war. Then, about 3 years after the war began, things began to change. The signs and bumper stickers slowly became a fraction of what they were before. Instead of vociferous support for the war, overheard comments started to be from Gold Star mothers denouncing the war and veterans talking about how it ate at them to oppose their commander in chief, but they were going to do it. I believe a similar reversal is possible regarding the Growler expansion. The question could shift from "Why do we have to have ALL the Growlers here?" to "Why do we have to have ANY of the Growlers here?" For example, I recall reading last year about the loss of one of the Blue Angels. I believe this plane went down on take-off and crashed about 2 miles from the runway. The pilot did not eject, and it was speculated that he had stayed with the disabled plane to try to keep it from crashing into an apartment complex. Should such a catastrophe occur here, all the questions, objections, and requests the Navy is now receiving about the Growler expansion would burst forth at a decibel level exceeding that of a Growler. That would be a fast change. A slow change is also a possibility, as constant pressure can be expected to be exerted on our congressional representatives, our governor, and the Navy to change things or to provide substantial compensation for such of the community losses as can be monetized. I understand that the Navy needs to place these planes. I request that the Navy consider whether in seeking to put all its additional assets on Whidbey Island it is not jeopardizing the assets it already has here. Thank You.

Greenbank, WA 98253

1.a. Thank You
12.n. Quality of Life
12.o. Cost-Benefit Analysis

Dear Sir: We moved to Whidbey Island to enjoy the scenic beauty and rural quality of life that it offers. Whenever friends and family visit, we take them to see Ebey's Reserve, the Lighthouse, and Ft. Casey, because we want to show off our island. It is heartbreakingly obvious that an increase in operations from 6100 per year to up to 35100 operations per year will bring our continued enjoyment of these visits into question. This is a quality of life intangible. Just because it is intangible does not mean it is of little importance. Please give more attention to such intangibles in the FEIS and in making your decision about Growler placement. Thank You.

Greenbank, WA 98253

1.a. Thank You
12.e. Agriculture Analysis
6.f. Fuel Dumping

Dear Sir: I do not think the draft Environmental Impact Statement is paying enough attention to the interests of agriculture on Whidbey Island. Maintaining an agricultural presence has been an important goal in central Whidbey, and I know some farmers have contended that the very considerable increase in flights being contemplated threatens their business by making it oppressive or unhealthy to spend long hours daily in the fields. I have also heard concerns about fuel dumping or fuel vapor pollution resulting from the massive proposed increase in operations. The Navy may be dismissive of this, but local residents are not. I have personally been told by farmers that it would be better to buy from them because some of the other farms are under the jets. Please do not underestimate the psychological, as well as the financial aspects, of such factors. Thank you.

Langley, WA 98260

The Growlers are simply too loud for frequent use in a populated area. They are disruptive of daily life. Increasing flights will have a negative impact on business, tourism, and people's ability to live a normal life unhindered by excessive noise.

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.n. Quality of Life

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:
EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name _____

2. Last Name _____

3. Organization/Affiliation _____

4. City, State, ZIP Lopez Island, WA 98261

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

Please consider the 12 comments above and find a way to redirect the aircraft so it does not impact negatively our health + well being.
Sincerely,
[Redacted Signature]

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name [Redacted]
2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military) *Have lived here since 1982*
Resident, business owner
3. Address [Redacted] *Business [Redacted], Coupeville, WA 98227*
4. Email [Redacted]

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- ^{aquifer} Aquifer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

- Why put a noise source on Whidbey? = Least likely, they would be distributed around location, & it places an unbearable burden on Whidbey & the surrounding area.

- The increased noise with jet noise & the proposed increase in flights will make it impossible for those of us living & working in the noise zone.

- The economic impact of down zoning the impacted areas for land owners, business owners & local governments will be significant - and unwanted.

- Who will pay for the relocation of the jetifier (Island Transit, the County dump, possibly the middle/high school) in the crash zone, much less the loss of value for property owners?

- The noise modeling does not reflect true impact of these jets, like true measuring.

- Alternative placement of these jets has not been considered - must be. The EIS is not accurate or complete!

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Oak Harbor, WA 98277

I am concerned with a number of things in the EIS: -other locations were not considered seriously, leaving all options on Whidbey. This is not a thorough exploration. -the EIS should be re-written using actual rather than modeled noise data to more accurately predict public health, economic, and environmental impacts of increased EA-18G training. -we need assurances that in the final EIS all ground water contaminants at Ault Field and OLF Coupeville are below EPA thresholds prior to any increase in EA-18G numbers. -The final EIS should propose exact APZs around the OLF, with adequate compensation to Local Governments for all recommended private property downzoning, prior to any operational increases at OLF Coupeville. -the EIS does not address the decrease in property value for owners within the noise zone if the amount of flights increase. -the EIS does not address the decrease in quality of life for those of us in the noise zone. I look forward to a final EIS which addresses my points. Thank you for the opportunity to comment. [REDACTED]

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 2.k. Range of Alternatives
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 5.a. Accident Potential Zones

Coupeville, WA 98239

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP).

Coupeville, WA 98239

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports

The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupportable, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

Coupeville, WA 98239

1.a. Thank You
4.j. Other Reports

The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts.

Coupeville, WA 08239

1.a. Thank You

4.q. Potential Hearing Loss

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy's defined hazardous noise zone threshold (i.e., "an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month")

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

Coupeville, WA 98239

1.a. Thank You

7.c. Noise Disclosure

Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy's 2005 AICUZ directives for Outlying Field Coupeville, such as no residences in a noise zone 2. Whether due to willful intent to ignore by the County or to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and attendant land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should be immediately advocating to the County to place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved.

Coupeville, WA 98239

1.a. Thank You

13.a. Environmental Justice Impacts

Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Environmental Impact Statement Comment Form
 EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

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The loss of property value in the Coupeville area will adversely affect every property owner in the county. By past employment experience, I am very well aware that the sum to be raised by property taxes is fixed and is apportioned among property owners by the value of their property. Right now our family spends approximately the same amount for property taxes and food. This is surely enough. If property values in Coupeville go down, our property taxes, and those of our neighbors, will go up. Please reconsider the apparent decision to site virtually the entire Growler fleet in Island

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.d. Program of Record for Buying Growler Aircraft
- 2.l. No Action Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.d. Arrivals and Departures
- 4.l. Points of Interest
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 6.f. Fuel Dumping
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

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Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

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This is a quality of life intangible. Just because it is intangible does not mean it is of little importance. Please give more attention to such intangibles in the FEIS and in making your decision about Growler placement.

Thank You.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

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Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

I have had a grandson play and practice for Little League baseball at Rhododendron Park, which is near the OLF. I understand that last year a 130 dbL level was recorded at these fields for a cumulative 2.5 minutes, during a game, well over the level the EPA says is enough to cause permanent hearing loss. I would never allow a child or grandchild to be outdoors in such noise, and I can't imagine that either a game or practice for a game would be beneficial under regular noise at a much lower level than that. I have another grandson who participated in Soccer camp at Ft. Casey, one of the activities enjoyed annually by hundreds of children at Ft. Casey. I would not consider enrolling a child in one of these camps if there is to be regular, intrusive noise there. Please note that an extensive bike path has been installed from Coupeville to Rhododendron Park, enjoyed by locals and visitors alike, bringing money into the community. The loss of money, enjoyment, and activities that the proposed Growler expansion would bring are very real to us. Please take our interests into consideration in determining whether to do ALL Growler FCLPs on Whidbey Island.

Thank you.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
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Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

If there must be an expansion of FCLPs on Whidbey Island, I would ask that a commitment be made to neither store nor use fire fighting foams containing PFOA and PFOS on the Island. Keep this stuff on the ships! I do not believe my well is at risk, but I know many who are—including the Whidbey Island Nordic Lodge, of which I am a member. We have very limited water resources here and there is no alternative water source for our aquifers and wells. It should be mandatory for the Navy to take every possible step to avoid contaminating it.

Thank You.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
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6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

It is my understanding that the OLF runway is presently inadequate for safely and efficiently handling the Growlers, and that one of the two "racetracks" at the OLF is also ill tailored to use by the Growler aircraft. I also understand that weather characteristics, such as a strong south wind, will cause cancellation of FCLPs on many days. Further, the possibility of "high tempo FCLP years" is contemplated as a possibility. I assume this would be because military events might require expedited and intensive training. I certainly have no military or aviation expertise, but even as a layman I must question the wisdom, in view of the above factors, of siting almost all Growlers and all Growler FCLP training on an island that is in a potential catastrophic earthquake zone. Surely it would be militarily prudent to have more than one site for training and maintaining such critical aircraft? I ask that the final Environmental Impact Statement address these concerns.

Thank you.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

I am a member of the Audubon Society and have been on their birding trips in the Coupeville area. I know that birds song and sound are an integral part of this experience. I know that some make a living from catering to birders in the area.

I am aware that there are many studies demonstrating that noise impacts the ability of birds and other wildlife in their behavior, including prey finding or avoidance and mating. I understand that the DEIS does not address the impact of the proposed significant increase in flight operations and noise on avian migration and habitat, particularly regarding wetland and shoreline species.

The whales in our waters are very important to us, for pleasure, tourism, and research. I am aware that most noise impact studies on marine mammals have focused on shipping, sonar, and seismic testing. However, it has also been shown that noise can affect the behavior of humpback whales more than 120 miles from the noise source, and that noise has been shown to increase stress hormones in right whales. I ask that in preparing the FEIS, inquiry be made of the New England Aquarium, a leader in

research in this area, about potential marine mammal impacts of the proposed great increase in FCLPs at the OLF.

The economic value of wildlife and wildlife viewing would be hard to replace in the limited economy of central Whidbey Island. The intangible and way of life benefit is irreplaceable. The No Action alternative is the only option that will preserve both the economy and intangible values of central Whidbey.

Thank you.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name** _____
2. **Organization/Affiliation** citizens, retirees
3. **Address** _____ Greenbank WA 98253
4. **E-mail** _____
5. Please check here _____ if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

We are members of Whidbey Island Nordic Lodge, a recognized affiliate of the Sons of Norway, a non-profit cultural and community service organization.

With a bequest by a member, a building of approximately 3000 square feet, toilets, and a full commercial-level kitchen was constructed near the intersection of Jacobs Road and Highway 20. We also have an outdoor trail and outdoor game space such as a horseshoe pit. Our activities include speakers on various topics, movies, a book club, a singing group, music programs, banquets, a language study group, craft classes, cooking classes, and presentations by local school students. As anyone who has been present when the OLF is in use can attest, none of these activities can be carried out without stopping all conversation until the jet has left the area. Where flights are not excessive, particularly if announced in advance, our functions can continue. According to the the Navy's December 2016 guide to the draft EIS, expansion of OLF flights of up to 575% is being proposed. Even if evenly distributed, that would be approximately 675 flights per week. Such a massive expansion would make all of our activities difficult or impossible.

The Lodge building is maintained by renting out the facilities. Our renters have included Yoga and Tai Chi classes, wedding rehearsals and dinners, the Saratoga Symphony, Christian Congregation (monthly—as a church), Dances, the Lions, the Soroptomists, the Whidbey Island Conservation District, Island County Health septic classes, high school reunions, the Girl Scouts, and numerous groups for holiday or fundraiser dinners. All of these renters are subject to noise disruption, and some, such as the Saratoga Symphony, are simply unthinkable under the proposed OLF expansion. The loss of rentals that would likely accompany a massive increase in OLF flights would leave Whidbey Island Nordic Lodge unable to raise funds to maintain our building.

According to the the Navy's draft EIS, pp 3-44 and 4-118, the proposed expansion would put the building in the conceptual APZ1. Besides further eliminating rental income—certainly no County agency is likely to be foolish enough to rent from us in an APZ1 zone— this brings into doubt our ability to obtain insurance, and subjects us and our parent organization, The Sons of Norway, to very substantial potential liabilities. We note that the Navy's own 2013 AICUZ brochure proposes that our building and all of its uses are incompatible with an APZ1 designation.

We ask that when considering the expanded use of the OLF that the Navy recognize that it would likely result in the effective destruction of the Whidbey Island Nordic Lodge.

We would also note the presence of an outstanding charitable organization, Ryan's House, which would be equally or more severely affected by the proposed expansion. Ryan's house provides housing for homeless or at risk youth on Whidbey Island. The Nordic Lodge is currently talking to Ryan's House about how we could help them. Please also consider the interests of Ryan's House in making your determinations.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

WhidbeyHealth Medical Center in Coupeville is Whidbey Island's only full service hospital. I understand that NASWI has decommissioned its ER, so I suppose WhidbeyHealth must now be the venue for ER services for our Naval personnel also. I understand that the DEIS has not delineated APZ zones, but that it is possible that WhidbeyHealth would be in an extended APZ zone, and that hospitals and other medical facilities are incompatible uses in APZ zones.

I also understand that the DEIS did not do sound modeling for WhidbeyHealth because it was considered to be close enough to Coupeville Elementary School for the same sound modeling to cover both. I understand that sound modeling showed that sound levels at Coupeville Elementary could reach as high as 98 dBI at least once per day. This is disconcerting since I understand that OSHA considers sounds over 85 dBI to be harmful to human health.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

I believe the Draft Environmental Impact Statement recognizes that noise has a negative effect on children's learning and cognitive abilities and that if the Growler expansion at OLF goes through, over 3000 children will be living in areas that by the Navy's own standards are not suitable for residential use. These children are not statistics. They have names and faces. My grandson was once one of them.

I understand that the sound modeling produced by the Navy for the DEIS showed that sound levels at the elementary school could reach as high as 98 dBl at least once per day. This is disconcerting since I understand that OSHA considers sound over 85 dBl to be harmful to human health.

It is my understanding that the World Health Organization has determined that background noise during school teaching sessions should not exceed 35 dBl. I have heard it alleged that the proposed Growler expansion might involve hundreds of interruptions at levels that not only exceed 35 dBa but at levels that effectively impede

conversation. If this is not so, the Final Environmental Action Statement should say so and should spell out how this determination was made.

I live in the Coupeville School District. The schools get part of their funding from mandatory property taxes and part from additional taxes that must be approved by the School District voters. I no longer have family attending the Coupeville schools but I always vote in favor of the extra taxes, because I believe that just like our airmen, our children deserve the best training possible. If the Coupeville Schools will no longer be able to provide such a level of training because of the Growler expansion, I would ask that the Navy consider furnishing the funds necessary to open a school at a better location and bus children to that location. Our community could never afford to carry out such a transfer unassisted—the entire annual county budget is less than the cost of a single Growler.

Thank you.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

I would like to make a comment on why I think it would be a public relations mistake, and possibly a major mistake, for the Navy to continue with its plans, as set forth in the DEIS, of greatly expanding the use of NASWI for the Growlers.

I attended one of the public meetings for the DEIS. The naval personnel at the meeting were mostly young and were unfailingly polite and attentive. Any family, community, or commander would be proud of them. The same cannot be said for some of our local politicians. We are at a state of near civil war on this island. Perhaps those local politicians are banking on the deep and passionate support that the Navy enjoys in much of the community.

I have seen this kind of deep and passionate support before. After the Iraq war began, the island, particularly Oak Harbor, exploded with "Support Our Troops" signs and yellow-ribboned themed bumper stickers. It was difficult for anybody to get a hearing on a comment not supportive of the war. Then, about 3 years after the war began, things began to change. The signs and bumper stickers slowly became a fraction of what they

were before. Instead of vociferous support for the war, overheard comments started to be from Gold Star mothers denouncing the war and veterans talking about how it ate at them to oppose their commander in chief, but they were going to do it.

I believe a similar reversal is possible regarding the Growler expansion. The question could shift from "Why do we have to have ALL the Growlers here?" to "Why do we have to have ANY of the Growlers here?" For example, I recall reading last year about the loss of one of the Blue Angels. I believe this plane went down on take-off and crashed about 2 miles from the runway. The pilot did not eject, and it was speculated that he had stayed with the disabled plane to try to keep it from crashing into an apartment complex. Should such a catastrophe occur here, all the questions, objections, and requests the Navy is now receiving about the Growler expansion would burst forth at a decibel level exceeding that of a Growler. That would be a fast change. A slow change is also a possibility, as constant pressure can be expected to be exerted on our congressional representatives, our governor, and the Navy to change things or to provide substantial compensation for such of the community losses as can be monetized.

I understand that the Navy needs to place these planes. I request that the Navy consider whether in seeking to put all its additional assets on Whidbey Island it is not jeopardizing the assets it already has here.

Thank You.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

1. **Name:** [REDACTED]
2. **Organization/Affiliation:** Retired, citizen
3. **Address:** [REDACTED] Greenbank WA 98253
4. **E-mail:** [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the final EIS when available

Please Print—additional room is provided on back—Mail to :
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

Dear Sir:

I do not think the draft Environmental Impact Statement is paying enough attention to the interests of agriculture on Whidbey Island. Maintaining an agricultural presence has been an important goal in central Whidbey, and I know some farmers have contended that the very considerable increase in flights being contemplated threatens their business by making it oppressive or unhealthy to spend long hours daily in the fields. I have also heard concerns about fuel dumping or fuel vapor pollution resulting from the massive proposed increase in operations. The Navy may be dismissive of this, but local residents are not. I have personally been told by farmers that it would be better to buy from them because some of the other farms are under the jets. Please do not underestimate the psychological, as well as the financial aspects, of such factors.

Thank you.

1.a. Thank You

Nordland, WA 98358

I live on Marrowstone Island (Nordland) and I am aware of how well sound travels over water. I request you do not increase the number or period of Grouse flights in our area as it is disruptive to both our environment and lifestyle.



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]

2. Organization/Affiliation _____

3. Address [REDACTED], Lopez Island, WA 98261

4. E-mail [REDACTED]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

I realize it may be far too late, but the need for ^{more} EA-18G Growlers in today's world is not needed for the defense of U.S. territory. The money should be spent for other more needed things, like ~~infrastructure~~ infrastructure, schools, health care, etc

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.a. Purpose and Need

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name [redacted]
2. Last Name [redacted]
3. Organization/Affiliation Self
4. City, State, ZIP Lopez Island, WA 98261
5. E-mail [redacted]

- 6. Please check here if you would NOT like to be on the mailing list
- 7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.a. Purpose and Need
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.

Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).

2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.

Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.

3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.

Action: Redo the noise simulation using the more recent Advanced Acoustic Model.

4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.

Action: Noise levels should only be averaged over active flying days.

5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.

Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."

6. The Draft includes some independent noise measurements and ignores others.

Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

I support all of the detailed comment above. More generally, as a Vietnam veteran, and a former employee of the Defense Department (OSD at the Pentagon), I firmly believe the our military budget is too high, i.e., we have too many Growler wings for our real defense needs.

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name _____

2. Last Name _____

3. Organization/Affiliation private citizen

4. City, State, ZIP Lopez, WA 98261

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
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- 2.c. Compliance with the National Environmental Policy Act
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- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
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6. The Draft includes some independent noise measurements and ignores others.
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Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

- 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

- 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

- 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

- 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:

Living on Lopez Hill on Lopez Is, WA
 the noise and disturbance has become
 quiet disruptive.

Please consider these comments and
 included them, [REDACTED]

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military) _____

3. Address _____ *Langley, WA 98260* _____

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquifer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

I am especially concerned about the huge increase in flights, the resulting noise impact on schools and our only local hospital. Already we must suspend conversations when these planes fly over. Increasing these intrusions endangers our children, patients at the hospital, workers in our fields - all of us. Please consider these impacts and alternative sites for Navy training flights.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

I've been attempting to submit the following comment online, to <http://www.whidbeyeis.com/Comment.aspx>

First Name:

[REDACTED]

Last Name:

[REDACTED]

Agency/Organization:

City/Municipality:

Bainbridge Island

State/Province:

Washington

Zip/Postal Code:

98110

To: EA-18G EIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506
 Hampton Blvd.
 Norfolk, VA 23508

Dear Sir/Madam,

Thank you for extending the comment period to February 24, 2017, in order accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way.

I concur with all the prepared remarks (points 1-27) below.

I would like to add:

- A) The Olympic National Forest, Hoh Rainforest, and the Square Inch of Silence (see <http://onesquareinch.org>), their ecosystems and biodiversity, are part of our national heritage, belong to all of us. Languaging-manipulations won't reduce the EA-18G Growler activities' destructions, to other species (i.e., biodiversity, intact ecosystems, and all that each species and their collaborations can teach us), and to humans' life-quality directly. The Olympic Peninsula should not be used for Electronic Warfare training, or other Growler practice.
- B) The noise standard should be, at very least, the the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36.
 "Day-Night Average Sound Level" (DNL), as a standard for the activities, should be deleted altogether — it makes no more sense than saying, if a drive-by shooter kills 15 people of a group of 100,
 — that he's caused only 15% bodily harm to anyone; or
 — that his bullets haven't caused any wounds, because we're averaging out his bullets' microsecond impacts over a year.
- C) Bioimpacts of the proposed electronic warfare training activities, upon all indigenous species — including threatened and endangered species — must be counted in, and not

- 1.a. Thank You
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.d. Recreation and Wilderness Analysis and Study Area
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources

only at a “tissue heating” exposure level. A major avenue of RF/EMF biological harm, at non-thermal exposure levels, has been identified: interference with voltage gated calcium channels (VGCC’s). This affects all species that have cell membranes. See, e.g.,

- “How to Approach the Challenge of Minimizing Non-Thermal Health Effects of Microwave Radiation from Electrical Devices” — International Journal of Innovative Research in Engineering & Management (IJIREM) ISSN: 2350-0557, Volume-2, Issue -5, September 2015 —
<<http://ahappyhabitat.com/docs/martinpall8-2015.pdf>>
- “Scientific evidence contradicts findings and assumptions of Canadian Safety Panel 6: microwaves act through voltage-gated calcium channel activation to induce biological impacts at non-thermal levels, supporting a paradigm shift for microwave/lower frequency electromagnetic field action” —
<<https://www.degruyter.com/view/j/reveh.ahead-of-print/reveh-2015-0001/reveh-2015-0001.xml>>

1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because all flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects.

2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.” (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions:

1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft;
2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers);
3. 2012 EA (26 Growlers including 5 from a reserve unit);
4. 2014 EA (Growler electronic warfare activity);
5. 2015 EIS discussing electronic warfare training and testing activity;
6. The current 2016-2017 DEIS (36 Growlers);
7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160.

Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville alone went from 3,200 per year to a proposed 35,100 in 2017. That's more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.”

The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomics, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability.

4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water.

5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential

impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is “turning out fully trained, combat-ready Electronic Attack crews.”

6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The "30-day waiting period" proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts.

7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." According to a memo from the President's Council on Environmental Quality (CEQ) to all federal agencies, "Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the "loser" among these communities.

8. The Navy has exacerbated the problem stated in #8 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, "[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to "identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . ." Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative.

9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are "tiered" for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and

training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula.

10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the "Affected Noise Environment" around Naval Air Station Whidbey Island

(NASWI) extends to the year 2021 and clearly demonstrates the Navy's ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas.

11. The Navy's claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the "library" of sounds that comprise the basis for the Navy's computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS that wildlife are "presumably habituated" to noise do not apply when that noise is sporadic and intense.

12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy's benefit, but does not benefit the public.

13. The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers.

14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>)

15. The Navy describes its activities using the term "event," but does not define it.

Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them.

16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service's draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with "...opening day and associated opening weekend of Washington State's Big Game Hunting Season for use of rifle/guns." While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control.

17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed.

18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets.

19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, "...but may be developed and altered based on comments received." Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's proposal to not allow a comment period on the Final EIS would be unlawful.

20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period.

21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable.

22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to contend that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can

claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant.

23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls "historic" use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of "identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam]." Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: "Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e)." The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word "perfluoroalkyl" or "PFAS" is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals. (<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>)

24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water.

25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft's flight operations and say that's all you're looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy's study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual "events,"

which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted.

26. Pages of boilerplate language do not constitute analysis of impacts to wildlife:

Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is "greatest during flight operations." However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is "highly unlikely," largely because "no suitable habitat is present." This begs the question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area.

27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB. (<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds," (<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test.

Thank you for considering these comments.

Sincerely,


Bainbridge Island, WA 98110

*****Our neighborhood hears the rumble of touch & go's across the water from both Whidbey Island airfields, Ault & OLF, and the roar of fight tracks transiting directly over us, burning 1304 gallons of fuel per hour; 21 gallons of fuel per minute over our heads, into our air, water, and land. What can be a quiet sanctuary of decibels in the 20's is now increasing to over 100 db, significantly impacting our health & all that live here.***

*****How many people are affected....over 120,000 living just on the peninsula... over 4 million visitors per year. What is the navy's definition of "unpopulated" and does that make a difference in where they fly? The map shows the part of Port Townsend where I live as being "unpopulated". (EIS Fig. 3 map)***

The Olympic Peninsula is home to over 120,000 people, full of natural wonders; many tourists and locals visit the [Olympic National Park](#) which attracts over 3 million visitors per year. The region's 200 miles of coastline have fostered the maritime and fishing industries. The labor market continues to develop, benefiting from the region's natural resources. The San Juan islands are spectacularly scenic and is a popular tourism destination. Today, tourism-related industries and retirement communities are a strong economic base on the Olympic Peninsula. In addition, Island County is home to 80,000 residents, with several state parks & protected areas. State of Washington, U.S. Census Bureau

*****What are the true consequences of adding more growlers? I object to the EIS stated purpose, as the navy is already conducting training & testing activities; 36 more or 1 more or 100 more doesn't insure that the navy meets its mission. But "more" does mean that it will cost more on many different levels, from monetary to quality of life & life itself. How is the land, water, air, wildlife, & humanity affected? The EIS does not consider the full impact of the cumulative consequences.***

Military-Industrial Complex Speech, Dwight D. Eisenhower:

“This conjunction of an immense military establishment and a large arms industry is new in the American experience. The total influence -- economic, political, even spiritual -- is felt in every city, every State house, every office of the

Federal government. We recognize the imperative need for this development. Yet we must not fail to comprehend its grave implications. Our toil, resources and livelihood are all involved; so is the very structure of our society. In the councils of government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes. We should take nothing for granted. Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together. Disarmament, with mutual honor and confidence, is a continuing imperative. Together we must learn how to compose differences, not with arms, but with intellect and decent purpose. Because this need is so sharp and apparent I confess that I lay down my official responsibilities in this field with a definite sense of disappointment. As one who has witnessed the horror and the lingering sadness of war -- as one who knows that another war could utterly destroy this civilization which has been so slowly and painfully built over thousands of years -- I wish I could say tonight that a lasting peace is in sight. The worst to be feared and the best to be expected can be simply stated. The worst is atomic war. The best would be this: a life of perpetual fear and tension; a burden of arms draining the wealth and the labor of all peoples; a wasting of strength that defies the American system or the Soviet system or any system to achieve true abundance and happiness for the peoples of this earth. Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children. The cost of one modern heavy bomber is this: a modern brick school in more than 30 cities. It is two electric power plants, each serving a town of 60,000 population. It is two fine, fully equipped hospitals. It is some 50 miles of concrete highway. We pay for a single fighter with a half million bushels of wheat. We pay for a single destroyer with new homes that could have housed more than 8,000 people. This, I repeat, is the best way of life to be found on the road the world has been taking. This is not a way of life at all, in any true sense. Under the cloud of threatening war, it is humanity hanging from a cross of iron..

The jet plane that roars over your head costs three quarter of a million dollars. That

is more money than a man earning ten thousand dollars every year is going to make in his lifetime. What world can afford this sort of thing for long? We are in an armaments race. Where will it lead us? At worst to atomic warfare. At best, to robbing every people and nation on earth of the fruits of their own toil. Now, there could be another road before us—the road of disarmament. What does this mean? It means for everybody in the world: bread, butter, clothes, homes, hospitals, schools—all the good and necessary things for decent living. ...He noted that in addition to military dangers, an arms race would place a domestic burden on both countries. Eisenhower talked of future peace and goals to unify Germany, removing occupying forces in Austria and minimizing what both sides would lose when spending so much of their wealth on armaments. He spoke of the consequences of putting so much effort into building weapons when that same effort could be put to better use feeding people. As a former general, he was supportive of a strong national defense, but he also hoped to reduce military spending so there could be an increase in funding for domestic programs.”

DEIS: Navy PROPOSED ACTION

The U.S. Department of the Navy (Navy) proposes to:

- *continue and expand existing EA-18G Growler operations at the NAS Whidbey Island complex, which includes FCLP by Growler aircraft that occurs at Ault Field and OLF Coupeville
- *increase electronic attack capabilities by adding 35 or 36 aircraft to support an expanded DoD mission for identifying, tracking, and targeting in a complex electronic warfare environment
- *construct and renovate facilities at Ault Field to accommodate additional Growler aircraft
- *station additional personnel and their family members at the NAS Whidbey Island complex and in the surrounding community.

The purpose of the proposed action is to conduct training and testing activities to ensure that the Navy meets its mission, which is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. In its request for consultation, the Navy characterized the term of the proposed action as the “foreseeable future.” For

purposes of this biological opinion, we are defining “reasonably foreseeable future” based on climate-change modeling horizons that are likely to occur. It is our best professional judgment, based on a review of that science, that an analysis period of 20 years is the maximum duration for which we can provide a reasoned analysis. 7/16 nwtt ..fish & wildlife

2. ROUTES

****Where are your military training routes?**

The DEIS does not show the routes, & when I asked for more info in an email to the navy, I was referred to navy documents of 2005 & 2010 which also didn't show the routes, & was told that I could determine the routes by looking at the destinations. So the 2016 DEIS statement about avoiding noise sensitive & wilderness areas cannot not be really true. The navy does not need to avoid these areas because the exceptions listed describe the entire flight; i.e. "...no less than 3,000 feet except when in compliance an approved traffic or approach pattern, military training route, or within Special Use Airspace." Where is the noise data from all areas the navy is impacting? Where is a map that shows the flights path training exercise beyond arrival & departure? (EIS figure 3.1-3)

Where are these established flight corridors? The navy can't even establish this for the marbled murrelets or for the people.

The routes have not been identified on the EIS.

On Dec 12, 2016, at 8:34 AM, "Welding, Mike T CIV NAS Whidbey Is, N01P" <michael.welding@navy.mil> wrote:

Ms. [REDACTED]

I'm not sure exactly how far and which direction(s) you are concerned with, but there are some robust maps in our Airfield Compatibility Use Zone (AICUZ) Study available here.

http://www.cnrc.navy.mil/content/cnrc/cnrc_hq/regions/cnrnw/installations/nas_whidbey_island/om/environmental_support/jcr_content/par1/pdfdownload_1/file.res/NAS%20Whidbey%20Island%20AICUZ.pdf

Dear Public Affairs Officer Mike Welding,

The file you have sent me contains over one hundred pages from a 2005 study.

The map i have a question about is from the 2016 EIS; Aircraft Arrival & Departure Flight Tracks.

I would like to see beyond the arrival & departure area, to include the entire flight track area; an extension of the map below.

Also, would you know the average speed & time from departure to when the aircraft are transiting the Port Townsend area?

Thank you,
[REDACTED]

-----Original Message-----

From: [REDACTED]
Sent: Monday, December 19, 2016 8:00 AM
To: Welding, Mike T CIV NAS Whidbey Is, N01P
Subject: [Non-DoD Source] flight tracks arrival & departure map

Thanks for the AICUZ 2010 study, Mike.

What I'm looking for are maps that show flight data (tracks, elevations, other data) over areas outside the immediate environs of NASWI, for example, when those flight paths go west, southwest and northwest off the edges of your maps, where do they go?

Specifically, I would like maps of flight paths for areas for which noise modeling has been done, such as in the West End, over the north side of the Olympic Peninsula, and over the south coast of Vancouver Island. If noise modeling has not been done there, the maps would still be helpful.
[REDACTED]

Welding, Mike T CIV NAS Whidbey Is, N01P <michael.welding@navy.mil>

To: [REDACTED]
[REDACTED] departure map
Security: Signed (WELDING.MICHAEL.T.1139875210)

[REDACTED],

I'm unaware of noise modeling in those areas. Noise modeling is typically done around airports and is considered the national standard. You could ask the National Park Service for noise monitoring they have done in the National Park.

Regarding your request about flight track information away from the base, you can check the Northwest Training and Testing Environmental Statement available here <http://nwtteis.com/> to understand where our Military Operating Areas are located. There are two primary areas to the west. That's where NAS Whidbey island aircraft go to when they leave the base here.

The military accounts for less than 40 percent of all aviation traffic over the Olympic Peninsula, an area used for such training for decades. To gain a complete understanding of flight routes in this region the agency that has oversight is the FAA.

The United States does not conduct noise modeling or measurement on the south coast of Vancouver Island; perhaps the regional Canadian government has as it's their sovereign territory.

Hope that helps.

Mike

3. NOISE

**Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its "study area" is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because all flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects.*

Eleven military mobile signal emitter vehicles will drive to eleven different sites on the Olympic Peninsula 260 days per year & stay there from 8-16 hours per

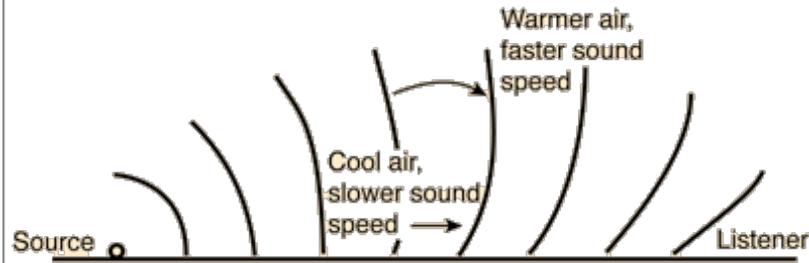
day involving 1,558 jet flyovers of an average time in air of 100 minutes each for Electronic Warfare activities and Air Combat Maneuvers!!! And what about the people, wildlife & environment?

**The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the “Affected Noise Environment” around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy’s ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas.*

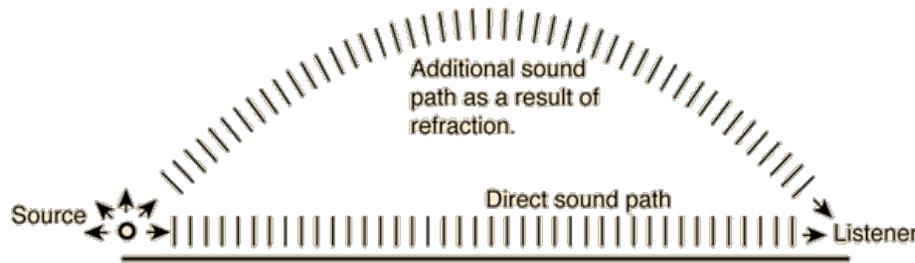
**There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, “...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives.” According to a memo from the President’s Council on Environmental Quality (CEQ) to all federal agencies, “Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the “loser” among these communities.*

*****We live in an area surrounded by water and mountains where sound travels further and the noise generated is amplified, which is not considered in the EIS.***

If the air above the earth is warmer than that at the surface, sound will be bent back downward toward the surface by [refraction](#).



Sound propagates in all directions from a point source. Normally, only that which is initially directed toward the listener can be heard, but refraction can bend sound downward. Normally, only the direct sound is received. But refraction can add some additional sound, effectively amplifying the sound. Natural amplifiers can occur over cool lakes.



<http://hyperphysics.phy-astr.gsu.edu/hbase/Sound/refrac.html#c2>

.... That's why sound travels further over water: less is lost up into the air, meaning more of it ends up in your ears — or your neighbors. Sedeer; Physics

DEIS: Noise Conclusion, Alternatives 1 through 3:

The Proposed Action and alternatives would have a significant impact on the noise environment as it relates to aircraft operations at Ault Field and OLF Coupeville. The number of persons exposed to noise levels 65 dB and above would increase under all alternatives and scenarios.

The maximum number of aircraft in the FCLP flight pattern is five. This is so the FCLP pattern stays within the 5-mile radius of the class “Charlie” airspace, aircraft do not get extended creating additional noise impacts, and allowances may be made for non-FCLP aircraft to operate concurrently.

Avoiding noise-sensitive and wilderness areas by flying at altitudes of no less than 3,000 feet AGL except when in compliance with an approved traffic or approach pattern, military training route, or within Special Use Airspace.

EIS: Table 45. Proposed annual training missions for EA-18G jets over the Olympic Military Operations Areas

Name/Identifier

Aircraft Flights / Year 1558 entry exit

Avg time in air 100 min. power setting 80 % speed 265

Specific locations for the 11 sites on Forest Service lands are provided in Table 6 and shown in Figure 1. Each site consists of an existing pull-outs or turnarounds which have already been cleared or have natural features (e.g., a cliff or ridgeline) that provide an unobstructed line of sight to the west. The MEWTS will not be parked at training sites overnight, but travel to sites each day from Naval Station Everett Annex Pacific Beach using existing roads. Once on sites, MEWTS will operate between 8 and 16 hours each day for 260 days each year (Navy 2014). Emitters are expected to be energized, emitting signals at 90-300 watts, about 45 minutes of every hour that the MEWTS are on sites (Mosher, pers. comm. 2015; Navy 2014). 7/16 nwtw fish & wildlife

6.3 Olympic Military Operations Areas Subunit

The Olympic MOAs Subunit includes the Pacific Northwest EW Range located on Navy, Forest Service, and Washington State Department of Natural Resources lands in the Olympic Peninsula (Figure 2). Activities include the use of mobile signal emitter vehicles at designated sites located along existing logging roads on Forest Service lands within the Olympic MOA. There will also be overflights for Electronic Warfare activities and Air Combat Maneuvers. 7/16 nwtw f&w

Marbled murrelets will not be exposed to high amplitude aircraft sounds by every aircraft flight, but only those where the aircraft are sufficiently close to habitat. Without knowing the location and flight pattern of each training flight, we assumed that the training flights will be evenly distributed throughout the Olympic MOAs. We also assumed that the proportion of the time that aircraft will disturb habitat is equal to the proportion of the training area that is habitat. 7/16 nwtt f&w

*****So... the 2016 DEIS statement about avoiding noise sensitive & wilderness areas cannot not be really true. The navy does not need to avoid these areas because the "exceptions" listed describe the entire flight; i.e. "when in compliance an approved traffic or approach pattern, military training route, or within Special Use Airspace."***

*****So...another way to say this is that marbled murrelets WILL BE EXPOSED to high amplitude aircraft sounds where the aircraft are close to habitat!!! I object to the navy's circle of words & assumptions used to downplay their impact on endangered species. There will be 1,558 flights per year in the Olympics at an average of 100 minutes each at a power setting of 80% traveling 265 mph. This is a huge impact to endangered species! Eleven military mobile signal emitter vehicles will drive to eleven different sites on the Olympic Peninsula 260 days per year & stay there from 8-16 hours per day involving 1,558 jet flyovers of an average time in air of 100 minutes each for Electronic Warfare activities and Air Combat Maneuvers!***

*****And what about the people, wildlife & environment?***

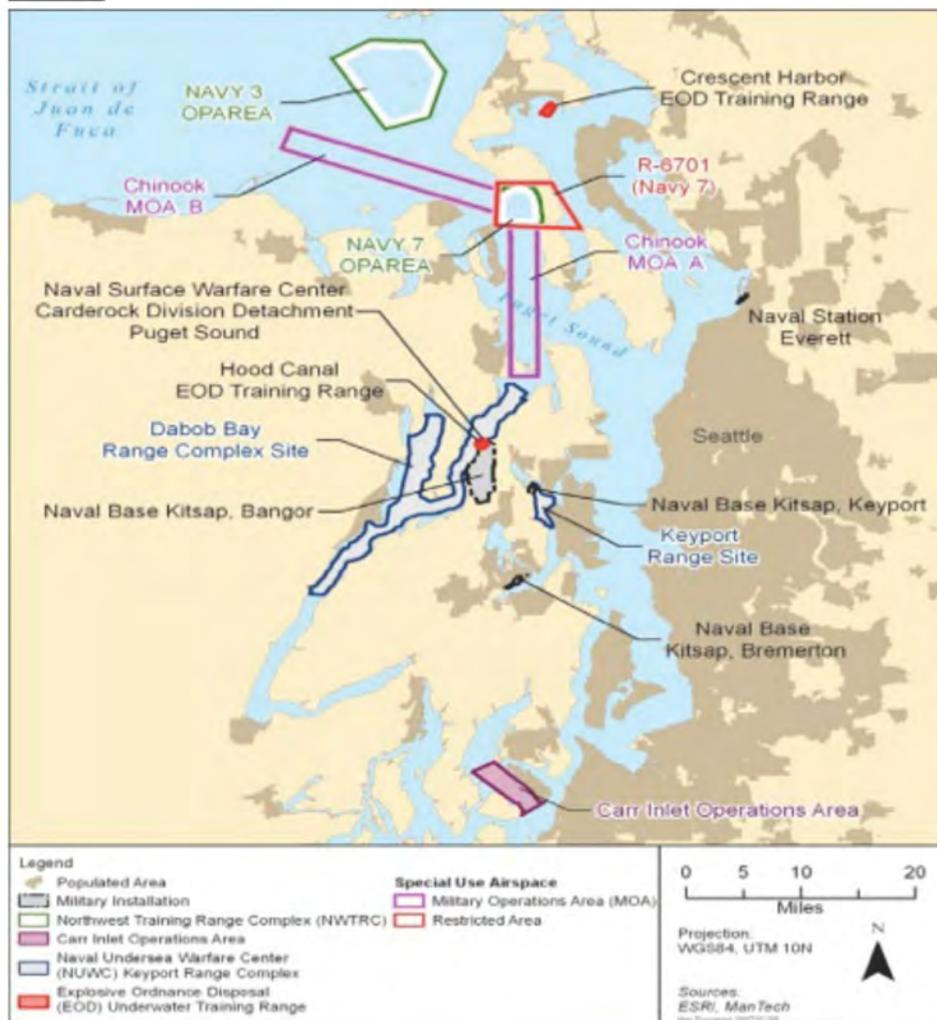


Figure 3. Northwest Training and Testing Inland Waters Areas. These areas are part of the Inland Waters Subunit, and include Puget Sound, Hood Canal, and the Strait of Juan de Fuca.

6.2.1 Air Space

Restricted Area 6701 (R-6701, Admiralty Bay) is a restricted area over Admiralty Bay, Washington, with a lower limit at the ocean surface and an upper limit of 5,000 ft MSL. This

airspace covers a total area of 56 nm². Chinook A and B MOAs are 56 nm² of airspace south and west of Admiralty Bay. The Chinook MOAs extend from 300 ft to 5,000 ft MSL. The sea and undersea area below R-6701 is categorized as Navy 7 (Figure 3).

NUMBER OF FLIGHTS & NOISE

Existing Growler aircraft that are transiting from Ault Field's Class C controlled airspace to nearby military training areas (Olympic, Okanogan, Roosevelt, and NWSTF Boardman) fly at altitudes between 14,000 feet and 16,000 feet above mean sea level (MSL).

Growler aircraft operating at these transit altitudes would create a sound exposure level (SEL) at ground level between 69 and 84 decibels (dB) and an L_{max} of 54 to 72 dB, comparable to the sound level of a passing automobile.

*****This statement in the DEIS says that above 14,000 feet the noise level is 69-84 db. Anything LESS than an altitude of 14,000 feet would create MORE than "69 to 84 decibels". According to another map from Figure 3.1-2, and another statement in the EIS, the Growlers are flying at much lower altitudes to the Olympics, "Avoiding noise-sensitive and wilderness areas by flying at altitudes of no less than 3,000 feet AGL except when in compliance with an approved traffic or approach pattern, military training route, or within Special Use Airspace."***

****Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed.***

****Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or***

1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets.

EIS: Noise metrics are outlined in Section 3.2. The public would hear noise from aircraft overflights if they are in the vicinity of an event. However, these effects would occur on a temporary and intermittent basis. All flight activity within 10 miles of the NAS Whidbey Island complex is analyzed in more detail in Section 4.2.

There is a net increase of 35 Growler aircraft; total annual airfield operations for the NAS Whidbey Island complex would increase to approximately 130,000, a 47-percent increase.

During an average year, total airfield operations at Ault Field would result in an increase of 12,300 projected operations under Scenario A, when 20 percent of all FCLPs would be conducted at Ault Field, to an increase of 38,700 projected operations under Scenario C, when 80 percent of all FCLPs would be conducted at Ault Field (Table 4.1-2)

***** $(130,000 \text{ divided by } 365 \text{ days} = 356 \text{ per day divided by } 24 \text{ hours} = 14.8 \text{ flights per hour})$***

****There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." According to a memo from the President's Council on Environmental Quality (CEQ) to all federal agencies, "Reasonable***

alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the “loser” among these communities.

DEIS: The noise levels analyzed and described within this study are from computer- modeled noise and not actual noise measurements at Ault Field or OLF Coupeville. As discussed in Section 3.2.2, computer modeling provides a tool to assess potential noise impacts.

The national average of time spent indoors is approximately 87 percent (or almost 21 hours of the day) (Klepeis et al., n.d.). With intermittent aircraft operations and the time most people spend indoors, it is very unlikely that individuals would experience noise exposure that would result in hearing loss.

Day-Night Average Sound Level (DNL) noise contours are generated by a computer model that draws from a library of actual aircraft noise measurements. Noise contours produced by the model allow a comparison of existing conditions and proposed changes or alternative actions that do not currently exist or operate at the installation. For these reasons, on-site noise monitoring is seldom used at military air installations, especially when the aircraft mix and operational tempo are not uniform

DNL represents noise exposure events over a 24-hour period.

It is the areas within the 65, 70, and 75 DNL noise contours that the FAA considers to be the most impacted by aircraft generated noise. Beyond the 65 DNL noise contour, noise is most noticeable in areas below established flight corridors. You can view the latest noise contour map at <http://www.broward.org/images/airport/noisemonitorlocations.jpg>.

(server couldn't find this http site)

*****Where are these established flight corridors? Recorded flyover sound at our home duration is over 2 minutes. We are "the public that would hear noise from aircraft overflights in the vicinity of an event." What is an "event"??? We hear jets continuously throughout the day; the continuous take off's & landings and the continuous flyovers. We do not "fit" into any of your noise models, or your national average of time spent indoors/outdoors, & our ears & bodies don't average noise into according to your DNL model.***

****The Navy's claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the "library" of sounds that comprise the basis for the Navy's computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS that wildlife are "presumably habituated" to noise do not apply when that noise is sporadic and intense.***

**** Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy's benefit, but does not benefit the public.***

** The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers.*

** The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>)*

**The Navy describes its activities using the term "event," but does not define it. Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them.*

NOISE

By air, land, & sea we are facing an onslaught of noise that threatens to make our world unlivable. As a society we have chosen to make a tradeoff. We've been willing to tolerate a certain amount of noise for the sake of having what we see as benefits: things like motorized travel, labor-saving machines, and amplified sound at community events. We have essentially granted ourselves the right to make noise. But along with rights, as is so often said, come responsibilities. Have we developed a sense of acoustic responsibility in our society? The evidence suggests that we have not. It's widely accepted that we have responsibility for our garbage. Drop a candy wrapper on the ground and you are potentially liable to a stiff fine. Noise is garbage, and it is a particularly insidious form of garbage. It destroys community life, pursues us into our homes, keeps us from sleeping, and is a cause of many stress-related illnesses as well as hearing loss. The current destruction of silence in our world is an environmental catastrophe. The soundscape, our acoustic

environment, has been described as a "commons" -- something that belongs to all of us. Everyone has the right to use it, but no one has the right to abuse it. Let's start using it responsibly. Acoustic Responsibility: A Concept Whose Time Has Come by Peter Donnelly August 1997

**Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as "normally unacceptable" and above 75 as being "unacceptable." (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).*

4. CHAFF

***I attended the Navy's Open House meeting in Port Townsend on Dec. 16, 2016. I am concerned about the navy's use of it in chaff being released into our air, land, & water. I asked several navy representatives about the navy's practice of releasing chaff and also the navy's practice of dumping fuel. One flight officer said he releases chaff during flights "at times" in the Olympic Peninsula area. Another officer told me that the navy only uses it at the Idaho location, and he has released it there. Another officer referred me to Laurie Kutina, who*

was representing the Air Pollution display. I wrote down exactly what L.K. said to me at that time; "...never heard of the navy releasing chaff" & "...fuel dumping is not done on a regular basis".

****Laurie Kutina should know what she is talking about as she was listed as a reference in the NAS Whidbey Island Complex Growler DEIS, Volume 1 November 2016** Laurie S. Kutina, CEM, REM, *Air Quality Specialist*, B.S. Physics, M.A. Architecture, M.A. Business Administration

NORTHWEST TRAINING RANGE COMPLEX EIS/OEIS 2010:

3.3.2.2.10 Aviation Fuel and Other Propellants

Under the No Action Alternative, a total of 7,586 sorties would be flown by fixed-wing aircraft, helicopters, and unmanned aerial vehicles (Table 3.3-23).

Table 3.3-23: Aircraft Sorties per Year – No Action Alternative

Issues associated with aviation fuel arise with the need to jettison fuel from a manned aircraft or with the loss of an unmanned aircraft. Both situations are infrequent and occur only in emergency situations. Aircraft with offshore in-flight emergencies that require the craft to weigh less will jettison stores, not fuel. Aircraft operating from an aircraft carrier that experience in-flight emergencies prefer to divert to a land-based airfield rather than a carrier landing. Fuel that is jettisoned is discarded above 8,000 feet (2,500 m) over water west of Naval Air Station Whidbey Island just prior to landing. At that elevation, the fuel dissipates in the air before any liquid reaches the ground. Given the small number of such incidents and the wide area across which they might occur, neither issue would have more than a negligible impact on the environment.

****Here is what I found about chaff from the NWTT 7/16.... that chaff is used for air combat maneuvers & electronic warfare in 110 "events" per year with 2 to 4 aircraft per event, above land & water. This usage of chaff is a documented to be of great concern in the environment, which is not noted on this current DEIS.**

Air	_____	No No	Chaff,	Conducted 95 percent daytime, 5 percent
Comb	Offshore	550	ne ne flares	nighttime.
at	Area			
Mane				
uver	(Warning	<p>Typically 2 but up to 4 aircraft per event. 110 events per year use chaff/flares. For flights over land in the Olympic MOAs, the minimum flight altitude is typically greater than 4,000 ft above ground level for 90 percent of the airspace. When flying in the MOAs, Navy aircraft do not fly at the outer edges of the MOAs, to prevent spilling out of the airspace. Navy aircraft will not be lower than 2000 ft above ground level. Seventy percent of all Navy flights in the MOAs are above 20,000 ft and 95 percent of all flights are above 10,000 ft.</p>		
	Area 237			
	[W-237]),			
	Olympic			
	MOA			

Electronic	Flare	Offshor	1(No No	Flares, Test conducted year-round, day and night,
Warfare	Test	e Area	ne ne chaff	greater than 3 nm from shore.

48 WHEREAS each cylinder contains millions of heavy metal-coated glass fibers called

49 “Chaff”; chaff is small enough to be inhaled or swallowed and is dangerous to human

50 health – a 72% increase in chaff release is expected according to the NWTT EIS; san juan county democrats 9/16

[Current DOD Chaff Use Policy and Initiatives:](#)

Currently, DOD severely restricts the use of chaff in training in order to reduce pollution of the environment and to protect civilian airspace. At the height of the Cold War, training with RF chaff was permissible at all military training ranges and MOAs within the United States. Since 1990, the DOD has attempted to balance the chaff training needs of the Armed Services with concerns of the public and government for the possible negative impacts of chaff use on the environment. In 1998, the Joint Chiefs of Staff issued a directive incorporating chaff use policies of each of the Armed Forces and placed significant restrictions on the use of chaff for training in the United States (CJCSM, 1998). As a result, the number of training sites where chaff training is permitted has been reduced to approximately 50 selected ranges and MOAs in and around the US (see Fig. 2). Additionally, flight rules were changed and now stipulate that chaff should not be released below certain altitudes during training to ensure chaff plumes are widely dispersed and dipole ground level concentrations are very low. Likewise, DOD policy for chaff operations requires that every effort be made to conduct chaff drops away from major air routes and air route hubs and to avoid frequent dispersal over the same ground points. DOD policy also specifies that all planned chaff releases and training flight plans be reported to the Federal Aviation Administration and local environmental agencies. <http://www.globalresearch.ca/chemtrails-the-consequences-of-toxic-metals-and-chemical-aerosols-on-human-health/19047>

What happens to aluminum when it enters the environment?

- 1 Aluminum cannot be destroyed in the environment, it can only change its form.
- 2 In the air, aluminum binds to small particles, which can stay suspended for many days.
- 3 Under most conditions, a small amount of aluminum will dissolve in lakes, streams, and rivers.
- 4 It can be taken up by some plants from soil.

<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=190&tid=34> 6/2/2012

Though it was impossible to know where the whales had been, Payne said the contamination was embedded in the blubber of males formed in the frigid polar regions, indicating that the animals had ingested the metals far from where they were emitted.

"When you're working with a synthetic chemical which never existed in nature before and you find it in a whale which came from the Arctic or Antarctic, it tells you that was made by people and it got into the whale," he said.

How that happened is unclear, but the contaminants likely were carried by wind or ocean currents, or were eaten by the sperm whales' prey.

Chromium, an industrial pollutant that causes cancer in humans, was found in all but two of the 361 sperm whale samples that were tested for it. Those findings were published last year in the scientific journal *Chemosphere*.

"The biggest surprise was chromium," Payne said. "That's an absolute shocker. Nobody was even looking for it."

The corrosion-resistant metal is used in stainless steel, paints, dyes and the tanning of leather. It can cause lung cancer in people who work in industries where it is commonly used, and was the focus of the California environmental lawsuit that gained fame in the movie "Erin Brockovich."

Wise found that the concentration of chromium found in whales was several times higher than the level required to kill healthy cells in a Petri dish, Payne said.

He said another surprise was the high concentrations of aluminum.

The consequences of the metals could be horrific for both whale and man, he said.

"I don't see any future for whale species except extinction," Payne said. "This is not on anybody's radar, no government's radar anywhere, and I think it should be."

http://news.yahoo.com/s/ap/20100624/ap_on_sc/whaling/print;_ylt=AgQjH_F44OC.Kyn1... 6/25/2010

Print Story: Report: Toxins found in whales bode ill for humans

STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT SAFE
DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986

CHEMICALS KNOWN TO THE STATE TO CAUSE CANCER OR
REPRODUCTIVE TOXICITY FEBRUARY 17, 2012: CHROMIUM.

The report addresses the potential biological effects of chaff on wildlife due to inhalation, ingestion, and direct contact as well as the effects of **chaff** on vegetation and aquatic life of chaff decomposing in soil or water. The Air Force reported no adverse impacts from chaff and said that chaff is generally nontoxic. However, few studies of the effects of chaff on wildlife have been conducted, and the report found no data on chaff's decomposition process under different environmental conditions (arid, alkaline, wet, acidic) or inside the digestive systems of animals. The study includes a literature review, field studies, and laboratory analyses of soil samples taken at Nellis and Townsend, the two military range areas studied. The report cites a 1972 Canada Department of Agriculture study that found no health hazards to farm animals. The Air Force study also cited

a previous report on the Chesapeake Bay ecosystem that found no impacts on the six marine organisms studied.\7

The Air Force study reports the following:

Animals can inhale chaff particles, but the particles do not penetrate far into the respiratory system and can be easily cleared out. Chaff disperses over large areas of land, limiting exposure of grazing animals. Little chaff accumulated on the surface of standing water bodies. Surface-feeding & bottom-feeding animals and fish may ingest chaff, but this only affects a few individual animals and has a low impact on species populations except in the case of protected species. Chaff disintegrates on land. It decomposes slowly in arid area and has no adverse effects on soil chemistry and plant growth. Chaff interference with wildlife is expected to be negligible based on chaff use, characteristics, and observed accumulations. Chaff decomposing in water has no adverse impacts on water chemistry and aquatic life. In wet areas, chaff is covered by plant growth and dead leaves. Chaff decomposes more rapidly in wet acidic environments, but when doing so it releases only minute amounts of chemicals. <http://www.fas.org/man/gao/nsiad-98-219.htm> 5/31/2009

The following article by the late Dr. Ilya Perlingueri was first published by Global Research in May 2010:

For decades, we have known that heavy metals and chemicals can cause grave physical harm. Going back to Rachel Carson's "Silent Spring," we have known and been amply warned of the serious consequences of using or being exposed to these poisons in our daily activities. Thousands of these are well-documented carcinogens.

Aluminum has a history of damaging brain function. Independent researchers and labs continue to show off-the-scale levels of these poisons. A few "anonymous" officials have acknowledged this on-going aerosol spraying.(5) Numerous tests have been done to verify that these poisons are off the scale in their toxicity. They are documented in our water, in our soil, and in our air. For more than 10 years, researcher Clifford Carnicom has been valiantly and systematically reporting on the various detrimental aspects of these aerosols -and what they are doing to our entire environment, as well as our blood.(6) Various "sky watch" groups also have been carefully documenting and diligently reporting about these daily assaults.(7) With all these poisons surrounding our every breath, it is not surprising

to see a dramatic increase in illnesses. There are numerous reports of the increase in cardiac deaths and upper respiratory illnesses (asthma, chronic bronchitis, lung cancer, and often multiple chronic illnesses). Chemtrails toxicity has already dramatically affected our deteriorating "collective health." The significant increasing heart disease and various upper respiratory illnesses has been linked to a vast increase in "particulate matter" in our air.

Dr. Kilburn's research clearly shows that chemicals do affect and seriously harm the brain [and, thereby, cognitive function]. Chemicals -especially a daily onslaught of toxic chemicals over many years- can damage our ability to think clearly. Even if we find this hard to believe, the evidence is there. Dr. Kilburn has expanded this essay into the first book to research this: "Chemical Brain Injury" (published in 1998). Dr. Kilburn notes: The brain's preservation represents the only possibility of survival for mankind. To find in many parts of the country and in many individual patients that its function is eroded seriously by chemicals, chemicals that have been introduced into the environment basically in the last 50 years, is bad news indeed. www.neuro-test.com/aboutKilburn/aboutKilburn.html

Wilderness Watch 1/14/17

The DDN and EA Inadequately Analyze Impacts to Wilderness in Violation of the National Environmental Policy Act and the Wilderness Act

The EA does not discuss the impacts of this proposal on the Olympic Wilderness (Olympic National Park), the Colonel Bob Wilderness, Washington Islands Wilderness, the Lake Chelan-Sawtooth Wilderness or the Pasayten Wilderness. All five of these Wildernesses are within, or partially within, the MOAs outlined in the EA (see figures 1.3-1 and 1.3-2).

Furthermore, the EA does not analyze whether flight paths would go outside of the MOAs. Given the location of the bases, the flights would have to go outside the MOAs. Thus, additional Wildernesses would likely be affected. The Stephen Mather, Glacier Peak, Mount Baker, Noisy Diobsud, Boulder River, Henry M Jackson, Wild Sky, Alpine Lakes and San Juan Islands Wildernesses could be affected.

The EA only says this about the topic:

Noise-sensitive areas are those areas where noise interferes with normal activities associated with its use. Normally, noise-sensitive areas include residential, educational, health, religious structures and sites, parks, recreational areas (including areas with wilderness characteristics), wildlife refuges, and cultural and historical sites. In the context of facilities and equipment, noise-sensitive areas may include such sites in the immediate vicinity of operations, pursuant to the Noise Control Act of 1972. Users of designated recreational areas are considered sensitive receptors.

There is no site-specific analysis of noise or any other impacts, either from the planes and how they may operate differently for this project, or from the emitters, some of which would be stationed near Wilderness. The only mention is of recreation areas which may have wilderness characteristics. Even if this is an erroneous conflation of recreational areas with Wilderness, it is not an analysis the impacts to Wilderness or wilderness character. Indeed, the Wildernesses affected in the MOAs are not even mentioned by name. The EA contains no analysis of Wilderness. Thus, the EA fails to comply with the Wilderness Act and NEPA. The wilderness analysis (including impacts to wilderness character) in the EA is not even an afterthought. The word wilderness is only mentioned 3 times in the EA: 1) page 3.2-13, the Salmon Priest Wilderness which is in northeastern Washington in context of caribou, 2) page 3.3- 3 in context of areas with wilderness characteristics (see our comment quoted above), and 3) wilderness protection plans in context of a coalition in northeastern Washington. Nowhere is it recognized the Colonel Bob Wilderness is within the MOA. The document is inadequate. Not only is that a serious omission in terms of the National Environmental Policy Act (NEPA) analysis, the EA and DDN fail to recognize the Forest Service's duty to protect Wilderness. The first sentence of Section 2(a) of the 1964 Act describes the purpose of the Act:

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be

composed of federally owned areas designated by Congress as "wilderness areas", and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

In brief that purpose is to keep some areas unoccupied and unmodified. And this protection is for present and future generations--for all time--in perpetuity.

Congress identified a new resource--the resource of wilderness.

Further Congress defined wilderness in section 2(c) as a place "in contrast" to areas where humans and their works dominate, "where the earth and community of life are untrammelled by man, where man himself is a visitor who does not remain."

Thus, there is a clear intention that Wilderness must remain in contrast to modern civilization, its technologies, conventions, and contrivances. Indeed, there is the mandate to preserve wilderness in perpetuity.

In response to our comments, there is simply the contention that the Navy in the EA determined that it would have no impact on small wilderness. On the face of it, such a conclusion is absurd, given the fact the EA does not specifically analyze the Colonel Bob Wilderness (or other wildernesses within other MOAs). In any case, military jets flying at low elevations have a tremendous impact on the Wilderness and those in it. There are two key points the EA and DDN fail to address:

- The Navy has no authority over or expertise in wilderness administration or wilderness stewardship. The deference given to this conclusion in the Forest Service's DDN suggests that agency had littler no involvement in preparation of the EA.
- Even if he Forest Service was fully consulted and made the erroneous and unsupported findings in the EA, the Forest Service knows full well that artificial sounds have an impact on wilderness character. The Forest Service's own document, Keeping It Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System (Landres et al.

2015, see Attachment 1) has an indicator of Remoteness from sights and sounds of human activity outside the wilderness. Also, wilderness.net, the website for agency wilderness professionals has extensive documentation on the impact of sound on Wilderness <http://www.wilderness.net/sound#> There is a long history of the importance of natural soundscapes in Wilderness documented in the Attachment 1 and on the wilderness.net website. There is also case law requiring the Forest Service to evaluate the impact on Wilderness of a snowmobile trail on the border of the Boundary Waters Canoe Area Wilderness.

5. ELECTROMAGNETIC RADIATION

**The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is “turning out fully trained, combat-ready Electronic Attack crews.”*

***War games would also test new electromagnetic weaponry, triggering significant concerns about the potential health impacts and migratory patterns of birds, amphibians and sea creatures, as well as plants, micro-fauna and human*

beings. Several indigenous tribes call these lands home. A quick search on Google Scholar for "Electromagnetic fields risk to humans" produces over 63,000 results, most of which are published scientific studies that chronicle the deleterious impact of electromagnetic fields. Health experts reported to be associated with ELF and/or RF include childhood leukemia, brain tumors, genotoxic effects, neurological effects and neurodegenerative diseases, immune system deregulation, allergic and inflammatory responses, breast cancer, miscarriage and some cardiovascular effects. The BioInitiative Report concluded that a reasonable suspicion of risk exists based on clear evidence of bioeffects at environmentally relevant levels, which, with prolonged exposures may reasonably be presumed to result in health impacts. Electromagnetic radiation's impact on wildlife is very well documented, as thousands of peer-reviewed scientific studies.

Table 5. Summary of mobile electromagnetic emitters in electronic warfare training.

Emitter type	Range of Electromagnetic (EM) wave frequencies (Gigahertz [GHz])	Shape of EM signal	Dimensions of EM Signal	Radiation Hazard Minimum Safe Separation Distance
Traveling Wave Tube Amplifier	4-8	Cone	8.1 degrees	30.8 m / 101.1 ft

	6.7 – 7.4	Wedge 9 degrees	
Magnetron		horizonta	
		l	8.9 m / 29.3 ft
		27	
		degrees	
		vertical	

(Mosher, pers. comm. 2015; Navy 2014)

Electromagnetic Radiation B. Blake Levitt. Former New York Times journalist and author of *Electromagnetic Fields, A Consumer’s Guide to the Issues and How to Protect Ourselves: Ambient man-made electromagnetic fields (EMFs)*, across a range of frequencies, are a serious environmental issue. Yet most environmentalists know little about it, perhaps because the subject has been the purview of physicists and engineers for so long that biologists have lost touch with electromagnetism’s fundamental inclusion in the biological paradigm. All living cells and indeed whole living beings, no matter what genus or species, are dynamic coherent electrical systems utterly reliant on bioelectricity for life’s most basic metabolic processes. It turns out that most living things are fantastically sensitive to vanishingly small EMF exposures. Living cells interpret such exposures as part of our normal cellular activities (think heartbeats, brainwaves, cell division itself, etc.) The problem is, man-made electromagnetic exposures aren’t “normal.” They are artificial artifacts, with unusual intensities, signaling characteristics, pulsing patterns, and wave forms, that don’t exist in nature. And they can misdirect cells in myriad ways. Every aspect of the ecosystem may be affected, including all living species from animals, humans, plants and even microorganisms in water and soil. We are already seeing problems in sentinel species like birds, bats, and bees. Wildlife is known to abandon areas when cell towers are placed. Radiofrequency radiation (RF)—the part of the electromagnetic spectrum used in all-things-wireless today—is a known immune system suppressor, among other things. RF is a form of energetic air pollution and we need to understand it as such. Humans are not the only species being affected. The health of our planet may be in jeopardy from this newest environmental concern—added to all the others. Citizens need to call upon government to fund appropriate research and to get industry influence out of the dialogue. We ignore this at our own peril now.”

Dr. Martin Pall

However the last quote sends us to Section 3.0.5.3.2.1 which has in it a section entitled “Airborne Electromagnetic Energy” which states “Sources of airborne electromagnetic energy include aircraft on shipboard radar and communications equipment and aircraft jamming systems. All of these systems are operated within Federal Communication Commission-approved frequency ranges designed to eliminate interference issues with common electronic systems used by the public. These systems are also operated at power levels, altitudes and distances from people and animals to ensure that energy received is well below levels that could disrupt behavior or cause injury.” It is not clear here whether they are referring to the electronic warfare that is the central issue with this EIS, or not. But what is clear in the last quoted statement, is that they are assuming here that only energy received (in other words heating effects) need be considered – something that the Navy knew to be false 44 years ago.

This is the sum total that is provided in the EIS that relates in any way to human health effects of the electromagnetic fields to be used for electronic warfare testing and training. It is all based on an almost magical belief that the Navy procedures will protect us from health effects while providing not one iota of information on what those procedures are nor why we should believe that they protect us from health and safety effects. It is all based on the claim that only heating effects need be considered something that over 10,000 published studies plus vast scientific opinion literature shows to be false. It is based, therefore, on a stunning ignorance of the scientific literature, such that it is impossible to find anything in these parts of the EIS that give us any confidence whatsoever in their claims.

Certainly, mammals of various sorts are likely to be affected by these EMFs much like humans. But the VGCCs occur universally or almost universally among animals including invertebrates and protozoa. Somewhat surprisingly, plants also have calcium channels in their plasma membranes that are activated by EMF exposures. Although they differ from the animal channels in important ways, they have a very similar voltage sensor to that found on the animal voltage sensor and

these appear to be the main target in plants of these EMFs (see, for example Plant, Cell and Environment 2007; 30:834-844). It follows from this that there are likely to be major effects on plants in both the National Forest and National Park if the Navy gets its way. There are publications suggesting that migrating birds, amphibians and bees are apparently particularly sensitive to such EMF exposures. Migrating birds have apparently an additional target of EMFs, small magnetic particles which help the birds migrate in accordance with the earth's magnetic field so it is likely that the Navy's claims that birds are not likely to be affected is probably bogus. In humans, one of the common neuropsychiatric consequences of EMF exposures (see ref 2 in paper copied below) is what is called dysesthesia, disruption of sensory function including visual, acoustic and olfactory function. So birds, including eagles which depend on an extremely keen visual perception, may well be visually affected by the Navy EMFs, quite possibly putting the Navy in violation of the Bald and Golden Eagle Protection Act (discussed on p. 3.0-2 or the EIS). There has been published evidence from Balmori's laboratory, showing the amphibians are very sensitive to these EMFs and it has been suggested that the widespread effects of artificial EMFs may contribute to the world wide, unexplained amphibian decline. In any case, it would be a mistake to assume no effects Navy's electronic warfare EMFs on amphibian populations without experimental studies testing whether this is true or not. This brings us to another point. In this entire EIS, the Navy has produced not a single study of biological impacts of the EMFs it plans to unleash on the people, animals and plants of the Olympic peninsula. Their entire argument for safety is based on a theory that only thermal effects need be considered, a theory that the Navy itself knew to be bogus 44 years ago and is still widely known in the scientific community to be bogus. This alone should be more than sufficient to throw out this entire EIS!

In summary, then, regarding human, animal or plant effects of the EMFs it plans to use for electronic warfare:

The Navy today is at least 2000 times less knowledgeable than the Navy was 44 years ago in 1971; the Navy today is also at least 10,000 times less knowledgeable today than it should be. The Navy provides not a single experimental study on biological effects of the EMFs it plans to use in the Olympic Peninsula. It provides, therefore not an iota of biological evidence to support any of its claims. It provides not even a single citation to the scientific literature to support its claims. The Navy claims are based entirely on the position that only thermal effects need be considered, a position that the Navy knew to be false 44 years ago and a position contradicted by many thousands of published scientific studies. That position is also contradicted by widespread scientific opinion expressed continuously over the past 44 years. Low-intensity microwave frequency EMFs have been shown to produce the following effects in humans and other mammals via non-thermal mechanisms: Oxidative stress; genotoxicity including single and double strand breaks in cellular DNA as well as 8-hydroxyguanine residues in cellular DNA; these are thought, in turn to cause cancer when they occur in the somatic cells of the body; these are thought to also cause germ line mutations when they occur in germ cells, producing in turn deleterious mutations in future generations; male and female infertility; massive damage to the nervous system which in the brain produce widespread neuropsychiatric effects – such widespread neuropsychiatric effects were known to the Navy as shown in its 1971 report; breakdown of the blood brain barrier; cardiac effects including tachycardia and also bradycardia associated with arrhythmias and arrhythmias are known to often lead to sudden cardiac death – such cardiac effects were already known to the Navy as shown by its 1971 report; melatonin depletion and insomnia. The Navy provides not one iota of evidence to show that each of these effects will not be caused by the electronic warfare EMFs in the civilian population of the Olympic Peninsula. It is also of great concern that similar effects may well occur in the pilots of the F18 planes involved. It can be seen from 5 above,

that low intensity EMFs attack each of the 4 things we most value as individuals and as a species: Our health, our brain function, the integrity of our genomes and our ability to produce healthy offspring. The EIS provides not one iota of evidence that these 4 things will not be produced in civilians of the Olympic Peninsula and in the F18 pilots by the electronic warfare EMFs. Each of the biological effects listed in 5 and 6 above, can be produced by what are called “downstream effects” of VGCC activation, the predominant mechanism of action of low-intensity EMFs in the cells of our bodies. None of this is considered in the EIS. The voltage sensor of the VGCCs appears to be extraordinarily sensitive to low intensity EMFs based on its physical structure and position in the plasma membrane of our cells. These physical properties, based simply on physics, predict that the forces placed on the voltage sensor by EMFs are about 7.2 million times higher than the forces places on single charged groups found elsewhere in the cell. This argues, therefore, that the acceptable levels of exposure of safety standards/guidelines based only on thermal effects, are about 7.2 million time too high and that much lower levels of exposure can cause major biological effects. This entire area of science is completely ignored by the EIS. The biological effects produced in 7 and 8 above are important and widespread in many animals and also in plants. Certain species, including birds (especially migrating birds and eagles), amphibia, bees, sharks and salmon may be particularly susceptible. It seems likely that still additional especially susceptible species may be discovered as such studies progress further. There is, therefore, ample reason for great concern about the animals and plants in and around the Olympic Peninsula.

In summary, each of the 9 major flaws in the part of the EIS on biological effects of EMFs are individually sufficient, in my view, to reject the entire EIS and being fatally flawed.

Martin L. Pall, Professor Emeritus of Biochemistry and Basic Medical Sciences
Washington State University

6. GROUNDWATER

***I have been a vendor at the Coupeville Farmers Market for several years. I am wondering how we can continue to have a viable farmers market as more of the community becomes aware of the pollutants contaminating the groundwater and soil that grows our food.*

**Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant.*

**Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls "historic" use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of "identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam]." Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: "Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e)." The statement is ludicrously outdated, and recent events refute it. Three*

days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals. (<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>)

**No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water.*

7. CONCLUSION

***The Navy needs to know that they have a significant & serious impact in Northwest Washington where I have lived my entire life; raised my 3 children, am a public school teacher and a commercial fisherman, and am shocked by the disruption & destruction that the navy has brought to this area.*

It doesn't make any sense to PRACTICE strategies to PROTECT potential outside threats to national security, while at the same time DESTROYING the health & well being of all living things within this area.

Many vital points are summarized in the following lines submitted by the San Juan County Democrats:

Impacts of Navy Expansion and Training 2 in Northwestern Washington State

3

Submitted by the San Juan County Democrats. (Date Submitted 9/2/2016)

1. 4 **WHEREAS** Northwest Washington, is home to pristine natural environments
2. 5 including: marine protected areas, National Monuments, Parks, Forests, and Wildlife
3. 6 Refuges, State Parks, the Olympic Coast National Marine Sanctuary, the Olympic
4. 7 Mountains, and the Cascade Mountains;
5. 9 **WHEREAS** Northwest Washington’s natural environment and wildlife provide
6. 10 immeasurable public benefits through sustainable economic and public health activity,
7. 11 including: agriculture, outdoor recreation options, and tourism (3 million to the
8. 12 Olympic National Park, 1 million to San Juan County), and are home to many
9. 13 communities and residents who value and rely upon the character of their regional
10. 14 environment for work, health, or both; and
11. 16 **WHEREAS** the U.S. Navy, based in several locations in Northwest Washington, has
12. 17 initiated a significant multi-regional expansion of training and testing schedules and
13. 18 locations, routines, and technologies, including:

Use of the western portion of the Olympic Peninsula and surrounding waters to simulate an Electromagnetic Warfare Range, flying 260 days per year, 8-16 hours per day, up to 153 jets, capable of 150 decibels each;

Combat training on 68+ beaches in Puget Sound, the Strait of Juan de Fuca and Pacific Ocean beaches in Washington, unannounced and undisclosed to the public and to state, local and federal agencies;

Increased range and frequency of EA-18G Growler jet training flights throughout Northwest Washington including: from OLF Coupeville and Ault Field on Whidbey Island, over San Juan County, Jefferson County, Clallam County, Skagit County, the North Cascades, the Olympic Mountains, LaConner, Port Townsend, Sequim, Port Angeles, Forks and several Indian Reservations, regularly measuring noise levels that exceed thresholds for permanent hearing damage, often between 75 and 108 decibels inside their homes;

38 **WHEREAS** the Navy estimates 1.2 million marine mammal takes (killed or harmed) as

- 14. 39 a result of Navy activities over a period of five years;
- 15. 41 **WHEREAS** the current level of jet noise has been medically documented to seriously
- 16. 42 impact health and quality of life of many residents in Northwest Washington;

Unprecedented expansion of sonar and explosive activities in the Strait of Juan de Fuca, the waters off Indian Island, Puget Sound, and the Olympic Coast National Marine Sanctuary, consisting of 2,408 square nautical miles of Olympic Peninsula coastline, in which the mid-frequency sonar systems the Navy employs are capable of generating sounds in excess of 235 decibels;

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43

- 1. 44 **WHEREAS** the current level of jet noise has affected real estate sales in San Juan

2. 45 County and Island County, forcing local realtors on Whidbey Island and San Juan

3. 46 County to add a military jet noise disclosure clause to property sales; and

47

1. 48 **WHEREAS** each cylinder contains millions of heavy metal-coated glass fibers called

2. 49 “Chaff”; chaff is small enough to be inhaled or swallowed and is dangerous to human

3. 50 health – a 72% increase in chaff release is expected according to the NWTT EIS;

51

1. 52 **WHEREAS** the increase in military jet noise over Northwest Washington has been well

2. 53 documented since the first Growlers arrived in 2008; San Juan County residents have

3. 54 entered over 4,800 jet noise complaints on the County jet noise reporting map since May

4. 55 of 2014; and the Navy, having listed many surrounding communities including San

5. 56 Juan County, as areas of “No Significant Impact” from Growler noise, has yet to issue a

6. 57 draft Environmental Impact Statement; and

58

1. 59 **WHEREAS** known environmental and human health impacts from the increase in

2. 60 frequency of training activity, and from testing new defense technology present
3. 61 irreparable harms to the residents, environment, and economy of Northwest
4. 62 Washington, and additional, lesser-known harms have not yet been evaluated through
5. 63 EIS or public experience

Snohomish, WA 98290-5884

As a veteran, and as one who deeply cares about our diminishing natural world, please stay out of Olympic National Park. This Park is also designated as Wilderness. Keep the noise out of this iconic area. Respect our last quiet places.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

7.d. Recreation and Wilderness Analysis and Study Area

Coupeville, WA 98239

1.a. Thank You
12.m. Education Impacts
4.o. Classroom Learning Interference

To whom this may concern, I have always supported the use of the OLF in Coupeville to maintain well trained Navy pilots. I support the current level of flights which to my knowledge averages 6100 flights a year. A reasonable increase in the number of flights would be acceptable; however an increase to over 35,000 flights a year is NOT acceptable. The impact on the community of Coupeville would be very negative with such an increase of jet noise. Please take into account the impacts on local schools and businesses in the area when considering such an increase in flights. Thank You, [REDACTED]

Port Townsend, WA 98368

I am shocked and saddened that the Navy would even consider polluting our Olympic National Forest (and Park) with the noise and CO2 emissions from their Growlers. I am STRONGLY opposed to the increase of training flights over our area and especially over the ONF and Park. We live on the north end of the Quimper Peninsula and on many a beautiful summer day, when we are outside enjoying the sunshine and natural beauty of our area the peace of the day (and night) is destroyed by the Navy Growlers flying along the coast. We live in a populated area and it is disturbing! I cannot imagine being in the remote woods of the Olympics and hearing such a racket! And people are only one consideration. The animals of the forest and the mammals in the Straits suffer more than we humans do under the terrifying noise of the Growlers. I at least understand where the sound comes from but the poor creatures are accosted with sounds that can disrupt their migrations, and in the case of the marine mammals, their very ability to find food. I cannot emphasize enough how WRONG this is! PLEASE do not add more harm to our fragile environment and some of our more threatened species by flying these training missions over the wild areas of the Olympic National Forest. Thank you.

1.a. Thank You

10.a. Biological Resources Study Area

10.b. Biological Resources Impacts

10.m. Impacts to Marine Species and Habitat

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

7.d. Recreation and Wilderness Analysis and Study Area

To: EA-18G EIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506
 Hampton Blvd.
 Norfolk, VA 23508

Dear Sir/Madam,

Thank you for extending the comment period to February 24, 2017, in order to accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way.

1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because *all* flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects.

2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.” (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.a. Scope of Cumulative Analysis
- 19.b. Revised Cumulative Impacts Analysis
- 19.d. Electronic Warfare
- 19.h. Cumulative Impacts on Biological Resources
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions:

1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft;
2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers);
3. 2012 EA (26 Growlers including 5 from a reserve unit);
4. 2014 EA (Growler electronic warfare activity);
5. 2015 EIS discussing electronic warfare training and testing activity;
6. The current 2016-2017 DEIS (36 Growlers);
7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160.

Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville *alone* went from 3,200 per year to a proposed 35,100 in 2017. That’s more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.”

The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomic, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability.

4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water.

5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential

13. The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers.

14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>)

15. The Navy describes its activities using the term "event," but does not define it. Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them.

16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service's draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with "...opening day and associated opening weekend of Washington State's Big Game Hunting Season for use of rifle/guns." While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control.

17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed.

18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled “Representative Sound Levels for Growler Aircraft in Level Flight,” on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets.

19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, “...but may be developed and altered based on comments received.” Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be “...identified in the Final EIS or Record of Decision.” Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy’s proposal to *not* allow a comment period on the Final EIS would be unlawful.

20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period.

21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable.

22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, “No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft.” While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can

claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant.

23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls “historic” use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned in the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals. (<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>)

24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water.

25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,”

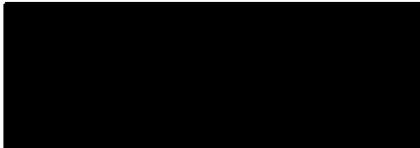
which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted.

26. Pages of boilerplate language do not constitute analysis of impacts to wildlife:

Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is “greatest during flight operations.” However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is “highly unlikely,” largely because “no suitable habitat is present.” This begs the question: if the scope of this DEIS measured the true impacts of jet noise, it is highly *likely* that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area.

27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB. (<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called “Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,” (<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the *best available science*. This DEIS fails that test.

Thank you for considering these comments.
Sincerely,



Seattle, WA 98133

I don't know where you go for relaxation and refuge, but I go to the Olympic peninsula. The Navy plans to turn the Olympic peninsula into a military playground? In Forks the Navy posted a sign stating that there was a two week comment period regarding these war games. This small sign wasn't noticed until the comment period was over. The ensuing outrage forced both the Park Service and the Navy to conduct town hall meetings, and create an EIS comment period. Over 126,000 signatures were gathered in protest of these plans and given to Gov. Jay Inslee. *The Navy proposed they were going to conduct war games and trainings in the Olympic National Forest with 5,000 "events" a year*. There is an area on the coast starting just under the Ozette Indian reservation going south through La Push (Quilette Indian Reservation), through Hoh Indian Reservation, through the whole Olympic National Forest, thru Quinault Indian reservation and stopping right before Ocean Shores and then going as far inland as the Hoh Rain Forest Visitor Center where the Navy wants to conduct these war games. They intend to have these Growler Jet planes take off from Whidbey Island (causing problems there too) and fly over to the above area. They *intend to have periodic unannounced closures of the Olympic National Parks* *in order to do mock warfare*. (Wow sure great for people who have planned their vacations, and once again falls disproportionately on Native people's traditional lands.) These Growler planes can produce 150 decibels of sound, enough to cause instantaneous hearing loss. (110 db is the threshold for permamant hearing loss). *In both humans and wildlife, effects from loud noise include hearing loss, increased stress hormones, cardiovascular disease, immune system compromise and behavioral/psychosocial impacts*. Ground equipment for the planes emit intense electromagnetic radiation associated with all kinds of other health concerns. For more information: *citizensofebeysreserve*.com/ 1 billion birds (already threatened by climate change) fly up and down the pacific coast using it to navigate. This will cause harm to those birds. The Navy's own supporting documents say: "Friendly Electronic Attack could potentially deny essential services to a local population that, in turn, could result in loss of life." *But most important from a climate perspective, each jet burns 1304 gallons PER HOUR and produces 12.5 metric tons of CO2 per hour! Just for perspective that is 23% more than the ANNUAL CO2 emissions of a WA state citizen!* (Then multiply by up to 118 jets x 260 days a year 14-16 hours a day, at altitudes as low as 1000 feet) This is outrageous that to practice war we would destroy the beautiful peninsula and our planet! Our planet cannot afford these kind of "games". We do not want these Growler aircraft and war games on the beautiful and irreplaceable Olympic Peninsula! Please deny permit for these Growlers to fly out of Whidbey Island or the Olympic Peninsula.

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.l. Bird Migration
- 18.b. Average Carbon Dioxide per Aircraft
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 4.m. Supplemental Metrics
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 9.a. Consideration of Tribes

Edmonds, WA 98026

1.a. Thank You

2.j. Costs of the Proposed Action

No to the expansion at Whidbey Naval Air Station. Environmental effects! You gotta be kidding us! Tremendous waste of petroleum and tremendous amount of CO2 released into the atmosphere. For the love of God STOP destroying our planet and STOP making war. Ground all the growlers and shut the base down!

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
for 25 years!!!

3. Address _____

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture. *workers can't work.*
- Aquifer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

- Can't watch TV or talk on phone when flying
- Schools & Hospitals need peace & quiet for healing → concentration
- Contaminants in H₂O & soil!
- People have come to my house to ask how loud the jet noise is at this time, how about when the increase comes

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

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SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name [REDACTED]

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
resident

3. Address [REDACTED] *Coupeville*

4. Email _____

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- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

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- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

As a resident I am deeply concerned about my community and my property values. Tourism will be effected by the noise and sight of military aircraft. Tourists come here for the quiet, bucolic environment which is why people, including retired military personnel, like to relocate here. Property values drop in noise and crash zones that is a given and has not been addressed in the EIS.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

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1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military) _____

3. Address _____ *Coupeville*

4. Email _____

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(over)

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- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.h. Species-Specific Discussions
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
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- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquifer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

As a birder and nature lover I don't find the impact on wildlife especially the birds of Crockett's Lake (an National Audubon Society designated Important Birding Area (IBA)) It is quite disturbing to think about the deafening noise on the susceptible wildlife which requires keen hearing think Short Eared Owls especially for their survival.

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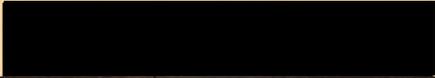
For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

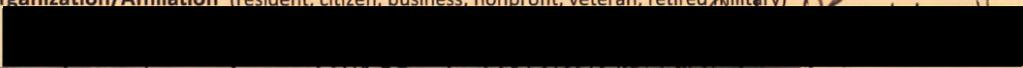
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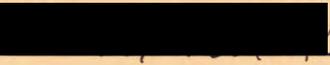
Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

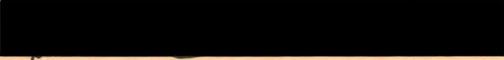
Comments must be postmarked or submitted online by February 24, 2017
SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name  Retired Physical Therapist

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military) 

3. Address  Coupeville, WA 98239

4. Email 

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

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- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
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- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

It is hard to isolate one issue that would be of greatest importance but I think children's health and learning is at the top of my list though I am a home owner in Coupeville. The damage to hearing, the added stress caused by the flights and there impact on learning and development are not trivial. My direct experience from working at the museum as a docent and a guide at the Pacific Rim Institute is that a conversation cannot be maintained during the flights. This need

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to be thoroughly investigated. (Impact on health).
 For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

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Coupeville, WA 98239

As a retired physical therapist married to a teacher I am deeply concerned that the EIS has not assessed the impacts on children's health and learning. Noise levels of the amounts independently recorded are known to damage hearing. A 600% increase in low-level training operations at Outlying Field Coupeville, exposure of nearly 3,500 more children to noise at health-damaging levels, and interruptions in some classrooms at rates of 45 times per hour. Studies show interruptions like these will have an impact on learning and neurological development. With many parks and athletic fields in the area children involved in outdoor activities are even more so at risk of injury.

- 1.a. Thank You
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.d. Environmental Health Risks and Safety Risks to Children

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

As a healthcare professional living under the Growlers and knowing the impacts of this type and intensity of sound on the human physiological state I will say that the Navy's EIS has not done an adequate job assessing these impacts. You don't have to have Post Traumatic Stress Syndrome to be negatively impacted by this type of sound though you certainly will be more impacted to a disturbing degree if you have PTSD. Studies clearly show the rise in the flight or fight responses ie increased heart rate, blood pressure, corticosteroids and adrenalin, etc. sleep disruption and psychological stress due to interrupted conversations and thought processes. An economic assessment model used to decide every high-noise project in the United Kingdom suggests that the consequent health costs to Island County residents are currently \$2.7 million per year, and will grow to \$3.1 million if the Growler program expands as planned. Obviously the Navy needs to do a better job.

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

My comment is that I request
an extention for the Navy EIS
The EIS has
~~It~~ been submitted over the holidays
which is inconsiderate of our families
and ~~the~~ community.

Also Nepa rules state that EIS
should be 300 pages and the
Navy's EIS is 1500 - we need
time to respond!

We believe our towns economy
and National Park will be
adversly affected as well!

For more information, please visit the project website at whidbeyeis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Remarks and concerns regarding the draft EIS presented by the Navy:

- There is little, to no, consideration given in the draft EIS addressing the impact of increased flights on our towns tourist economy; impacts on Ebey's Landing National Historical Reserve; impacts on property valuations or impacts on the second oldest town in the State of Washington.

It seems incongruous that the Navy, who is charged with serving our country and protecting our citizens, would not address the above concerns.

- The draft EIS points out the classroom interruptions in the Coupeville Grade School, but does not include the impacts on the Middle School or High School.

This must be addressed.

- The potential for water contamination was not included. Even if the Town of Coupeville wells turn out to be under the 70 parts that serve as the highest content permitted the EIS must address the possibility of future plane crashes and potential contamination. The draft EIS indicated that this would not be a problem because the Navy immediately cleans up after applying the flame retardant. If this is so, how come the well at Ault Field was tested to reveal more than 50,000 parts?

Coupeville has no alternative water source. Should there be an accident Central Whidbey would be uninhabitable. As there have been six F18 crashes in the last year it seems just a matter of time before there is one at the OLF.

Respectfully submitted,

██████████

1.a. Thank You

11.a. Groundwater

11.d. Per- and Polyfluoroalkyl Substances

12.h. Tourism

12.j. Property Values

4.o. Classroom Learning Interference

8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Coupeville, WA 98239

December 10, 2016 Regarding: Draft Environmental Impact Statement for the EA-18G Growler Airfield Operation Reference: NEPA, the Environmental Quality Improvement Act of 1970, as amended (42 U.S.C. 4371 et seq.), sec. 309 of the Clean Air Act, as amended (42 U.S.C. 7609), and E.O. 11514 (Mar. 5, 1970, as amended by E.O. 11991, May 24, 1977) Dear Sir or Madam: The NEPA Act states that the primary purpose of the statement is to allow for a "full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." In order to accomplish its goals of a full and fair discussion, the Act sets out several requirements. Among them: Sec. 1502.7 Page limits. The text of final environmental impact statements (e.g., paragraphs (d) through (g) of Sec. 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages. The referenced EIS is five times longer than the act suggests. Reviewing and responding to the draft EIS within the 75-day comment period determined by the Navy puts an undue hardship on other agencies and the public to have a "full and fair discussion" as required by the Act. The proposed action in the EIS cites several significant impact areas that require additional research to fully evaluate and quantify. Therefore, I request that the comment period be extended by 75 days to a total of 150 days to permit agencies and the public sufficient time to review and respond. Sincerely [REDACTED]

- 1.a. Thank You
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

Coupeville , 98238

APZ should be announced prior to closure of comment period. No, or insufficient, analysis of economic impacts, community impacts, impacts on Ebey's Landing National Historical Reserve. Contamination of Central Whidbey's aquifer necessitates delay of EIS and increased flights. Our community cannot exist without resolution especially if there is a crash. Failure to adequately address alternative airfields. DEIS significantly discredited due to analytically/research based deficiencies.

1.a. Thank You
11.d. Per- and Polyfluoroalkyl Substances
12.c. Socioeconomic Impacts
12.h. Tourism
2.k. Range of Alternatives
5.a. Accident Potential Zones

Coupeville, WA 98239

My family has lived in Coupeville since 1921, we did not sign on for any jets, let alone the Growler. This remark pertains to the APZ's lack of definition. I live under the flight pattern for the OLF and have not stayed at home when they fly since they began replacing the Prowler. It is poor policy on the Navy's part to not have defined boundaries so people know what to expect. Many land, and home,owners stand to face great losses if the touch and goes increase. That is not justice. Secondly, it has just come to my attention that it is a requirement that missions that are related, and co-occur, must be considered together. The Navy conducted individual DEIS procedures thru our region. There needs to be one process that includes San Juan, Skagit, Island, and Jefferson Counties, and actions taking place throughout the Olympic Peninsula. It is necessary to consider the entire impact.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

2.b. Scope of the Environmental Impact Statement and Analysis Conducted

2.c. Compliance with the National Environmental Policy Act

5.a. Accident Potential Zones

Coupeville, WA 98239

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.h. Next Steps

Requesting a comment period upon completion of the EIS, more than one month. Our lives are peril and we are entitled to analyze the document and provide our perspective and feedback.

Coupeville, WA 98239-9741

Single Siting: I read an article in a military publication regarding single siting of air craft that reported such actions as being a poor option. It is particularly a poor choice when taking into consideration the fragile environment the planes are housed: earthquake, tsunami: highly likely in the future, the entire inventory is at risk. Single siting furthermore exposes us as a significant target should there be conflict or war. It seems obvious that taking out that resource would be eminent. Additionally, Deception Pass Bridge: how simple would it be for a truck bomb to take that down. These points seem obvious, your defense for single siting seems short sighted and dangerous. You must analyze and report on the forthcoming EIS.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 3.a. Aircraft Operations

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

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 By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
3rd Generation of Coupeville Family

3. Address _____ *Coupeville*

4. Email _____

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(over)

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- 10.m. Impacts to Marine Species and Habitat
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- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
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- 2.f. Use of Public Comments
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- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
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- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports
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- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

• 40+ years of advocacy to 'preserve & protect' Coupeville will be destroyed because of an uncaring military - blindly ending a 163 year old community - a treasure to those who live (or will have lived) here and our entire country. At the same time drones are reportedly able to assume the role of the Growler and will, The Navy will sacrifice us for a few years of unendurable flights - immoral, water another use of the flame retardant could make Central Whidbey uninhabitable - aquifer - not piped in River water
 • APZ apparent lethal implications on property use & value
 • Education & Health Care - serious, unaddressed, consequences
 The DEIS is lousy and boldly anti-citizen

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1.a. Thank You

Anacortes, WA 98221

If there is any way to lessen the frequency, the timing, the volume of the unnerving roar of the jets and still train our people totally, please make it happen . The noise is like no other, unspeakably disruptive. It's untenable to contemplate the fact that their occasion may be increased. Thank you.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

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SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name [REDACTED]

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
[REDACTED]

3. Address [REDACTED]
Bellevue, Wa. 98004

4. Email [REDACTED]

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(over)

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- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

Coupeville is the 2nd oldest town in Washington & a very historical area & we treasure that - also the county seat. This is a huge state & you can chase another location for these tank & go practices that won't be ingested like Coupeville. It is also a popular retirement area. Places on the desert wanted these planes, go there to do this you already spend greatly for fuel (back in the '40's they flew to Boardman, Ore. to practice) The final EIS must include other options

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

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Dallesport, WA 98617

The EA18G Growler needs to be removed from north Puget Sound. Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature. Thank You, [REDACTED]

1.a. Thank You

4.r. Nonauditory Health Effects

Dallesport, WA 98617

I would like to see the OLF Coupeville facility closed. The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconception has to be credibly revised to properly characterize the real impacts.
Thank You

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.j. Other Reports



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at www.whidbeyeis.com;** or **(4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]
2. Organization/Affiliation Pointe @ San Juan HOA
3. Address [REDACTED] Audcoates, VA 48221
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

45 Homeowners Above Alexander Beach
in the community of The Pointe @ San Juan
on West side of Fidalgo Island off
Marine Drive - Would Like Full Impact
Re Noise Increase Levels when the
36 Additional Aircraft Are Stationed
& Operational @ NAS Whidbey.

Please send Reply to [REDACTED]
Email - [REDACTED]

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model

1.a. Thank You

Damascus, OR 97089

As a former member of an operational VAQ command based in Whidbey Island, I feel that all the training aircrew can get is extremely important as OP schedules can change on a day to day basis. It is critical that this training regimen be completed. I fully support scenario A and whatever future expansions would be needed to continue to utilize NAS Whidbey Island and OLF as this base is critical to our nation's security. I would have no problems owning a home near either LA and raising my family. Another thing to look at is MCAS Miramar. San Diego wanted the navy out due to the jet noise and instead received the Marines with helicopters that were slower and at times just as loud as the navy aircraft. I urge any change in policy to be fully reviewed at the impact of any move for our community as any change will affect residents wherever the new VAQ home could be. To clarify I fully support NAS Whidbey Island and its operational needs!

Mount Vernon, WA 98273

I am writing for two reasons, noise impact on my farm and a variety of impacts on the Whidbey Island Nordic Lodge located on Jacobs Road in Coupeville. My farm is located on [REDACTED] in Mount Vernon. We (farms and residents west of Mount Vernon) are already impacted by noise from the base; a substantial increase of the number of flights, as much as 575% will have a substantial impact on quality of life. The EIS appears to be more highly focused on Coupeville and Whidbey Island, however, the affected area is much broader including west Mount Vernon and La Conner farms. the scope of the EIS should be expanded to measure impacts in these areas. night flights and their noise have a particular impact on both humans and animals--there are a number of farms raising livestock in this area. The Whidbey Island Nordic Lodge is more directly impacted being located in APZ1. Impacts to the Lodage, a community gathering place impact the organization's ability to serve its members and community due to both the noise of increased flights and the safety to those occupying the lodge. increased flights to 675 have an impact on those individuals who live, work and gather in the immediate area of Coupeville and extending further to the mainland. I encourage you to adequately evaluate the health, safety, usage and quality of life impacts posed by increased use and to adequately consider and evaluate site alternatives.

- 1.a. Thank You
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.l. Points of Interest
- 4.q. Potential Hearing Loss
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area

Clinton, 98236

Don't average the jet noise, but acknowledge the excessive and harmful noise that impacts children's learning, causes psychological harm, causes harm to people's hearing, reduces property values. Adding more growlers to flight paths over eBay's reserve and the Coupeville population will exacerbate the current problem. Please find a different area to fly these planes! Sincerely, [REDACTED]

- 1.a. Thank You
- 12.j. Property Values
- 3.d. Arrivals and Departures
- 4.d. Day-Night Average Sound Level Metric
- 4.r. Nonauditory Health Effects

**NAVY GROWLER DRAFT EIS
NOTES FOR COMMENTS**

*Prepared for the public by the West Coast Action Alliance
(<http://westcoastactionalliance.org>)*

Navy Growler EIS online comments at: <http://www.whidbeyeis.com/Default.aspx>

Dear Reader,

The deadline for comments has been extended to February 24, 2017. For more information, go to: <http://westcoastactionalliance.org>. Please use these notes as you see fit, to help inform your comments, which may be filed in two ways:

1. Mail your comments to:

EA-18G EIS Project Manager
Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506
Hampton Blvd.
Norfolk, VA 23508

2. Go online to cut and paste them into the Navy's comment box, at:
<http://www.whidbeyeis.com/Comment.aspx>

These comments are detailed, but detail is what's needed to qualify as "substantive" and thus grant the person who comments "standing," which means the legal status to continue to participate in the process, either via comments at the next phase of the process, or possibly in litigation at the end, should one choose to be part of a larger group that files suit.

It's better to go long than short, because unless you cover multiple topics in comments at this stage, you may not be allowed to bring up information you left out if there is a future opportunity to comment—unless it's verifiably "new" information. Do your own research to augment these - go to the site, download the documents, read and do keyword searches:

(<http://nwtteis.com/DocumentsandReferences/NWTTDocuments/FinalEISOEIS.aspx>)

Make these sample comments your own! There are other concerns that have not been discussed in these sample comments. You may notice that we have not editorialized about like how we feel about all this; that is up to you, but remember, feelings alone may not comprise comments that the Navy will view as substantive.

According to Navy Public Affairs Officer Mike Welding there is no character limit, and lengthy comments like these can be copied, pasted and sent in one go via the comments box.

Thanks for caring enough to read this detailed information and to participate in the process.

Sincerely,

The West Coast Action Alliance

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.a. Scope of Cumulative Analysis
- 19.b. Revised Cumulative Impacts Analysis
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.h. Cumulative Impacts on Biological Resources
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

To: EA-18G EIS Project Manager
Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506
Hampton Blvd.
Norfolk, VA 23508

Dear Sir/Madam,

Thank you for extending the comment period to February 24, 2017, in order to accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way.

1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because *all* flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects.

2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.” (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions:

1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft;
2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers);
3. 2012 EA (26 Growlers including 5 from a reserve unit);
4. 2014 EA (Growler electronic warfare activity);
5. 2015 EIS discussing electronic warfare training and testing activity;
6. The current 2016-2017 DEIS (36 Growlers);
7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160.

Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville *alone* went from 3,200 per year to a proposed 35,100 in 2017. That's more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.”

The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomic, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability.

4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water.

5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential

impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is "turning out fully trained, combat-ready Electronic Attack crews."

6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The "30-day waiting period" proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts.

7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." According to a memo from the President's Council on Environmental Quality (CEQ) to all federal agencies, "Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." (<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the "loser" among these communities.

8. The Navy has exacerbated the problem stated in #8 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, "[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to "identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . ." Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative.

9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are "tiered" for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and

training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula.

10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the "Affected Noise Environment" around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy's ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas.

11. The Navy's claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the "library" of sounds that comprise the basis for the Navy's computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS that wildlife are "presumably habituated" to noise do not apply when that noise is sporadic and intense.

12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy's benefit, but does not benefit the public.

13. The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers.

14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>)

15. The Navy describes its activities using the term "event," but does not define it. Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them.

16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service's draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with "...opening day and associated opening weekend of Washington State's Big Game Hunting Season for use of rifle/guns." While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control.

17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed.

18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets.

19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, "...but may be developed and altered based on comments received." Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's proposal to *not* allow a comment period on the Final EIS would be unlawful.

20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period.

21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable.

22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can

claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant.

23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls “historic” use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>)

24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water.

25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,”

which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted.

26. Pages of boilerplate language do not constitute analysis of impacts to wildlife:

Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is "greatest during flight operations." However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is "highly unlikely," largely because "no suitable habitat is present." This begs the question: if the scope of this DEIS measured the true impacts of jet noise, it is highly *likely* that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area.

27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB. (<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds," (<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the *best available science*. This DEIS fails that test.

Thank you for considering these comments.
Sincerely,


Poot Townsend, WA.
98368

1.a. Thank You
19.d. Electronic Warfare

Vancouver, WA 98664

This is absolutely not acceptable. 5,000 warfare ops is 5,000 too many anywhere near the Olympics.

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Fill in and mail with comments to:
EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

1. First Name _____

2. Last Name _____

3. Organization/Affiliation _____

4. City, State, ZIP Lopez Island, WA 98261

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.

Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).

2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.

Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.

3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.

Action: Redo the noise simulation using the more recent Advanced Acoustic Model.

4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.

Action: Noise levels should only be averaged over active flying days.

5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.

Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."

6. The Draft includes some independent noise measurements and ignores others.

Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

Anything less than incorporation of all the above concerns is a sham, and demonstrably proves the Navy's intent to circumvent the law.

seattle, WA 98106

Please please do not allow these atrocious plans to go through. Using plans and jets in the manner proposed will have serious negative effects on both the wildlife and people of the peninsula. It's also extremely disrespectful to the native nations these jets would be flying over. I am strongly against these war "games" I consider them a terrible irresponsible waste of money and resources.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

9.a. Consideration of Tribes

Eastsound, WA 98245

I would like the NAS to REDUCE the number of Growler's instead of increasing them. I like walking down West Beach sometimes when over house sitting for friends at Dewey Beach. The last time I walked down toward the base the NAS was conducting touch and go's. It was worse than earsplitting horrible. There were nice beach homes on that beach all empty as they could not be inhabited with that level of noise. Yes, there is the argument that "you knew the base was there, so why did you buy property or a house"? What would you have everyone do, MOVE? Whidbey, Fidalgo Island and the southern portions of Lopez and San Juan Islands are populated and the NAS should work on a noise abatement to help reduce noise pollution, noise harm to health, noise effects on livestock, health effects on children living in the flight path. This has never been adequately addressed even when we had the A-6's. I was involved in a noise abatement efforts back in the early 80's to no avail. You can't make all the people who live and work on Whidbey, Fidalgo and the outer islands just disappear and that are suffering. We even get the noise here on Orcas Island at times. Barlow Bay and McCay Harbor are intolerable at times. Dewey Beach noise is deafening. There is a "shove it down your throat" attitude by the Navy, "you don't like it Move" and no attempt to mitigate the noise pollution and health concerns. So what alternative would I like to see? NONE but if one had to be picked, then it would be a 50/50 between the fields. The NAS is located in a very populated area now and it is growing in population. It's not like we are in the middle of a desert. I do not feel that the EIS addresses the health concerns, livestock and animal reproduction with high levels of noise, and the well being of the people who live within the airspace of the base. Sincerely, [REDACTED] Eastsound, Wa.
98245

- 1.a. Thank You
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife



Public Meeting Comment Form

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

- 1. Name
- 2. Organization/Affiliation
- 3. Address *LOPEZ*
- 4. E-mail
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

1) THE NAVY DOES NOT HAVE ANY REAL TIME NOISE MEASUREMENTS, THIS IS THE ISSUE BOYS. YOU CAN MAKE A COMPUTER PROGRAM DO WHATEVER YOU WANT. I'VE WRITTEN ENOUGH OF THEM. I OUGHT TO KNOW. THIS PRO-FORMA

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.t. Noise Mitigation

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

EXERCISE IS A WASTE OF TAXPAYER DOLLARS.

2) WHY WASN'T THIS WHOLE PROJECT PLANNED WITH A HUSH HOUSE AND OTHER NOISE MITIGATION DEVICES? IT WOULD BE A FRACTION OF THE COST OF ONE JET.

3) WHY NOT HAVE SOME (AT LEAST) OF THE TOUCH AND GO FLIGHTS AT YOUR VAST FACILITY NEAR YAKIMA? THIS WOULD BE TOO MUCH OF AN INCONVENIENCE I SUPPOSE.

4)

For more information, please visit the project website at whidbeyeis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in

1.a. Thank You

12.a. Socioeconomic Study Area

12.j. Property Values

2.c. Compliance with the National Environmental Policy Act

2.e. Public Involvement Process

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.g. Average Annual Day/Average Busy Day Noise Levels

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.j. Other Reports

4.r. Nonauditory Health Effects

4.t. Noise Mitigation

7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. 12. I understand that the EIS will be assessed and possibly approved by the Navy itself. This obviously creates a conflict of interest that invalidates the whole process. Action: To assure public confidence in the legitimacy of the EIS, provide for an independent expert to assess the accuracy of the final document.

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

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Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

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- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
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- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

I live on the south end of Lopez Island - San Juan County noise reports, performed by 36L Acoustics need to be included into EIS analysis.

I often have to cover my ears, when outside, when Growlers fly over (my eardrums hurt.) I believe it is important to recognize the Growler noise impacts on our health as

documented in WHO "Guidelines on Community Noise" + "Night Noise Guidelines for Europe." Thank you,

01/08/16

www.QuietSkies.info

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:
EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

- 1. First Name _____
- 2. Last Name _____
- 3. Organization/Affiliation private citizen
- 4. City, State, ZIP lopez is, va 98261
- 5. E-mail _____
- 6. Please check here if you would NOT like to be on the mailing list
- 7. Please check here if you would like your name/address kept private

Port Townsend, WA 98368

U. S. Navy EA-18G EIS Project Manager (Code EV 21/SS) NAVFAC Atlantic 6506
 Hampton Blvd. Norfolk, VA 23508 e-mail: WhidbeyEIS@navy.mil Submitted online at:
<http://whidbeyeis.com/Comment.aspx> January 25, 2017 Greetings, I wish to thank you for
 the opportunity to submit my comments related to the EIS currently being conducted for
 EA-18G Growler Airfield operations at Naval Air Station, Whidbey Island, WA. As you can
 imagine, I am not hopeful you are listening, but I feel compelled to submit my comments
 anyway. I am deeply concerned about the continued and proposed increased use of the
 Coupeville Outlying Field by the U.S. Navy. The new jets are louder and they are flying
 far more often, sometimes until well after midnight during the work week; they disrupt
 people's lives as well as the local economy which is reliant upon tourism; they
 permanently damaging our hearing with decibels far exceeding safety levels; and they
 endanger many parts of the environment. As a resident of the North Beach/Fort Worden
 neighborhood in Port Townsend, since 1989, I have made numerous complaint calls over
 the years to the Navy and can observe and hear the planes at OLF not only from the
 beach and outside, but also from inside my home on a regular basis. The major noise
 impact in the Port Townsend area is when the planes turn from south to east to north,
 approaching the OLF runway. At this time, the noise is extremely loud, and I have
 observed it several hours after midnight on countless occasions. I have definitely noticed
 significantly louder noise since 2009 when the EA-18G Growlers have been replacing the
 EA-6B Prowlers. Another impact is various fly-overs in the Port Townsend and Fort
 Worden area. For many years, I have observed the P-3 Orion prop planes circle through
 the Admiralty Inlet area, quite close to, and occasionally directly over the City of Port
 Townsend. While noisy, they are much quieter than the P-8 Poseidon jet, which is
 replacing them. The increased flights to the western areas of the Olympic Peninsula also
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 assaulted by the noise from the planes. Animals were disturbed as well as the people
 there. NOISE: The Navy considers any sound above 84dB as noise hazardous, or
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 maximum of 150 dBs, high enough to result in permanent hearing loss. Actual noise
 levels and frequencies should be determined by measurement throughout the affected
 area, not just in the immediate vicinity of the OLF. This includes throughout central and
 north Whidbey, including Coupeville and Oak Harbor, all affected State Parks (Fort
 Casey, Fort Worden, Fort Flagler, fort Ebey, Deception Pass, etc.) and the affected
 portion of Olympic National Park, affected portions of Skagit County, Jefferson County
 including Port Townsend, San Juan County, and on the water where boaters may be
 subjected to the noise. Real-time high noise events experienced with each touch-and-go
 operation should be measured rather than averages over periods when the jets aren't
 even flying. The economic impacts of noise generated by Growler jet operations is not
 addressed in the EIS. These include reduction in property values; reduction in income
 due to lost work opportunity and productivity (e.g., inability to perform time dependent
 farm work due to Growler noise), economic health costs, and reduction in recreation and
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 disclosed. In particular, impacts in areas where there are aggregations of birds should be
 determined, including Crockett Lake, Smith and Minor Islands, and areas of Puget

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 10.j. Plants
- 10.l. Bird Migration
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 18.a. Climate Change and Greenhouse Gases
- 18.d. Washington State Greenhouse Gas Goals
- 19.d. Electronic Warfare
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.k. Comparison of the Prowler to the Growler
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- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 6.f. Fuel Dumping
- 7.e. Impacts to Recreation from Noise/Operations
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Sound. This includes not just resident individuals, but periodic visitors (e.g., migrating birds). Noise impacts to listed species which may not occur in large aggregations, particularly Marbled Murrelet, also need to be considered. Due to the frequency profile of the sound made by Growler jets, there is also the potential for noise impacts to marine mammals. Additionally, impacts of noise on livestock also need to be disclosed.

HEALTH: Aircraft noise can permanently damage hearing, raise blood pressure, and harm livestock and wildlife, and children have greater susceptibility to harm. Studies include those by: the World Health Organization, the US Department of Transportation, and the US Environmental Protection Agency. The EIS does not consider the variable ages of the affected human population especially youth. There needs to be particular consideration of travelers in motor vehicles, boaters, people recreating at all of the affected State Parks, etc. Results should be presented in terms of impacts to individuals (i.e., exposure thresholds resulting in hearing loss) and populations (i.e., such as the increased rates of cardiovascular disease). The Navy has not disclosed any existing data regarding fuel dumping it may have and, if there is none, disclosed this lack of data. Second, a formal monitoring program needs to be put in place that will log and record instances of fuel dumping, including where the dumping occurred, jet speed and elevation, and how much fuel was dumped. This system should operate with a system allowing members of the public to report fuel dumping. These results need to be evaluated both in terms of human and animal (livestock and wildlife) health and effects on vegetation, including forest trees. Investigation of impacts of fuel dumping on forest canopies also needs to consider possible impacts of wind created by low flying jets. This review must also consider impacts to aquatic systems, including both freshwater and marine waters that may be receiving dumped fuel. The impacts to human and animal health from electromagnetic radiation from antenna farms and radar installations needs to be investigated and disclosed, as it is a part of this particular expansion.

SAFETY: Flights over populated areas pose potential safety problems. Pilots and residents are at risk when the Navy uses this short, outdated World War II era OLF. Keeping it open will cause some of the people of the North Puget Sound area permanent hearing loss; air pollution from fuel dumps in the air; risk of jets crashing into civilians' houses.

ENVIRONMENT: The OLF sits next to Ebey's Landing National Historic Reserve, a 24,000-acre National Park of environmental, cultural, and historical significance and an important wildlife and migratory bird habitat, supporting recreational/tourist use and appreciation. Does this EIS fully consider the real effects of OLF operations on these significant values? Air Pollution and Climate Change Pollution from jet aircraft releases harmful greenhouse gases that will contribute to climate disruption.

VEGETATION MANAGEMENT: The EIS needs to address weed control around OLF, particularly of Canada Thistle, blackberry & Scotch Broom. There are several rare plants and communities present on NAS Whidbey including forest at Rhododendron Park, prairie remnants on Smith Prairie (including the presence of the federal and state listed Golden Paintbrush), the rare forest types along Whidbey's west coast, Admiralty Inlet Natural Area Preserve, and various plant communities in both the affected State and National Parks. Without active management, degradation is predictable.

GEOLOGIC IMPACT: An examination of the possible impact of aircraft noise and ground vibrations on the various island slide areas including in the Ledgewood Beach community on Whidbey Island and the bluff collapse at Chetzemoka Park in Port Townsend.

ALTERNATIVES TO OLF: The OLF was not used for the second half of 2013, during which time training has been conducted elsewhere. Less populated areas should be considered for Touch &

Go traffic required for training. This would make it safer for everyone including the Navy families living under the planes. Yakima is an option with airfields and facilities to accommodate staff. It is less than ten minutes by growler to eastern WA. & these planes all ready use this area regularly. Personally, I wish it were not necessary to disturb ANYONE or ANYTHING by the Growler noise. Places less populated by people are still inhabited by many other species. I strongly recommend the No Action Alternative, for the reasons stated above. In the event that the No Action Alternative is not chosen, I recommend Scenario C for the remaining alternatives. Thank you for the opportunity to contribute to this Environmental Impact Statement. Sincerely, [REDACTED]
[REDACTED] Port Townsend, WA 98368

U. S. Navy
 EA-18G EIS Project Manager (Code EV 21/SS)
 NAVFAC Atlantic
 6506 Hampton Blvd.
 Norfolk, VA 23508
 e-mail: WhidbeyEIS@navy.mil
 Submitted online at: <http://whidbeveis.com/Comment.aspx>

January 25, 2017

Greetings,

I wish to thank you for the opportunity to submit my comments related to the EIS currently being conducted for EA-18G Growler Airfield operations at Naval Air Station, Whidbey Island, WA. As you can imagine, I am not hopeful you are listening, but I feel compelled to submit my comments anyway.

I am deeply concerned about the continued and proposed increased use of the Coupeville Outlying Field by the U.S. Navy. The new jets are louder and they are flying far more often, sometimes until well after midnight during the work week; they disrupt people's lives as well as the local economy which is reliant upon tourism; they permanently damaging our hearing with decibels far exceeding safety levels; and they endanger many parts of the environment.

As a resident of the North Beach/Fort Worden neighborhood in Port Townsend, since 1989, I have made numerous complaint calls over the years to the Navy and can observe and hear the planes at OLF not only from the beach and outside, but also from inside my home on a regular basis.

The major noise impact in the Port Townsend area is when the planes turn from south to east to north, approaching the OLF runway. At this time, the noise is extremely loud, and I have observed it several hours after midnight on countless occasions. I have definitely noticed significantly louder noise since 2009 when the EA-18G Growlers have been replacing the EA-6B Prowlers.

Another impact is various fly-overs in the Port Townsend and Fort Worden area. For many years, I have observed the P-3 Orion prop planes circle through the Admiralty Inlet area, quite close to, and occasionally directly over the City of Port Townsend. While noisy, they are much quieter than the P-8 Poseidon jet, which is replacing them. The increased flights to the western areas of the Olympic Peninsula also impact our area. I have been out at the coast, in the National Park and have been assaulted by the noise from the planes. Animals were disturbed as well as the people there.

NOISE: The Navy considers any sound above 84dB as noise hazardous, or having the potential to cause hearing loss. The F/A-18E/F Growler aircraft emits, a maximum of 150 dBs, high enough to result in permanent hearing loss. Actual noise levels and frequencies should be determined by measurement throughout the affected area, not just in the immediate vicinity of the OLF. This includes throughout central and north Whidbey, including Coupeville and Oak Harbor, all affected State Parks (Fort Casey, Fort Worden, Fort Flagler, fort Ebey, Deception Pass, etc.) and the affected portion of Olympic National Park, affected portions of Skagit County, Jefferson County including Port Townsend, San Juan County, and on the water where boaters may be subjected to the noise. Real-time high noise events experienced with each touch-and-go operation should be measured rather than averages over periods when the jets aren't even flying.

The economic impacts of noise generated by Growler jet operations is not addressed in the EIS. These include reduction in property values; reduction in income due to lost work opportunity and productivity (e.g., inability to perform time dependent farm work due to Growler noise), economic health costs, and reduction in recreation and tourism.

The adverse noise impacts to wildlife has not been adequately studied and disclosed. In particular, impacts in areas where there are aggregations of birds should be determined, including Crockett Lake, Smith and Minor Islands, and areas of Puget Sound. This includes not just resident individuals, but periodic visitors (e.g., migrating birds). Noise impacts to listed species which may not occur in large aggregations, particularly Marbled Murrelet, also need to be considered. Due to the frequency profile of the sound made by Growler jets, there is also the potential for noise impacts to marine mammals. Additionally, impacts of noise on livestock also need to be disclosed.

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ENVIRONMENT: The OLF sits next to Ebey's Landing National Historic Reserve, a 24,000-acre National Park of environmental, cultural, and historical significance and an important wildlife and migratory bird habitat, supporting recreational/tourist use and appreciation. Does this EIS fully consider the real effects of OLF operations on these significant values? Air Pollution and Climate Change Pollution from jet aircraft releases harmful greenhouse gases that will contribute to climate disruption.

VEGETATION MANAGEMENT: The EIS needs to address weed control around OLF, particularly of Canada Thistle, blackberry & Scotch Broom. There are several rare plants and communities present on NAS Whidbey including forest at Rhododendron Park, prairie remnants on Smith Prairie (including the presence of the federal and state listed Golden Paintbrush), the rare forest types along Whidbey's west coast, Admiralty Inlet Natural Area Preserve, and various plant communities in both the affected State and National Parks. Without active management, degradation is predictable.

GEOLOGIC IMPACT: An examination of the possible impact of aircraft noise and ground vibrations on the various island slide areas including in the Ledgewood Beach community on Whidbey Island and the bluff collapse at Chetzemoka Park in Port Townsend.

ALTERNATIVES TO OLF: The OLF was not used for the second half of 2013, during which time training has been conducted elsewhere. Less populated areas should be considered for Touch & Go traffic required for training. This would make it safer for everyone including the Navy families living under the planes. Yakima is an option with airfields and facilities to accommodate staff. It is less than ten minutes by growler to eastern WA. & these planes all ready use this area regularly. Personally, I wish it were not necessary to disturb ANYONE or ANYTHING by the Growler noise. Places less populated by people are still inhabited by many other species.

I strongly recommend the No Action Alternative, for the reasons stated above. In the event that the No Action Alternative is not chosen, I recommend Scenario C for the remaining alternatives.

Thank you for the opportunity to contribute to this Environmental Impact Statement.

Sincerely,



Port Townsend, WA 98368

Seattle, WA 98116

please do not disturb the Olympic National Park lands with war game operations, including Growler air operations. The park is known for it's peaceful quietness and wildlife. It is a precious resource to me, and all Americans.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

7.d. Recreation and Wilderness Analysis and Study Area

, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in

1.a. Thank You

12.a. Socioeconomic Study Area

12.h. Tourism

2.c. Compliance with the National Environmental Policy Act

2.e. Public Involvement Process

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.g. Average Annual Day/Average Busy Day Noise Levels

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.j. Other Reports

4.r. Nonauditory Health Effects

4.t. Noise Mitigation

7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. Further more no underwater acoustic studies have been done.

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in

- 1.a. Thank You
- 10.m. Impacts to Marine Species and Habitat
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 18.a. Climate Change and Greenhouse Gases
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. 12. The Draft analysis ignores the CO2 emissions produced and impact on ocean acidification and air quality. Estimates equating to 604,337 metric tons of toxic emissions of CO2 – annually. (ref: Department of Defense, US Energy Information Administration, EPA and State Transportation studies) Ref: CAA Among other references specifically 42 U.S.C. United States Code, 2013 Edition Title 42 - THE PUBLIC HEALTH AND WELFARE CHAPTER 85 - AIR POLLUTION PREVENTION AND CONTROL SUBCHAPTER I - PROGRAMS AND ACTIVITIES Part A - Air Quality and Emission Limitations Sec. 7408 - Air quality criteria and control techniques From the U.S. Government Publishing Office, www.gpo.gov 13. The Draft analysis ignores impact on Marine Mammal life and protected species specifically Stellar Sea Lion colonies South of Lopez Island (Whale Rock). This includes incidents of harassment by military flyovers and low noise emissions. Ref Marine Mammal Protection Act (MMPA) 1972 (16 USC Chapter 31)



Public Meeting Comment Form

1.a. Thank You

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

- 1. Name [REDACTED]
- 2. Organization/Affiliation photo journalist
- 3. Address [REDACTED]
- 4. E-mail [REDACTED]
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

I have shot on the base for 18 yrs and there is nothing like a father or mother seeing their child after a long deployment. The military is what keeps us safe. I have shot from Whidbey to Japan to all countries in the world & God Bless each one of you for doing the hard work and for our country. I've lived in Japan twice the Philippines also Naples Italy and followed the ship back it's part GOD BLESS YOU ALL.



Please print • Additional room is provided on back
Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

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[Redacted]

[Redacted]

OK Harbor, WA
98277

OK Harbor, WA
98277

For more information, please visit the project website at whidbeyeis.com

Please print
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YOUR INPUT MATTERS



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- 1. Name [REDACTED]
- 2. Organization/Affiliation Navy League / USN Ret
- 3. Address [REDACTED] Oak Harbor, WA 98277
- 4. E-mail [REDACTED]
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

I fully support the training and operations facilities for the EA-18G Growler, especially the use of OLF Coupeville for FCLP training. The environment on and around the OLF is unmatched anywhere and having been the ~~recipient~~ recipient of the training it is invaluable when preparing for carrier operations. There are many who support the use of this facility (that may not be vocal) but they are out there.

The NW also has a number of other training opportunities that make NAS Whidbey Island a premier location for the Growler training. To welcome the addition of as many new aircraft as is necessary for the U.S. Navy to perform the missions the aircraft are tasked with. They deserve the finest facilities and training we can provide.



Please print • Additional room is provided on back
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 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Coupeville, WA 98239

1.a. Thank You

5.a. Accident Potential Zones

5.d. Environmental Health Risks and Safety Risks to Children

I am concerned about the potential for a greater number of jet crashes near Coupeville OLF if the number of operations is increased from what it is now to a 80%/20% split between OLF and Ault Field. The DEIS also doesn't show where those zones are.

Coupeville, WA 98239

1.a. Thank You

12.i. Housing Access and Affordability

I am concerned about the amount of people who will be trying to live in Oak Harbor and Coupeville if more Navy personnel are brought to WNAS. There is already a housing shortage and rents are being raised because landlords can get more rent from Navy personnel due to the housing subsidy. That hurts other people trying to live on the island.

Coupeville, WA 98239

1.a. Thank You
12.h. Tourism

More flights and more noise will completely disrupt and ruin the peacefulness of Central Whidbey. People come here to experience nature and have a pleasant experience. The more noise there is the less visitors will come and therefore less revenue.

Coupeville, WA 98239

I am extremely concerned about housing all of the Growlers on Whidbey. Do we want another Pearl Harbor? Shouldn't they be spread out over the entire country? On a similar note, if there were to be a disaster that cut the island off from the rest of the state, for example, an earthquake or bombing that destroyed Deception Pass Bridge, or a ferry attack on the south end of the island, thousands of Navy personnel would be trapped here.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 3.a. Aircraft Operations

Coupeville, WA 98239

1.a. Thank You
11.d. Per- and Polyfluoroalkyl Substances

Water pollution is already here due to the Navy. We don't want more. That will also make life here impossible.

Coupeville, WA 98239

I am concerned about the increase of noise from the much louder Growlers. Thenway the Navy analyzed noise levels was by averaging decibel reports over 365 days, whereas in reality, the planes don't fly every day. In addition, I know FOR A FACT that decibel levels have been recorded well over 100 on a daily basis throughout the summer when most of the field carrier landing practices occur. I have PERSONALLY been under the jets about three miles from OLF when they are flying very low, and my chest shook and I had to cover my ears with a sweatshirt and my hands. It is a lie that the noise is minimal. Not when one lives right under the flight paths!!! Farmers, school children, hospital patients, dog walkers, personal caregivers, pets, and wildlife, to name just a few, are detrimentally affected by this auditory and physical onslaught.

- 1.a. Thank You
- 4.d. Day-Night Average Sound Level Metric
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.r. Nonauditory Health Effects

Coupeville, WA 98239

I am concerned about my and other people's property values decreasing over the next 3-10 years because people will not want to settle here because of the Navy's expansion. Once they see how noisy and invasive thousands of more operations at OLF will be they will not even consider Central Whidbey. Property values will decrease because of accident potential zones, also.

1.a. Thank You

12.j. Property Values

7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Coupeville, WA 98239

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP).

Coupeville, WA 98239

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupported, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports

Coupeville, WA 98239

1.a. Thank You
4.j. Other Reports

The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

Coupeville, WA 98239

1.a. Thank You

4.q. Potential Hearing Loss

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy's defined hazardous noise zone threshold (i.e., "an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month").

Coupeville, WA 98239

1.a. Thank You
7.c. Noise Disclosure

Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy's 2005 AICUZ directives for Outlying Field Coupeville, such as no residences in a noise zone 2. Whether due to willful intent to ignore by the County or to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and attendant land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should be immediately advocating to the County to place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved.

Coupeville, WA 98239

The two most dangerous aspects of flying are the approach, landing and takeoff -- in other words most of the OLFC flight path. The risks are significant (a) because of significant encroachment problems, (b) because OLFC is about 49,000 acres below and the runway about 3000 feet short of standard for Growlers, (c) because the pilots are mostly students flying the F-18 airframe which is 5.5 times more likely to crash than its EA-6B (Prowler) predecessor, and (d) FCLP operations occur at low elevations that increase likelihood of bird strikes with the significant shoreline bird population. These risks cannot be mitigated other than by moving the FCLPs off a suitable 21st century off-Whidbey site.

- 1.a. Thank You
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

Coupeville, WA 98239

1.a. Thank You

13.a. Environmental Justice Impacts

Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Coupeville, WA 98239

The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% overestimated use of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected.

- 1.a. Thank You
- 3.e. Field Carrier Landing Practice Patterns
- 3.f. Field Carrier Landing Practice Operation Totals
- 3.g. Field Carrier Landing Practice Evolutions and High Tempo

Coupeville, WA 98239

1.a. Thank You
4.p. Sleep Disturbance
4.r. Nonauditory Health Effects

The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the "percent probability of awakening for all scenarios..." While music torture is still permitted under US law, the United National Convention against Torture defines torture as "any act by which severe pain of suffering, whether physical or mental..." Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations.

Coupeville, WA 98239

1.a. Thank You
4.o. Classroom Learning Interference
4.r. Nonauditory Health Effects

The DEIS obfuscates the effects of FCLP jet noise on classroom interruptions by averaging interruptions with periods when jets are not practicing. The average understates interruption events compared with event frequency during FCLP sessions, which are as frequent as an interruption every 1-2 minutes. Interruptions of such frequency complicate teaching and thwart student concentration and break the focus of teacher and student. In addition the EPA states "Noise can pose a serious threat to a child's physical and psychological health, including learning and behavior," but the DEIS has not recognized the contemporary research. These oversights and failings must be properly addressed and analyzed.

Coupeville, WA 98239

1.a. Thank You
4.q. Potential Hearing Loss

The DEIS fails to address the effects of noise on hearing and tinnitus and consequential medical costs associated with hearing loss by stating that civilians would need to be exposed to noise emitted by the Growlers for 40 years before there is a permanent shift in hearing. This defies all scientific and audiological evidence to the contrary, even by the US military itself. Hearing loss and tinnitus are the MOST compensated injuries in the military and increasing annually (US Dept. of Veteran Affairs.) That and failure to address the effects of impact or sudden noise must be more fully delineated.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

The DEIS fails to adequately address the effects of high noise levels during pregnancy provoking significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss.

November 15, 2016

**To: Senator Maria Cantwell
 Senator Patty Murray
 Congressman Rick Larsen**

**Re: Draft EIS for Growler Jets at NAS Whidbey Island
 Opposition to Expansion**

I live in Anacortes 25 miles north of NAS Whidbey Island. Any further expansion or increase of Growler jet air traffic training is totally unacceptable and intolerable for the following reasons.

- The noise created is unbearable. It is constant from 25 miles away with each landing, takeoff, fly-over and all engine testing.
- The flight pattern during constant landing and takeoff exercises extends directly over multiple communities affecting tens of thousands of residents. As each jet flies overhead, the noise extends out for 5 to 10 miles on each side. They are at full power with wheels and flaps down and circling every 2 to 4 minutes. Many times two planes fly together with twice the noise impact.
- All public school teachers' efforts to teach, and for children to learn, is greatly impacted when having to compete with the constant noise. Outdoor activities at school – sports, recesses, etc. is even more impacted.
- Simple expectations, such as listening to our TV's, radios and having normal conversations **within our private homes**, is greatly and negatively impacted.
- Carrying on a conversation when outdoors is also prohibited.
- The inability to hear other vehicles' horns or emergency vehicle sirens when walking or biking because of the noise is a real danger and liability.
- The loss of sleep caused by the noise during night flight operations, which extends to midnight or later during the longer days of the year greatly impacts everyone. This is especially significant and serious for student learning and productivity of workers, and it decreases mental alertness. The mental, physical and emotional impact from the unabated noise is very real and substantiated by research.
- The constant irritation of the noise creates frustration, tension, and physical stress and is a very real health concern.

- 1.a. Thank You
- 1.d. General Project Concerns
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 14.a. Transportation Impacts
- 2.a. Purpose and Need
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.j. Impacts on Outdoor Sports

- Residents face financial loss because of the decreased value to our homes and property through the degradation of the livability of our communities caused by the excessive noise.
- I question whether our present infrastructure is even capable of handling the projected increase of personnel and planes at NAS Whidbey. Yes, an increase in personnel will benefit the business community but that is being very short sighted and driven by financial gain or greed. It will only add increased vehicle traffic (and accidents), gridlock at times, pressure on public facilities, parks, emergency services and health care facilities.

It is beyond all logic and common sense reasoning that any further expansion to NAS with Growlers would even be considered. I would better argue that a **reduction** of the present number of Growlers and similar types of aircraft should be considered. As a 20 year resident of Skagit County, property owner, past military veteran and a patriotic taxpayer and citizen, it is totally unacceptable to consider any expansion with Growler aircraft at NAS Whidbey. My neighbors and acquaintances in Anacortes and some other parts of Skagit County are also adamantly opposed to any expansion.

Sincerely,



Anacortes WA 98221

1.a. Thank You

Port Townsend, WA 98368

I am very distressed that the Navy intends to increase the number of Growler flights. As it is I am frequently disturbed by the noise of these planes, both day & night. I feel as if I live in a military occupied zone or on a military base with all of the attendant sounds. This is NOT the sound of freedom but the sound of oppression.

Greenbank, WA 98253

Increased flight activity at OLF is unacceptable for public health and protection of property rights. The increased noise level of the Growlers makes them unacceptable for airfield operations on Whidbey Island. The level of noise created by the Growlers is harmful to native species and the environment in general. Growlers should not be stationed at NAS and should not be flying in the area.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Seattle, WA 98106

The effects of increased fossil fuel burning, the failure to address the wider environment impact of the proposed increased operations by 47% in this statement to 130,000 per year... over national park, forest, wilderness, notably the Olympic National Park, including over one of the few places in the world remaining where man-made sounds do not intrude. Don't follow the drumbeats of war encouraged by this puppet of presidents and his cabinet. Peace to the Planet and all living beings. I don't have any sample comments, but yours could range from objection to increasing capacity for warfare,

1.a. Thank You

18.a. Climate Change and Greenhouse Gases

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

7.d. Recreation and Wilderness Analysis and Study Area

1.a. Thank You

Sequim, WA 98382

Please leave us alone!

- The Navy did not adequately look at siting new Growler aircraft elsewhere**, despite this being the #1 request from the community during the Navy's prior scoping forums.
- An additional 880-1,574 personnel and dependents would severely impact our tight housing market, decreasing the already low stock of affordable housing on Whidbey Island.**
- Single-siting Growlers at NASWI presents a major terrorist risk to our Island, which is served by one bridge and two ferries.** All active electronic warfare jets in the US Military would be at NASWI.
- The Growlers are at risk for more mishaps and crashes due to problems with their onboard oxygen system that can cause pilot hypoxia**, with over 100 incidents in all F/A-18 airframes in 2015 alone. Increases in OLF operations increase the risk of crashes on Whidbey Island and in Puget Sound.

Please include any additional comments here:

What else you can do

1. **Get involved.** To volunteer, email us: coupevillecommunityallies@gmail.com
2. **Call (best) or email your elected officials and share your concerns.** The number of calls are important.
 - a. U.S. Senator Patty Murray: 206.553.5545; www.murray.senate.gov
 - b. U.S. Senator Maria Cantwell: 425.303.0114; www.cantwell.senate.gov
 - c. U.S. Congressman Rick Larson: 800.652.1385; rick.larsen@mail.house.gov
 - d. Governor Jay Inslee: 360.902.4111; governor.wa.gov

To Learn More

- ✓ To receive email updates, or to get involved, **email us** at coupevillecommunityallies@gmail.com
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at www.whidbeyeis.com

All comments submitted by January 25, 2017 will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017
SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name [REDACTED]
2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
3. Address [REDACTED] *Coupeville, WA 98239*
4. Email [REDACTED]

'Resident citizen' who moved to Coupeville 17 years ago because of its beauty and charm.

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.** *We're right in OLF FARP path - noise unendurable when outside. Must come inside or wear uncomfortable ear protectors.*
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.** *Noise over these facilities is criminal. NAF claims they don't fly over hospital, but some WAF employees disagree.*
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.** *Very important to central & south WI even though NASWI + Oak Harbor don't care.*
- A decrease in private property values due to noise.** *What else can we say, unendurable!*

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 12.p. Local Differences in Economy
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve
- 7.i. Deception Pass State Park and Other State Parks
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields. *Deception Pass Campers. Leave, getting money back when planes fly at night. Baseball (kids) at Rhododendron Park has to halt for planes*
- Noise impacts on commercial properties including agriculture. *A tree farm north of Oak Harbor won a lawsuit against NTS a few years ago - flights were low enough to damage their trees!*
- Aquafer and well contamination. *NTSWI knew about problem up in O.H. years ago, even had EPA involved.*

Additional Concerns:

Why were we never warned (with OLF)?

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values. *IT's a shock (yet another) to learn Crash Zones are community's job, not NTS!*
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums. *I believe NTS never looked at or considered our comments from "Scoping Forums". They*
- The impact on marine and terrestrial wildlife. *Severe + unpredictable consequences! DON'T CARE!!*
- The major security risk for Whidbey Island by siting all Growlers here. *Too obvious to even comment on except consider W.I.'s isolation if bridge is damaged.*
- Mishaps and crash risks due to problems such as their onboard oxygen system. *Any crash risk is unacceptable unless they fly over water!!*

Please include any additional comments and concerns here:

Whidbey Island has always been treasured for its idyllic beauty and apartness; as is Olympic Peninsula. Moving ALL NAS Growlers here for 'economy of scale' is unjustifiable. Placing this place of refuge and invites an attack of sabotage. Also very vulnerable here - no land link to main land, no local water supply.

It will also exacerbate the problems of high-cost housing and homelessness in O.H. and strain that school system - with no help ~~for~~ from Navy-employees' taxes!

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Coupeville, WA 98239

IS OLF SAFE and APPROPRIATE? OLF was built for WWII airplanes and lacks in two specifics: 1. runway 25% shorter than Navy-required for Growlers 2. landing area smaller than Navy requirement: only 2.3% of regular Navy-required 30,000 OPEN acres surrounding runway, therefore lots of residences around that will suffer from accidents and fuel-dumping (which NAS does not even acknowledge happens). Crash Zone/APZ is not provided for or financed by the Navy and must be implemented by the community, which is very high-handed. Apparently this zone would need to be 'extended' over already existing residences, reducing property values dramatically. Your own literature states: "Growlers known to be 'accident-prone'" & "Mitigation measures are to be implemented". A December "ground aircraft emergency" accident at Ault Field required the crew to be air-lifted to Harborview in Seattle. The Navy halted all EA-18G Growler and F/A-18/E/F Super Hornet operations as a precaution. Since it was at Ault Field, a helicopter and extensive back-up first aid were available for the crew, and presumably the Navy Hospital would have proper emergency-handling equipment and experience to handle this. If that were to happen at OLF, there would be a potentially crucial delay in getting patients to Harborview. Whidbey General Hospital is nearby but most likely would not adequately equipped for this kind of treatment, and therefore not useful.

- 1.a. Thank You
- 12.j. Property Values
- 3.c. Military Training Routes
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 6.f. Fuel Dumping
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Coupeville, WA 98239

NASWI Contribution to Whidbey Island's Economy NASWI is not good for the economy of Whidbey Island, not even for Oak Harbor. Our small, historical town of Coupeville relies heavily on tourism, and the horrible noise of Growlers drives them away and changes their minds about possibly relocating here. Our National and State parks report refunding up to \$1,000 per day to campers whose vacations are disrupted by low-flying jets. "When the jets fly, the parks clear out." Many if not all of these campers will not return here. A visit to Oak Harbor clearly shows it is not flourishing economically: stores close and change hands frequently, and many stay empty. Traffic is terrible. Schools are struggling to accommodate the new students from your latest influx of 900 more personnel, and it's said that the fee the Navy pays to the schools is insufficient to make up for the tax shortfall. Rents are rising dramatically, contributing to a growing number of homeless and pan-handlers. WI food banks and help-houses are challenged to handle demand. When Oak Harbor expands to handle more military families, their politicians will be eager to re-zone sensitive areas for new housing developments, resulting in that town becoming even less attractive and destroying sensitive and natural habitat. As residents of Coupeville, we shop in Oak Harbor weekly for items not available in our small town, specifically from Wal-Mart, Home Depot, large groceries, ACE hardware, Office Max, as well as enjoying amenities such as Starbucks and BBQ Joint. Conversely, Oak Harbor residents do not contribute to Coupeville's economy, other than perhaps an occasional meal at one of our restaurants. They come to enjoy the beauty of the town and its surrounding preserved areas of outstanding scenery and solitude, but not to shop. On a factual level, statistics show Island County revenues do not benefit from Navy personnel; school costs and loss of sales tax revenues (due to shopping at the PX) result in an estimate of \$5.7 million dollar shortfall each year, "Attributable directly to the presence of the Naval Air Station" as compared to contributions from comparable private industry. It's reported that communities that have 'lost' similar military facilities fare better without them, turning those non-productive areas into industrial parks, for example. Your EIS does not address any of these economic challenges.

- 1.a. Thank You
- 12.b. Invisible Costs
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.p. Local Differences in Economy
- 14.a. Transportation Impacts
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.i. Deception Pass State Park and Other State Parks

Coupeville, WA 98239

NOISE It's a recognized fact that high decibel levels damage hearing, and we've read that the most common health problem among Navy personnel is hearing loss. This issue should not be ignored, and to camouflage the facts by averaging out high readings is unconscionable! Even a decibel level of 98, which has been recorded at the Coupeville Elementary school, should certainly be considered damaging, especially for children. Much higher decibel levels have been recorded privately and reported to NASWI, only to be ignored. To increase the number of flights at OLF ignores the harm NASWI is doing to Central Whidbey. The frequency and timing of the flights will certainly impair our quality of life. Sometimes flights are even scheduled around midnight on evenings which are already pitch black by 7 pm; this naturally interferes with sleep patterns and general health. These are indications of the callous disregard you have for us residents. NASWI misled us a few years ago about Growlers being quieter than Prowlers and then again about how many Growlers would be based here. Now the proposed total seems to increase at every news release. And you want more and more to use the antiquated OLF landing strip rather than your more modern Ault field facilities. We're also only now hearing about a proposed change in use of OLF Runway 14 -- to fly over shoreline residences rather than over the water as has been the pattern since the mid-1960's. This will maximize the sound impact. Will it also increase the APZ (Accident Potential Zone) and the APE (Area of Potential Effect)? We read that the publicized APE is based on 2005 noise data (pre-Growler) and is not large enough. Central Whidbey was a wonderful place to re-locate to in 2000 with incredible natural beauty and peace. At that time OLF was used rather infrequently, and the flights were not intrusive. We even had our back deck expanded a few years ago in order to better enjoy our outdoors. As NASWI has ramped up its equipment and training flights, the noise has become much more of a problem. At the worst, four or five years ago, it was impossible to stay outside during the fly-overs. If I was working outside when the roar started, I would think "I'll just finish up this chore and then go inside." But that was too painful, requiring either abandoning outside activities or resorting to donning uncomfortable ear protectors! Are lawsuits the only way to get the Navy to listen? Recently the newspapers reported Okinawa was awarded an \$80 million judgment over noise from the noise of US Navy planes, and that Japan was requesting the US to be responsible for much of this sum. We've heard that NASWI pilots choose to live in Anacortes, which is quite telling. Perhaps it would be appropriate to require every Navy officer to live in a Growler flight path?

- 1.a. Thank You
- 12.i. Housing Access and Affordability
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 3.d. Arrivals and Departures
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.m. Supplemental Metrics
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 7.d. Recreation and Wilderness Analysis and Study Area

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- 1.a. Thank You
- 12.b. Invisible Costs
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.m. Education Impacts
- 12.p. Local Differences in Economy
- 14.a. Transportation Impacts
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.i. Deception Pass State Park and Other State Parks

Coupeville, WA 98239

MILITARY EXPANSION Your stated goals are: "Retaining and Expanding Military Missions program in WA: Military Alliance: objectives Protect military and defense infrastructure, Promote military and defense industry vitality, Facilitate military and defense partnerships" I strongly object to and resent your commitment to rewarding the defense industry. We regularly hear of tanks and helicopters being built and bought that are not requested or even wanted, and sometimes are proven dangerous. Does this matter as long as the defense contractors profit? Does no one respect President Eisenhower's warning about the 'Military-Industrial Complex'? Is this primarily to keep Boeing profitable? We've learned how strongly Boeing is committed to the PNW - not at all when profits are involved! Why are Australian pilots trained here? Is this because they buy Boeing aircraft, and Boeing requests it? If so, is NASWI/Whidbey Island compensated? WHY EXPANSION? The 'Selected Acquisition Report' states the plan to increase the number of Growler Aircraft from 82 to 153 plus 7 to Japan, totaling 235 in this country. The recent draft EIS "ALTERNATIVES" charts show number of Growlers ranging from 45 to 63. It's hard to keep up with your figures since they keep increasing, some even since this Guide was published. Your 2015 EIS, which has not even been accepted, cited a lower figure. Why does this number keep increasing? Is it true that the goal is to house ALL Growlers in the US here at Oak Harbor? Your expansion plans involving usage of OLF are extremely confusing. The "NO ACTION ALTERNATIVE" is the only acceptable one for the health of Whibey Island! And to threaten a "20/80% split" of flights at Ault/OLF is just insulting to our intelligence; you have a state-of-the-military-art (presumably) facility at Ault and a make-shift, sub-standard strip at OLF! For your "ACTION ALTERNATIVES", even the most favorable to residents of central Whidbey allows for 8,300 flights compared to the 2016 number of 6,100. That is a minimum 33% increase, and IT HAS BEEN INCREASED since your publications listing the choices! WHY HERE? What motivates the goal of 'Expanding Military Missions program in WA'? Why do we need more offensive military equipment? Aircraft carriers are for attacking foreign lands, not for defending our own shores; we do that from land-based fields. We are not at war! If you claim these are to 'defend our country', there should be more facilities than just these in the PNW. Why not have bases near the Gulf of Mexico to protect oil tankers, the northeast coast to protect our economic centers, and the eastern coast to protect those military facilities? More importantly, stationing all your equipment in only one location would be very short-sighted and inviting to an enemy. As at Pearl Harbor, one preemptive strike would be devastating. A sparsely-populated part of central WA, OR, or CA would be much more appropriate and sensible, and some of those areas would likely welcome your presence. Here are two very pertinent quotes from the Sierra Club regarding the use of OLF: "The Navy should close the outdated Coupeville OLF and permanently relocate all EA-18G and EA_6B flight training to safe, state-of-the-art facilities in non-populated areas." "The OLF is an antiquated World War II runway that lacks the proper clearances for safe take offs and landings and it should be closed." An island is not easily protected or supplied in case of a terrorist attack or a natural emergency. NASWI depends on a rather antiquated bridge over Deception Pass as the only fixed access on and off the island, and it could easily be destroyed. Occasionally this bridge closes temporarily just from a vehicle accident. The two ferry

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 14.d. Bridges and Ferries
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 2.l. No Action Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations

routes, one west to the Olympic Peninsula and the other east to the mainland, cannot be guaranteed to operate under all weather and tidal conditions, and they have rather limited capacity. The FBI lists Seattle ferries as #1 maritime terrorism target (along with Gulf Coast tankers). A natural disaster such as earthquake and/or tsunami could instantaneously isolate Whidbey. These all lack effective security checks. Additionally, NASWI relies on a pipeline under Deception Pass Bridge for water from the mainland. Damage to the bridge could most likely cut off the water supply to both NASWI and Oak Harbor, which could be disastrous. Please rethink these vulnerabilities.

Coupeville, WA 98239

"Hot-dogging" and "Fuel Dumping" While it is not called by this name, "hot-dogging" is explicitly forbidden in the DEIS. Under "Existing Noise Mitigation" [page 3-30]: "Make smooth power changes. Large, abrupt changes in power result in large, abrupt changes in sound level on the ground." Notwithstanding this prohibition, I have personally observed pilots doing exactly this with no apparent justification. Some folks believe the motivation for such acts is to intentionally "send a message" to those who complain about jet noise. Indeed, some claim they are aware of pilots actually boasting about doing this. This theory is supported by the fact that the Navy has compensated a few property owners for sound-related damages. There have also been allegations of fuel dumping at low altitude. I have only one personal example concerning such an insult, where a neighbor reported fuel dumped on her home. The Navy simply denied the claim. The DEIS has a single reference to "Fuel Dumping" [page 1-20]. This practice is strictly forbidden by FAA and Navy rules at altitudes below 6,000 feet, except in an emergency situation. One wonders if in the process of training a pilot in this procedure, some fuel might be dumped unintentionally? I have no doubt that the vast majority of pilots follow these rules to the letter, but any organization must be vigilant in enforcing their rules. This is especially true for public service organizations which rely on public funds for their equipment and compensation. The Navy has been loathe to even acknowledge that such rule infractions actually occur. Putting aside the veracity of any such claims, the current "blind eye policy" simply encourages public distrust regarding the enforcement of these rules, and empowers those who would break them, be it intentionally or not. Since these two issues have generated visible public awareness, consider a change to a "policy of transparency". Please add to the DEIS, some descriptions of the process of detecting, reporting, investigating and enforcing alleged infractions of these rules. This will not only help resolve the current PR problem, but also encourage compliance by airmen.

- 1.a. Thank You
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 4.t. Noise Mitigation
- 6.f. Fuel Dumping

Coupeville, WA 98239

Any Increase in FCLP Noise is too much for this Kineth Point Resident I purchased my home on Kineth Point in 2000. At that time, I signed a noise disclosure that indicated that this property was in OLF noise zone 3. At that time, I was told that flights were infrequent, depending on conditions. To experience the noise level directly, I experienced FCLP flights at OLF before completing the purchase. It was quite noisy but tolerable, in particular because of the belief that FCLPs were infrequent. This judgment proved to be correct for the next ten years or so. It was possible to adjust behavior and activities to compensate for and mitigate the noise when the planes were flying -- avoid outside activities altogether, and use high quality ear protectors when needed. However, two things have changed in recent years: (a) the noisier Growlers have replaced the Prowlers, and (b) many more flights are projected. A Growler FCLP using OLF runway 14 typically comes right over the treetops on my property as it turns back for the next run. Often, the Growler is not more than 120 feet above ground level (my estimate) and its engines are accelerating. Anyone who has experienced this will tell you that the Growler is much noisier than the Prowler. You don't need an engineer or a health expert to tell you this -- you know it because your bones rattle and your ears hurt. But for the record, the DEIS (starting on page 4-103) provides a tiny glimpse into the science behind this experience. Unfortunately, this information does not address the levels of noise experienced at my home. It explains that NIPTS (hearing loss) may occur as a result of long-term exposure to 90 dB noise. What it does not say (and should say) is that higher noise levels, approaching 120 dB, can cause permanent hearing damage within a few seconds, especially if repeated frequently. Looking at the noise levels for the DEIS POIs R06 and R07 (the POIs closest to my property) on page 4-64, 120 dB is quite plausible for my location. Indeed, local independent noise level tests have been reported at much higher levels. Notably, the "noise disclosure" I signed in 2000 only mentioned that noise levels "may exceed 100 dB" -- if it had said "may exceed 120 dB", I may have looked elsewhere. That said, even an occasional short-term noise level of 120 dB could be tolerated if anticipated and with appropriate ear protection. What cannot be tolerated is a daily barrage of noise events at this level. But that is exactly what is being proposed for my location -- nearly a ten-fold increase in "noise events" (page 4-64)! Enough is enough -- something has to be done to avoid turning an occasional inconvenience into a daily ordeal that affects all aspects of my life and property. Since the Navy has already rejected using alternative locations for at least some of Growler FCLPs (DEIS section 2.4), the only suggestion is a "Noise Abatement Policy" (starting on DEIS page 4-112). Unfortunately, except for minor scheduling adjustments and "prudent airmanship techniques", this policy offers very little for OLF-area residents like myself. It is worth noting that CEQ regulation Section 1502.1 prescribes that reasonable alternatives are those that would "avoid or minimize adverse impacts or enhance the quality of the human environment" (DEIS page 2-3). The only alternative offered that satisfies this regulation is the "No Action Alternative".

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.l. No Action Alternative
- 3.j. Flight Simulators
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.c. Noise Disclosure

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
resident right near OLF

3. Address _____

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

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- 10.b. Biological Resources Impacts
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- 5.a. Accident Potential Zones
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- 7.g. Ebey's Landing National Historical Reserve
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- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

We live in what will become the expanded APZ, right under the OLF flight path. The level of activity at OLF has been tolerable since moving here in 2000. The increase proposed, however, will significantly reduce quality of life because of ten times as many days of unhealthy noise and associated risks and values to life and property. Please consider offloading extra training to other sites.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Coupeville, WA 98239

Hidden Costs of Increased Growler Training It is clear from the DEIS that the Navy is asking the local community to accept a significant burden to support the increased Growler training program on Whidbey Island. It is also clear that very little is being offered to the local community in return for their cooperation. One view is that the Navy doesn't really care and will do whatever they want. I prefer to believe that the Navy will listen to reasoned arguments and make appropriate accommodations. To believe otherwise suggests a grave disregard for the impact of this program on the local community. As a start, it would be helpful for the DEIS to acknowledge the full costs of significantly increased noise levels and increased military population. (1) decreased county revenues from tourism, and property and sales taxes. (2) loss to businesses that cannot operate with greatly increased noise levels. (3) increased costs for schools and infrastructure. (4) decrease of property values, home construction, and real estate activities. (5) degradation of the unique natural environment that is Whidbey Island. (6) costs of acquiring or condemning property in expanded "Crash Zones". (7) no doubt other DEIS comments expand this list. A fair evaluation of increased Growler training should include an estimate of these costs to the community. Even when considering alternative airports [Appendix H of volume II], the only costs that are considered are direct costs to the Navy, like runway modifications and arresting gear. Criteria 8 [Noise Abatement] in the "PACNORWEST FCLP Screening" analysis of civilian airfields notes that the "exponentially louder" Growler noise levels "would likely receive a hostile response from the (respective) community". Sadly, this criteria is only used to reject off-island alternative airfields, and is ignored when evaluating OLF. It is far too easy to reject alternatives as too expensive when the costs to local property owners, businesses, and organizations are ignored. If all costs and benefits are taken into account -- both to the Navy and to the local community -- something closer to a win/win solution to this issue is more apt to be forthcoming. Different goals and priorities. This is a clear case of two groups with different goals and priorities. Lacking a willingness to negotiate these differences and come up with acceptable trade-offs will only exacerbate the pressure for legal and political remedies. I take the DEIS to represent the Navy's goals: satisfy congressional mandates, establish single-site home basing, exploit their "center of excellence" in Electronic Warfare capability, maintain efficiency of operations. What is missing is a process to clearly enumerate the goals and priorities of the local communities. It is important to acknowledge that there are several different local communities on Whidbey Island, each with its own goals and priorities. Also, those who are more heavily impacted should be given more consideration. I suggest that the DEIS comments serve as a first cut at formalizing their goals and priorities. Despite their differences, I believe that the majority of Whidbey Islanders accept and benefit from the Navy presence and accept some level of FCLP activity. As such, the DEIS NO ACTION alternative forms a baseline for agreement. Speaking for myself as a homeowner living close to OLF, here are my four top goals and priorities. A young family in Oak Harbor would have a different set of goals and priorities, and I can't speak for them. (1) Be able to enjoy being outdoors on my property during good weather without being subjected to unhealthy extreme jet noise. I don't love jet noise and that slogan makes as much sense to me as "pain makes you stronger". (2) I have invested a fair amount in my property and would prefer that its value

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.m. Education Impacts
- 14.a. Transportation impacts
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.d. Recreation and Wilderness Analysis and Study Area

not be dramatically reduced because of excessive jet noise. Some estimates suggest 30% loss in value can be expected. Finding that my property will be part of an APZ would be a big negative. (3) I enjoy the natural beauty of Whidbey Island, activities such as walking trails, birding, and local outdoor events. A significant deterioration of these activities would be a very negative factor. (4) I strongly support the efforts of our County government to support a healthy small-town rural economy. A major hit to the local tax base could make that support difficult and would be a negative. Here are some suggested mitigating alternatives and trade-offs that could satisfy both the Navy's goals (as I understand them) and my own. (1) Share the FCLP training over a wider set of airfields. See more details below. (2) Provide some form of safeguard against dramatic loss of property values. (3) Similarly, provide some form of direct economic support to compensate for lost County tax revenues. (4) Better police the behavior of a small group of airmen who violate Navy rules on noise abatement. (5) If extended APZs are needed, pursue acquisition of these properties through the Eminent Domain process. This will ensure that it is not just a "land grab", but something that is "in the public interest" and is justly compensated. (6) The "just move" alternative. Unfortunately, the Navy has empowered, intentionally or otherwise, a small group of vocal critics that advocate this alternative. The sad fact is that this alternative is not possible for folks with badly depressed property values. I strongly hope that the Navy disavows this alternative in some constructive way. Alternative airfields. The "PACNORWEST FCLP Screening" analyzes 32 civilian airports, including "Eisenberg (Oak Harbor)," as potential FCLP sites. While all are rejected for one reason or another, this analysis is only cursory. I got the impression that the purpose of this survey was not seriously intended to actually find alternatives. I urge a review of this analysis with the addition of several new criteria. (1) Consider negotiating with these airports to see if there is anything that might entice them to host a limited number of FCLP flights, perhaps during well-defined short time-frames. There may well be airfield improvements or enticements the Navy could offer that would be welcomed. For example, in return for a certain number of FCLP flights, the Navy could provide an improved public space that could serve as a fairground, market, or sports fields during most of the year. (2) By relaxing the 50 nm Growler flight distance requirement, many more potential airfields could be considered. This would require a willingness to temporarily house training squadrons off-site for a week or more. Use the same sort of "negotiated carrot" approach as (1) above. (3) With a bit more effort, this sort of off-site training could be extended country-wide or even world-wide (maybe even to Australia) to include many more potential locations. Even a small number of additional "partner training airfields" could significantly reduce the impact of increased Growler training to Whidbey Island and surrounding areas.

Port Townsend, WA 98368

1.a. Thank You
10.c. Wildlife Sensory Disturbance and Habituation
2.e. Public Involvement Process

I live in Port Townsend and am concerned about the disruption to our lives and to the Olympic Peninsula eco-system, which is being caused by the noise and other pollution created by Navy jet flyovers. I do not bear Navy personnel any animosity. I am convinced that they are doing what they think is best, as are we all. I have heard some speak about those with concerns similar to mine as if we were crackpots or whiners who didn't appreciate that there are dangerous forces in the world against which we need to vigilantly protect ourselves. From my point of view, the tone of those sentiments could be roughly expressed as "who cares about some sparsely inhabited forest when there are pressing threats to our safety." I am seventy years old and I know how the world works, so I have no doubt that the defense contractors who are selling these jets to the Navy carry much more weight at all levels of our government and military than do the voices of a few thousand concerned citizens. So I would be shocked if all of the concerns about the jets flying over the Olympic Peninsula came to anything. But I feel compelled to tell you that the noise of those jets kills living eco-systems, permanently. Sound studies of wild areas, conducted over many decades, demonstrate that loud noise critically damages these systems; and they don't recover when the noise stops. The point is that our natural environment operates in a much more sophisticated way than most of us understand. And those complex living systems nourish all of us, whether we actually go there or not. That concept may be too abstract for most to wrap their minds around, but it is true nevertheless. What I am suggesting is that we are destroying that which supports life out of a fear that something bad may happen (war, terrorism) if we don't. Many would say that this is a reasonable trade-off, but that is only because they don't appreciate the magnitude and importance of what we are destroying by our actions. What the Navy is doing here, and proposing to do, is sort of like a right-handed gunslinger having his right foot amputated so that he doesn't accidentally shoot himself in the foot when he is drawing his gun. In other words, it is insane. The noise from these jets is doing more damage than you appreciate. More flyovers will make that markedly worse. This isn't just about a group of people who want to enjoy their peaceful lives. It is about permanently destroying one of the most pristine eco-systems on earth. If you want documentation about how sound-critical natural environments are, please ask and I will send you some information. Thank you for your time.



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]

2. Organization/Affiliation N/A

3. Address [REDACTED] PT 98368

4. E-mail [REDACTED]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

TOO MUCH NOISE! "AVERAGES" SKEWED.
GREW UP EXPOSED TO NAVY TAKE-OFF LANDING
NOISE. HOW ABOUT A DECREASED EXPOSURE
OPTION, RATHER THAN AN MS NOW OPTION AS THE
ONLY ALTERNATIVE TO BAD & WORSE.
KEEPS THE CONTRACTORS BUSY, I GUESS.

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
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YOUR INPUT MATTERS

- 1.a. Thank You
- 2.k. Range of Alternatives
- 4.d. Day-Night Average Sound Level Metric
- 4.m. Supplemental Metrics

Friday Harbor, WA 98250

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in

1.a. Thank You

12.a. Socioeconomic Study Area

12.h. Tourism

2.c. Compliance with the National Environmental Policy Act

2.e. Public Involvement Process

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.g. Average Annual Day/Average Busy Day Noise Levels

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.j. Other Reports

4.r. Nonauditory Health Effects

4.t. Noise Mitigation

7.h. San Juan Islands National Monument

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Friday Harbor, WA 98250

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4.t. Noise Mitigation

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- 1. Name [REDACTED]
- 2. Organization/Affiliation IRONDALE PEACE ORGANIZATION
- 3. Address [REDACTED] PORT HADLOCK WA
- 4. E-mail [REDACTED]
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

NO. NO NO NO.

Are you going to ignore this because its not a substantiating statement? Or is it because you always ignore what people say? Because NOISE IS NOT GOOD

The problems with excessive noise are too numerous to go into on this pre-approved tenary form. And you're going to do whatever you want to RUIN the Olympic Peninsula anyhow. So what's the point?

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 2.f. Use of Public Comments
- 7.d. Recreation and Wilderness Analysis and Study Area

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Lined area for handwritten comments.

Also?
From...
...

For more information, please visit the project website at whidbeyeis.com

Please print
Please drop this form into one of the comment boxes here at the public meeting or mail to:
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

1.a. Thank You

Friday Harbor, WA 98250

EA-18G growler overflights and engine testing noise is a huge infringement on my rights to peace and happiness. The noise is completely distracting and anger inducing. Please stop them. Develop a quieter aircraft or test them in a less densely populated area.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Greenbank, WA 98253

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Coupeville, WA 98239

Please do not add 35-36 new Growler jets to the fleet at the Naval Air Station on Whidbey Island. If flight operations increase from 6,100 to 35,100 annually children at the Coupeville schools will lose their hearing, they won't be able to go outside at recess, practice their sports or play their games when the planes are flying. Children who are play outside in their yard or at a park when the planes start flying will lose their hearing. When the planes fly over the schools the kids will hear and feel it. A friend of mine told me when the planes were flying during his kindergarten son's baseball practice at Rhododendron Park, the sound was so deafening that everyone had to stop and hold their hands over their ears but it didn't help because all their ears were ringing for hours after the practice. I experienced the plane noise when I was shopping at the Red Apple, which is right by the schools. When I got out of my car, the noise and vibration was so loud that I waited in my car for the planes to pass before I walked outside to the store. The Coupeville economy is based on tourism which will be eliminated by all these planes. Tourists will stop camping at the camp grounds. The Navy is silencing Coupeville citizens with marginalization and shame ("Sound of Freedom"). I honor the protection the Navy provides. However, I insist the Navy use its own military reserves or simulators, not Coupeville, for pilot training.

- 1.a. Thank You
- 12.h. Tourism
- 2.n. Alternatives Considered But Eliminated
- 4.m. Supplemental Metrics
- 4.q. Potential Hearing Loss

Coupeville, WA 98239

We strongly object to the Navy adding hundreds and perhaps thousands more flights to the Coupeville OLF. We live in Admirals Cove and the jets fly directly over our house. When the jets fly, we cannot carry on conversations, we cannot have guests to our home, we cannot talk on the phone, we cannot watch tv, we cannot work in the yard, we cannot enjoy our deck. We were aware of the jets when we purchased the house in 2012, however, we did not sign up for the many hundreds more flights that the additional jets would create. It seems to us it would greatly increase the chances of an accident as well and property values would fall. Further, aside from the effects of additional flights on us personally, we are concerned about Coupeville and Central Whidbey. Coupeville is an historic seaside town that depends greatly on tourism, a major industry. Hundreds of flights per day would drive tourists away; we personally have heard of guests who have come to the island and left very quickly because of the jet noise. This would impact the town merchants, restaurants, B&Bs, and event venues Another major industry in the area is farming; farmers could not work in their fields with constant, daily jet noise. In addition, the noise would be harmful to children at Coupeville schools and those playing in parks. We wonder how the noise levels affect the eagle pair that live in a tree close to our property, as well as other wildlife in the area. It is our understanding that the Navy has not actually measured noise levels, but has used models to come up with their figures. We are not against the Navy; we know the base in Oak Harbor is a major economic source for the town. We strongly feel, however, that increasing flights over Coupeville and Central Whidbey, would be extremely harmful to this community.

- 1.a. Thank You
- 1.d. General Project Concerns
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 7.c. Noise Disclosure

port townsend, WA 98368

To: EA-18G EIS Project Manager Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508 Dear Sir/Madam, Thank you for extending the comment period to February 24, 2017, in order accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way. 1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because all flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects. 2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.” (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). 3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions: 4 squadrons of P-8A Poseidon Multi-Mission Aircraft; A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers); 2012 EA (26 Growlers including 5 from a reserve unit); 2014 EA (Growler electronic warfare activity); 2015 EIS discussing electronic warfare training and testing activity; The current 2016-2017 DEIS (36 Growlers); And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160. Therefore, it has been impossible for the public to know just

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.a. Scope of Cumulative Analysis
- 19.b. Revised Cumulative Impacts Analysis
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.h. Cumulative Impacts on Biological Resources
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville alone went from 3,200 per year to a proposed 35,100 in 2017. That's more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are "no significant impacts." The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) "...does not allow an approach that would permit dividing a project into multiple 'actions,' each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomics, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability. 4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water. 5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is "turning out fully trained, combat-ready Electronic Attack crews." 6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The "30-day waiting period" proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts. 7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." According to a memo from the President's Council on Environmental Quality (CEQ) to all federal agencies, "Reasonable alternatives include those that are practical or feasible from the

technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.”

(<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the “loser” among these communities. 8. The Navy has exacerbated the problem stated in #8 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, “[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to “identify the agency’s preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . .” Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative. 9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are “tiered” for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula. 10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the “Affected Noise Environment” around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy’s ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas. 11. The Navy’s claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the “library” of sounds that comprise the basis for the Navy’s computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS

that wildlife are “presumably habituated” to noise do not apply when that noise is sporadic and intense. 12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy’s benefit, but does not benefit the public. 13. The Navy’s noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers. 14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software “...do not properly account for the complex operational and noise characteristics of the new aircraft.” This report concluded that current computer models could be legally indefensible.

(<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>) 15. The Navy describes its activities using the term “event,” but does not define it. Therefore, the time, duration, and number of jets in a single “event” remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public’s ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them. 16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service’s draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with “...opening day and associated opening weekend of Washington State’s Big Game Hunting Season for use of rifle/guns.” While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control. 17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: “Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL.” This guidance further states, “Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.” If this official guidance directs Growlers to fly

at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed. 18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets. 19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, "...but may be developed and altered based on comments received." Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's proposal to not allow a comment period on the Final EIS would be unlawful. 20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period. 21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable. 22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant. 23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls "historic" use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health

advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>) 24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water. 25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,” which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted. 26. Pages of boilerplate language do not constitute analysis of impacts to wildlife: Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is “greatest during flight operations.” However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is “highly unlikely,” largely because “no suitable habitat is present.” This begs the

question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area. 27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB.

(<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,"

(<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test. Thank you for considering these comments. Sincerely, [REDACTED] Port Townsend, WA 98368

Friday Harbor, WA 98250

There are very few places left where there is no man-made noise, where we can listen to nature alone. There are still places on the San Juan Islands and the Olympic National Forest where that can be achieved - ALMOST. The noise from the Growlers every 15-20 minutes on the days they are active is nerve wracking and disturbing of any kind of peace. The peace of the Pacific Northwest is not an appropriate place for additional war machinery. 1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

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- 12.a. Socioeconomic Study Area
- 12.h. Tourism
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- 12.n. Quality of Life
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- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

12. Add your own comments here:

Growlers significantly decrease our quality of life here on Lopez. The children run inside when growlers are out scared and crying. There is constant low rumbling every where / anytime we go for walks. The presence of military training feels invasive and aggressive. Please, please reduce the # of growlers that fly over our beautiful, serene island.

01/08/16

www.QuietSkies.info

Thank you.

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name _____

2. Last Name _____

3. Organization/Affiliation _____

4. City, State, ZIP Lopez Is. WA - 98261

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

1.a. Thank You



Public Meeting Comment Form

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name
2. Organization/Affiliation
3. Address
4. E-mail
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

I HAVE BEEN A FULL + PART TIME
 RESIDENT OF THE ISLANDS FOR 50 YEARS
 + AM IN FULL SUPPORT OF NAS OPERATION.
 I AM AN ACTIVE PRIVATE PILOT +
 APPRECIATE HELP FLYING THRU CLASS

Please print • Additional room is provided on the

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Coupeville, WA 98239

In response to your request for comments of the draft EIS of the proposed Growler expansion at OLF, my concerns are as follows:

- My husband's family arrived here in the 1800's and I am honored to be part of a multi-generational family, many of who have farmed this land since they settled here and still do today--my husband and I farm on [REDACTED] along with our 5 year old son and my mother-in-law. My husband is the fifth generation, my son, the sixth.
- Your computer-generated model of decibels, that averages in a 24-hour period, simply does not accurately measure the sound of the Growlers during the touch and go practice. As you must be aware, another federal entity, the National Park Service, measured sound on the Reserve and the decibels far exceeded your 'average' of 60 decibels. Its accurate measurement of the sound (not a computer generated calculation) of 115 decibels is LITERALLY deafening. Averaging an enormous sound that can cause permanent hearing loss over a 24 hour period is insulting to the health of the good citizens of this area, many of whom are children. If someone hits you on the head with a brick it will certainly hurt you. If you average that pain over 24 hours it looks less painful, but does not negate the pain of being hit on the head with a brick. Because much of the 1700 page document is based on this inaccurate model of measurement, the potential effects on our community are not accurately reflected in the Draft EIS. I implore you to reconsider your sound model and base the EIS on ACTUAL sound measurements.
- Our children. In your proposed Alternative 1 for jet increases, according to table 4.2-3, the number of jets flying over Coupeville Elementary goes from the current level of 367 to 1,325. It is also admitted in the EIS that children's cognitive development can be affected by jet noise. How is it possible that there is no alternative considered other than exposing our own children to the 'shock and awe' brought on by the Growlers, risking the healthy growth of their minds and bodies? They are the future of this country. The draft environmental impact statement (DEIS) gives insufficient consideration to the detrimental effects of noise on children's learning, despite the fact that the Wyle Aircraft Noise Study (DEIS Appendix A) recognizes these effects: "While there are many factors that can contribute to learning deficits in school-aged children, there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning. This awareness has led WHO and a North Atlantic Treaty Organization (NATO) working group to conclude that daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites." [DEIS at p. A-176; emphasis added.] Substantial research has been done on the impact of high noise levels from aircraft and other sources on children's learning (and health), and there is a growing consensus in the scientific community that such noise adversely affects academic performance. For example, Cohen et al. (American Psychologist 35(3):231- 243, 1980) found that children from noisy schools had higher blood pressure, were more likely to fail on a cognitive task, and were more likely to give up. Students in the study were exposed to peak noise levels as high as 95 dB, similar to peak noise levels shown for Whidbey Island schools in Chapter 4 of the DEIS. A later study by Hygge et al. (Psychol. Sci. 13(5):469-474, 2002) found impairment of long-term memory and reading in noise-affected children. In a 2008 review, Clark (Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008) stated that "evidence for the effects of noise on children's cognition is strengthening . . . with

- 1.a. Thank You
- 2.l. No Action Alternative
- 2.m. Record of Decision/Preferred Alternative
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.t. Noise Mitigation

over twenty studies having shown detrimental effects of noise on children's memory and reading." Significantly, Clark points to "a linear exposure-effect relationship between chronic aircraft noise exposure and impaired reading comprehension and recognition memory, after taking a range of confounding and socioeconomic factors into account." A 2013 review of more than 80 studies (Klatte et al., Front. Psychol. 4:578, 2013) found that noise exposure impaired children's abilities in speech perception, listening comprehension, short-term memory, reading, and writing. The authors state that these effects "have to be taken seriously in view of possible long-term effects and the accumulation of risk factors in noise- exposed children." Not one of the studies reviewed by Klatte et al. is cited in the DEIS (Ch. 7). In view of the large body of research showing harmful effects of aircraft noise on learning, the EIS must give greater attention to noise levels in schools, including a frank discussion of the documented effects. Mitigation measures must also be discussed as required by the applicable regulations (40 CFR §1502.14(f); 40 CFR §1502.16(h)). In honor of our young citizens you are claiming to protect, I implore you to consider a no action alternative or to explore other options. Thank you for reading, [REDACTED]

1.a. Thank You

Victoria , British Columbia V9A 7A5

Good Morning, While the Growlers are loud, I do acknowledge the need to train for battle.
Keep on flying.

Port Townsend, WA 98368

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

Please extend the comment date for public input.

1.a. Thank You
12.e. Agriculture Analysis
4.o. Classroom Learning Interference
4.q. Potential Hearing Loss
4.t. Noise Mitigation

[REDACTED]
[REDACTED]
Coupeville, WA 98239
[REDACTED]
[REDACTED]

8th December 2016

Commander, U.S. Fleet Forces Command
1562 Mitscher Avenue, Suite 250
Norfolk, VA 23551-2487

Commander, U.S. Fleet Forces Command,

I am writing to share with you how I personally and my family have lived and operated a business within the flight path of the jets utilizing the O.L.F. practice field on Whidbey Island.

Having lived my life on Whidbey jets and jet noise are a common occurrence and are to be expected. I have certainly been irritated by the sound and variability that occurs with each of the maneuvers while trying to operate a business, teach school, communicate with my family and so on. I also balance that in my head with memories of 9/11 when seeing those jets in the sky provided feelings of safety and security.

That being said, I am concerned about three things: 1) the extreme polarization that has developed within the communities on Whidbey Island and the nearly absent effort to negate those effects and 2) the effect the increase of jet flights in our region will have upon our communities and prosperity of our members and 3) the exclusion of the Coupeville Middle School and Coupeville High School from the EIS.

- 1) With the first EIS tempers around the community began to flare, but with the increase proposal that was then developed Vandalism, belligerence, anger, hate, abuse, and divisiveness have become rampant in local newspapers, public meetings, signage, and other areas. Having lived in the Coupeville community my entire life I have experienced jets that entire time and have always accepted them as a necessary part of life. Just like many other property owners I even signed documents when purchasing my house that I knew there would be jet noise. What I didn't expect was that there would be a different kind of jet noise with the Growlers and that there would be a significant increase in jet noise. Maybe we were naive but this is what has happened and people rightly feel like we have been caught off guard. I have seen nothing done in part by the Navy, State and local governments, or civic groups to improve community relations, to bring

people together, to acknowledge issues and to educate people, nothing to mitigate the damage being done. All I see now are people who are so worked up and venomous that the only responses you get to the issue are “move away if you don’t like the noise”, “don’t support that town’s economy”, “I ‘heart’ jet noise”... This has gotten to such extremes that many people from both sides of the issue are exasperated at how polarized this has become. People see the value and importance of the work the Navy does but they don’t see any education on how to maintain their physical and mental health when dealing with these effects from the jets.

- 2) [REDACTED], my spouse, and I operate a community supported agriculture program at our 20 acre farm located at [REDACTED]. We serve approximately 40 members of the surrounding communities by providing them with fresh produce each week from our farm and opportunities to explore the rural lifestyle.

When attempting both outdoor education or crop harvesting on our farm it has become necessary to provide our membership with hearing protection so that they can enjoy the farm when they are there with their families. I have received no information from the Navy as to whether these earplugs are enough to protect our members hearing during the touch and go operations occurring overhead. I wear the same ear protection I wear when using a chainsaw but also do not know if the protection is adequate. I find it very disconcerting and unsafe to operate equipment such as tractors when touch and go operations are occurring due to the reduced hearing I experience and the reduced hearing our members experience. I have had to reduce my productivity on my farm due to trying to be safe on my farm while the touch and go operations are occurring.

Our membership of 40 families comes from many diverse roles in the community and it is interesting to hear them having conversations out in the corn when the jets are flying. Everyone agrees the noise hurts our ears and stops our progress. An increase in any form of touch and go operations would also inversely affect safety and productivity.

- 3) I teach school at Coupeville Middle School and Coupeville High School. I am gravely concerned that these two schools were left out of the EIS. I teach several of my classes outdoors and learning comes to a halt when jets are overhead. We communicate in short bursts, cover our ears, and resume. We repeat this activity frequently during the touch and go operations. This fragmented approach to instruction is not effective by any means but it is how I have to accommodate and adapt to instruction in a loud environment.

My students are not provided with hearing protection, I know that they are uncomfortable in the noise produced by the jets and they do not learn as well as when there is less noise. I am also concerned about the fact that while prolonged exposure to high decibel sounds can permanently damage hearing, that short bursts of high decibel sounds over a period of time can have an accumulative effect.

Without the inclusion of these two schools I see a serious lack of data provided to the NAVY and other governing bodies. Coupeville Middle School serves approximately 227 students and Coupeville High School serves approximately 315 students. There are staff and community members utilizing this campus as well which can bring the numbers of human beings at this campus site to close to 600 individuals at one time. This is a significant lack of data in this EIS.

I would really like to see the following happen:

- 1) Significant efforts made by both the NAVY and the local entities to provide educational outreach to those living in the flight paths, not just the Oak Harbor community, on how to best adapt to living in an environment with infrequent high noise issues at the current levels of volume.
- 2) Recognition and outreach on best practices for operating businesses during instances of impacted hearing.
- 3) Education as to what appropriate measures need to be taken to insure hearing safety equipment is effective and maintained.
- 4) Touch and Go carrier practices to flex scheduling to do the following:
 - a) Night landing practices be concentrated to winter times in the afternoon so that low light and earlier dusk times are banked for evening practices instead of late night practices during the summer hours when dusk times are later in the evenings.
 - b) Weekends be made a priority for periods of quiet or limited flights.
 - c) School hours of operation be impacted as little as possible to reduce exposure to noise.
- 5) Identification of noise related impacts upon learning and explanation as to how those impacts will affect the learning of Coupeville School District Students instead of just our Elementary School.

Sincerely,



camano island, WA 98282

Strongly oppose increased flights at OLF!!! Your data collection strategy is flawed for Camano residents. Using Cama Beach for noise studies misrepresents the noise level experienced on Camano across from the north end of OLF and skews your data, as does using collection periods/years when flights have been reduced due to the lawsuit and study. Flights over water do not mitigate the issue and do not absorb the unbearable noise levels from flights up Saratoga passage. Camano property buyers are victims of the OLF and are NOT warned of the existence of the navy operations and impact on health, quality of life, and property values even when we inquire specifically about these concerns. These issues reveal themselves after the fact. It flabbergasts me that using loud, intense, constant noise is an internationally recognized form of torture yet it's ok for the navy to subject citizens to jet noise lasting many hours for days and nights on end. We endure noise so loud that windows must be closed to carry on conversation or listen to t.v. We endure constant vibration that rattles windows and household items, and reverberates through high bluffs. These jets were made without typical muffling apparatus and are not designed for use around population centers. The navy has better options, and the "jobs" argument to support relocating some jets is implausible. Clearly communities in other states didn't buy it and successfully fought adding more of these jets in their airspace. We will continue to fight this in all forums.

- 1.a. Thank You
- 2.k. Range of Alternatives
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.i. Points of Interest
- 4.n. Speech Interference (Indoor and Outdoor)
- 7.c. Noise Disclosure

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.d. Recreation and Wilderness Analysis and Study Area

1 UNITED STATES NAVY
2 PUBLIC MEETING
3 FORT WORDEN STATE PARK CONFERENCE CENTER
4 USO HALL
5 200 BATTERY WAY
6 PORT TOWNSEND, WASHINGTON
7 DECEMBER 5, 2016

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ENVIRONMENTAL IMPACT STATEMENT (EIS)
FOR EA-18G "GROWLER" AIRFIELD OPERATIONS
AT THE NAVAL AIR STATION (NAS)
WHIDBEY ISLAND COMPLEX

Court Reporter: Nicole Johnson
Olympic Court Reporting Services
Chimacum, Washington 98325
(360) 732-4600

1 ██████████: I hear the Growlers fly over
2 nearly every night. And I have Parkinson's disease, and I
3 wake up every time. Please add noise-attenuating devices
4 to every Growler. It's supposed to not only reduce the
5 noise to about -- by about 20 decibels, but also it's
6 supposed to help the particulates too.

7 When will you decide how the Navy will address
8 the elevated risk of civilian accidents and deaths? We
9 finally found our paradise, and now the Navy wants to kill
10 it and some of the animals. I'm just concerned about the
11 mammals and the fish and the wildlife. I'm very concerned
12 about that.

13 And another thing, I'm concerned about the noise
14 in the Olympic National Park. They're trying to come take
15 that nice, quiet hike, and then you hear all that noise.
16 It's terrible.



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

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1. Name [REDACTED]
2. Organization/Affiliation _____
3. Address [REDACTED] Port Townsend, WA 98368
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

~~THE~~ EACH OF THE PROPOSED SCENARIOS WOULD RESULT IN AN INDIRECT ECONOMIC IMPACT TO THE COMMUNITY. THE DRAFT EIS DOES NOT INCLUDE ANY MEASUREMENT RELATIVE TO THE LOSS OF TOURISM AS A RESULT OF INCREASED GROWLER NOISE. THE POSITIVE ECONOMIC IMPACT OF INCREASED MILITARY PAYROLL AND SPENDING COULD BE MORE THAN OFFSET BY A DECREASE OF PROPERTY VALUES TO EXISTING RESIDENTS AND THE LOSS OF TOURISM REVENUE BY INCREASED FLIGHT ACTIVITY.

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 12.h. Tourism
- 12.j. Property Values

Lopez Island, WA 98261

The flight path map in the draft EIS is not up-to-date. Both growlers and the P3/P8 reconnaissance aircraft frequently fly FAR outside the flight paths indicated in the draft EIS. For example, on Lopez Island, they regularly fly over the school, the village, areas directly north and south of the village, approaching Lopez Island from due west. A Navy representative at an EIS public outreach event said that this is due to a “math problem” regarding number of aircraft and airfield capacity. The EIS states that all three alternatives would double current Field Carrier Landing Practices. Therefore, the EIS must correct its flight path maps and provide data on actual flight paths for the current growler contingent, and how the flight paths will expand with proposed additional growlers, and how many more people will be impacted by the flight path expansion, and how often and at what noise level. The EIS must take into account temporary runway closures or other exceptions to an ideal but unrealistic modus operandi. The EIS should base its flight path map on a complete, unedited dataset of GPS flight data. The draft EIS says that bird populations have habituated to the noise, yet anyone observing birds, other wildlife, and pets can see that growler flyovers are disturbing to non-human species. The EIS should include pertinent studies on local wildlife noise impact to support its statement. In addition, the draft EIS does not discuss the CO2 impact of additional growlers flights. One growler emits 12.5 metric tons CO2 per hour. Washington State marine life is impacted by ocean acidification due to anthropogenic CO2 increases which in turn impacts the local shellfish industry. If CO2 emissions of additional growler flights are not included in the EIS, how will the WA State Department of Ecology be notified of the potential CO2 impact? How will the potential increase in jet/aviation fuel for the various alternatives be included in the Washington State Greenhouse Gas Inventory projections report? The EIS for assessing the impact of additional growlers should include CO2 emissions. See also the Office of the Governor Executive Order 12-07. The draft EIS does not include San Juan County noise reports (collected since 2014). The EIS should include these ~6000 actual noise reports and level categories to enhance evaluation of noise pollution affecting residents living near growler flight paths. The SJC noise report data should be compared to the computer modeling results, and computer modeling results and methodology should be reevaluated, in order to match SJC noise reports. In addition, the validity of computer modeling results must be evaluated with actual field decibel measurements during all high and low altitude flight activity scenarios, throughout the year. In addition, actual field data must be conducted for flights with landing gear out, flights outside of the flight path indicated in the EIS (because it is not up-to-date), and low altitude flights – as all these scenarios frequently occur. EIS analysts and Navy representatives at EIS public outreach events react incredulously when told that shouting/yelling (at approximately 100-110) decibels is often required outdoors in San Juan County in order to continue communicating when a growler flies overhead. Their reaction (or lack of knowledge) that this is often the case seems to indicate the need for additional data collection to inform the EIS and subsequent decision-making. The noise impact data should be based on actual, realistic, peak scenarios, not averages. The EIS noise impact data should take into account that growler pilots – despite being advised to follow rules about landing gear, minimum flight altitude, and flight path – don’t always follow these rules, as evident from personal observation for

- 1.a. Thank You
- 10.c. Wildlife Sensory Disturbance and Habituation
- 12.h. Tourism
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 18.b. Average Carbon Dioxide per Aircraft
- 18.d. Washington State Greenhouse Gas Goals
- 2.c. Compliance with the National Environmental Policy Act
- 2.k. Range of Alternatives
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 7.e. Impacts to Recreation from Noise/Operations

many years. Navy leadership has been unable to monitor and correct for their pilots' behavior. The EIS analysis should therefore assume that a certain percentage of growler flights don't conform to Navy rules that impact noise pollution (suggested percentage from personal observation: 50%), such as landing gear, minimum flight altitude, and flight path. Both growlers and the P3/P8 reconnaissance aircraft frequently fly extremely low, at an estimated altitude of 500ft to 1000ft. The P3/P8 aircraft in particular frequently flies barely above the tree-tops. Extremely low flight altitude drastically increases noise and visual impact. The EIS analysis must include flight altitudes of 500, 1000, 1500, 2000 ft, etc. and indicate noise level impacts for each altitude category. If flight regulations prohibit flying below, for example, 2000ft, then the EIS must not assume that pilots observe this rule. The draft EIS barely mentions noise mitigation measures. Discussion and impact of measures such as hush houses and jet blast deflectors should be expanded. The draft EIS does not mention decision-making criteria for selecting one alternative over another. Clear decision-making guidelines should be established. The draft EIS compares any increased flight activity from additional growlers to the higher flight activity of 1980s. However, the Prowlers of the 1980s did not have afterburners but the growlers of today do. Aircraft with afterburners are much louder. Therefore, this comparison should be removed. The draft EIS should mention the low frequency vibration associated with the growler in section 3.2., Noise Associated with Aircraft Operations. It should also mention evaluations of physical and mental health impacts for low frequency vibrations – this vibration shakes the walls of my house and rattles the glasses in my cabinets 20 miles away from Ault Field. C-Weighting should be used throughout the EIS. The draft EIS states that it is a priority for the Navy to promote the well-being of individuals in nearby communities. The EIS should state in more detail what the Navy will do to show that it is indeed a priority as additional growlers are being considered. For example, how does the Navy intend to eliminate the impact on property values, tourism, and recreation due to noise pollution? Judging from the exasperated comments in the SJC Noise Reports, the Navy is currently not doing a satisfactory job in promoting the well-being of nearby residents. What exactly would change with a potential increase in growlers?

Lopez Island , WA 98261

Comments 1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide “scientifically and legally defensible noise assessments” of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.” ACTION: Supplement the EIS to address deficiencies identified in

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. From Laren: All of these comments are very real to me. Besides them, I live on Shoal Bay and the Growlers go right by my house. To me, they are a huge intrusion, an intense irritant. I have chosen where to live out my later years with extreme care and consideration. And now I find that rather than one of the few remaining extremely benign places to live, it is one of the very worst, solely because of the Growlers. [REDACTED]

Lopez Island, WA 98261

As a fulltime resident of Lopez Island having lived at the south end of the island since 1989, I want to ask the Navy to be a better neighbor going forward now there will be so many more Growlers flying out of Ault field. I understand the need for training but I am sure there are less offensive ways to manage that than flying low and dirty directly over our homes here. The noise measurements being used in this EIS, as an average, do not fairly represent the extreme loudness of a given fly by, which is sometimes painfully loud. When I can't hear the person I'm conversing with INSIDE my home, that's intrusively loud, and the spike in my blood pressure is not good for my health. Please bring some consideration for your neighbors into your planning of routes and activities. Surely there must be different routes than low over populated areas like the south end of Lopez. Thank you.

- 1.a. Thank You
- 3.a. Aircraft Operations
- 4.d. Day-Night Average Sound Level Metric
- 4.r. Nonauditory Health Effects

Anacortes, WA 98221-8461

the noise and vibration of additional aircraft of this nature are of great concern, absent plans to mitigate by directing such flights over water rather than land, and at higher altitudes when over land. We experience sufficient vibration to dislodge china and/or misalign artwork on walls, and periods when conversation must be halted even inside the house. Nighttime operations are also excessive.

- 1.a. Thank You
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.p. Sleep Disturbance
- 4.t. Noise Mitigation

Coupeville, WA 98239

I would like to know that status and time frame for the installation of noise reducing chevrons on the Navy jets. I am concerned about the impact of noise on humans and the eagle population.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You

oak harbor, WA 98277

I am a concerned citizen living on Whidbey very much in support of expanding NASWI capabilities. I have read the EIS reports and found only positive results that were thoroughly researched with Zero negative factors to be found from more Growler flights overhead. Love the sound of freedom flying overhead protecting us! God Bless the USA.
v/r /s/ [REDACTED]

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017
SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name [REDACTED]

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
S.M. Retired Military

3. Address [REDACTED]

4. Email [REDACTED]

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

As far as I'm aware its the ra ra soldier boy who lives the lie that some other group of people is out to get him, who in this illusion of security, makes life hell for those just trying to live. Stop making and participating in war "yes you just need to be brave"

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

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By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name Dr. [REDACTED]
2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Please Please Care
3. Address If you care Do something
4. Email if you cant care I Pray

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

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- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

Water is being contaminated Please use
That enormous budget to clean it up.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

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Langley, WA 98260

----- To: EA-18G EIS Project
 Manager Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code
 EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508 Dear Sir/Madam, Thank you for
 extending the comment period to February 24, 2017, in order accommodate the fact that
 having four major public processes open over the holidays, all concerning Navy activities
 or the biological resources that may be affected by them, made it difficult to read,
 comprehend and prepare comments in a timely way. 1. Jet noise outside the immediate
 environs of the runways on Whidbey Island is not being evaluated, yet impacts are
 significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity
 of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact
 Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the
 corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these
 runways to get airborne and to land; therefore, what happens outside the study area
 cannot be ignored as if it does not exist, because all flight operations are functionally
 connected to takeoffs and landings. By considering only takeoff and landing noise and
 exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to
 consider the wider area of functionally connected impacts caused by naval flight
 operations. By failing to consider the interdependent parts of a larger action that cannot
 proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate
 cumulative effects. 2. Impacts to cultural and historic sites are not adequately considered.
 The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic
 resources that it also fails to consider significant nearby impacts. The State Historic
 Preservation Officer confirmed this in a January 9, 2017 letter to the Navy.
 (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic
 properties within existing APE boundaries be adversely affected, but additional portions
 of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are
 also within noise areas that will receive harmful levels of sound and vibration from
 Growler activity. The US Department of Housing and Urban Development posted noise
 abatement and control standards that classify the 65 dB levels being used by the Navy as
 “normally unacceptable” and above 75 as being “unacceptable.”
 (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from
 these runways, have recorded noise at least twice that loud. Therefore, by failing to
 include these areas, this DEIS violates both the National Environmental Policy Act
 (NEPA) and the National Historic Preservation Act (NHPA). 3. Piecemealing projects to
 avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its
 aircraft training and testing activities affecting Whidbey Island, the San Juans, and the
 Olympic Peninsula into at least six separate actions: 1. 4 squadrons of P-8A Poseidon
 Multi-Mission Aircraft; 2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57
 Growlers that replaced Prowlers); 3. 2012 EA (26 Growlers including 5 from a reserve
 unit); 4. 2014 EA (Growler electronic warfare activity); 5. 2015 EIS discussing electronic
 warfare training and testing activity; 6. The current 2016-2017 DEIS (36 Growlers); 7.
 And, likely, a seventh process, as confirmed by news reports and a Navy official at a

- 1.a. Thank You
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources

recent open house, for 42 more jets to bring the Growler fleet total to 160. Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville alone went from 3,200 per year to a proposed 35,100 in 2017. That's more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.” The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomics, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability. 4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water. 5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is “turning out fully trained, combat-ready Electronic Attack crews.” 6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The “30-day waiting period” proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts. 7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, “...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives.” According to a memo from the President’s Council on Environmental Quality (CEQ) to all federal

agencies, "Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant."

(<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the "loser" among these communities. 8. The Navy has exacerbated the problem stated in #8 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, "[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to "identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . ." Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative. 9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are "tiered" for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula. 10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the "Affected Noise Environment" around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy's ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas. 11. The Navy's claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the "library" of sounds that comprise the basis for the Navy's computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with

quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS that wildlife are “presumably habituated” to noise do not apply when that noise is sporadic and intense. 12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy’s benefit, but does not benefit the public. 13. The Navy’s noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers. 14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software “...do not properly account for the complex operational and noise characteristics of the new aircraft.” This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>) 15. The Navy describes its activities using the term “event,” but does not define it. Therefore, the time, duration, and number of jets in a single “event” remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public’s ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them. 16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service’s draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with “...opening day and associated opening weekend of Washington State’s Big Game Hunting Season for use of rifle/guns.” While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control. 17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: “Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL.” This guidance further states, “Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or

structure.” If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed. 18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled “Representative Sound Levels for Growler Aircraft in Level Flight,” on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets. 19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, “...but may be developed and altered based on comments received.” Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be “...identified in the Final EIS or Record of Decision.” Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy’s proposal to not allow a comment period on the Final EIS would be unlawful. 20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period. 21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable. 22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, “No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft.” While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant. 23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls “historic” use of fire suppressants for flight operations. In May 2016 the USEPA issued

drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>) 24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water. 25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,” which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted. 26. Pages of boilerplate language do not constitute analysis of impacts to wildlife: Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is “greatest during flight operations.” However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is “highly unlikely,” largely because “no suitable habitat is present.” This begs the

question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area. 27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB. (<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds," (<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test. I realize that your chances of reading my comments are very minimal, and I am sure that you have received these comments hundreds (hopefully "hundreds of thousands") of times. Our local environment is under siege, from drastically diminished salmon runs, which severely affects the health of our unique "resident" Orca pods, now with diminishing numbers. Some experts fear that we will lose them completely in the next 30 years! Other major marine life systems are also being drastically reduced. We need to conduct additional research. We need your cooperation. We request complete transparency. Please submit "all" the information and data that you have kept from public disclosure. I understand the need for defense our of great country, and the need for training, but the adverse affects of this program are seriously undermining the health of our citizens and our resident life systems. If our systemic health is affected and weakened, this program isn't protecting us from danger. I urge you to use: Patience-please undertake and complete additional studies; Compassion-our concerns are for all of us-Navy personnel as well; and most importantly Wisdom-in the process of reviewing our concerns please visualize our common needs to insure health, welfare, and safety of all of us. Thank you for considering these comments. Sincerely, Dr. [REDACTED]

1.a. Thank You

7.d. Recreation and Wilderness Analysis and Study Area

Olympia, WA 98501

Sir, the presence of Navy growlers in frequent flight on the Olympic Peninsula of Washington state is a serious disturbance to the peace and health of that area. Last summer I was camping at Mora Camp ground and had a hard time sleeping from the night noise of navy planes. Also during the day time they flew along the coast making too much noise. Also it was really scary. Please stop this ridiculous practice. I do not believe in war. Spend citizen tax money on ocean preservation from oil spills. I would totally support that activity. Thank you. [REDACTED] retired teacher Olympia, Wa

Langley, WA 98260

In addition to the her Renda's noise from the growlers, the L L Ave. in Coupeville is extremely short for these dangerous missions. People live just above and below the take off and landing areas, so in addition to painful noise levels there is harm from air pollution and risk of crashes which are overlooked.

1.a. Thank You

5.a. Accident Potential Zones

5.c. Condition of Outlying Landing Field Coupeville

5.d. Environmental Health Risks and Safety Risks to Children

Langley, WA 98260

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

The averaging system that the Navy has devised for this report is absolutely ludicrous. How can you purport to say that this is a real E I S when you are taking the noise from one flight and averaging it out with the blissful sounds of silence that surround Coupeville ?????

Langley, WA 98260

- 1.a. Thank You
- 4.m. Supplemental Metrics
- 4.q. Potential Hearing Loss

The noise from the growlers is extremely and inappropriately loud. The damage to a person's hearing and health has been dramatically underestimated and downplayed it in this report. Additionally the standards that the Navy has used for how much noise and packs hearing and Health are out of date. Why??

Langley, WA 98260

In addition to the her Renda's noise from the growlers, the L L Ave. in Coupeville is extremely short for these dangerous missions. People live just above and below the take off and landing areas, so in addition to painful noise levels there is harm from air pollution and risk of crashes which are overlooked.

1.a. Thank You

5.a. Accident Potential Zones

5.c. Condition of Outlying Landing Field Coupeville

5.d. Environmental Health Risks and Safety Risks to Children

LaConner, WA 98257

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP).

Coupeville, WA 98239

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

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Coupeville, 98239

The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupported, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports

Coupeville, 98239

1.a. Thank You
4.j. Other Reports

The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts.

Coupeville, 98239

1.a. Thank You

4.r. Nonauditory Health Effects

Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

Coupeville, WA

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy's defined hazardous noise zone threshold (i.e., "an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month").

1.a. Thank You

4.q. Potential Hearing Loss

Coupeville, WA 98239

1.a. Thank You
7.c. Noise Disclosure

Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy's 2005 AICUZ directives for Outlying Field Coupeville, such as no residences in a noise zone 2. Whether due to willful intent to ignore by the County or to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and attendant land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should be immediately advocating to the County to place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved.

Coupeville, WA 98239

1.a. Thank You
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Coupeville, WA 98239

1.a. Thank You

13.a. Environmental Justice Impacts

Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Coupeville, WA 98239

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Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at www.whidbeyeis.com;** or **(4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]
2. Organization/Affiliation _____
3. Address [REDACTED], Coupeville, WA 98239
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

I don't think your examination of the of the impact of either scenarios 1, 2, or 3 on the local economy and on housing was accurate or comprehensive. Firstly, regional housing is not sufficient to handle the significant increase in population that these plans entail. There are currently, at most recent count, over 500 homeless people in Oak Harbor alone. Many of those people are

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 12.p. Local Differences in Economy
- 14.b. Vehicle Collisions and Safety
- 14.c. Pedestrians, Bicycles, and Bus Stops
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

homeless because they can't afford the rapidly escalating rental rates.

There ~~is~~ ^{are} almost no rental vacancies in Coupeville. And since the APZ's won't allow development, land on the outskirts of Coupeville isn't available for housing. There are very few lots w/in Coupeville available for development.

I understand that you expect Navy people to commute from as much as 50 miles away.

That means they have a choice of the southern half of the Island, which also has a very tight and expensive housing supply. Or they have to go off Island and commute by Ferry or over a narrow, much trafficked bridge.

The Ferries already operate at capacity during peak hours, often with long waits in Ferry lines. Both Ferries are subject to cancellations and delays in stormy weather, which we have our fair share of. The PT Townsend Ferry also gets cancelled regularly when there are very low tides.

The Deception Pass Bridge, while beautiful, is accessed by a narrow winding 2 lane hiway. It's already crowded and jammed on a regular basis.

For more information, please visit the project website at whidbeyeis.com

Please print

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6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Secondly, the examination of the financial/economic impact on the Coapeville economy was woefully superficial and very limited. You cite "positive direct and indirect economic impacts resulting from increase in military payroll and construction spending." Property developers in Oak Harbor would benefit. Military personnel do the bulk of their shopping on base, with no benefit to the local economy. They also use base athletic facilities and entertainment. They therefore are paying much less in sales tax than the civilian population. In Washington state the sales tax is the major source of income for the state, funding education, infrastructure, Social and Health Services, and much more.

The construction spending will be short lived. Construction materials are often not bought locally or are bought at Home Depot, which is not a locally owned business & does not plow money back into the

community

The jobs that Home Depot and the other big box stores offer are low wage retail jobs. And a large percentage of those jobs are taken by either retired Navy or Navy spouses, with a significant part of that income being spent on base.

Increase in local population puts pressure on the community in a variety of ways. Oak Harbor has been scrambling to add another elementary school. The need for police and social services will increase.

There is a significant population of homeless youth in Oak Harbor, with accompanying drug use and criminal activity. Many of those youth are from Navy Families and are high users of community resources.

And nowhere did you actually address the economic impact on Coupeville and the surrounding community.

Property values will plummet,

depriving the County of Property Tax income. Central Whidbey has a large population of retirees, many of whom will not be able to live under the extreme noise from the jets but will also not be able to sell their homes and move away. Their homes are a significant part of their retirement security, and the loss of value will have a great impact on them.

The economic base of Coupeville is Tourism and farming. Farmers can't work under the jets, even with ear protection it's difficult. And ear protection for farmers is dangerous. The work crews need to be able to hear each other on the heavy equipment.

All 3 scenarios offered mean a loss of our tourism industry. The DEIS didn't look at any of this, I think it is essential that you go back and address all of these issues. An EIS requires that these issues be addressed.

Draft Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Coupeville Resident

3. Address _____ *Coupeville 98239*

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and include additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 10.b. Biological Resources Impacts
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.d. Arrivals and Departures
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.b. Overtasking/Overloading of Air Traffic Control at Ault Field and Elsewhere

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.

Additional Concerns:

- Risk of increased aquifer and well contamination.
- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife such as orcas and migratory birds.
- The major terrorist risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as the Growler onboard oxygen system.

Please include any additional comments and concerns here:

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, go to Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler EIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Coupeville, WA

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Coupeville, WA 98239

The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% overestimated use of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected.

1.a. Thank You

3.e. Field Carrier Landing Practice Patterns

3.f. Field Carrier Landing Practice Operation Totals

3.g. Field Carrier Landing Practice Evolutions and High Tempo

Coupeville, WA 98239

1.a. Thank You
4.p. Sleep Disturbance
4.r. Nonauditory Health Effects

The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the "percent probability of awakening for all scenarios..." While music torture is still permitted under US law, the United National Convention against Torture defines torture as "any act by which severe pain of suffering, whether physical or mental..." Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations.

Coupeville, WA 98239

1.a. Thank You
4.o. Classroom Learning Interference
4.r. Nonauditory Health Effects

The DEIS obfuscates the effects of FCLP jet noise on classroom interruptions by averaging interruptions with periods when jets are not practicing. The average understates interruption events compared with event frequency during FCLP sessions, which are as frequent as an interruption every 1-2 minutes. Interruptions of such frequency complicate teaching and thwart student concentration and break the focus of teacher and student. In addition the EPA states "Noise can pose a serious threat to a child's physical and psychological health, including learning and behavior," but the DEIS has not recognized the contemporary research. These oversights and failings must be properly addressed and analyzed.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

The DEIS fails to address the effects of noise on hearing and tinnitus and consequential medical costs associated with hearing loss by stating that civilians would need to be exposed to noise emitted by the Growlers for 40 years before there is a permanent shift in hearing. This defies all scientific and audiological evidence to the contrary, even by the US military itself. Hearing loss and tinnitus are the MOST compensated injuries in the military and increasing annually (US Dept. of Veteran Affairs.) That and failure to address the effects of impact or sudden noise must be more fully delineated.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

The DEIS fails to adequately address the effects of high noise levels during pregnancy provoking significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

The DEIS does not address the affect of the pollution to our community and private wells by Navy use of fire fighting foam. An Environmental Impact Statement that ignores the impact of Navy activity on our aquifers is woefully inadequate. This needs to be remedied

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EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

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1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
 citizen _____

3. Address _____ Coupeville, 98239

4. Email _____

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Please check all that concern you and add additional comments on the back.

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- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
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- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

The DEIS does not address the financial/economic impact on Coupeville of drastically reduced tourism and loss of agriculture. These are the legs our town stand on. We do not experience much financial benefit.

The DEIS does not address the financial/economic impact of the APZs on Coupeville and the whole County. The newly upgraded Transit Center is very close to OLF. Will it have to be relocated? It serves all of Island County. Who will pay the millions of dollars for that? In the likelihood that it will be Island County residents, they have a right to know that.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

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EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name [REDACTED]

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Citizen

3. Address [REDACTED], Coupeville, WA 98239

4. Email [REDACTED]

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

This has been an agricultural community since settlers first arrived in the 1850's. I personally know farmers who have been struggling to work their fields under current levels of flights. The only other source of income for the area is tourism. Increasing flights at any level would negatively impact both of our major industries. The APZs contain a unique state park, home to our state flower, the wild Rhododendron. Also a historical National Reserve, preserving much of our pioneer heritage. The DEIS needs to consider other alternatives, i.e. no increase of flight at OLF, consideration of other

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The DEIS does not adequately address how the APZ's will affect Coupeville, and Island city as a whole. The bus transit station, with fuel tanks, is very close to OLF-. What zone is it in? It cost about \$29 M to recently build it. Will it have to be abandoned and another one built? And who pays for it?

There are numerous businesses, including a gun club, in that same area. If they all have to be closed down, they need to know that is going to happen. And who pays for that? Do people just lose their property and livelihood, or are they bought out? Again, who pays for it? The only

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The dramatic devaluation of property in the flight path and the accidental potential zones will result in a dramatic decrease in property tax revenue for ~~the~~ Island County. Much of the property in these zones is very high value, expensive view property. The county will then have to raise property taxes on other areas of the county which will put an unrealistic burden on a county largely populated by retired people, (The mean age in Coupeville is 62) low paid agricultural people, and low paid wage earners.

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- 12.c. Socioeconomic Impacts
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Coupeville is the 2nd oldest incorporated town in the state of WA. It is unique in its preservation of its pioneer history, it's remarkable, stunning natural beauty. Ebey's Reserve is a National Park. Tourism is the backbone of our economy, with agriculture coming in as second. Increasing flight operations at OLF - in any amount would destroy both of these industries. The DEIS states there is no adverse economic impacts. This is demonstrably false. A recent economic survey states that the Navy presence results in a net loss of over \$1M. The DEIS needs to be adjusted to reflect

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I live on property that's been in my family for over 100 years. It's right in the OLF flight path. I'm 72 yrs old. My blood pressure gets very high when the Growlers fly a couple of days in a row, I have normal B.P. (120/70) otherwise. I get anxious, irritable, distracted. The bulk of my retirement funds are in this property - If the jets fly more than they have, I won't be able to live there, and it will be considerably devalued - I'm too old to start over. I won't have enough to support myself for the rest of my life. I'm

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pretty unhappy about that prospect.

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The DEIS does not address impacts on our aquifers. It does not address the impacts of the APZ's on local property, farming, businesses, the Transit Center, a Youth Residential Center for homeless youth, a Gun Club, a state park, and private residences. All of which appear to be in Zone 1. Zone 2 looks like it may contain a Waste Transfer station, more businesses, private homes (hundreds) churches, an elementary school, more farms, and part of a National Historical Reserve. The DEIS does not spell out what will happen to these properties, and who will be financially responsible for changes.

The DEIS does not use a realistic model for measuring noise.

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Prepared by Coupeville Community Allies

January 18, 2017

Newcastle, WA 98059

I have been made aware of the Navy's plans to use the Olympic Peninsula for war games. My father was career Coast Guard. He would be appalled. He retired in Bremerton and we hiked the peninsula often. These games would have multiple and tragic impacts on the environment (CO2 emissions), the native populations, wildlife (sound and other disturbances), recreation enthusiasts, business... What a shame to take one of the most pristine areas in the US and turn it into a place to practice warfare. This does not benefit the greatest number of people and it is an assault on the senses and sensibility of the local population. It is sad that we even need war games and sadder still that the Navy would even consider disturbing this magnificent area.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 18.a. Climate Change and Greenhouse Gases
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area
- 9.a. Consideration of Tribes

1.a. Thank You

Easley, SC 29640

1) Coupeville has easy access a short flight away. 2) Other military and civilian air traffic have no impact on Coupeville operations. 3) Coupeville has an extremely low amount of cultural lighting, very hard to find now-a-days 4) A short drive for LSO's from NUW to OLF, very important as they can brief crews then get to OLF Coupeville, this directly leads to an increase in proficiency. 5) As a former RAG instructor, the most improvement I witnessed in students was after several FCLP periods at OLF Coupeville. The light really came on for these folks. An increase in proficiency thus leads to increased safety, combat readiness and saves lives. 6) Finally, Coupeville is cost effective!!

Seattle, WA 98125

I am very concerned about the impacts on the Olympic National Forest and especially the Olympic National Park, and to the native tribes that live on the Olympic Peninsula. The noise and disruption caused by these aircraft are not compatible with the mission of the National Park. I understand that there could be closures of the National Park during some operations. Closing a national park for any reason other than extreme UNAVOIDABLE danger to people is not acceptable. The Olympic National Park is used by a large number of people who live in western Washington as well as by visitors from around the country and around the world. It should be preserved as a quiet, natural place with undisturbed wildlife. I appreciate the need for military training opportunities, but I think this is the wrong place. Thank you.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

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Port Townsend, WA 98368

Re: Draft EIS for EA-18G Growler airfield operations at Naval Air Station (NAS) Whidbey Island In cooperation with the Sierra Club's North Olympic Group and its 1,000 members, I am commenting on this draft EIS that would expand existing EA-18G Growler operations at the NAS Whidbey Island by adding 35 or 36 aircraft to support expanded electronic warfare exercises on OLFC on Whidbey Island and in the San Juans, Puget Sound, Olympic Peninsula, and adjacent areas. While we support the need for adequate military training, we also support a fair and open public process that protects public health and the environment. Unfortunately, the Navy's draft EIS fails to do so as described below: The Draft EIS Improperly Segments the Navy's Expansion of Growler Activities The Draft Environmental Impact Statement (EIS) is deficient in not addressing 40 additional Growlers that are in the process of delivery beyond the 35 or 36 identified in the Proposed Action. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into multiple separate actions: 4 squadrons of P-8A Poseidon Multi-Mission Aircraft; A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers); 2012 EA (26 Growlers including 5 from a reserve unit); 2014 EA (Growler electronic warfare activity); 2015 EIS discussing electronic warfare training and testing activity; The current 2016-2017 DEIS (36 Growlers); And, a seventh likely process, as confirmed by a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160. As a result, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish to protect human health and the environment. Furthermore, this piecemeal approach to public involvement violates NEPA as 40 C.F.R. § 1502.4 "...does not allow an approach that would permit dividing a project into multiple 'actions,' each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." In public meetings, the Navy referred to these increases in Growler activities as "adjustments" to its mission, but "adjustments" to functionally and geographically related activities, each of which when taken individually might not rise to the level of "significance," are significant when taken together. This segmentation represents a significant but hidden erosion of environmental protection and public health. Citizens, elected officials, and tribes have reminded the Navy for years that its segmentation of impacts violates both the law and the public trust, but the Navy continues to ignore these concerns. The Draft EIS Fails to Consider All Impacts The draft EIS only analyzes potential impacts for 35 or 36 of potentially 160 Growlers, and is further confined to evaluating impacts only to areas immediately surrounding the runways. However, jet noise, emissions and other impacts from Growler operations adversely affect a wide area including Olympic National Park, state parks, tribal and private lands as well as Puget Sound and endangered Orcas and other species. By failing to enlarge the scope of its analysis beyond Naval Air Station Whidbey Island, the DEIS also violates NEPA by not considering all the interdependent parts of a larger action: Growler operations cannot proceed without takeoffs and landings, regional overflights, broadly distributed noise impacts, etc. By failing to consider these additional impacts, the DEIS also fails to evaluate cumulative effects as required by NEPA. The Draft EIS Fails to Consider All Alternatives The Navy has not made a good faith effort to

- 1.a. Thank You
- 1.d. General Project Concerns
- 10.f. Endangered Species Impact Analysis Adequacy
- 12.h. Tourism
- 18.b. Average Carbon Dioxide per Aircraft
- 18.d. Washington State Greenhouse Gas Goals
- 19.b. Revised Cumulative Impacts Analysis
- 19.d. Electronic Warfare
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

explore other alternatives as NEPA requires in S40 CFR 1502.14 (a). All of the Navy's 'alternative' scenarios will increase noise, harm to health, and other adverse impacts. The Navy's "no action alternative" would continue Growler operations that currently expose people in homes, schools, parks and businesses to noise that exceeds community standards set by the State of Washington, the EPA, the Occupational and Health Administration (OSHA), and the World Health Organization. No genuine "no-action" alternative is proposed that would address these impacts. Furthermore, the draft EIS violates basic NEPA procedures, as it appears to improperly reflect procurement and operational decisions already made by the Navy. Increased Air Emissions and Worsening Effects on Climate Change Not Adequately Addressed Growler jets use an extraordinary amount of fuel--a single Growler jet's emissions dwarf what thousands of citizens seek to reduce voluntarily by choosing to use electric cars, add solar collectors to their homes, and conserve energy in other ways. In its continuing and planned expansion of the Growler fleet, the Navy has ignored the cumulative impact of Growler emissions, including their effects on climate change. The military is the world's largest single user of fossil fuels, and exhaust emissions beyond the narrowly defined affected areas near runways are not being analyzed and should be. The Navy Has Failed to Document that DOD-Owned Lands Are Unsuited or Unavailable for Growler Operations The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to examine non-Whidbey Island sites to conduct flight carrier land practice (FCLP). Instead, it continues to assume that an outdated and dangerously small World War II landing strip on Whidbey, the OLFC, can be used for an increasing number of Growler and other training flights. The two most dangerous aspects of flying are the approach, landing and takeoff. Because the OLFC is about 49,000 acres smaller and 3,000 feet short of the Growler standard for these maneuvers, it places nearby schools, hospitals, residences, a state ferry terminal and parks, and a state conference center at serious risk of accidents. This risk is greatly increased because FLCP maneuvers are, by their nature, conducted at low elevations where collision with birds is likely to occur, particularly since much of the surrounding area is a protected habitat for shore birds. The draft EIS, itself, acknowledges that one of the runways at OLFC has an "unacceptably steep angle of bank" and can only be used 30 percent of the time due to weather conditions. Yet knowing this, the Navy is significantly increasing the number of flights there and placing nearby communities at harm. Impact on Threaten Endangered Species Not Adequately Addressed The Navy needs to provide a more detailed and specific response on whether and how the additional Growlers will affect endangered species, particularly Marbled Murrelets, given that the acknowledged lack of scientific information on noise impacts to this species affects the ability to determine harm and cumulative effects. This is particularly urgent in light of their precipitous decline and the December 2016 decision by the State of Washington to reclassify Marbled Murrelets from threatened to endangered. More generally, by failing to initiate consultation under Section 7 of the Endangered Species Act with the US Fish and Wildlife Service on the potential impacts from the significant increase in Growler flights, the DEIS fails to evaluate direct, indirect and cumulative impacts on threatened and endangered species. Inadequate Consideration of Public Health Impacts Growler jets utilize the latest electronic warfare capabilities yet the risk of exposure to people and wildlife from downward-directed radiation is not considered. The only discussion we are aware of was a brief mention in a 2014 EA, in reference to radio transmitters on mobile emitter trucks and the stationary transmitter at Pacific Beach on the Olympic Peninsula. In that document, the Navy referenced a paper

and concluded that links from radiation exposure to leukemia were speculative, when in fact, that same paper stated unequivocally that there are direct links between radiation exposure and childhood leukemia. Despite this, any mention or discussion of risks from exposure to electromagnetic radiation from Navy jets is completely missing from all discussions of potential impacts. The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading for two reasons: (1) the Navy inappropriately uses a 365-day averaging rather than busy-day averaging, and (2) the Navy represents as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. Furthermore, modeled noise levels by the Navy have not been validated with on-site noise data nor has the Navy made any actual noise measurements in the affected communities. In addition, the NOISEMAP software used for computer modeling is outdated, and a report from a DOD commission concluded that noise measurements using this software may be legally indefensible. Additionally, the DEIS selectively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. Moreover, there are no alternatives proposed in this DEIS that would reduce noise. Therefore, it represents decisions already made. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." Also, as mentioned earlier in this letter, by narrowly considering only takeoff and landing noise and exhaust emissions at the runways themselves, the DEIS violates the National Environmental Policy Act (NEPA) §1508.25 by failing to consider the wider area of functionally connected impacts caused by naval flight operations. The DEIS Fails to Consider Historic and Economic Impacts The Navy has not responded to an August 2016 request for formal consultation under Section 106 of the National Historic Preservation Act, from the City of Port Townsend, in a letter also asking the Navy to expand its Area of Potential Effect (APE). The APE is so narrowly defined in this DEIS that the State Historic Preservation Officer (SHPO) wrote to the Navy in January 2017, confirming that not only would cultural and historic resources within the existing APE be adversely affected, but also recommended expanding the APE to include additional portions of Whidbey Island, Camano Island, Port Townsend, and the San Juan Islands, because the state is "...not convinced that the 65 dBA serves as the best or most appropriate measure for quantifying and assessing harmful levels of sound and vibrations from Growler activities." The SHPO went on to say, "Our concern is based upon what appears to be an averaging of sound levels over long time periods that does not adequately capture the real time experience of brief but more numerous exposures to higher decibel levels, as well as the cumulative effect of these events." Additionally, the addition of Growlers will have a deleterious effect on the economy of the region. The region is heavily dependent on recreation and tourism and Washington's overall economy is heavily dependent on tourism and outdoor recreation, accounting for: \$22.5 billion annually, 227,000 direct jobs, and \$1.6 billion in tax revenues. Accordingly, any expansion of the Growler fleet needs to address potential job loss, economic harm, and state revenue loss from decreased tourism and outdoor recreation. Conclusion For all of the deficiencies, omissions, and failures to properly implement NEPA, as cited above, we are asking the Navy to issue a revised, second draft EIS with a new public comment period. We appreciate the opportunity to comment on this draft EIS. Sincerely, [REDACTED]
[REDACTED] Port Townsend Washington 98368

Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

- 1.a. Thank You
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects

1. First Name _____

2. Last Name _____

3. Organization/Affiliation _____

4. City, State, ZIP Port Townsend WA 98368

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

Port Townsend, WA 98368

I believe that the Navy could find a better location for its growler training. The noise affects both residents of the area and a fragile environment. Using the national park as part of the electronic testing plan is a crime. Leaving a poor environment for your grandkids and making enemies of your neighbors should not be a legacy you can be proud of.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

4.m. Supplemental Metrics

Port Townsend, WA 98368

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

Please extend this deadline and give us time to respond. We live here. It is important to usm

Port Townsend, WA 98368

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.n. Alternatives Considered But Eliminated

I went to the Navy meeting in Fort Worden today. A waste of time. Why didn't they just fly over some growlers to show even more contempt? Did they really need 100 military and law enforcement folks? Did they expect us to riot? You are ruining lives of citizens and the environment . Relocate these programs to less sensitive areas. Period. Expensive silly meetings won't change our minds and you ignore all the input you get in any case. I am sure Mr Trump will make all your dreams come true. Enjoy. But it is on your conscience.



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. *The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.*

1. Name

2. Organization/Affiliation

3. Address PT WA 98368

4. E-mail

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

The Navy has proven very sneaky in how they obtain permissions. Not enough was given. Extremely limited and very regulated methods for public opinion. Even with all that, it's ignored!! Congrats, I am sure Donald Trump will make your dreams come true.

The growled noise hurts us all. And the environment, just RULN it. Great. I do not see any info on alternative areas for training, less populated or environmentally sensitive. How about a remote desert? Please, No sympathy anymore with the Navy. We are fed up.

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.n. Alternatives Considered But Eliminated

1.a. Thank You

Bellevue, WA 98007

Please, keep this place more clear, holy, and sacred for the local people. We don't need more pollution - noise or otherwise - in such a beautiful place.

Seattle, WA 98115-7625

The Olympic Peninsula is a NATIONAL PARK It is in no way available for war games. It is an outrage and insult to even think of such desecration. I have been visiting this Park for more than 60 years. It has been legislated to be a refuge for plants and animals, and an entire ecosystem including the Northwest coast --ocean and tidelands as well as marine life. The native populations that reside there have been good stewards of the land and very helpful in restoring the mighty Elwha river to historic salmon runs. This historic land has been preserved for many decades with multiple good reasons. It is not to be destroyed by the noise of Growler Jets, war games or other rapes of the land and its inhabitants. It is an abomination the way the government is trying to sneak this EIS past a very large caring population. No to war games of any kind on this sacred land--already saved in perpetuity. You have absolutely no right to even think of using a National Park for an abomination of war games. STOP NOW! I am also contacting my Senator, Patty Murray, to alert here to this totally unacceptable plan. [REDACTED]

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

7.d. Recreation and Wilderness Analysis and Study Area

Seattle, WA 98115-7625

1.a. Thank You
9.a. Consideration of Tribes

Comment # 2 I can't help but notice the Growler jets begin the coast harassment at the Northern most Indian Village, "target" each village along the coast and stop just before the white man's resort at Ocean Shores. What a blatant example of white man's privilege and total disregard for "who was here first."

Altadena, DE 91001

Friends - I grew up in Seattle, and have spent days on the coast between LaPush and the Hoh, and up in to the rain forest. I have taken high school students beach hiking there, and all had a wonderful experience. This is sacred space not only to native Americans, but to myself as well. I remember when Justice William O Douglas walked this, and Olympic National Park added the ocean strip. This is heritage for the world. The Navy's plan to invade this space is contrary to what Congress mandated, and which many of us still maintain. Thank you for your consideration.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

7.d. Recreation and Wilderness Analysis and Study Area



Public Meeting Comment Form

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1. Name [REDACTED]

2. Organization/Affiliation citizen troubled by Growlers

3. Address [REDACTED] Lopez Isl, WA 98261

4. E-mail _____

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

① The Navy has not evaluated the low-frequency noise characteristics of the Growler. This must be done.

② The Navy has discounted the health effects of noise. You must recognize these effects. Almost 200 comments on the detrimental effects of noise and vibration were submitted.

③ The Navy excluded new technology alternatives. I ask that you evaluate the alternative that deploys UCLASS jets instead of Growlers.

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

④ The Navy lacks commitment to mitigating noise. Please commit to mitigation measures with timelines in the Record of Decision.

⑤

For more information, please visit the project website at whidbeyis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

Open House Comments

Fill in and Submit at the Open House

1. Name [Redacted]

2. Organization/Affiliation citizen

3. Address [Redacted], Lopez Isl, WA 98261

4. E-mail [Redacted]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like your name/address kept private

7. Please check here if you would like to receive a CD of the Final EIS

Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

- 1. Evaluate impacts of the Growler at low frequencies (C-weighted, dBC).
- 2. Recognize the impacts of low frequency Growler noise on health.
- 3. Incorporate San Juan County noise reports in the EIS analysis.
- 4. Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.
- 5. Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.
- 6. Commit to Mitigation Measures and timelines in the Record of Decision.
- 7. Add your own comments here:

yes.

(Continue on the back)

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

IN THE MATTER OF:
The Open House Public Meeting for the Draft Environmental
Impact Statement (EIS) for EA-18G "Growler" Airfield
Operations at Naval Air Station (NAS) Whidbey Island Complex

DATE TAKEN: Wednesday, December 7, 2016

PLACE: Lopez Center for Community and the Arts
204 Village Road
Lopez Island, Washington

TIME: 3:00 p.m. to 6:00 p.m.

REPORTED BY: Mary Mejlaender, CCR No. 2056
Likkell & Associates
Court Reporters & Legal Video
2722 Colby Avenue
Suite 706
Everett, WA 98201
depos@likkellcourtreporters.com

LIKKEL & ASSOCIATES, COURT REPORTERS & LEGAL VIDEO
2722 Colby Avenue, Suite 706, Everett, WA, 98201
(425) 259-3330

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation

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25

* * *

(The personal identifiable information disclosure
statement was read by the following commenter.)

MS. [REDACTED]: My name is [REDACTED]. I have
read the statement on the public meeting comment form about
names, street addresses and e-mail addresses, et cetera,
being kept confidential.

So my comments. First of all, the Navy has not

1 evaluated the low frequency noise characteristics of the
2 Growlers and I really think that this must be done. Second,
3 the Navy has discounted the health effects of noise. You
4 must recognize these effects. Almost 2,000 comments on the
5 detrimental effects of noise and vibration were submitted in
6 the scoping -- during the scoping time.

7 Third, the Navy excluded new technology
8 alternatives. I ask that you evaluate the alternatives that
9 deploys U-class jets instead of Growlers. Fourth, the Navy
10 lacks commitment to mitigating noise. Please commit to
11 mitigation measures with time lines in the record of
12 decision. Thank you.

13 * * *

14

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide “scientifically and legally defensible noise assessments” of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization “Guidelines on Community Noise” and “Night Noise Guidelines for Europe.” 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.” ACTION: Supplement the EIS to address deficiencies identified in

1.a. Thank You

12.a. Socioeconomic Study Area

12.h. Tourism

2.c. Compliance with the National Environmental Policy Act

2.e. Public Involvement Process

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.g. Average Annual Day/Average Busy Day Noise Levels

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.j. Other Reports

4.r. Nonauditory Health Effects

4.t. Noise Mitigation

7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared.

1.a. Thank You

King County , WA 98133

I am deeply concerned about the increase of 36 Growlers scheduled for Whidbey Island .
The many residents there find the noise UNBEARABLE. I have visited when the droning
noise is happening....

:Lopez Island, WA 98261

As a resident of the south end of Lopez Island our quality of life has been substantially and negatively impacted by the noise generated by the Growlers and Navy Whidbey. It is very likely our property value has been reduced due to the Growler and Navy Whidbey noise. And I have an ongoing concern that our employees may be exposed to harmful noise levels, and I do not feel I should be responsible for the impact on their hearing caused by the noise from Navy Whidbey. I do not feel the noise levels as noted by Navy Whidbey accurately reflect the noise we experience. There should be independent noise testing, and the noise levels should be evaluated based upon peak noise and frequency of noise and not be averaged out over a long period of time as we do not experience the average, we experience the intense and the frequent. In addition: 1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
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harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

Port Townsend, WA 98368

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. The US CDC says that even one-time noise above 120DB can cause hearing damage.

- 1.a. Thank You
- 4.d. Day-Night Average Sound Level Metric
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.q. Potential Hearing Loss

Port Townsend, WA 98368

The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was relatively complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% use projection of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected.

1.a. Thank You

3.e. Field Carrier Landing Practice Patterns

3.f. Field Carrier Landing Practice Operation Totals

3.g. Field Carrier Landing Practice Evolutions and High Tempo

Langley, WA 98260-8419

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

As a resident of Coupeville for 22 years I have seen an unacceptable increase in the noise emitted by the jets over the years. The EIS does not adequately address the health concerns around the impact of low-frequency noise on my town. This study does not address the impact of noise on areas in Ebby Reserve which are used for recreation by both residents and visitors. It is extremely distracting to drive the curves around OLF while the jets practice touch and go. It is a miracle that accidents have not occurred during high peak times on highway 20 around OLF. Finally well water concerns caused by the use of fire suppression foam are not fully addressed since we depend on wells for our water in the Ebby Reserve.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 14.b. Vehicle Collisions and Safety
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.r. Nonauditory Health Effects
- 7.g. Ebey's Landing National Historical Reserve



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at www.whidbeyeis.com;** or **(4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name
2. Organization/Affiliation
3. Address
4. E-mail
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

THE PROPOSED INCREASE IN GROWLER CARRIER LANDING PRACTICE AT OLF COUPEVILLE WOULD SEVERELY, NEGATIVELY IMPACT THE SOCIAL, HEALTH AND ECONOMIC VITALITY OF CENTRAL WHIDBEY ISLAND AROUND COUPEVILLE. SINCE THE PRIMARY PROPOSAL IS TO ALMOST TRIPLE FLIGHT OPERATIONS, THE NOISE STUDIES, WHICH DO NOT ACCURATELY MEASURE REAL NOISE EXPOSURE, ARE OBSOLETE BEFORE FLIGHT INCREASES EVEN BEGIN. CURRENTLY AND FOR THE PAST 4 1/2 YEARS, A FEW FLIGHTS OCCUR DURING THE FALL AND WINTER, PRESUMING THAT WILL STAY THE SAME, AS WEATHER CONDITIONS FORCE THIS, ALL OF THE INCREASE WILL HAVE TO OCCUR IN SPRING AND SUMMER. THAT MEANS FLIGHTS WILL OCCUR ALL DAY, EVERY DAY, IT IS ALREADY BONE-JARRING TO BE AWAKENED OCCASIONALLY

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 3.a. Aircraft Operations
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

AFTER MIDNIGHT BY THE GROWLERS, BUT THE PROPOSED INCREASE WILL REQUIRE THAT BE A REGULAR PRACTICE. THIS WILL BE INCREDIBLY DETRIMENTAL TO PEOPLE'S HEALTH.

THE NAVY HAD SEVERAL YEARS TO CONDUCT NOISE TESTS IN THE ACTUAL FLIGHT ZONE WHICH WOULD HAVE BETTER INFORMED THIS DECISION. THE NOISE MODELING EMPLOYED ALLOWED THE NAVY TO OBTAIN DATA TO SUPPORT ITS DESIRED OUTCOME. AS ~~AS~~ MANY RESIDENTS REQUESTED ON SITE NOISE TESTING SEVERAL YEARS AGO, IT SHOULD BE UNDERTAKEN GIVEN THE TREMENDOUS INCREASE IN OPERATIONS BEING PROPOSED.

For more information, please visit the project website at whidbeyeis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic

6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

To: EA-18G EIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506
 Hampton Blvd.
 Norfolk, VA 23508

Handwritten comments last page

Dear Sir/Madam,

Thank you for extending the comment period to February 24, 2017, in order to accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way.

1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because *all* flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects.

2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy.

(http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.”

(<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA).

- 1.a. Thank You
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.d. Recreation and Wilderness Analysis and Study Area
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources

3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions:

1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft;
2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers);
3. 2012 EA (26 Growlers including 5 from a reserve unit);
4. 2014 EA (Growler electronic warfare activity);
5. 2015 EIS discussing electronic warfare training and testing activity;
6. The current 2016-2017 DEIS (36 Growlers);
7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160.

Therefore, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville *alone* went from 3,200 per year to a proposed 35,100 in 2017. That’s more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are “no significant impacts.” The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) “...does not allow an approach that would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant environmental impact, but which collectively have a substantial impact.”

The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomic, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability.

4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water.

5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential

13. The Navy's noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers.

14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software "...do not properly account for the complex operational and noise characteristics of the new aircraft." This report concluded that current computer models could be legally indefensible. (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>)

15. The Navy describes its activities using the term "event," but does not define it. Therefore, the time, duration, and number of jets in a single "event" remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public's ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them.

16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service's draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with "...opening day and associated opening weekend of Washington State's Big Game Hunting Season for use of rifle/guns." While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control.

17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: "Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL." This guidance further states, "Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure." If this official guidance directs Growlers to fly at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed.

18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled “Representative Sound Levels for Growler Aircraft in Level Flight,” on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets.

19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, “...but may be developed and altered based on comments received.” Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be “...identified in the Final EIS or Record of Decision.” Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy’s proposal to *not* allow a comment period on the Final EIS would be unlawful.

20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period.

21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable.

22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, “No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft.” While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can

claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant.

23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls “historic” use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>)

24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water.

25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,”

which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted.

26. Pages of boilerplate language do not constitute analysis of impacts to wildlife:

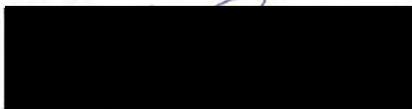
Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is "greatest during flight operations." However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is "highly unlikely," largely because "no suitable habitat is present." This begs the question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area.

27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB.

(<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,"

(<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test.

Thank you for considering these comments.
Sincerely,



Not opposed to a Navy base but Olympic Peninsula is not a training ground. Too many people and noise sensitive areas.

Port Townsend, WA 98363

1. Have found it difficult to conduct face to face meetings outdoors in Forks, WA area when bombers overhead. (2016) Cannot even hear person I'm talking with 3 feet in front of me.
2. Listened to them every day while backpacking in Olympic National Park, Mt Olympus area. (2014) wilderness area.
3. P-3 Orion spent all night flying overhead Port Townsend at about 1,500 agl. ~ 3 years ago. Made local newspaper. Not a good neighbor strategy.

COUPEVILLE, WA 98239

1.a. Thank You
4.q. Potential Hearing Loss

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise.

Coupeville, WA 98239

1.a. Thank You

2.b. Scope of the Environmental Impact Statement and Analysis
Conducted

-water quality & aquifer contamination -noise impact on children/schools -natural
resources impact -crash frequency -economic impact (tourism, property values) Please
suspend any expansion until these are adequately addressed

Coupeville, WA 98239

- 1.a. Thank You
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects

Increase Growlers at OLF will harm the school children as the EIS does not currently adequately address the potential harm to their hearing and health.

COUPEVILLE, WA 98239

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

If any increase scenario is considered, only the scenario C is viable for Coupeville. Any other will so negatively impact the health of our children, the adults, Agri-business and tourism as to destroy Coupeville's economy.

Nordland, WA 98358

The draft EIS does not include data about Growler airfield operations on the population of Marrowstone Island where I live. I can hear and see the planes in operation during the day and have been awakened at night by the noise. I have experienced difficulty getting back to sleep with the constant activity of the planes. It is like having the Navy and one of its most powerful weapons stationed in my house, without warning and without recourse. I have a rescue dog who also becomes restless and agitated with the noise. I cannot speak to what other animals experience, nor do I know what Tucker is picking up in the way of noise frequencies and levels, but the EIS does not seem to adequately address the impact of the Growler activity on either more vulnerable individuals or animals who have experienced trauma. I do know that neighbors who have endured air warfare have reported being deeply disturbed and unsettled by the Growler flights. I want also to raise a cost benefit question. Have the expenditures on the Growlers and the costs of their basing, training and deployment contributed effectively to our security? Are there expenditures, either militarily or through statecraft that are as effective or more effective in securing our nation? Finally, does it make sense to spend extraordinary amounts of money expanding the Growler operation when our Veteran's Administration and in particular trauma treatment is inadequate to care for thousands of wounded warriors? What is the ecological balance between repairing the damage we have already done and causing further harm? The scope of the EIS is frankly far too limited. It does not look at the impact of Growler activity as a whole on the immediate human and natural environment. Nor does the EIS look at the Growler activity in the context of the larger human/planetary environment. At the very least the EIS should acknowledge that there are larger issues at stake and refer these for further discussion by the appropriate authorities, including the civilian leadership of the defense department, other affected departments and agencies, the congress, and state and local entities. An adequate EIS should be clear about the limits of its research and findings. The foundations of ecology rest on a holistic approach to knowledge and understanding. Giving the go ahead to a complex operation, based on a piecemeal study subverts the very basis of environmental methods and policy.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.d. General Project Concerns
- 12.c. Socioeconomic Impacts
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 4.l. Points of Interest
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Coupeville, WA 98249

This expansion will not make us more safe. In fact, this expansion puts this island at a much greater risk of an attack. This will ruin an entire community. please hear our desperate cry! Imagine your grandparents or parents being forced to give up their home or family farm and lose their entire retirement to what.... ??? Your EIS doesn't even address the water contamination... What are you doing to us? This is a really fucked up situation... You all should be ashamed of yourselves for being a part of such a destructive system!

1.a. Thank You
11.d. Per- and Polyfluoroalkyl Substances
12.n. Quality of Life
5.a. Accident Potential Zones

Coupeville, WA 98239

North Puget Sound is no place for the EA-18G growlers. Puget sound is an economically vibrant and diverse area, one of the fastest growing the nation with one of the strongest economies, fueled by high tech, clean energy and tourism. People move here and visit here because of the exceptional natural beauty of the NW. We love to be outside: gardening, hiking, camping, fishing, boating, skiing. The harmful noise levels of the EA-18G growlers is completely incompatible with the increasing population density of Whidbey Island and all of North Puget sound. The noise destroys the economic health of the region by squelching tourism and by making our communities inhabitable. Too many people's lives and livelihood will be impacted by stationing the Growlers in the Puget Sound region. Find less a populated location elsewhere. Thank you

1.a. Thank You

12.h. Tourism

12.n. Quality of Life

2.m. Record of Decision/Preferred Alternative

2.n. Alternatives Considered But Eliminated

Coupeville, WA 98239

I work from home and much of my work involves phone calls with my teammates in Seattle and DC. There is no way I can carry on a conversation and get my work done when the jets are flying--the noise is simply deafening. That is now with 6000 flights. 35,000 is untenable. 6000 flights is 4000 too many. OLF directly impacts my economic well being. Clearly there has been zero consideration on the part of the Navy of how people will live and work in Coupeville if there are 135 flights per day. Nor have you considered the fact that Puget Sound is a vibrant and growing area economically. It is a place where people want to visit and live. We have thriving communities inversely impacted by the excessive noise from the Growlers. OLF is incompatible with the current and growing population of Central Whidbey and North Puget Sound. OLF was designed for PROP plans in the 1950s. The planes have gotten louder, while at the same time, central Whidbey and North Puget Sound become more densely populated. OLF is no longer suitable for Navy operations. Take the planes elsewhere.

1.a. Thank You

12.n. Quality of Life

2.n. Alternatives Considered But Eliminated

4.n. Speech Interference (Indoor and Outdoor)

4.o. Classroom Learning Interference

Coupeville, WA 98239

1. The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP). 2. The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather than busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. 3. The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupportable, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data. 4. The DEIS misconstrued an important finding of the National Park Service’s 2015 noise study at Ebey’s Landing Historic National Reserve and obfuscated a forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts. 5. Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature. 6. The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy’s defined hazardous noise zone threshold (i.e., “an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month”). 7. Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy’s 2005 AICUZ directives for Outlying Field Coupeville, such as no residences in a noise zone 2. Whether due to willful intent to ignore by the County or to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and attendant land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should be immediately advocating to the County to place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved. 8. The two most dangerous aspects of flying are the approach, landing and takeoff -- in other words most of the OLFC flight path. The risks are significant (a) because of significant encroachment problems, (b) because OLFC is about 49,000 acres below and the runway about 3000 feet short of standard for Growlers, (c) because the pilots are mostly students flying the F-18 airframe which is 5.5 times more likely to crash than its EA-6B (Prowler) predecessor, and (d) FCLP operations occur at low elevations that increase likelihood of bird strikes with the significant shoreline bird population. These risks cannot be mitigated other than by moving the FCLPs off a suitable 21st century off-Whidbey site. 9. Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise. 10. Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 13.a. Environmental Justice Impacts
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.e. Field Carrier Landing Practice Patterns
- 3.f. Field Carrier Landing Practice Operation Totals
- 3.g. Field Carrier Landing Practice Evolutions and High Tempo
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.j. Other Reports
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.c. Noise Disclosure

at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment. 11. The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% overestimated use of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected. 12. The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the "percent probability of awakening for all scenarios..." While music torture is still permitted under US law, the United National Convention against Torture defines torture as "any act by which severe pain of suffering, whether physical or mental..." Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations. 13. The DEIS obfuscates the effects of FCLP jet noise on classroom interruptions by averaging interruptions with periods when jets are not practicing. The average understates interruption events compared with event frequency during FCLP sessions, which are as frequent as an interruption every 1-2 minutes. Interruptions of such frequency complicate teaching and thwart student concentration and break the focus of teacher and student. In addition the EPA states "Noise can pose a serious threat to a child's physical and psychological health, including learning and behavior," but the DEIS has not recognized the contemporary research. These oversights and failings must be properly addressed and analyzed. 14. The DEIS fails to address the effects of noise on hearing and tinnitus and consequential medical costs associated with hearing loss by stating that civilians would need to be exposed to noise emitted by the Growlers for 40 years before there is a permanent shift in hearing. This defies all scientific and audiological evidence to the contrary, even by the US military itself. Hearing loss and tinnitus are the MOST compensated injuries in the military and increasing annually (US Dept. of Veteran Affairs.) That and failure to address the effects of impact or sudden noise must be more fully delineated. 15. The DEIS fails to adequately address the effects of high noise levels during pregnancy provoking significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss.

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide “scientifically and legally defensible noise assessments” of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Fill in and Submit at the Open House Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.” ACTION: Supplement the EIS to address deficiencies identified

1.a. Thank You

12.a. Socioeconomic Study Area

12.h. Tourism

2.c. Compliance with the National Environmental Policy Act

2.e. Public Involvement Process

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.g. Average Annual Day/Average Busy Day Noise Levels

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

4.j. Other Reports

4.r. Nonauditory Health Effects

4.t. Noise Mitigation

7.h. San Juan Islands National Monument

in comments and offer further opportunity for public comment before the Final EIS is prepared.

1.a. Thank You

2.n. Alternatives Considered But Eliminated

Port Townsend, WA 98368

I have lived in Port Townsend all my life. As a child I heard deafening noises from military planes flying overhead. Often briefly we could not hear ourselves speak as the planes flew low overhead. My Dad would say that it was the sound of freedom, and no one argued with that. We were a very small town, and it was a very big war. Now, the situation is not the same. We are a fast growing area of the U.S. Many new homes are planned. The increase in motor vehicles is constant. There is always airplane noise overhead. I live on the bluff overlooking the Straits of Juan de Fuca. I have heard the Growlers, and was able to tolerate the deep sound as we were hearing it, but knowing that if it increased it would be intolerable to me. At the time I had no idea how much your proposal would increase it. In small doses, for freedom, I decided not to comment. Now I understand how much it will be increased, how it will go on night and day without ceasing, I feel it cannot be tolerated. Since our area is growing so fast now, and because we already have nuclear submarines not far away, as well as military installations in Bangor and on Marrowstone Island, it seems like we are in a war zone. Our Senior citizens have been loyal Americans, and in retirement do not deserve this assault. We are so aware that there are many places in the United States which are losing population, and hurting for employment, and would welcome Growlers which would grow their economy, and fill their empty stores and houses. If you wish to not increase the number of Growlers in our region, I'm sure that the present level of noise is satisfactory, but otherwise having the number you are planning to send here will be intolerable to our citizens. Please, please find another place for your Growlers, somewhere where the citizens will be accepting, and even look forward to your coming. If you really care about equality in the USA you will do this. The Olympic Peninsula is doing enough for now. Sincerely, [REDACTED]

Coupeville, WA 98239

We moved to Coupeville twenty years ago. We knew that we were building a house in the navy OLF flying area. We adjusted to the flying noise of the Prowlers - uncomfortable, but not too often fly over. (We are in one of the flying patterns, and when they come over, they are very close over our home.) The first flying of the Growlers indicated a BIG change. Noise so intense that we cannot be outside while they fly. And to bring all the pilots training on the new plane, they started flying many more flying time. The Growlers are a different plane, and it is impossible to hold a conversation, sleep. To think that with one of the scenarios proposed, more flights will make it very uncomfortable to live here. Some neighbors have already left this area because of the noise. Coupeville area should not have more flying attached to OLF than it already is experiencing.

- 1.a. Thank You
- 2.k. Range of Alternatives
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.p. Sleep Disturbance

Coupeville, WA 98239

Air and Water Pollution. It is staggering to think about the effect of additional Growlers on the whole livelihood of Central Whidbey Island. This is an area made up of small farms, the county seat, schools, a hospital, Ebey Reserve, a National Park, and communities that rely on a single aquifer for our water. The recent studies done by Washington State Health Department tell us that the noise of the Growlers can be harmful to our health, and the discovery of well water contaminated with fire foam chemicals is an additional concern to all of central whidbey who rely on well water. The EIS does not address either of these areas. It also does not address the fact of having almost all of the electronic warfare planes in one location. which even to the ordinary citizen seems lacking in security and safety for the Navy itself, and the community at large. We respectfully ask for further study. The lives of Whidbey island residents depends on it.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 3.a. Aircraft Operations
- 4.r. Nonauditory Health Effects

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

I totally understand and appreciate the need for the military and the operations around us but it is important to be partners on this island in a balanced responsible way that respects and preserves the island resources and the creatures that live on it. Isn't the military ultimately about protecting?

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Greenbank, WA 98253

1.a. Thank You
4.q. Potential Hearing Loss

6. The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy's defined hazardous noise zone threshold (i.e., "an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month").

Portland, OR 97239

1.a. Thank You

1.d. General Project Concerns

From noise pollution to safety issues this proposal is a threat to all communities: people, wildlife, oceans, air, fresh water and the land itself.

Coupeville, WA 98239

Siting 96% of the entire electronic warfare force on a costal island accessed by ferries and bridges, which have been deemed terrorist targets, does not seem to be a well thought out strategy. Other Navy jets are deployed on at least two bases. The Deception Pass bridge carries the major water supply for NAS Whidbey. Siting on the East coast where more than half of the military tactical units are located seems more appropriate. Protection of Gulf Coast tankers would be enhanced.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 2.n. Alternatives Considered But Eliminated

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

If flight operations are expanded to the extent suggested in the navy's projections the likelihood of increased water contamination is likely, and this is not a condition that is adequately addressed in the DEIS.

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name [Redacted]
2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
resident
3. Address [Redacted] *Coupeville, WA 98239*
4. Email [Redacted]

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

Noise: Using census figures to calculate the number of people impacted is narrow and unrealistic. Coupeville is the seat of county government and a popular tourist destination. Nearby is a ferry terminus, a county park and Camp Casey which is used by many groups for outdoor activities.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

1.a. Thank You

Oak Harbor, WA 98277

The Anti OLF individuals will be the first to say why did we not respond if a attack like 9/11 happened again. They need to think the reason OLF is open so our pilots can train, so they can respond to any attack that is made on our great country

1.a. Thank You

Oak Harbor, WA 98277

The Anti OLF individuals will be the first to say why did we not respond if a attack like 9/11 happened again. They need to think the reason OLF is open so our pilots can train, so they can respond to any attack that is made on our great country

Port Townsend, WA 98368

I am on your mailing list. I request 45 more days to discuss, and assess your rights to use our air space to pollute and make noise in our pristine area of the Olympic Peninsula. The Navy does not have the right to make our lives and environment compromised. The Environmental Assessment was poorly conducted and needs further examination by sound and pollution experts who are not paid by the Navy on a regular job basis.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

Public Affairs Office Commander

U.S. Fleet Forces Command

1562 Mitscher Avenue, Suite 25

Norfolk, Va. 23551-2487

Dear Commander:

As citizens of the Olympic Peninsula who have attended the open houses over the years to see what the Navy is doing to our environment, we are quite disappointed that the Navy has not taken their responsibilities seriously, and instead are increasing the pollution, and noise load on the pristine Olympic National Park and the many citizens who try to preserve this lovely part of the world. The Navy's DEIS ignores the harmful consequences of Growler operations taking place. It does not address the true environmental and public health consequences of planned Growler increases. The DEIS is flawed by design and prepared in violation of the National Environmental Policy Act. The Navy should relocate touch-and-go Growler training from Whidbey Island to another less populated and environmentally sensitive location.

- The DEIS misrepresents the impacts of Growler noise. No measurements of noise were taken in communities. Instead, the Navy used computer modeling that averaged periods of noise with long period of silence.
- The DEIS ignores overwhelming scientific and medical evidence of harms caused by hazardous Growler noise. It presents no evidence that those harms are not now occurring and will not occur in the future
- ALL of the alternatives for Growler operations proposed by the Navy will create more noise and harms in communities throughout the Puget Sound. The DEIS's alternatives only shift the burden of harms between communities.

Sincerely,

Port Townsend, WA 98368

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

2.b. Scope of the Environmental Impact Statement and Analysis Conducted

2.c. Compliance with the National Environmental Policy Act

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

4.d. Day-Night Average Sound Level Metric

4.f. Noise Measurements/Modeling/On-Site Validation

4.r. Nonauditory Health Effects

7.d. Recreation and Wilderness Analysis and Study Area

Mercer Island, WA 98040

1.a. Thank You
19.d. Electronic Warfare

I am strongly opposed to increasing the number of Growler jets at the Whidbey Island Naval Air Station, and also to using the Olympic National Forest and surrounding lands for Naval war games.

Mercer Island, WA 98040

1.a. Thank You

10.m. Impacts to Marine Species and Habitat

I AM VERY CONCERNED ABOUT NOISE POLLUTION IN THE SAN JUAN ISLANDS FROM THE NAVY GROWLERS EXPANSION PARTICULARLY DUE TO THE LIKELY DETRIMENTAL IMPACT ON OUR ENDANGERED ORCA WHALES.

Coupeville, WA 98239

I have lived in Central Whidbey for the past 20 years. I was under the flight path of the Prowlers from 1997-2007 and had 3 children during that time. Yes, they woke up late at night due to the Prowler flights, but that was nothing compared to the sound/VIBRATION of the Growlers. Although I understand that your computer-generated model of decibels is the model that you use across the board, and that it is averaged in a 24-hour period, it simply does not accurately measure the sound/vibration of the Growlers felt on the ground during the touch and go practice. As you are aware, another federal entity, the National Park Service, measured sound on the Reserve and the decibels far exceeded your 'average' of 60 decibels. Its accurate measurement of the sound (not a computer generated calculation) of 115 decibels is literally deafening. Averaging an enormous sound that can cause permanent hearing loss over a 24 hour period is insulting to the health of the good citizens of this area. If someone hits you on the head with a hammer it will hurt you. If you average that pain over 24 hours it looks less painful, but does not negate the pain of being hit on the head with a hammer. Because much of the 1700 page document is based on this inaccurate model of measurement, the potential effects on our community are not accurately reflected in the Draft EIS. I urge you to reconsider your sound model and base the EIS on actual sound measurements. It is also distressing to me that you have not identified in the draft EIS the Accident Prone Zones that will be created with the jet expansion and what that will do to our property values, etc. How does the Navy plan to compensate citizens for that loss? Failing to determine those before a final EIS is proposed limits our ability to respond to something that we are not yet aware of. It is difficult to understand how and why the Navy has not explored or listed any other alternatives than expanding the Growler operations at OLF Coupeville. OLF Coupeville was built for a very different plane than the Growler--From what I can tell, the Navy will have to extend the runway at a significant cost. The very freedoms that our great men and women in uniform are fighting to protect are threatened by this expansion, and by reading the EIS, it seems that no alternatives were considered. There are alternatives -- what about a decommissioned air craft carrier in the water? What about Smith Island? What about Minor Island? What about Eastern Washington? Rather than destroying a community and landscape that people visit from all over the world to witness and putting our citizens at risk, it feels like the community is being punished for being good stewards of the land. Currently, I live in a house built in 1883. We have many historic structures in our community built in the 1800's. The Growler flights several hundred feet over multiple historic structures in a community dedicated to historic preservation is not compatible. We have a 21st Century Aircraft flying in a 19th Century Community on a 20th Century airfield. I urge you to consider other options for expansion that are more compatible with the Growlers. Sincerely, [REDACTED]

- 1.a. Thank You
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.a. General Noise Modeling
- 4.d. Day-Night Average Sound Level Metric
- 4.j. Other Reports
- 4.k. Comparison of the Prowler to the Growler
- 5.a. Accident Potential Zones
- 8.e. Outlying Landing Field Coupeville and Coupeville History
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Coupeville, WA 98239

I have lived in Central Whidbey for the past 20 years. I was under the flight path of the Prowlers from 1997-2007 and had 3 children during that time. Yes, they woke up late at night due to the Prowler flights, but that was nothing compared to the sound/VIBRATION of the Growlers. Although I understand that your computer-generated model of decibels is the model that you use across the board, and that it is averaged in a 24-hour period, it simply does not accurately measure the sound/vibration of the Growlers felt on the ground during the touch and go practice. As you are aware, another federal entity, the National Park Service, measured sound on the Reserve and the decibels far exceeded your 'average' of 60 decibels. Its accurate measurement of the sound (not a computer generated calculation) of 115 decibels is literally deafening. Averaging an enormous sound that can cause permanent hearing loss over a 24 hour period is insulting to the health of the good citizens of this area. If someone hits you on the head with a hammer it will hurt you. If you average that pain over 24 hours it looks less painful, but does not negate the pain of being hit on the head with a hammer. Because much of the 1700 page document is based on this inaccurate model of measurement, the potential effects on our community are not accurately reflected in the Draft EIS. I urge you to reconsider your sound model and base the EIS on actual sound measurements. It is also distressing to me that you have not identified in the draft EIS the Accident Prone Zones that will be created with the jet expansion and what that will do to our property values, etc. How does the Navy plan to compensate citizens for that loss? Failing to determine those before a final EIS is proposed limits our ability to respond to something that we are not yet aware of. It is difficult to understand how and why the Navy has not explored or listed any other alternatives than expanding the Growler operations at OLF Coupeville. OLF Coupeville was built for a very different plane than the Growler--From what I can tell, the Navy will have to extend the runway at a significant cost. The very freedoms that our great men and women in uniform are fighting to protect are threatened by this expansion, and by reading the EIS, it seems that no alternatives were considered. There are alternatives -- what about a decommissioned air craft carrier in the water? What about Smith Island? What about Minor Island? What about Eastern Washington? Rather than destroying a community and landscape that people visit from all over the world to witness and putting our citizens at risk, it feels like the community is being punished for being good stewards of the land. Currently, I live in a house built in 1883. We have many historic structures in our community built in the 1800's. The Growler flights several hundred feet over multiple historic structures in a community dedicated to historic preservation is not compatible. We have a 21st Century Aircraft flying in a 19th Century Community on a 20th Century airfield. I urge you to consider other options for expansion that are more compatible with the Growlers. Sincerely, [REDACTED]

- 1.a. Thank You
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.a. General Noise Modeling
- 4.d. Day-Night Average Sound Level Metric
- 4.j. Other Reports
- 4.k. Comparison of the Prowler to the Growler
- 5.a. Accident Potential Zones
- 8.e. Outlying Landing Field Coupeville and Coupeville History
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at www.whidbeyeis.com;** or **(4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]

2. Organization/Affiliation citizen

3. Address [REDACTED] Compenlk 98239

4. E-mail [REDACTED]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

① I would like to know why ^{growlers} they can't fly/practice their FCLP on a simulated carrier out in the ocean or on the Power station island or in the desert. I don't feel like a good explanation has ever been given why OLF is a preferred site.

② I haven't seen ACTUAL noise measurements (decibels) done by the Navy. Modeling is much different and not accurate.

③ The Growlers are a 21st century aircraft operating over many 19th century structures that are irreplaceable (my home included).

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

8 February 2017

The DEIS does not consider the cumulative effect of all the negative consequences of the proposed expansion. The following itemized list should be taken in its entirety to represent my objections to the proposed expansion.

Water Contamination -

Expanded flight operations significantly increase the likelihood of future use of toxic flame-retardants and additional water contamination, a threat made more severe by the Navy's commitment to using up existing stockpiles of PFOA/PFOS materials. This possibility of further contamination to the aquifer, and indeed current water contamination, is not adequately addressed in the DEIS.

I am now having to drink contaminated water from Coupeville's town well.

Noise -

Noise during FCLP operations impacts schools, residents, and the local economy, reducing property values and driving away tourist activity. Computer modeling of noise impacts does not adequately reflect the real impact on affected communities. The DEIS ignores scientific and medical evidence of harm caused by excessive noise.

Several farms in my community are considering shutting down operations because their employees cannot safely work outside under increased noise frequency.

Environmental Impact -

The environmental impacts of increased operations are not addressed in the DEIS, from harm to wildlife and effects of increased CO2 in surrounding marine waters, among other impacts.

Alternative Siting -

The DEIS offers no analysis of many alternative sites in the region for FCLP operations. The Navy is not acknowledging the reality of population growth in the region surrounding NASWI.

Economic Impact -

The Navy is externalizing costs of its expansion, to be borne by the community through lost or depressed property values, negative impacts on tourism and the necessity to remediate contaminated water.

Increased flight operations will require establishment of an Accident Potential Zone (APZ), further exacerbating property-devaluation impacts.

I have directly impacted my neighbors in the building trades by postponing renovation work at my house because this area of Coupeville may be affected too severely by noise to be livable. My property is already served by a contaminated well, and I am looking at a likely loss of property value if I sell my house.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 19.b. Revised Cumulative Impacts Analysis
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.k. Range of Alternatives
- 4.a. General Noise Modeling
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones


Coupeville WA

Coupeville, WA 98239

1 - The DEIS does not sufficiently address the issue of diminished property value if/when an APZ is necessary because of increased operations at OLF and Ault Field. At what point is this considered a taking? And, at what point is a property's value established? 2 - The DEIS does not adequately evaluate the option of conducting operations in other locations. It is a lot to require that Whidbey and surrounding areas bear the entire burden of FCLP operations. Other locations should be seriously considered to spread out this burden and its impact on the affected communities, especially Oak Harbor and Coupeville.

1.a. Thank You

2.k. Range of Alternatives

2.n. Alternatives Considered But Eliminated

7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Coupeville, WA 98239

1.a. Thank You
12.b. Invisible Costs

https://sustainableeconomycollaborative.files.wordpress.com/2017/02/invisible-costs-final_2_20.pdf

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

The DEIS makes no reference to private and municipal well contamination. There is no provision for avoiding additional contamination at current operational levels, much less at the proposed increased operational levels. Citizens must be told - - what is the time period of concentrated use of PFAS substances in any form? - what is the path of the plume of contamination? - what is the speed and duration of movement of the plume? - what is the size and shape of the plume? - why is the Navy using different labs and analysis for testing on its properties as opposed to tests conducted on town and private properties? - what is the number and location of all wells with contamination below the EPA advisory level? Additionally, the Navy needs to provide a complete map of all well test results in order to determine the scope of the contamination. And, the Navy needs to cap Coupeville's contaminated well and provide the town with a new, uncontaminated well.

Coupeville, WA 98239

I am a farmer and entrepreneur. We manufacture products from the crops we grow. We provide a few jobs to our community, and we add to the attractiveness of Whidbey Island for visitors. Whidbey Island, itself, is an increasingly valuable tourist destination place because of the vistas, the weather, and the peaceful life-style that has existed here for centuries. This isn't a place where life is struggling to exist, it is a lush, beautiful location full of wildlife, natural beauty, and quiet roads. It is one reason so many retired Navy people retire here. In addition to the business we get from the large retirement community here, tourism is an important revenue generator for our county. Unfortunately, I have visitors come into either of my two shops and tell me of their distress as they settled into their lodging (either B&B or Camping) only to be unable to sleep due to the extreme noise because they near the flight patterns. This happens around Coupeville, around Oak Harbor, and around Deception Pass State Park. They are angry when they tell me these stories. I remember when the same happened to me when I first tried to camp at Deception Pass State Park. We had to break camp and find another place to sleep, and ended up sleeping in our car. This reaction by our visitors results in people who will not return. They won't come back and spend money in our community, our businesses. However, my business has a bit of an advantage, because we sell wholesale to several Navy Exchanges in the area. The Exchanges are big department stores and we are honored that they took on our product line. In the years of working with them, we have developed a positive relationship. They order from us frequently, and have been doing so for about 10 years. But, to put it in perspective, the sales to the Exchange accounts for only 3.5% of our total sales. The presence in the Exchanges brings some customers to us when they discover the source of what they are buying in the Exchange is right here, on Whidbey Island. Even so, it isn't a huge percentage of our sales, and it won't compensate for the loss of tourists if the flights increase. As you might be seeing from this statement, the basic effect of the Navy's flight patterns on Whidbey Island is not a positive one in any economical sense that a tourism economy would measure. The tourists who will spend their money on lodging, food, and shopping will be increasingly reluctant to come, especially if flight operations increase significantly. This is an economic burden that compensation for which is impossible and totally unlikely. How do you compensate a business, a community, and individual residents, for the loss of what they hold dear? The loss of the American Dream of retiring to a place that is loved. The loss of reasonable expectations of tranquility, at least most of the time. I urge the Navy to work collaboratively with the local community to spread out the negative effects of the flight operations so many of the operations can be accomplished at other bases, in addition to Whidbey, thus spreading out the negative effects so that one community, a rare one, is not bearing the whole burden of the Growler training needed.

1.a. Thank You

12.h. Tourism

2.n. Alternatives Considered But Eliminated

7.i. Deception Pass State Park and Other State Parks

Coupeville, WA 98239

1.a. Thank You
11.d. Per- and Polyfluoroalkyl Substances
2.n. Alternatives Considered But Eliminated

The bottom line is this - the Navy (and other branches of the Military) are charged with defending the American way of life. If they destroy that way of life in the act of defending it, then it is really money thrown away for nothing. The issue of sound and water safety is not irrelevant, it makes up the whole of what is worth protecting here on this archipelago. The reality is that this area will be increasingly populated by people who want to vacation here and the Navy has an opportunity to take their fellow American's well-being to heart, or not. The saddest outcome would be if the Navy treats Whidbey Island as an occupied territory and sacrifices the Americans who live here. To the people who will be making the final decision: please remember what your mission is and who you are protecting and don't sacrifice them for an erroneous concept of what your mission is. It's not about flying planes, or saving money on jet fuel, or only getting pilots ready for combat - it is remembering what is great about this country, what we create federal reserves to protect, and, ultimately, how we consider the full ramifications of our decisions and what effect they will have on us and the people who live nearby. Spread out the burden of the flight training, don't make the citizens of Whidbey Island bear the brunt of all of it.

Coupeville, WA 98239

Dear Sir or Madam: The Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex does not take into account the infrasound produced by EA-18G Growlers. I live under the Snakelum Point turn and have experienced both the EA-6B and EA-18G. There is something qualitatively different about the EA18G noise. I think it is the infrasound component and this is never addressed in the DEIS. DEIS Volume II Appendix A 2.2.1 Noise Metrics states: "The metrics in this study are presented in terms of A-weighted decibels, which approximate the response and sensitivity of the human ear." This excludes infrasound but that doesn't mean infrasound has no effect. Jet noise at a SEL of 110dB (Table F1. SEL Ranked Flight Profiles for Average Year Baseline Scenario) is a whole body experience. One shortcoming of the DEIS is reliance on instrumentation and standards that are tied to a single estimation of biologic system's response (A-weighted curves). In 2000, U. Landström presented a paper (Human Effects Of Infrasound) that stated; "Studies have also shown an increased risk of drowsiness during exposure to infrasound." Further stated is "What is above all almost wholly lacking is definite knowledge of the way in which human beings are affected by long-term infrasound exposure." (Ref: <http://www.confor.org/fr/internoise2000/cdrom/data/articles/000956.pdf>) A later paper published in 2007 by Alves-Pereira and Castelo Branco includes "At present, infrasound (0-20 Hz) and low-frequency noise (20-500 Hz) (ILFN, 0-500 Hz) are agents of disease that go unchecked. Vibroacoustic disease (VAD) is a whole-body pathology that develops in individuals excessively exposed to ILFN. VAD has been diagnosed within several professional groups employed within the aeronautical industry, and in other heavy industries. However, given the ubiquitous nature of ILFN and the absence of legislation concerning ILFN, VAD is increasingly being diagnosed among members of the general population, including children." [Emphasis added] (Ref: <http://cat.inist.fr/?aModele=afficheN&cpsid=18484208>) The work by Dr. Alec N. Salt (Ref: <http://dx.doi.org/10.1016/j.heares.2010.06.007>) suggests that: 1. "The ear is sensitive and responds to low frequency sounds at levels that are not heard." 2. "Low frequency sounds amplitude modulate cochlear responses to higher frequency sounds. This is a biological amplitude modulation that cannot be detected with a sound level meter." [Emphasis added] My brief survey indicates that infrasound effects can be dangerous AND that more research is needed. We don't want to engage in population-level studies of those effects on Whidbey civilians. The EIS should address EA-18G infrasound output, what is known about human health impacts of infrasound and what further answers are needed to insure a safe change in deployment. Thank you for your consideration, [REDACTED]

- 1.a. Thank You
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests

Coupeville, WA 98239

Dear Sir or Madam: The Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex states that "No school would experience an increase of more than two learning-disrupting events per hour under any scenario under Alternative 1 compared to the No Action Alternative. Oak Harbor High School (S01) and Crescent Harbor Elementary School (S02) under Scenarios B and C (with windows open) and Coupeville Elementary (S03) under Scenario A (with windows closed) show the highest increase of classroom/learning interference, at an additional two events per hour.(DEIS p.4-69)." I was a science teacher at Oak Harbor High School and I can verify that jet passes do disrupt learning. Even with closed windows, when an EA18G passes by everything stops. Students and teacher sit looking at each other until we can hear conversation. If the noise happens during a video then I have to decide whether or not to backup and replay the section or just move along. Learning is a process and jet noise resets the process. It takes real student effort to regain their focus. With the next pass more students tend to hang it up for the period. In science I told my students that anecdotes are the enemy of data. There are references going back to 1980 that were compiled by the community that support my anecdotal experiences. I urge that the DEIS incorporates those studies so a complete assessment of the deployment changes can be evaluated. The DEIS has a misconception about modern education. More and more learning is taking place outside a traditional classroom. The DEIS states: Because the individual is assumed to be indoors for this analysis, noise level reduction factors were applied because the walls, doors, insulation, and other building features reduce the noise levels inside. (DEIS, pp.4-37, 4-66). The data show that there is a range of potential outdoor speech interference that may disturb individuals participating in outdoor recreational activities depending on the location of the POI relative to the airfields and flight tracks. (DEIS p. 4-44) I taught Earth science and horticulture classes at OHHS. I wanted students to be outside as much as feasible. When the jets were flying the class had to scurry back in the building. Talk about disruption of learning! The DEIS should not assume that students will be in a building. I will leave the effects on athletic events for the coach's comments, but athletics is considered to be an integral part of schools and learning. The community is VERY supportive of athletics. I would be hesitant to dismiss "outdoor recreational activities". The data show that there is a range of potential outdoor speech interference that may disturb individuals participating in outdoor recreational activities depending on the location of the POI relative to the airfields and flight tracks. (DEIS p. 4-44) I noticed that Coupeville Middle and High School did not seem to be mentioned in the DEIS. I am not sure what that is about as they are closer to the OLF than the elementary school. People tend to worry more about the little kids, but I assure you jet noise affects older children. Please understand also that we are already impacted by EA-18G operations. While the increase might be 'zero' in one scenario, the existing overflights and their effects is not zero. North and Central Whidbey already are affected and the communities' support of NAS Whidbey prior to these proposed changes should not be disregarded. The average number of events is mostly consistent with those expected under the No Action Alternative conditions; however, some POIs may experience an increase in the average daily events. These increases range from zero to an increase of three events per hour (P03), depending on the scenario. (DEIS p. 4-44)

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.l. No Action Alternative
- 4.l. Points of Interest
- 4.o. Classroom Learning Interference
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.j. Impacts on Outdoor Sports

The DEIS needs to incorporate the studies done on aircraft noise on school. This will allow an accurate assessment of the deployment changes. Thank you for your consideration, [REDACTED].

Coupeville, WA 98239

Dear Sir or Madam: I was surprised to read in DEIS section 3.14.2.3 Seismic Activity, "Since earthquakes are a reflection of active tectonic processes, this fault does not appear to present any significant seismic hazard." This implies that because the last estimated movement of one fault was many years ago that NAS Whidbey is OK. The Pacific Northwest (PNW) is one of the most tectonically active areas on Earth! We have a megathrust earthquake every 300-500 years. The 2004 Sumatra-Andaman earthquake was a megathrust type. The last megathrust earthquake in the PNW occurred in 1700. There are three sources of PNW earthquakes. (Ref: <http://pnsn.org/outreach/earthquakesources>) with recurrences of every 30 to several hundred years and magnitudes up to 9Mw. The megathrust earthquake is one of those sources. The pervasive risk of seismic activity in the PNW is well documented. These risks include ground movement, liquefaction and tsunamis. All are documented in Puget Sound and Whidbey Island geography. A place to start researching this is the Island County earthquake page (Ref: <https://www.islandcountywa.gov/Health/EH/Documents/EARTHQUAKE.pdf>). This resource tends toward emphasizing effects of a crustal fault and Benioff zone earthquakes. The megathrust event will have up to 100 times the ground motion and last for several minutes. I was born and raised in the Puget lowlands and have taught Earth science. This is a real problem that the DEIS glosses over. Please address this in the final EIS. Thank you for your consideration, [REDACTED].

1.a. Thank You

16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)

1.a. Thank You

Saanich, British Columbia v9a1m4

A little noise is a fair price to pay for the protection which the US armed forces give to Canada

Oak Harbor, WA 98277

Sir/Madam: The use of Day/Night Noise Levels (DNL) does not accurately capture the noise levels of the aircraft during take off, landing, and in flight. Consequently the calculations and assumptions in the EIS to determine public health and safety are not accurate. The use of DNL is not applicable to a situation where aircraft only operate for a few hours at a time. Further, noise levels should be measured at the sight with instruments that can collect sound accurately (90 degrees to object emitting noise), which requires sound measuring devices to either track the planes and/or the use of multiple devices at key spots along the flight and landing paths. Without this real-time data and the use of real data points, the EIS is flawed and inaccurate. Public health and safety at OLF and at the Naval Station should be based on the sound during the period when aircraft are conducting their take off and landings, not averaged over a period of 24 hours. Harm and disruption are caused in several ways such as acute occurrences and total duration above a certain threshold. To address this, the EIS needs to show maximum sound levels (Lmax), single event noise exposure levels (SENEL), and sound exposure levels during the period when aircraft are practicing take offs and landings (SEL). Without these measurements, the EIS cannot be evaluated.

- 1.a. Thank You
- 4.a. General Noise Modeling
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.m. Supplemental Metrics
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects

Oak Harbor, WA 98277

I am concerned about hearing loss from the current flights at the OLF and the proposed increased number of takeoffs/landings because of a recent study by the US Centers for Disease Control and Prevention (CDC) showing that most people do not know they have hearing loss simply by asking them and that much of the cause of the hearing loss is from outside the workplace (url: <https://www.cdc.gov/vitalsigns/HearingLoss/>). I am especially worried that we do not know the levels of noise associated with hearing loss in children. A single loud event is sufficient to cause hearing damage. As the information from the CDC shows, damage can occur from 100db for 14 minutes, 110db for 2 minutes, and 120db for 1 minute. And this is on average and not for children. The EIS needs to lay out noise lines around the OLF to show maximum noise levels, sustained noise levels, and average noise levels over various meaningful times. It is insufficient and misleading to use DNL for this calculation. Once this information is provided, then the noise levels and duration can be compared to studies showing noise-caused hearing loss in children and adults to determine safe zones using real data measurements taken from planes at the OLF and real research about public health hazards from such noise. Further, the Navy could support a study right now that would examine hearing loss among members of the community and begin to determine the effects of long term exposure to relatively short (less than two hours) amounts of intense noise. Without the data on the actual levels of noise and information on public health studies, the EIS is incomplete at best and misleading at worst.

- 1.a. Thank You
- 4.m. Supplemental Metrics
- 4.q. Potential Hearing Loss
- 4.s. Health Impact Assessment and Long-term Health Study Requests

The Honorable Rick Larsen
 119 North Commercial St.
 Suite 1350
 Bellingham, WA 98255

Mr. [REDACTED]
 Commander, US Fleet Forces Command
 1562 Mitscher Ave, Suite 250
 Norfolk, VA 23551, 2487

EA-118 GEIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic
 Attention: Code EV21/SS
 6506 Hampton Blvd.
 Norfolk, VA 23508

Coupeville Mayor Molly Hughes
 P.O. Box 725
 Coupeville, WA 98239

Gentlepeople,

I wish to comment on the Navy Growler Field Carrier Landing Practice (FCLP) environmental issues. My wife and I have our primary residence of 16 years in Coupeville and we own other properties within the area of concern. We are firm supporters of the Navy presence on Whidbey. We believe, however, the issue of severe acoustics and now apparent water pollution in some areas threaten the health and finances of many residents, regardless of statistics detailed in the Navy Environmental Impact Studies. We have heard of people who moved from Coupeville and surrounding area on doctor orders to preserve their health. At times, we and some friends of ours retreat to our basements or don protective ear gear to lessen sound to tolerable levels so we can function or sleep. Also, who wants to purchase or build a residence that is subjected to such an environment? Clearly, there is a definite health and financial impact on the community at large, beyond just brief periods of annoyance.

Assuming the Growler is here to stay, it seems the only way to resolve the multitude of issues surrounding FCLP is to eliminate the need or decrease the need to an "acceptable" level. Relocating FCLP to another location or attenuating the sound pressure levels at the engine source does not appear practical.

1.a. Thank You
 11.d. Per- and Polyfluoroalkyl Substances
 12.c. Socioeconomic Impacts
 12.j. Property Values
 2.k. Range of Alternatives
 2.n. Alternatives Considered But Eliminated
 4.p. Sleep Disturbance
 4.q. Potential Hearing Loss
 4.r. Nonauditory Health Effects
 4.t. Noise Mitigation

The EA-18G Growler has digital flight controls which means it can be controlled by sensors and software. A system currently exists that allows near automated landing of carrier based Growler aircraft (Google "Navy's Magic Carpet Simplifies Carrier Landings"). The H-12 version has been tested extensively in 2016. The H-12 version with failure modes will be available early this year and should be operational by the end of 2017 according to this recent article. The Navy has already stated that this system significantly reduces flight deck crew, pilot training requirements and maintenance and operation budgets! Also, the world is on the cusp of unleashing thousands and eventually millions of self driving vehicles on the highways and city streets where reliability and safety are paramount. Space X can now land a spent first stage booster on an ocean platform. Using these existing technologies, automatically and reliably landing a Growler on a carrier deck under any realistic condition, eventually without any input from the pilot, seems very feasible (and certainly desirable).

I believe there is minimal need to subject man, machine or community to the stresses associated with FCLP. If the Navy could tell the concerned public that the present FCLP schedule is a temporary situation until the Magic Carpet becomes operational (with an estimated time frame), I believe the community at large would be placated and the fury would subside. I would certainly put Magic Carpet on the fast track (if it isn't already). It solves so many issues.

If it is deemed absolutely necessary to give pilots FCLP, in addition to the many hours of simulator training, can that be achieved with a less powerful plane thereby reducing noise and perhaps reducing the number of actual Growler FCLP events? Hopefully, with a system like Magic Carpet, FCLP can be greatly curtailed or eliminated entirely.

Respectfully submitted, 


Coupsville, WA 98239
January 27, 2017

The Honorable Rick Larsen
 119 North Commercial St.
 Suite 1350
 Bellingham, WA 98255

Mr. Ted Brown
 Commander, US Fleet Forces Command
 1562 Mitscher Ave, Suite 250
 Norfolk, VA 23551, 2487

EA-118 GEIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic
 Attention: Code EV21/SS
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Coupeville Mayor Molly Hughes
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Assuming the Growler is here to stay, it seems the only way to resolve the multitude of issues surrounding FCLP is to eliminate the need or decrease the need to an "acceptable" level. Relocating FCLP to another location or attenuating the sound pressure levels at the engine source does not appear practical.

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 4.r. Nonauditory Health Effects
 4.t. Noise Mitigation

The EA-18G Growler has digital flight controls which means it can be controlled by sensors and software. A system currently exists that allows near automated landing of carrier based Growler aircraft (Google "Navy's Magic Carpet Simplifies Carrier Landings"). The H-12 version has been tested extensively in 2016. The H-12 version with failure modes will be available early this year and should be operational by the end of 2017 according to this recent article. The Navy has already stated that this system significantly reduces flight deck crew, pilot training requirements and maintenance and operation budgets! Also, the world is on the cusp of unleashing thousands and eventually millions of self driving vehicles on the highways and city streets where reliability and safety are paramount. Space X can now land a spent first stage booster on an ocean platform. Using these existing technologies, automatically and reliably landing a Growler on a carrier deck under any realistic condition, eventually without any input from the pilot, seems very feasible (and certainly desirable).

I believe there is minimal need to subject man, machine or community to the stresses associated with FCLP. If the Navy could tell the concerned public that the present FCLP schedule is a temporary situation until the Magic Carpet becomes operational (with an estimated time frame), I believe the community at large would be placated and the fury would subside. I would certainly put Magic Carpet on the fast track (if it isn't already). It solves so many issues.

If it is deemed absolutely necessary to give pilots FCLP, in addition to the many hours of simulator training, can that be achieved with a less powerful plane thereby reducing noise and perhaps reducing the number of actual Growler FCLP events? Hopefully, with a system like Magic Carpet, FCLP can be greatly curtailed or eliminated entirely.

Respectfully submitted,

Couville, WA 98239
January 27, 2017

Coupeville, WA 98239

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 3.j. Flight Simulators

Technology has the capability to simulate everything from the pit to the deck in unbelievable detail with what if's, why must you have so many stick flights? Seems unnecessary to me as a person who helped land a man on the moon and was program manager on NASA projects. Read about Apollo 12, an all Navy crew!! I can help. 

seattle, WA 98177

The Olympic Peninsula is a treasure and its value is immeasurable. It needs to be protected for us and for future generations. I object to the Navy's plan to use the Olympic Peninsula for their training exercises. This will harm wildlife, runs through reservations and ruin the natural landscape we are so blessed to have thanks to Roosevelt and so many that have worked to protect our little remaining wild lands. This idea needs to be abandoned for the sake of the environment and respect of indigenous people.

1.a. Thank You

19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training

19.d. Electronic Warfare

Langley, WA 98260

- 1.a. Thank You
- 1.d. General Project Concerns

I am most concerned with the environmental impact of our military pollution on our local environment.

Freeland, 98249

COORDINATED DOCUMENT FOR RESPONSE TO NAVY DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) / INFO FOR COUNTY, STATE AND LOCAL REPRESENTATIVES SECTIONS IN THIS DOCUMENT: 1. SUBJECTS ADDRESSED IN THE DEIS: A. Airspace and Airfield Operations B. Noise associated with Aircraft Operations C. Public Health and Safety D. Education Impact – local schools E. Air Quality F. Land Use G. Biological Resources H. Water Issues I. Socioeconomics J. Hazardous materials and wastes K. Environmental impact L. Impact on Wildlife and domestic animals M. Effects of increased waste production and toxic chemical usage in planned training operations 2. SUBJECTS NOT ADDRESSED IN THE DEIS: A. Impact of jet noise on patient care at Whidbey Health B. Dumping of Fuel C. Impact on Tourism D. Impact on National Park and National Forest lands E. Noncompliance with NEPA standards for content and length of DEIS F. Briefness of Response Time vs. Length of DEIS G. Rationale for having 100% of all Growler jets stationed at NAS H. Impact on historic structures I. Additional Alternatives J. Actual need for additional Growlers K. Use of public lands for training L. Larger scope of noise evaluation M. Bluff Instability vs. Low Frequency Vibrations N. Compensation O. Flights outside planned flight zones P. Confusion on actual number of jets planned ISSUES ADDRESSED IN THE DEIS 1A: AIRSPACE AND AIRFIELD OPERATIONS The Navy DEIS states that flight operations on Whidbey Island will increase from 6100 to 35,100, a 575% increase. There are already issues and problems with the current operations. An increase of any amount is problematic. Details and data explaining these problems appear throughout this document. 1B: NOISE ASSOCIATED WITH AIRCRAFT OPERATIONS In the DEIS Executive Summary, page E-5 the following is written: "These include additional events of indoor and outdoor speech interference, an increase in the number of events causing classroom/learning interference, an increase in the probability of awakening, and an increase in the population that may be vulnerable to a potential hearing loss of 5 dB or more. Therefore, the Proposed Action would have a significant impact on the noise environment as it relates to aircraft operations at Ault Field and OLF Coupeville." The Navy DEIS states that between 1,658 and 1,803 residents potentially risk hearing loss, directly due to aircraft noise exposure. Any risk of hearing loss to residents is unacceptable, but the intensity of noise from training flights actually poses greater harm than stated in the DEIS. For instance, children suffer disproportional harm due to higher vulnerability. (Reference: EPA - Noise and Its Effects on Children) Calculation of decibels: The Navy uses a computer simulation to determine the average daily decibel level (which includes non-flight time), and then spreads that over the year. They don't measure the actual noise generated on training days. Their finding: 90 dBA. However, the National Park Service, in a federally funded study, measured actual dBA at the actual locations in question to be as high as 113 dBA, Sound Exposure Level (SEL) of 117.2 dBA (at the historic site known as Reuble Farm). Instead of dividing the averaged number by the actual number of days training operations happen at OLF, that averaged number is divided by 365 days, so that the decibel level described in the DEIS appears much lower than it actually is when training operations are being conducted. The computer modeling program used by the Navy to calculate aircraft noise levels (NOISEMAP Version 7.2) has been in use for at least 12 years, and was found by the Department of

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.l. Bird Migration
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.b. Invisible Costs
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.m. Education Impacts
- 12.n. Quality of Life
- 12.o. Cost-Benefit Analysis
- 13.a. Environmental Justice Impacts
- 17.a. Hazardous Materials and Waste Impacts
- 18.b. Average Carbon Dioxide per Aircraft
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.e. Naval Special Operations EA
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 2.g. Agency Participation
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.e. Field Carrier Landing Practice Patterns
- 3.f. Field Carrier Landing Practice Operation Totals
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.k. Comparison of the Prowler to the Growler
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference

- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 6.a. Air Quality Impacts from Mobile Source Emissions (Jet Engine and Vehicle)
- 6.f. Fuel Dumping
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve

Defense's Strategic Environmental Research and Development Program (SERDP) to be outdated and might not be able to "provide legally defensible aircraft noise assessments of current and future aircraft operations." The company that makes NOISEMAP 7.2 stated that a new aircraft noise model, the Advanced Acoustic Model (AAM), "...produces more physical realism and detail than the traditional integrated model." The Naval Research Advisory Committee acknowledges that variations in noise from tactical aircraft measurement standards are not addressed because this program was developed measuring commercial aircraft noise, and that there are no standards for acquiring near-field aircraft noise data. Therefore, the Navy's methodology is outdated, inconsistent with current noise measuring technology, and does not allow the transparency needed to establish baselines for risks to public health. The DEIS should use currently available best-practice models and technique to achieve a realistic assessment of impact. Federal Interagency Committee on Urban Noise (FICUN) standards are invoked to justify the additional operational noise of between 2200 to 29,000 flight operations. These average the noise over non-flight days to an average of 65 Db. But the FICUN standards are for urban airports with flights regularly spaced throughout the 24/7, rather than bursts of 115 dB during some days and parts of days, which if averaged over those actual times qualify as intolerable and unlawful even by Navy standards. The DEIS should call out either training days or specific events with impacts analyzed. Furthermore FICUN is outdated, and by new standards anything over 50 dB average is damaging to public health. The DEIS projects that from 8 to 26% additional locations will experience higher than sound criterion used for the DEIS. The DEIS uses no on-the-ground data collection method but states that many thousands more flight operations above the current number, as well as an expanded footprint of land these operations will require, cause no meaningful negative effects on the population. In fact, the current number of flight operations is already intolerable to many Whidbey residents. An actual noise study by the National Park Service in 2015 measured the noise at two different points in Ebey's Reserve over a 30 day period. One representative 24-hour period cited in the study recorded 281 "military aircraft events" that exceeded 70 Dba, which is 10 dBA over the limit of speech interruption. Because the DEIS relies on sound level averages, either for example in regard to the noise the aircraft themselves produce or the ambient background noise levels in the study area, it understates the amount of actual noise produced by each aircraft. The Environmental Protection Agency (EPA) states 60 DB is the level of speech interruption for normal conversation (U.S. Environmental Protection Agency, 1974), meaning a human voice cannot be heard above the interrupting noise. For comparison, the noise volume of a jackhammer at 2 meters distance is approx. 100 DB. In a Navy report from 2005 on establishing AICUZ areas for NAS-WI the EA-18G (growler) jet on departure produces 117 DB, and on approach 114 DB, at 1000 ft. distance. The Growlers fly directly over occupied houses, a middle school, and within 1000 feet of the hospital in Coupeville. People in these locales are exposed to these sound pressure levels up to 60-80 times a day (and night) when they are doing Field Carrier Landing Practice (FCLP). At pattern altitude, they get 115 dBA or more if they live close to the end of the downwind leg. From the Ebey's Landing National Historical Reserve Acoustical Monitoring Report (EBLA): Two acoustic monitoring systems were set up, and recorded data for 28 days on NPS property in the Reserve. The systems were deployed near the Reuble Farmstead (EBLA001) and adjacent to Ebey's Landing at the Ferry House (EBLA002). These systems collected continuous audio and sound pressure level (SPL) data for 731 hours and 741 hours respectively. A total of 1,853 Growler overflight events were identified

during the measurement period. A single deployment of a Growler may have resulted in multiple events depending on the flight path. Some results were:

- Impact on citizens and animals: 2243 additional residential acres will be significantly affected by excessive sound levels
- Impact on farms: 1183 additional agricultural acres, many of which raise livestock, will be significantly affected by sound levels

EBLA provided a table showing effects at discrete acoustic levels SPL (dBA) Relevance:

- 35: Blood pressure and heart rate increase in sleeping humans (Haralabidis et al., 2008)
- 1: Desired background sound level in classrooms (ANSI S12.60-2002)
- 45: World Health Organization's recommendation for maximum noise levels inside bedrooms (Berglund, Lindvall, and Schwela, 1999)
- 52: Speech interference for interpretive programs (U.S. Environmental Protection Agency, 1974)
- 60: Speech interruption for normal conversation (U.S. Environmental Protection Agency, 1974)

EBLA provided a table showing how much time sound levels were above acceptable levels at night at two locations. The most outstanding figures were: % Time above sound level: 19:00-07:00 (night times) Location: EBLA001* - 20-1250 Hz at 35dBA 36.87% of the time 12.5-20,000 at 35 dBA 57.32 % of the time Location: EBLA002** - 20-1250 at 35dBA 62.11% of the time 12.5-20,000 at 35 dBA 77.52% of the time *EBLA001= Reuble Farmstead 6/19/2015- 7/21/2015 Agricultural Field 19 m 48.1893 -122.6664 **EBLA002 = Ferry House 6/19/2015- 7/21/2015 Agricultural Field and Ruderal Shrubland) The highest recorded SPL and SEL at EBLA001 were 113 and 117.2 and at EBLA002 were 85 and 96.6, respectively; both of these were from aircraft. Figures 10 and 11 show the L_{Amax} recorded during an event, different from the SEL (sound exposure level) which is equivalent to the total sound energy of the event, which is calculated as opposed to recorded. SEL is better when considering the intrusiveness of a single noise event. Where noise consists of discrete events the L_{Amax} of the event will be a good indicator of disturbance to activities and sleep (Berglund, Lindvall, and Schwela, 1999). Nearly 100% of aircraft events exceed the hourly existing median ambient (L₅₀). Levels of 70 dBA L_{Amax} were exceeded by 281 military aircraft events at EBLA001 and 125 military aircraft events at EBLA002. At EBLA001, there is a peak occurrence of military overflights at 14:00 to 17:00 and 22:00 to 1:00. The aircraft recorded during these hours were the loudest recorded for the entire monitoring period. From EBLA report: "Recent studies suggest that sound events as low as 35 dBA can have adverse effects on blood pressure while sleeping (Haralabidis, 2008)... The second level addresses the World Health Organization's recommendations that noise levels inside bedrooms remain below 45 dBA (Berglund et al., 1999)" The National Park Service and Navy met in March 2015 to discuss operations on Whidbey Island and potential impacts of Growler noise at the reserve. The NPS and Navy agreed that additional acoustic information, collected at the Reserve, would be beneficial for the NPS to adequately respond to the NEPA (National Environmental Policy Act) document being prepared by the Navy. In July 2015, NPS started the above acoustic data collection. These data should be considered as valid for usage in a true DEIS. Natural and cultural sounds are integral to ecosystem function and are one of the many resources and values that National Park Service (NPS) managers are responsible for preserving and restoring. NPS evaluates federal actions that may impact the human and natural environment within our public lands. Air, water and wildlife are valuable resources that can quickly be substantially harmed by inappropriate sound levels and frequencies. Intrusive sounds are of concern to the management of the National Park system because they impede the ability to accomplish the NPS mission of resource protection and public enjoyment. Anthropogenic noise may also disrupt ecosystem processes by interfering

with predator prey relationships and the ability of wildlife to communicate, establish territory, reproduce, support and protect offspring (Siemers and Schaub, 2011; Schroeder et al., 2012; McClure et al., 2013). Visitors to many NPS units come with expectations of seeing, hearing, and experiencing phenomena associated with a specific natural or cultural environment, yet in many cases these environments are being increasingly impacted by anthropogenic noise altering their experience (Lynch, Joyce, and Fristrup, 2011). According to table 4.1-2 the greatest increase in an average year for flight operations at OLF would be 547 percent. The metric for measuring the impact of this is calculated in conversation interruptions per hour averaged over 15 hours. Three to five planes run a touch and go pattern for up to 45 minutes. Being outside under an accelerating aircraft generating 104 to 127 db of noise is more than a conversation interrupter. It hurts and you must cover your ears. Increasing these 45 minute barrages by 547 % will have a significant impact. People live in central Whidbey because of its quiet rural atmosphere. The DEIS does not address the damaged quality of life, what is termed aesthetics by NEPA. Presently, The noise has already increased because there are now two squadrons flying at a time, so while there used to be refueling breaks, they can now fly continuously, and do so for up to 6 hours per day, often as late as 1:00 a.m.

Calculating Sound Averages That More Accurately Describe Environmental Impact Introduction Currently accepted practices of using A-weighted noise profiles, NOISEMAP simulation software and annual noise weighting to create sound contours contain assumptions that mask the experience of unwanted noise as reported by many residents of Whidbey Island and the surrounding communities. This situation has created a discrepancy between what the draft EIS purports as reasonable noise metrics and what the local residents report as experiencing. This report outlines shortcomings in the current Growler noise modeling averaging techniques and proposes changes in the DEIS to more accurately reflect the impact of the noise on the community so that a more accurate and realistic impact can be described in the final EIS. Airport noise has been analyzed as it relates to "annoyance" of the local residents. Day-Night average contours have been used to assess the potential annoyance based a relatively steady level of sound throughout a day and over a year. Averaging the noise over a year has been shown to equate well to annoyance levels when the noise is relatively constant throughout the year. However, the annoyance levels experienced and reported by residents near the Growler flight path seem to exhibit a much higher degree of annoyance than the literature and accepted practices would explain. The following factors are postulated to explain the discrepancy: 1. The Growler, based on the F/A-18F airframe, is equipped with engines that produce 44,000 pounds of thrust having a significant low-frequency content that is not modeled when using dBA noise metrics. The result is that the noise modeling, capturing only sound in the human-hearing frequency range, does not account for the effects of lower frequencies which are experienced as "felt" rather than "heard." 2. Training occurs in periods of peak intensity in order to support deployment requirements. Squadrons deploy (five jets per squadron currently and seven to eight proposed in the DEIS) within a narrow time window so that the pilots are all carrier-qualified in a narrow time window. This has the effect of lumping flight operations (eg. Field Carrier Landing Practice, FCLP) into a few days with up to 200 flight operations per day, including night operations. 3. Noise contours based on a 365-day averaging work for operations of a fairly continuous nature and are not as useful for a few, very loud events. The intense sound of the Growler, Sound Event Level (SEL) of 118 dBA at 600 Ft1 is equivalent to a leaf blower or rock concert, both 1 "Air Installations

Compatible Use Zones Report", Naval Air Station Lemoore, California, November 2010, Page 4-14 Calculating Sound Averages That More Accurately Describe Environmental Impact 2 recommended to have ear protection. Other DoD agencies use daily noise averages routinely to remain below acceptable community noise levels when generating a few loud events per day². Discussion Impact of Low Frequency Noise The Growler noise profile, when compared to the A-6B, Prowler, has significantly higher sound pressure energy at lower frequencies. Figure 1 shows the Growler having 15-20 dB greater levels over the Prowler at 10 - 15 Hz. The power levels used for FCLP in the DEIS are modeled at 85 %NC, similar to the data in the chart. Figure 1 Sound Profile of EA-18G This lower frequency component also travels farther, i.e. experiences less atmospheric attenuation, than higher frequencies. However, this effect is not carried forward if dBA weighting is used since dBA weighting filters the frequencies below 1000 Hz. C-weighting includes the lower frequencies and better captures the sound energy of the event. Figure 2 depicts the sound energy that is included (to the right of the curved line) and excluded (to the left of the curved line) in A-weighted metrics. The Growler has a significant amount of sound energy excluded from the modeling using A-weighting metrics. The result is an understated amount sound energy used to calculate sound contours, which, in turn, results in sound contours encompassing smaller areas in modeling than experienced in practice. 2 Fort Bliss Mission and Master Plan (TX, NM); Final Programmatic Environmental Impact Statement; Volume II, Appendices A through K, December, 2000, pg G-17. Calculating Sound Averages That More Accurately Describe Environmental Impact 3 The additional effect of excluding low frequency sound is to understate the distance the sound pressure can be experienced. Lower frequencies travel considerably farther as explained in Fort Bliss Mission and Master Plan: 3 "The atmosphere absorbs sound energy. However, this absorption is not a significant factor for sounds with frequencies of 500 Hz or less. For example, at 10 Hz, approximately 0.04dB is lost to atmospheric absorption over a 6.2-mile distance, and for a sound at 100 Hz, about 3.5 dB is attenuated over the same distance. Conversely, for a sound at 1,000 Hz, approximately 100 dB would be lost over the same 6.2 miles." In addition, water is a very good reflector of sound waves, resulting in even farther propagation of sound energy to surrounding communities. It is not clear how this modeling is included in NOISEMAP since most airport modeling is typically for airports surrounded by land. Figure 2 Discarded Sound Energy Using A-Weighting 3 Fort Bliss Mission and Master Plan (TX, NM); Final Programmatic Environmental Impact Statement; Volume II, Appendices A through K, December, 2000, pg G-18 Calculating Sound Averages That More Accurately Describe Environmental Impact 4 Operational Training Peaks From the Draft EIS: " Per Navy guidelines, pilots must perform FCLP before initial carrier qualification (ship) lands or requalification landings. The first carrier landing needs to occur with 10 days of completion of FCLP." Growler Squadrons currently have five Growlers each and the DEIS proposes adding either two or three Growlers to each VAQ squadron; meaning a squadron would then deploy with seven or eight planes. A pilot typically requires, on average, 150 "bounces" (a simulated carrier landing) to become proficient at one of the most challenging tasks in aviation. For a squadron of 8 planes, this totals 1200 bounces and is counted as 2400 Flight Operations in the DEIS. The DEIS further explains that a typical FCLP lasts 45 minutes with three to five aircraft participating the training. Using an average of four planes per exercise, 45 minutes would permit 8-10 FCLP loops per session, or a total of 32 to 40 FCLP landings and takeoffs. If there are few minutes between sessions, one could assume a session occupies an hour, therefore, the number

of sessions required to train a squadron equals the number of hours of FLCP required. This totals about 24 hours for a 5-jet squadron and 37.5 hours for an 8-jet squadron. At three training sessions per day, each day has 96 bounces. The training scenario outlined above would occur for 8-10 days over a two-week period to prepare all pilots in a five-jet squadron for deployment. Alternative 1A in the DEIS would generate 183 days of training using the scenario described above, approximately two weeks of training followed by two weeks of no activity, on average, in order to accommodate the larger squadrons.

Calculating Sound Averages That More Accurately Describe Environmental Impact 5 Typical Training Day Noise Averaging Using SEL data for F/A-18E/F, the same platform as the Growler, the value for a daily noise level average can be calculated. Table 4-4 from the AICUZ for NAS Lemoore is partially reproduced below in Table 1. 4 Table 4-4* Sound Exposure Levels and Maximum Sound Levels for Representative Flight Conditions F/A-18C/D F/A-18E/F Condition Power %NC Speed (knots) SEL (dBA) Lmax (dBA) Power %NC Speed (knots) SEL (dBA) Lmax (dBA) Departure through 1,000 ft AGL (not co-located) 97 300 114 108 97 250 116 113 Departure through 10,000 ft MSL (prior to Hwy 41) 97 310 91 77 97 350 91 83 Non-Break Arrival through 1,800 ft MSL (near Initial Points) 88 135 103 95 85 135 110 103 FCLP on Downwind (600 ft AGL) 88 135 114 108 85 135 118 113 GCA Box mid-downwind (1,800 ft MSL) 83 200 91 84 83 200 102 93 Table 1 - Excerpt from AICUZ, NAS Lemoore, 2010 Note: SEL of 118 dBA correlates well with the Nation Park Service calculation of SEL at 117.2 dBA at Reuble Farmstead during an overflight at EBLA001 during the measurement period⁵. The calculation for daily average of multiple events spread over a day is given by⁶ $LCdn = CSEL + \{ 10 \log_{10} (ND + 10 NN) \} - 49.4$ Equation 1 Where: CSEL = C-weighted Sound Exposure Level for a single event ND = Number of events per 24-hour period occurring between 7:00 a.m. and 10:00 p.m. (daytime) NN = Number of events per 24-hour period occurring between 10:01 p.m. and 6:59 a.m. (nighttime) Multiplying the events by 10 assigns a 10 dB penalty for noise events at night. $49.4 = 10 \log_{10}$ of 86,400 (the number of seconds in a 24-hour period). Source: U.S. Army, 1986b Using the A-weighted SEL from Table 1, the daily average for a training day can be calculated using Equation 1 with various scenarios spread between day and night FCLP loops. 4 Air Installations Compatible Use Zones Report, Naval Air Station Lemoore, California, November 2010, Page 4-14 5 Ebey's Landing National Historical Reserve, Acoustical Monitoring Report, Natural Resource Report NPS/ELBA/NRR—2016/1299, pg viii 6 Fort Bliss Mission and Master Plan, pg 18

Calculating Sound Averages That More Accurately Describe Environmental Impact 6 SEL (dBA) ND NN Total FCLP Loops Lcdn (dBA) 118 96 0 96 88.5 118 80 16 96 92.4 118 60 36 96 94.9 Table 2 Daily Average Noise Level for Typical Training Day Table 2 Daily Average Noise Level for Typical Training Day shows that for points below the flight path for a Growler at 600 feet, a typical altitude for an FLPC training loop, the daily average for a typical training day is between 88 dBA and 95 dBA. As discussed above, using A-weighted sound levels understates the amount of energy of Sound Exposure Level since the A-weighting excludes a significant amount of sound energy. Therefore the amount of sound energy experienced by structures (including biological bodies) is even higher. Using the Reuble Farmstead as a benchmark, it is in the 75dBA noise contour in the DEIS in all alternatives, however, the daily experienced sound average on training days is over 90dBA using calculations for daily averaging. The World Health Organization, the EPA and the DoD all recommend sound protection at levels of 80 dBA. At over 90 dBA the daily average at Reuble Farmstead is ten times the level recommended for sound protection. Calculating Sound Averages That More

Accurately Describe Environmental Impact 7 Conclusion Residents near the flight paths report significantly higher annoyance levels than predictions by standard annual noise modeling indicate. This report demonstrates that the sound exposure levels of the Growler are significantly higher than the DEIS reports using annual averaging. C-Weighted noise contours would be more useful for non-human impacts. The EA-18G has considerable amount of sound energy at low frequencies and excluding low frequency sound pressure energy may understate the impact on animals, birds, marine life, and physical structures and should be examined for impact in the final EIS. Using DoD-sourced information and calculations, the daily sound averages are significantly higher to the point that sound protection is essential to prevent permanent hearing loss for any residents, visitors or workers under or near the flight path when FCLP operations are underway. Recommendations to incorporate in the Final EIS

1. C-Weighted Typical Training Day noise averages should be generated in the Final EIS to better inform the public of the requirements for sound protection to prevent adverse health impacts. The public and public health officials would then be better able to prepare for the impacts to minimize long term exposure effects.
2. Residential populations and businesses within Daily Typical Training Day noise contours over 80 dBC should be specifically notified so that appropriate precautions can be taken.
3. Residential populations within the 80 dBC and higher Daily Typical Training Day contours should be monitored for adverse health effects since long term exposure could produce chronic conditions.

Effects of Low Frequency Noise: Although some low frequencies produces at high amplitude are felt more than heard by people, their effects are significant. Here is a responsibly researched report on the effects of low frequencies on the human ear and body: Low-frequency noise: a biophysical phenomenon M. Oud (medical physicist / consultant)* * Mireille.Oud@gmail.com, <http://nl.linkedin.com/in/mireilleoud>, the Netherlands Abstract Complaints on low-frequency noise were till recently fairly unexplained, but audiological research shed light on the mechanisms that enable perception of frequencies below the threshold of average normal hearing. It was shown that exposure to low-frequency sound may alter the inner ear. This results in an increase of sensitivity to low-frequency sounds, and as a result, previously imperceptible sounds becomes audible to the exposed person. Interactions between inner-ear responses to low and higher frequencies furthermore account for perception of low-frequency sound, as well as the property of the hearing system to perceive so-called difference tones. Introduction A growing minority of people experiences an increased sensitivity for low-frequency sound. Not surprisingly, they complain about noise, even about loud noise in some cases. Their complaints about the presence of hum, buzz, and rumble are often not recognized as a nuisance, since the majority of people does not perceive the very low frequencies. Low-frequency noise (LFN) may have serious health effects like vertigo, disturbed sleep, stress, hypertension, and heart rhythm disorders [1]. The number of sufferers is growing, and this has two possible causes. The sources of lowfrequency sounds increased in volume and dimension over the past decades, and auditory sensitisation takes years to develop. Nowadays, the main source of low-frequency noise is the public infrastructure: wind turbines, gas transmission grid, industrial plants, road and railway traffic, sewerage, and so on. Their expansion is enormous as it keeps pace with our rapidly increasing welfare and industrialization. Recent inventions like district heating (citywide hot water pipeline grids for home warming and hot tap water) and underground waste transportation furthermore add on to the sources of LFN. In recent years, more insight has been gained into the biophysical explanation for sensitisation of the hearing system for low sound

frequencies. This paper discusses several of the proposed mechanisms for this biophysical phenomenon. Biophysics of low-frequency sound perceptibility Sound audible to the human ear is in the frequency range 20 -20.000 Hz, and the ends of this spectrum are barely audible. In audiology, the measured range is restricted to the frequencies relevant to speech 125 - 8000 Hz [2]. LFN may be loosely defined as having frequencies below this range. Sounds of all frequencies can also be transmitted via the skull, thus by-passing the eardrum. This is called bone conduction and it occurs most with low frequencies. Tones with low frequencies therefore contain no spatial information for our hearing system. (For this reason stereo equipment has only one subwoofer.) The maximum amount of sound pressure that is bearable is 140 dB (ref. 20Pa), the threshold of pain. As illustration: heavy traffic generates about 80 dB, and a normal conversation 60 dB [2]. At average sound pressure levels, frequencies within the range of speech are better perceived than very low or very high frequencies with the same sound-pressure level. This is what the widely used dBAweighting standard refers to. Figure 3 shows the low-frequency part of this standard. The cochlea is a bony structure, with three fluid-filled compartments that are separated by membranes. The basilar membrane is set into motion by sound-pressure waves in the upper compartment. This excites the outer hair cells of the sense organ on the basilar membrane, the organ of Corti. This organ lies in the middle compartment of the cochlea. The outer hair cells act as preamplifiers, and they excite the inner hair cells. The inner hairs cells transduce the mechanical activity into electrical stimuli to the brain. In Figure 2 the sensitivity curves of the inner and the outer hair cells are shown, along with the noise spectrum of a Dutch wind turbine. It is seen that noise above 50 Hz can be heard by the average normal hearing person. Noise below 5 Hz is not audible for anyone. The region in between is not audible, unless the sensitivity of a persons outer hairs cells are altered. Frequency sensitivity of the cochlea is distributed over the basilar membrane from high frequencies at the basis (i.e. where the sound-pressure waves enter the upper compartment) to low frequencies at the apex (end point). At the apex, the cochlear upper compartment is connected with the lower compartment through a passage called the helicotrema. The pressure waves pass through the helicotrema into the lower compartment, in order to dispose of their remaining energy and extinguish. Frequencies lower than about 20 Hz cannot be heard by the average person, but they can be sensed as vibrations, as most people will have experienced when standing near e.g. a subwoofer. A minority of people, however, are able to hear these frequencies as well. Low-frequency audiograms of three very sensitive persons are shown in Figure 1. These three subjects show to be able to hear sounds below about 20 Hz, sounds with pressure levels more than 20 dB less than the hearing threshold for normal-hearing persons. Several mechanisms in the cochlea may be responsible for this increased sensitivity and for other health effects. We will describe two hydromechanical mechanisms and two neural mechanisms. Figure 1: Hearing thresholds of three especially sensitive persons (from [5]). Figure 2: Unweighted noise spectrum of a Dutch wind turbine [7], hearing thresholds from Figure 1, and sensitivity curves of inner and outer hair cells [6]. The latter are based on animal hair-cell response characteristics, but with helicotrema and middle-ear characteristics for the human. Stimulation of the cochlea has been shown to result in swelling (hydrops) of the middlecompartment fluid (endolymph) [3]. The swelling results in flow of endolymph through a narrow duct that is connected with the sacculus. The sacculus is a compliant chamber with sensory cells that

generate neural impulses to the brain when the head makes movements. When these cells are excited due to the endolymphatic flow, this is experienced as vertigo (dizziness) [4]. Endolymphatic hydrops is also known to contribute to occlusion of the helicotrema. When the helicotrema is blocked, the pressure waves bounce at the helicotrema and travel back through the upper compartment. They interfere with incoming waves and, with that, intensify the pressure waves in the upper compartment. The returning waves start at the apex and will lose their energy along their way to the basis. As they have most energy near the apex, they will excite the cochlear area near the Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 3/5 M. Oud (medical physicist / consultant) apex most: and this is the area with sensitivity for low frequencies. This may make the ear 20 to 30 dB more sensitive to low-frequency sounds [8]. The distance between the sensitivity curves of the inner and the outer hair cells is indeed about 20 dB; this supports the idea of LFN-induced sensitivity enhancement. As we saw from the dBA curve, higher frequencies are better perceived than low frequencies, at most sound pressure levels. However, at sound-pressure levels higher than about 85 dB SPL, the opposite was seen to occur: in measurements on the cochlear response of laboratory animals, the low-frequency part of the cochlea then showed more response to 5 and 50 Hz tones than to a 500 Hz tone [9]. Another interesting finding in this laboratory experiment is the observation of biological amplitude modulation: sounds with higher frequencies could suppress the response of the cochlea to very low frequencies. With low frequencies at pressure levels that do not yield cochlear response (and thus no nuisance), a remarkable observation was made. A tone of e.g. 50 Hz could still exert its influence: it was able to suppress the response of the cochlea to higher frequencies [9]. When the spectrum of a noise source contains two coherent higher-frequency tones with only slightly different frequencies, their interference pattern shows a beat with low frequency. Our hearing system perceives this form of amplitude modulation as a so-called difference tone. Normal-hearing persons can, under certain circumstances, hear this form of low-frequency sound too, e.g. when tuning a musical instrument. Musicians know these tones as 'Tartini tones'. Readers unfamiliar with this biophysical phenomenon are invited to listen to a sound example that we present online [10]. Figure 3: Equal-perception level curves used for weighting spectra, according to three standards. Figure 4: Wind turbine spectrum of Figure 2, with four different weightings. Discussion and recommendations

Legislative control of noise necessarily rests on noise-level standards for the average person, as these standards cover the majority of people. The ear of the average person is generally assumed to have a frequency-sensitivity characteristic according to the dBA-standard. When this standard is applied in the assessment of noise, as a weighting, the amount of low-frequency noise produced by public infrastructure seems small. The unweighted low-frequency level, however, can be considerable. For wind-turbine noise, this is shown in Figure 4. A growing number of people suffers from LFN-induced enhanced hearing sensitivity for low frequencies, with enhancements of 20 dB or more. The experiments discussed in this paper furthermore showed that low frequencies can generate more cochlear response than higher frequencies, when Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 4/5 M. Oud (medical physicist / consultant) their sound-pressure levels are considerable. At the time of construction of the dBA standard, high-powered low-frequency noise was not as common as today. It is likely that the phenomenon of reversal of sensitivity was not taken into account in the construction of the dBA curve. Therefore, for assessing low-frequency

noise, other standards than dBA are required. The dBC-standard might be considered for this purpose, or the more recent dBG standard. The dBG weighting is an ISO-standard and is especially designed for assessing low-frequency sounds [12], [13]. For a comparison, see Figure 4. The elder generation has been exposed longest to the noise of public infrastructure. It was found that the prevalence of LFN-complaints increases with age [1]. This supports the conclusion that long-lasting exposure to low-frequency noise, inaudible for years to the exposed persons, may at the long term result in alteration of the cochlea; such alterations could already be demonstrated in laboratory animals. When sensitisation finally occurs, the LFN “suddenly” becomes audible to the exposed person. This person will try and search for recent changes in his immediate surroundings that can be pointed to as “the” cause of his LFN problem. But not necessarily recent and nearby changes are the main and only cause. Ground-borne vibrations have a propagation length of tens of kilometres. In a small and densely built-on country as the Netherlands, the large propagation length inevitably causes the noise from the different numerous elements of the infrastructure to interfere and accumulate. So, looking for one unique structure as the source of nuisance may often be impossible and illogical. This explains why engineering attempts to localize “the” noise source are often fruitless. A single subset of infrastructure may in itself not produce sufficient low-frequency sound to cause problems, their combination may. In regulatory debates on combatting LFN, the discussion should therefore not focus on finding “the” industrial culprit (like “wind turbines”), but rather on the relative contribution of each industry. A special type of interference is the difference tone that appears when two sine waves are coherent and close in frequency. This tone is not present as an individual frequency in the sound spectrum. In order to detect the presence of low-frequency difference tones, measuring power spectra does not suffice. Coherence should be detected and therefore the time-evolution of phase spectra should be studied. This should be done at an appropriate frequency resolution. Sound spectra are often presented with logarithmically-spaced frequencies, because this is in accordance with the frequencydiscrimination characteristic of the ear. However, low-frequency beats arise from pairs of tones that are usually not distinguishable for the ear. To detect the presence of difference tones, spectral information with a high frequency resolution has to be gathered. The sufferer can indicate what beat period he hears, and this may serve as a guide to determine the in-situ required frequency resolution. If low frequencies are actually present in the spectrum, they do not necessarily have to be audible, or even be continually present, to be perceived. This paradoxical fact was shown in the experiments, and is a property of the cochlea. When a low-frequency sound does not yield any cochlear response (and therefore no nuisance), it could still suppress the response to sounds with higher frequencies. In case the inaudible low-frequency sound shows up in intervals, the higher frequencies will seem modulated in amplitude. This may give rise to a perceptible beat with a period of the intervals mentioned. Low-frequency sound may cause endolymphatic hydrops, which may result in vertigo. We assume that physiological process as lymphatic flow and helicotrema blockage cannot resolve as quickly as sound can be turned off. Therefore, the dizziness may persist after the low-frequency sound vanished. As a consequence, LFN-measurement may yield zero result while the sufferer still has the physical complaint. Higher frequencies were found able to suppress cochlear response to low-frequency sounds. This form of masking may be an advantage for the LFN sufferer when there is a continuous presence of higher frequencies in the ambient noise. However, when high-frequency sounds show up in intervals, the amplitudes of the

low-frequency sounds are modulated with the same period. Then, we Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 5/5 M. Oud (medical physicist / consultant) expect, another low-frequency beat will be perceived, with a period equal to the modulation interval. The above three effects are all due to cochlear properties, but they cannot be solely ascribed to cochlear problems: they still require the presence of low-frequency sound in order to manifest themselves. Data on the prevalence of LFN in the Netherlands do not exist. Systematic investigations have not yet taken place. The need to do so has become fairly apparent, but suitable measurement protocols still need to be developed. In addition, a dedicated nuisance-assessment methodology needs to be developed for LFN. This is because LFN-sufferers miss many of the coping strategies that sufferers from traditional noise have. First, they do not have any means of shielding against LFN. Since LFN propagation is mainly structure-borne, closing doors and windows is not effective. Earplugs are of no use, because LFN bypasses the eardrum. Secondly, LFN has no spatiality and is therefore perceived as being located “within the head”. The sufferer literally cannot distance himself from the unwanted sound. Thirdly, LFN never lets up, since public infrastructure is continuously in operation. Fourthly, social control, like talking to the neighbours in case of music nuisance, is not applicable. Lastly, moving house will not bring a solution since the propagation depth of structure-borne low-frequency vibrations is large and the public infrastructure densely present in our small country. All this implies that LFN exceeds tolerable noise levels and noise durations sooner than traditional noise does under comparable (but not yet established) noise loads. Acknowledgement The author kindly acknowledges Dirk van der Plas, Ellen Mulder and Lies Jonkman of the Dutch low-frequency noise vigilance group [14] for their constructive support. References [1] G. Leventhall, P. Pelmear and S. Benton, A review of published research on low frequency noise and its effects, Report for Dept. for environment, food and rural affairs, London (2003) [2] F.N. Martin, Introduction to audiology, Needham Heights: Allyn and Bacon, (1997) [3] Salt, A.N. Acute endolymphatic hydrops generated by exposure of the ear to nontraumatic low frequency tone, JARO 5, 203-214 (2004) [4] A.N. Salt and J.T. Lichtenhan, Perception-based protection from low-frequency sounds may not be enough”, Proc. inter.noise, New York (19-22 Aug. 2012) [5] C.S. Pedersen, “Human hearing at low frequencies with focus on noise complaints”, Ph.D. thesis, Aalborg University, Denmark (2008) [6] A.N. Salt and T.E. Hullar, Responses of the ear to low-frequency sounds, infrasound and wind turbines, Hear. Res. 268, 12-21 (2010) [7] G.P. van den Berg, The sound of high winds: the effect of atmospheric stability on wind turbine sound and microphone noise, Ph.D. thesis, Rijksuniversiteit Groningen (2006) [8] A.N. Salt, D.J. Brown, J.J. Hartsock, S.K. Plontke, Displacements of the organ of Corti by gel injections into the cochlear apex, Hear Res. 250, 63-75 (2009) [9] A.N. Salt and J.T. Lichtenhan, Responses of the inner ear to infrasound, Proc. 4th Int. meeting on wind turbine noise, Rome (12-14 April 2011) [10] <http://tiny.cc/LFG2012NAG>: .ppt presentation with graphs, pictures and sound examples associated with present paper (Dutch text) [11] A.N. Salt, Infrasound: yours ear “hear” it but they don’t tell your brain, Proc. 1st int. symposium ‘The global wind industry and adverse health effects’, Picton, Canada (29-31 Oct. 2009) [12] R. Cedric R., Ecoaccess guideline for the assessment of low frequency noise, Proc. of Acoustics 2004, 619– 624, Gold Coast, Australia (3-5 Nov. 2004) [13] ISO norm dBG: http://www.iso.org/iso/catalogue_detail.htm?csnumber=13813 [14] Belangengroep Laagfrequentgeluid <http://www.laagfrequentgeluid.nl> 1C: PUBLIC HEALTH AND SAFETY (See Also 1H: water issues) The human body perceives jarring

noise as a danger cue, which triggers a stress response—even during sleep, and even in people who have lived in noisy environments for years. When exposed to short, intermittent noises during sleep, study subjects experienced heightened heart rate, blood pressure, and stress hormones. Long-term exposure is even associated with long-term cardiovascular problems. The DEIS refers to health effects on the average person: someone in their 30's or 40's with no particular physical and/or emotional vulnerabilities. The demographic groups most vulnerable to the Growler's noise are children/youth whose bodies are not yet fully developed and the aging, which by definition are not at their best, but nevertheless make up a significant proportion since we have a large retired population. Accident Potential Zones for Navy airfields: APZs are required to be assessed for any DoD fields with 5000 operations per year. In 2004 the Whidbey AICUZ determined that an APZ wasn't required at the OLF due to the level of operations the previous year. This conclusion of course proved inaccurate. In fact the OLF most likely has been out of compliance for many years, according to the Navy's own requirements. From DEIS, page 4-261: "... While it is generally difficult to project future safety/mishap rates for any aircraft, the Growler has a well-documented and established safety record as a reliable aircraft." The DEIS provides no data on accident history or mishap rate of EA-18G or the F-18 Hornet platform. In actuality the All-Navy Class A Mishap Rate over the past ten years is 1.27 mishaps per 100,000 hours flown. At the rates in the DEIS, the translates to 3-4 "mishaps" over the next 10 years. (See the graphic for the NAS stats available in a 2003 DEIS.) Additionally, ignoring pilot error as a potential cause for a mishap creates an unrealistic view of accident potential. The above quote is the extent of effort expended on an accident risk analysis in the DEIS. Yet a thorough risk analysis must accompany every credible EIS. A manual from the Department of Energy on EIS preparation says an EIS must include treating a "maximum foreseeable" (different from worst-case) accident, its probability of happening, its potential adverse consequences and its remediation. The magnitude of a risk must be calculated from its probability and its consequences; comparisons of risks for each alternative should be done.* Stating "reliable aircraft" and "well-documented safety record" is not appropriately backed up by data. The Navy withheld important statistics (i.e. 22 crashes since 2000 of the EA-18G and its closely related F/A-18 E, F aircraft) from the DEIS. Several aggravating factors at OLF are conducive to accidents, thus endangering the populace, the environment, local properties and the airmen themselves. The EIS accident risk analysis for all four action alternatives must include factors such as facility shortfalls, unique Whidbey atmospheric challenges, scheduling compromises, contributors to pilot error such as night flying, and must include the most pernicious Growler technical problem: hypoxia effects. Furthermore all EISs must include the potential harms and disruptions resulting from use of the dated OLF facility as well as outline the consequences of accidents of various levels of complexity and intensity. Omitting such an analysis fosters a tone of unrealistic optimism that prompts the proposal to multiply flight operations sixfold while pronouncing "no significant impact." There is no realism here: it is obvious that amplifying flight operations will severely escalate the likelihood of a significant life- and property-destroying "impact." The following EIS-omitted factors are amplifiers of, and results of, accident risk: Compromises on facilities: • 35% shorter than regulation Growler runway-length • 1/40 of the required open acreage surrounding the runway-length • residences, fuel depot, businesses, county facilities, a highway and a city are within accident-risk areas near runways and often within short distances of their ends. Atmospheric conditions: • Frequent wind shifts, creating dangerous tail-winds for allowed

T & G's, some witnessed so far as even exceeding strict wind-speed regulations • Common presence of birds that endanger engines • Frequent fog, rain events, and wind that can force "edgy" calls on permitted flights. • A six-fold increase on demand for precious flight times (meaning half the days of the year are needed for flights); this is very likely to result in further tightening the line between "flight go" and "flight abort" calls, leading to decreasing the safety envelope. • A vast "density altitude" difference between OLF (d.a. 337) and typical Middle East sortie locations (Persian Gulf d.a.2182). While not endangering pilots in training it endangers them in a war theater: increases their risk of hitting a Persian Gulf carrier deck too hard or not soon enough by misjudging the lift of the air. Pilots and planes – circumstances contributing to risk: • Night flights with tired pilots (tiredness welcomed for realistic practice) • The troubling rise in the number of breathing and pressurization problems in FA-18G and Hornets; the pilots rate the Growler's tendency toward hypoxia their most pressing problem. • Pilots are trainees learning new, dangerous maneuvers, automatically increasing accident risk above routine flights done by seasoned pilots. • The Growlers are part of a family of similar planes that have a significant accident rate: 38 crashes (and numerous incidents of dropping pieces from flight) since 2000. (The F-18 series, of which the Growler is part, is rated at a minimum 5.6 times as likely to have mishaps than its predecessor, the Prowler.) Potential effects of catastrophic accidents on the Whidbey Island Community • Dispersal into the water table of fire-fighting Type B foam with health-endangering, banned, toxic ingredients. Training and accidents have already injected these into the Whidbey water table, rendering some vital citizen wells unusable, and endangering the Coupeville water supply (toxins detected at barely acceptable level). These banned toxins are still being stored on Whidbey for emergency use and increased flight ops will risk their use. • Increased economic, health and infrastructure damage from several catastrophic accident scenarios, intensified by training in a moderately crowded civilian setting. Conclusions and Implications of risky conditions at the OLF: the Navy finds itself adjusting flights, limiting schedules, and handling constant noise complaints, all because it is training on an inadequate facility in a highly populated region, yet it intends to expand operations. Meanwhile, a catastrophic accident could, besides creating real health, economic and environmental damage, shatter the public's diminishing patience and faith in local Navy ops. With a realistic assessment of substantial crash risk, the time is right now to scope and begin a transition of anticipated increased Growler training to an alternate, more appropriate facility. Further information and discussion of the accident-risk factors outlined above: Compromises on facilities: The OLF runway is 5,200 feet long and regulations from which it has been exempted (by a permanent waiver issued by the Navy!) demands that it be 8000 feet. Additionally the antiquated runway depth is thinner than regulation, courting the possibility that it could crack because of six-times-intensified use and occur during a rough landing with the currently heavier Growler aircraft than what it was designed for. and create a high speed accident Furthermore, there is a highway (average 9000 vehicles a day) just a few hundred yards ahead of the field's north end. Takeoffs and landings at a few hundred feet above those drivers can be very startling and contribute to driver accident risk. But more important here, the highway proximity considerably elevates the disaster risk from a Growler accident where there is a failure to ascend after landing and the short runway is exceeded before the plane can stop. This is further amplified by the fact that often crowds of parked cars and gawkers accumulate to watch the FCLPs. Result: more civilian risks. During the most recent attempt to build an outlying field in eastern North Carolina, the

Navy sought 30,000 acres of relatively undeveloped land as the current-day threshold to provide civilian safety and to prevent unreasonable encroachment. So the Navy admits that a contemporary outlying field demands at least 30,000 acres of relatively undeveloped surroundings. At only 700 acres (!) OLFC falls 29,300 acres short of standard, (i.e., having just 1/40 or 2.3% the desired acreage). Another way to put it is that a 30,000 acre circle would be 3.8 miles in all directions from OLF's center and this circle would include the majority of the town of Coupeville, and numerous residences, parks, and facilities east and west of OLF clear to the waters of the sound. The operations at OLF are a large foot stuffed into a small shoe, raising the risk of accident to considerable heights. Yet mysteriously the Navy is year-by-year, decade-by-decade granted permission to go full bore with increased operations, and even propose yet a six-fold increase of these operations, while declaring "no significant impact" in the DEIS, all while completely omitting an accident risk analysis. Exacerbating the problem is that the County, with the Navy's tacit indulgence has not discouraged development in accident-prone zones and has not designated accident protection zones (APZs) at the ends of the OLFC runway, creating "an accident waiting to happen" scenario. Aggravating this, the County has not respected in its zoning the Navy's stipulation of no residences (zero) within a [high] Noise Zone 2 area, (which is arguably also more accident-prone due to near-roof-top trajectories). We have now the reality of over 600 residential homes and businesses in elevated harm's way and, in 2016 it is useless to argue whose negligence, Navy or County) has passively allowed these to be placed there with no comment dating years ago. Furthermore, the low-level FCLP touch-and-goes mean that planes approach over neighborhoods at altitudes under 500 feet, in some areas as low as 200-300 feet. The FAA, however, requires no flights below 500 feet over homes or people, as codified by the Supreme Court. The conditions around OLF require the Navy to strongly bend (and break) legal regulations (and their safety margins) in order to function at all. Challenging, potentially dangerous atmospheric conditions: Pilots land and take off often with a tailwind (discouraged for actual carrier landings but a common problem at OLF). There are frequent wind events, fog, and major rain events (less frequent in most US war theaters but a fixture at OLF). Although the Navy theoretically restricts OLFCs at OLF to tailwinds of less than 5 knots, Growlers have been observed on a number of occasions practicing with tailwinds of up to 10 knots and on one occasion, about 15-knot tailwinds, which is patently dangerous. Additionally these atmospheric cause endless scheduling headaches, present more danger for training flights, and their inconvenience could cause a dangerous stretching of the acceptable window of safety for flights (as illustrated in the tailwind example above). All such risk-elevators must be evaluated in the EIS. More on the tailwind problem: If a malfunction were to necessitate a full-stop landing, the ground roll would be significantly longer with a tailwind (1.5% per knot). Because the OLFC landing strip is only 5400 feet long, an aircraft needing to land could continue off the end of the runway. Directly ahead approximately a 1/4 of the runway length is Whidbey Island's Transit Fuel Depot, and then one more runway length further is the township of populated Coupeville. Loss of control in attempting to land could result in loss of aircraft crew and civilian residences. The other runway direction has the community of Admiral's Cove a runway length away as well. At a high approach speed of 160 to 180 knots (303 ft/sec), an out-of-control plane could reach the Fuel Depot (also many facilities and residences) in 17 seconds and, if flying low or with pilot ejection, the town of Coupeville in 34 seconds. More on the Density Altitude problem: It is also worth mentioning that the Navy ignores the vast

“density altitude” difference between OLF (d.a. 337) and typical Middle East sortie locations (Persian Gulf d.a.2182). Because aircraft behave according to density altitude rather than actual altitude, landing or taking off during high-density altitude conditions necessarily increases approach speed and involves longer landing roll and longer takeoff roll. This means fighters run the risk of hitting a Persian Gulf carrier deck too hard or missing it by flying too high with a pilot trained with the “feel,” despite instrumentation, of the wrong air conditions. On May 29, 2016, a Growler landing aboard the carrier John C. Stennis in the South China Sea engaged the carrier arresting gear while still in flight. Result: millions in damage. (Yakima training area, for instance, a proposed OLF alternative with far greater area and, while 1400 feet above sea level, has a density altitude of 2963 (around that of the South China Sea). Could training there have prevented the costly Stennis accident?) The EIS needs to evaluate such factors in the interest of airmens' safety. A note on the huge accident-risk reduction of an alternate field like Yakima: Risk considerations in a EIS must consider alternative actions that reduce risk. As an alternative, the Yakima training field, for example, has near zero lethal civilian accident risk, infrastructure accident risk, civilian health risk from Growler noise, and groundwater pollution risk (no aquifer running underneath it like at Coupeville). And a Yakima-like field's bonus: while higher than sea level, it supports the plane's weight much more typically of war theaters than the OLF, thus adding to the safety of airmen flying missions in the middle east. Previous vetting of alternatives has overlooked many of these risk-lowering benefits (assumed because risk was not even evaluated in the DEIS) and it appears that distance from Ault Field is one of Yakima's down-sides due to fuel limitations of the fighters. But aerial refueling is very common with the Growler missions—an everyday non-event. Yes, slightly more expensive to fly further for training but nowhere equivalent to the expense to health and safety born by Coupeville residents and to the flying airmen. Hypoxia problems raise the risk probability. According to the Navy Times 5/8/16: “Nothing scares Hornet pilots more than losing oxygen — and it happens all the time.” This article details the hypoxia (low oxygen) problem in the Growlers, which pilots have identified as their top concern. “Naval Air Systems Command is scrambling to implement fixes, but the brass has underplayed the severity and frequency of the danger since it emerged in a February 2016 congressional hearing, according to interviews with pilots and official reports.” “These show a troubling rise in the number of breathing and pressurization problems, and that Navy and Marine F/A-18 Hornet and EA-18G Growler aviators view the problematic On-Board Oxygen Generation System as the fleet's most pressing safety issue by far (10 times over). Despite these issues, aviation bosses have not grounded the fleet, a common response to aircraft safety issues.” It is not possible to ignore the hypoxia problem in an EIS. It is perhaps a background contributor to several of the 22 Growler and F/A-18 E/F accidents since 2000 but may have been left out of the accident descriptions in that it can simply contribute to pilot error: misjudgment, fatigue, and distraction. Accident statistics raise the risk estimate: The accident risk evaluation must include probability predictions related to the statistics of crashes. It is challenging to choose which metric best predicts the likelihood of Growler accidents. One way is to look at accidents for the Growler and its close “cousin” models the F/A-18 E/F series worldwide. A ratio with the number of flight ops done with those models would be illuminating. Crash records can be spotty on information but our a good estimate is 22 such crashes since 2002 of which 10 were midair collisions in training and 12 were a random mix of pilot error and mechanical failures, in air and during takeoffs and landings, often with ejections. Midair collisions are

less likely in FCLP training but the other 12 crashes of these type could happen at or around OLF during FCLPs. Due to the crowded conditions of OLF they would be quite costly in lives, property and environmental damage. The percent risk as indicated by these accidents is definitely not near-zero as was implied in the DEIS. Yes, the OLF has not suffered one of these yet, but many circumstances present in the other accidents are even more pronounced at OLF due to many night flights, hypoxia problems, tight scheduling and challenging atmospheric conditions. Another approach would be to look at all accidents since 2000 of fighters of all models flying in non-paired-combat-simulation in order to simulate the accident probabilities of a fighter doing FCLPs. Another is to look at all accidents of fighters of all types flying FCLP training. This information should be researched by the EIS writers. Here is yet another way: The All-Navy Class A Mishap Rate over the past ten years is 1.27 mishaps per 100,000 hours flown. At the rates projected in the DEIS, this translates to 3-4 "mishaps" over the next 10 years, some of which could be crash disasters. Finally, this statistic needs to be factored in: already there have been 24,000 operations at OLF with one accident, which translates to about 1.5 mishaps per 35,000 flight operations per year. Applying a proportion of "mishaps" that are crash disasters throughout the Navy could provide yet another estimate of probability of actual crashes. It is the Navy's obligation to choose the best estimation technique for crash disaster probabilities and present it in the EIS. Note: It is important to keep in mind that the probabilities, regardless of which of these ways they are estimated, are elevated by a) some of the unique atmospheric and scheduling challenges of OLF discussed above and b) by the sixfold increase of operations presented as a preferred alternative. A sixfold increase in operations can easily create a higher-than-six-fold increase in crash potential due to the complicated interaction of factors like tight scheduling, support staff fatigue, more crowded airspace, cutting the safety window too closely for weather events, etc. discussed above. In other words, it is not "if there is a crash disaster at OLF" but "when," and the EIS, all about "impacts," must describe the damage to life and property, and the disruption that follows, for the worst reasonably probable accident. OLF operations court potentially highly destructive fatal accidents in a variety of ways: • a shorter than regulation runway, with less open acreage surrounding it than regulation • The OLF airfield was built for World War II planes and does not meet Navy requirements for use with modern jets, even though they have a waiver (see below). • On page 4-9 of the DEIS states that one of the two runways at OLF has an "unacceptably steep angle of bank" and can be used only 30 percent of the time due to weather conditions. • nearby neighborhoods and population centers are at risk • there is a fuel depot straight ahead of the runway • night flights with tired pilots (tiredness encouraged for realistic practice as part of training) • dangerous touch-and-go maneuvers that require stable atmospheric conditions that Whidbey Island is short on. • the "density altitude" of Whidbey is far different from that of the areas where the planes are currently deployed, thus creating risk when in an actual battle zone • use of a fighter known to be accident-prone • Three "Accident Potential Zones" - areas where crashes may occur - extend up to 5,000 feet from ends of the Outlying Field plus a 3,000-foot wide track located 1500 feet on either side of fields used for carrier landing practice, threatening hundreds of households with potential crashes and significant loss of property values. • Already there have been 24,000 operations at OLF with one accident, which translates to 50 mishaps per 100,000 hours. The Navy has statistics on the EA-18G mishap rate and is remiss in not including that information, or any forecast of future mishaps, in the DEIS in the interest of honest disclosure. From DEIS, page 4-261: "... While it is generally difficult to project future

safety/mishap rates for any aircraft, the Growler has a well-documented and established safety record as a reliable aircraft." This is a contradiction. The Navy provided the following information subsequent to the 2003 DEIS to convert the A-6 fleet to EA-18G:

From: AICUZ Study Update for Naval Air Station Whidbey Island's Ault Field and Outlying Landing Field Coupeville, Washington, Final Submission, May 2005 Table 5-2 Accident History Summary, 1975-Present Aircraft Type Date Accident General Location Type of Flight Operation EA-6 August 1976 NAS Whidbey Island Golf Course IFR departure A-6 September 1976 Water west of Ault Field Runway 07 Instrument operation EA-6B February 1980 Water northwest of Ault Field Runway 13 FCLP (approach) P-3A January 1981 Hard landing on Ault Field runway Landing (touchdown) EA-6B December 1982 OLF Coupeville off government property FCLP (break maneuver) EA-6B October 1985 Landing on Ault Field runway Landing (rollout) A-6 August 1989 Ault Field runway Practice air show flight demonstration A-6 November 1989 Water northwest of Ault Field Approach A-6 January 1990 Ault Field Clear Zone Post-maintenance flight Notes: Instrument Flight Rules (IFR), field carrier landing practice (FCLP) Source: Draft Environmental Impact Statement (DEIS) for proposed air operations associated with increased training activity at Ault Field and OLF Coupeville, August 2003

During the most recent attempt to build an outlying field in eastern North Carolina, the Navy sought 30,000 acres of relatively undeveloped land as the current-day threshold to provide civilian safety and to prevent unreasonable encroachment. By comparison OLF falls 29,300 acres short. At only 700 acres of land and a 5,200-foot-long runway (about 3000 feet short of Growler landing standard) OLF can only be classified as substandard and inadequate, and, neither acreage nor runway length are expandable. In fact, the Navy created for itself a permanent waiver to continue to use the OLF runway. Centering a 30,000-acre mylar over a map of the OLF area would show inclusion of three public schools, the historic town of Coupeville (approximately 2000 residents), historic farms and homes, Admirals Cove with over 600 single home properties, a National Historic Reserve, a state park, several local parks, the island's main north-south highway averaging over 8,000 vehicles per day (route 20). An inflight emergency would be catastrophic. Accident Potential Zones (APZs) have not been designated at either end of the runway. If APZs were designated, they would violate Navy standards, because the APZ-1 would include over 600 residential homes and businesses. In 1987, a Navy planning document (Navy document 101) reviewed and reported the status of the OLF for future use. It notes the depth of the concrete and below-standard length of the OLF landing strip as insufficient for new jets and increased use. The new, heavier aircraft cannot land at OLF safely. If a jet requires an emergency landing, it would not be allowed to take off, and would need to be trucked back to NASWI in Oak Harbor. That 1987 report recommended alternatives to OLF be investigated by the Navy because of the encroachment issue. Instead, the Navy issued itself a permanent waiver. In addition, both flight paths (14 and 32) require low-level approaches over neighborhoods at altitudes under 500 feet, in some areas as low as 200-300 feet. The FAA, however, requires no flights below 500 feet over homes or people, as codified by the Supreme Court. The court has ruled that a property owner controls use of the airspace 500 feet above their property and may make any legitimate use of their property that they want, even if it interferes with aircraft overflying the land (https://en.wikipedia.org/wiki/Air_rights). This is an FAA a regulation the Navy claims to honor as explained by this Oak Ridge National Laboratory Report: The military services are committed to safety and to minimizing the collateral noise associated with low-level flight training. The U. S. Air Force, for example, has set

numerous restrictions and tailored its training to reduce noise as much as possible. The DoD in general, in addition to following its own flying rules of low-level altitudes and airspeed, also follows those in Federal Aviation Regulation 91.79 which states that no plane may fly closer than "500 ft [152 m] from any person, vessel, vehicle, or structure." (USAF Fact Sheet 96-17) In addition, because of the greater potential for human annoyance during sleeping hours, low-level flying by military fixed-wing aircraft generally occurs during daylight hours; low-level flying near densely populated areas is prohibited. On approach to and departure from an OLF bounce, Growlers cannot comply with this 500-foot rule, and must cross over hundreds of residence, a well-used children's athletic field, dog park, county park trail system, and crowded recycle center. It is an uncompensated taking. Additionally, although the Navy claims it only conducts FCLPs at OLF in tailwinds of less than 5 knots, Growlers have been observed on a number of occasions practicing with southerly tailwinds of up to 10 knots and on one occasion, about 15-knot tailwinds, which is patently dangerous. If a malfunction were to necessitate a full-stop landing, the ground roll would be significantly longer with a tailwind (1.5% per knot). Because the OLF landing strip is only 5400 feet long, an aircraft could continue off the end of the runway. This could result in loss of the aircraft and crew and civilian residences, as well as endanger traffic on the three adjacent roadways and crowds that park unsafely along those roads to watch the FCLPs. Direct Downward Radiation from Weaponized Directed-Energy Emissions: Nowhere do any Navy NEPA documents from the last 7 years discuss the risk of exposure to chronic downward-directed radiation from weaponized forms of directed energy to civilians, wildlife and habitat. (The only discussion was a brief mention in the 2014 EA, in reference to radio transmitters on the mobile emitter trucks and the stationary transmitter at Pacific Beach. The Navy referenced a paper by Focke et al, and concluded that links from radiation exposure to leukemia were speculative, when in fact, that same paper stated unequivocally that there are direct links between radiation exposure and childhood leukemia.) The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards are overlooked or believed irrelevant for civilians exposed to the same or greater levels of noise. This double standard must be addressed and corrected in the DEIS analysis of noise exposure/dose impacts. 1D: EDUCATION IMPACT DEIS 6.3 p 6-13 Unavoidable Adverse Impacts: "This Environmental Impact Statement (DEIS) has determined that the alternatives considered may result in significant impacts with respect to noise and education from implementation of the action alternatives." Since significant impacts are predicted, it is imperative to address them. Yet the DEIS offers no alternatives. The DEIS does not thoroughly address the impact on children. No mention of Coupeville Middle School or the Coupeville High School which are close to the flight pattern. For Oak Harbor, figure 3.3.2 on p. 3-47. Exec Order 13045 (p 3-44) states that it is a high priority to identify and assess the environmental health risks and safety risks that may disproportionately affect children. This has not been done. Noise generated in any of the DEIS scenarios interrupts classroom instruction (pages 4-35, 4-120) and exposes children to noise levels known to cause health issues if exposure is prolonged. The DEIS does not recommend any amelioration - i.e. restriction of flight operation during school hours, avoidance of schools during school sessions, funding for sound insulation or any other possible actions to reduce interruptions or noise exposure. Children play outdoors, take lunch breaks, wait for buses and walk to/from school during school terms and are directly exposed to sound levels in excess of 90 dBA during flight operations. Studies (see reference) suggest that permanent hearing loss is

likely for exposure of just a few minutes at these levels. Reference: •Children's health and the environment: A review of evidence. Tamburlini G et al., eds. EEA-WHO, 2002 (www.eea.europa.eu/publications/environmental_issue_report_2002_29) A typical training day around OLF Coupeville would have 10 different Growlers doing 10 touch-and-goes each; for a total of 100 loops around the airfield. This would be spread over both day and night training and would happen on 175 days of the year. Since training is needed when squadrons are scheduled to deploy, this intense activity would be 5 days/week for 3-4 weeks at a time, then pause for 3-4 weeks, then resume. The DEIS shows exposure of nearly 3,500 children to more noise at health-damaging levels, and interruptions in some classrooms at rates of up to 8 times per hour. (Reference: DEIS, Vol. II, Pg. A-133) 1E: AIR QUALITY No information is presented in the DEIS on jet emissions and their impact on air quality. As an environmental concern, this should be addressed. 1F: LAND USE NASWI has and continues to utilize sites other than OLF, reportedly including Fallon AFB in Nevada, Hanford NAS in California, North Island NAS near San Diego, China Lake Naval Air Weapons Station near Los Angeles, and Moses Lake's Grant County International Airport (once Larson AFB) in central Washington State. One or more of these options, as well as others not included here, are surely viable and would allow necessary FCLP training without continuing and exacerbating community discord and turmoil, which history has shown elsewhere to have led to base closures. When asked why other locales are not used, Navy representatives have responded verbally that "it would put undue stress on Navy families for the trainees to be away for so long." This is not a valid response, since all the other locations already have housing for families or could easily construct it. Additionally, The Navy has contracted with civilian airports and other government agencies for FCLP training elsewhere. For Example, NASA and the U.S. Navy have signed an agreement to conduct FCLPs at the Wallops Flight Facility on the Eastern Shore of Virginia. They have also signed an agreement to conduct FCLP training at Greensville Municipal Airport in Virginia. Grant County International Airport (GCI) at Moses Lake in Eastern Washington is one such alternative FCLP location for NASWI (assuming these locations do not have similar population density concerns to those at Whidbey, in which case there are still remote locations available). The DOD owns thousands of square miles of desert land in both California and Nevada where a new FCLP training facility could be located. For example, the Nellis AFB range facility covers approximately 6000 square miles (3.8 million acres) of unpopulated desert area. Another alternative: Growlers do not operate at OLF during low ceilings, low visibility, and high wind conditions, all of which would be encountered in actual cruise situations. Flight simulators, however, would allow training under such weather conditions. Simulators provide far more exacting carrier landing details than possible at OLF. That is, OLF cannot simulate aircraft carrier movement, severe weather conditions, and emergencies, but simulators can do all of those things at no risk to pilot, aircraft, or resident homes and life. 1G: BIOLOGICAL RESOURCES No comment to date 1H: WATER ISSUES The DEIS dismissed addressing past, present, and future problems associated with perfluoroalkyl substances (PFAS). Long-chain PFASs are persistent when introduced into the environment, bioaccumulate in animals, and are toxic to laboratory animals, the EPA reports. The DEIS apparently did not consider these toxic chemicals associated with fire-retardant foam to be a relevant impact even though the EPA does (Health Advisory) and even though PFAS have been discovered in wells adjacent to OLFC. Firefighter trainings and possible crashes would likely instigate further foam use and contamination of wells. The fire retardant foam used by the Navy contains

perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Perfluorooctanoic Acid has been found in wells near NAS and OLF. PFOA has been linked to kidney and testicular cancers, birth defects, damage to the immune system, heart and thyroid disease, and complications during pregnancy. The EPA's Science Advisory Board labeled it a likely human carcinogen. Although the Navy describes the amounts found in its firefighting foam as "trace", PFOA is hazardous in tiny doses because it accumulates in the body and takes years to excrete. The Navy judges "no significant impacts" to ground water from all its operations at Ault and OLF. In fact there has been detected a potential underground flow of some of the worst PFCs from a well on the OLF; testing of neighboring wells potentially affecting 10,000 people is currently underway by the Navy. To date significant toxins have been detected in some Coupeville wells. The OLF is situated on the one and only aquifer available to the whole of central Whidbey including the town of Coupeville. All results of the well testing, including private testing as verification, must be disclosed in the DEIS. But the timing of the current testing does not support the comment period the Navy has allowed for the DEIS. Well testing results will be available "at the end of January" according to the Navy, while the DEIS comment period closes on Jan 25. Vastly increased operations that include the new Growlers will increase likelihood of this kind of pollution, which has been problematic near several other military bases in the nation and has been the subject of class-action lawsuits. The DEIS indicates that this would not be a problem because the Navy immediately cleans up after applying the flame retardant. But the well at Ault Field was tested to reveal more than 50,000 parts per million. The NEPA Process requires that amelioration or contingency plans be in place wherever possible. The DEIS does not offer any realistic amelioration or contingency plans for well toxicity. The only plan mentioned is to provide bottled water. In December 2016, the first of possibly many families was informed by the Navy that PFOA was found in their drinking water at more than six times the EPA's Health Advisory Level. A neighbor's well was also found contaminated, and the family warned against using their water for drinking or cooking. The Navy has indicated through verbal statements by its personnel that a new formulation of firefighting foam has been adopted which is less toxic. However, there is no indication that they had disposed of their present stockpile of foam containing the older formulation. In June 2016, the Navy announced they would be testing sites across the country for chemicals called Perfluoroalkyl Substances or PFAS, which are hazardous chemicals used in the Navy's firefighting foam. PFASs have been known to be highly toxic since 2007 by the Environmental Protection Agency. Navy documents show there are 13 possible toxic sites between Naval Air Station Whidbey and Naval Base Kitsap. In May, the U.S. Environmental Protection Agency issued lifetime health advisory levels on two "long-chain" PFASs, perfluorooctane sulfonate and perfluorooctanoic acid, at 70 parts per trillion, individually and combined. Both of these chemicals are ingredients in "aqueous film forming foams," or AFFFs, a synthetic firefighting foam, according to the National Institute of Standards and Technology. Welding explained that the foam is the most effective way to put out the petroleum-based fires that occur in aircraft accidents. The foam was used at the fire training area at NAS Whidbey and possibly on runways. 11: SOCIOECONOMIC IMPACTS Costs of hearing loss www.hear-it.org estimates the economic burden of severe to profound hearing loss is \$300,000 over a victim's lifetime, or \$43,000 if it occurs after retirement. Costs to schools The DEIS estimates income from taxes and additional economic activity from the presence of Navy families on the island, but makes no effort to quantify the costs of the new activities such as the proposed

additional load on schools which are already overcrowded. For example: nationally, a K-12 student costs \$8-\$10K per year exclusive of capital costs. These costs are available by school district, yet, the DEIS authors made no effort to quantify these or other costs. The US Government pays no local taxes, yet 25% of the school budget is from local sources (mostly property taxes). 50% of Oak Harbor students are from federal employee (military) families, so (25% x 50% =) 12.5% should be expected from federal impact funds. The 2016-2017 Oak Harbor budget expects only 7.3% from federal impact funds, or about a \$3M annual shortfall. Costs to Low Income Populations In section 3.11 of the DEIS, the Navy has concluded that there are no significant impacts on low income communities and communities of color. But in fact, people who can afford to sell their homes and move out of the impacted area have a choice, whereas low income people do not have the same choice. This is a disproportionate impact. The DEIS fails to forecast impact of jet noise on demographics. Growler noise has and will continue to drive out residents who can afford to relocate. Due to the falling housing costs in undesirable (i.e. high noise and toxic-well) areas, lower-income families will be forced to live in these unhealthy, undesirable areas. This represents a disproportionately negative impact on economically disadvantaged populations. Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise. Loss of Property Value The principle subdivisions affected by Growler noise lost 6.64% of their property value between 2010 and 2015. In Island County as a whole, property values dropped about 3%. Therefore 3.64% of lost property value can be attributed to the Growlers—a taking of about \$9 million. This number will go up as the Growler program intensifies, and word of the problem spreads. A recent evaluation of the properties affected by noise document a 3.6% reduction in property values -- at the current levels of noise. This amounts to a taking of approximately \$9,000,000. The DEIS made no effort to compute the reduction in property values and only quoted academic work relating to commercial airport noise impact on property values. Data on assessment, sales and home values is available and can be computed on properties within and outside the impacted areas. This is how the \$9,000,000 was calculated. This \$9,000,000 is computed only for Island county and will grow as more Growlers train and the noise become more pervasive and the reputation of the area is further harmed. Additionally, all properties with wells that have tested as toxic cannot be sold, so those properties are now greatly diminished. This represents a devastating loss for many families and individuals. Sales taxes Island County receives nearly the lowest sales tax yield per capita in the state (and other military-dependent counties compete with it). If the tax yield from Navy families were the same as from average Washington state residents, the County would receive \$3.5 million more in tax revenue. Opportunity costs A military job has much less economic impact than the civilian equivalent – below we refine the models to determine how many civilian jobs it would take to equal the economic impact of the current & planned military jobs: “In my economic model, I performed the following exercise. I removed all military jobs (the model has them at 6,170 in 2014), and redistributed them in sectors of the Island County where there was significant leakage (nonlocal expenditures). I distributed the jobs proportional to the leakages. The result was that the Island actually grows 5,511 MORE jobs (because of the indirect effects), with \$607 million in additional wages, \$1.6 billion in more value added, and \$151 million in new state and local taxes. “ 1J: HAZARDOUS MATERIALS AND WASTES: see 1E: Air Quality and 1H Water Issues 1K: ENVIRONMENTAL IMPACT

Page 4-296 states Scenario A will increase the entire Whidbey Naval Station Co2 output by 57% which is .7% of all plane emissions in Washington state. (See Air Quality Issues, above) 1L: IMPACT ON WILDLIFE AND DOMESTIC ANIMALS Wildlife: The DEIS contains an inventory of the plants and animals that live in the study area, but nowhere does it address the effects of increased exposure to loud sounds, low frequency vibration, or water toxicity on any of these organisms. Birds and animals use the pitch and frequency of each animal's "voice" as a determinant of its place in its habitat – where to be at what times of day or night, and what other animals inhabit that space at that time. Very loud noise disrupts this communication, both intra-species and inter-species, thereby disrupting habitat occupation, reproduction, and behavior. Further, loud noise can affect animals – both marine and land – as profoundly as it does humans. Hearing and general health (related to stress and immune function) are vulnerable. The DEIS does not address this issue except to say that any animals not already impacted "have adapted". No proof is offered, nor any definition of "adaptation". From the EBLA report: "Anthropogenic noise may also disrupt ecosystem processes by interfering with predator prey relationships and the ability of wildlife to communicate, establish territory, reproduce, support and protect offspring (Siemers and Schaub, 2011; Schroeder et al., 2012; McClure et al., 2013)... "Chronic noise exposure... may interfere with predator prey relationships and the ability of wildlife to communicate, forage, establish territory, and reproduce (Barber, 2010)." Further, animals drinking from water sources polluted by PFOAS leaching from a crash site or from fire-fighting training sites are just as susceptible as humans to the effects of those toxins. The DEIS confines its wildlife impact information to mid-air collisions (birds and bats), and no mention is made on terrestrial organisms. With respect to avian species, the area lies in a critical migratory and breeding area; there is no doubt that increased flight operations will impact both, particularly breeding activity. This will certainly be true for terrestrial species. The impact of increased flights over Olympic National Park for electronic warfare training is not adequately addressed. This park has been measured to be one of the last quiet places on earth; the navy's added flights will change this and impact many species, some of them endangered, such as the marbled murrelet. Nascent sound scientists were tasked with gathering field recordings of nature's auditory ensemble and using them to study the relationship between sound and functioning ecosystems. A groundbreaking 1993 news dispatch from Sweden detailed its effects on wild animals: when a military jet flew over a zoo, animals ate 23 of their own babies as a protective response. (Those affected included Siberian tigers, foxes, and lynxes.) Studies have since shown that animals carve out sonic "niches" to hear the information they need for mating, navigating, hunting, and not being hunted. "To interrupt that information flow, even for a few brief seconds, is dangerous," Hempton says. When exposed to sudden bursts of unfamiliar noise, they revert to survival instincts. In wild areas where noise persists, animals have been known to drop in numbers. According to a 2006 report from the U.S. Fish and Wildlife Service, the Northern spotted owl, an endangered species found in Hoh Rainforest, has been found to neglect feeding its young, or even to eject eggs and juveniles from the nest, when noises like passing trucks or electric tools are present. Farm Animal and Domestic Pet Impact No assessment is given in the DEIS on the impact of flight training on the nearby farm and domestic animal population. Citizens have reported significant anxiety issues with their animals. A study of the number of animals that have disappeared during times of high noise (flight trainings), animals that have injured themselves, and other occurrences such as decreases in milk production in dairy cows, sheep and goats should

be included in the DEIS. ISSUES NOT ADDRESSED IN THE DEIS 2A: IMPACT OF JET NOISE ON PATIENT CARE AT WHIDBEY HEALTH (HOSPITAL) The DEIS does not address the impact of high noise events upon patient care at Whidbey Health. Flying directly over a hospital cannot help but affect patient stability and the ability of medical staff to communicate with patients and with each other. No statistics are cited regarding increase in heart attack, stroke, and accident patients seen in the emergency room during or as a result of high noise events. This must be thoroughly studied for the EIS to be valid. 2B: DUMPING OF FUEL Dumping of fuel: There is no mention in the DEIS of the practice at NAS Whidbey of dumping jet fuel over both land and water. This practice is of significant concern and should be addressed in the EIS. 2C: IMPACT ON TOURISM The tourism industry in Washington State employs 154,500 people, creates \$5 billion in earnings (payroll), generates total direct visitor spending of \$17.6 billion and generates \$1.1 billion in state and local tax revenue, and touches the community in countless other ways. Hotels and meeting facilities, attractions, restaurants, cultural institutions, tour companies and transportation providers are among the local businesses greatly impacted by travel to Washington State. Source: Preliminary 2012 Travel Impacts Report / Washington Tourism Alliance Nationwide, the U.S. travel industry directly employees 7.4 million people, generates payroll of \$188 billion, travel expenditures of \$758 billion and tax revenues of approximately \$118 billion. The U.S. Travel Association ranks travel fifth among 20 major private industry sectors. Visitors to the U.S. spend more here than U.S. residents traveling abroad, creating a \$32 billion trade surplus for the national economy. Sources: U.S. Travel Association, Bureau of Economic Analysis, U.S. Department of Commerce: Office of Travel & Tourism Industry From EBLA Report: "People visit national parks to see, hear and experience myriad phenomena associated with specific natural and cultural environments. Yet, in many cases, those environments are being increasingly impacted by anthropogenic noise altering their experience (Lynch, Joyce, and Fristrup, 2011)" 2D: IMPACT ON NATIONAL PARK AND NATIONAL FOREST LANDS The Navy Plans to Construct an Electronic Warfare Range Covering Olympic National Park, Olympic National Forest and Western Clallam & Jefferson Counties : 1. Periodic unannounced closures of portions of Olympic National Forest for war games, testing and training. 2. Up to 118 Growler jets flying over Olympic Peninsula communities 260 days/year, 8-16 hours/day, day or night, in 5,000 "events"/year. The Navy has not defined "event". Growlers fly in groups of three. This could mean 15,000 flights/year. Currently there are 1250 flights/year. The Navy must define "event". 3. Growlers, the loudest Navy jet, can produce 150 db, enough to cause instantaneous hearing loss. Navy statistics say they produce 113 db at an altitude of 1000 feet, well above the 85 db threshold for permanent hearing loss. Growlers can fly at 1200 feet above ground level in some areas of the Olympic Peninsula. With three Growlers flying together, local noise levels will be worse. 4. Ground-based equipment using 15 locations in the Olympic National Forest will emit enough electromagnetic radiation to melt eye tissue after brief exposure in close proximity. Growler jet electronic weaponry is far more powerful. 5. A National Park Service report issued in July 2014 showed that in 2013, 3,085,340 visitors to Olympic National Park spent \$245,894,100 in communities near the park. That spending supported 2,993 jobs in the local area. Visits to the Park increased 17.1% in 2014. Without a clean and quiet environment this economic success will be a thing of the past. Alarming effects of a warfare range: 1. A Navy supporting document says, "Friendly Electronic Attack could potentially deny essential services to a local population that, in turn, could result in loss of life and/or political ramifications." 2. Each jet burns 1304

gallons per hour and produces 12.5 metric tons of CO2 per hour. This is 23% more than the annual CO2 emissions of a Washington State citizen. 3. Aircraft aerial maneuvers and their resulting horrific noise on the western half of the Olympic Peninsula will have an overwhelming impact on people living in or visiting the area. 4. In both wildlife and humans, effects from loud noise include hearing loss, increased stress hormones, cardiovascular disease, immune system compromise and behavioral/psychosocial impacts. 5. One billion birds fly up and down the Pacific Coast Flyway each year. The effects of loud noise and electromagnetic radiation on their ability to find resting places and to navigate has not been analyzed by the Navy or the Forest Service. Why you may not have heard about the Navy's plans: 1. No public notices were published in any media that directly serve the northern and western Olympic Peninsula. In the absence of public comment, the Navy issued a "Finding of No Significant Impact." 2. Neither DNR nor Olympic National Park was consulted in the early stages of the Navy's Environmental Assessment. The Navy has not applied for a permit to use DNR lands. 3. Destruction of neither the "wilderness soundscape" over Olympic National Park nor property values in areas subject to jet noise are discussed in any official documents. 4. The Navy's EA said the EWR would include electronic surveillance AND electronic attack, yet none of its environmental documents evaluate the impacts of either electronic surveillance OR electronic attack in the EWR. 5. 2E: NONCOMPLIANCE WITH NEPA STANDARDS FOR CONTENT AND LENGTH OF the DEIS The Draft DEIS as published is not compliant to NEPA requirements: In the DEIS, a cost-benefit analysis was not performed as required by 40 CFR 1502.23. Of the many significant impacts stated in the DEIS (e.g. Additional households are subjected to increased aircraft noise, school interruption due to aircraft noise, APZ establishment restricting property rights, additional overcrowding in Oak Harbor schools, an already-tight housing market that will be further stressed), none have had cost/benefit analysis performed. The DEIS lists total employee earnings, but has no discussion of the costs to the public (schools, sewage, roads, other infrastructure) as a reasonable cost/benefit analysis would normally have. Page limits have been excessively exceeded over the "normal" limit of 300 pages (Sec. 1502.7) having the effect of obfuscating the issues the DEIS should address as reflected by comments received during the scoping period. The NEPA Act states that the primary purpose of the statement is to allow for a "full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." In order to accomplish its goals of a full and fair discussion, the Act sets out several requirements. Among them: Sec. 1502.7 Page limits. The text of final environmental impact statements (e.g., paragraphs (d) through (g) of Sec. 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages. The referenced DEIS is five times longer than the act recommends. Sec. 1502.14 Alternatives including the proposed action. This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (Sec. 1502.15) and the Environmental Consequences (Sec. 1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. In this section agencies shall: (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated. (b) Devote

substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits. (c) Include reasonable alternatives not within the jurisdiction of the lead agency. (d) Include the alternative of no action. (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference. (f) Include appropriate mitigation measures not already included in the proposed action or alternatives. The 9 different possible actions listed as alternatives are essentially one alternative (accept 35-36 new Growlers). Other alternatives for deployment, non-deployment or training dismissed with no analysis. "No action" is considered only as a baseline. There is virtually no substantive difference in the environmental impact of the 9 scenarios described. The Navy has not made a good faith effort to explore other alternatives as NEPA requires in Sect. 1502.14 (a). 2F: BRIEFNESS OF RESPONSE TIME VS. LENGTH OF DEIS Reviewing and responding to the draft DEIS within the 75-day comment period determined by the Navy puts an undue hardship on other agencies and the public to have a "full and fair discussion" as required by the Act. This is particularly true because of the excessive length of the DEIS as discussed in the section above. Since Sec. 1502.7 (Page limits) of EPA regulations for an EIS states that the text of final environmental impact statements (e.g., paragraphs (d) through (g) of Sec. 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages, the DEIS is far too large for the normal resident to absorb and understand in such a short period. Additionally, the fact that the comment period happened over a holiday period further complicates this because many will not have had a chance to voice their concerns in this timeframe. Actions that greatly impact a community require an appropriate amount of time to learn, understand and respond. The timing of this is not acceptable; the public needs more time. 2G: RATIONALE FOR HAVING 100% OF GROWLER JETS STATIONED AT NAS No clear rationale for adding 35-36 aircraft to NAS Whidbey. Having all electronic warfare equipment in one locale creates a major target for those seeking to destroy electronic warfare capability, thereby putting both the public and national security at risk. Another problem in using the OLF for exclusive military-wide electronic warfare flight training is the weather: frequent wind, fog, and major rain events. Winds for about 8 months in the year are predominantly from the south (i.e., tailwinds), which means either canceling scheduled FCLPs or making pilots land and takeoff with a tailwind, something never done on carriers. More severe rain and wind events occur in the winter months, which compacts FCLP training into even fewer acceptable days, thereby forcing more FCLP sessions into summer days, when residents are outside and have windows open. Night flights must take off later during the summer, which exacerbates problems with late-night (10 PM to 1 AM) training, including sleep loss and annoyance. The Navy argues that OLF is essential for simulating actual carrier landing conditions. The Navy states that FCLP training should be at conducted at

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017
SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

- 1. Name _____
- 2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
CITIZEN
- 3. Address _____ WANGLEY WA 98260 - actual address
FREELAND WA 98249 - PO Box address
- 4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.l. Bird Migration
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.b. Invisible Costs
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 12.o. Cost-Benefit Analysis
- 13.a. Environmental Justice Impacts
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 18.b. Average Carbon Dioxide per Aircraft
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.e. Naval Special Operations EA
- 2.a. Purpose and Need
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 2.g. Agency Participation
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports

- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 6.a. Air Quality Impacts from Mobile Source Emissions (Jet Engine and Vehicle)
- 6.f. Fuel Dumping
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve
- 7.i. Deception Pass State Park and Other State Parks
- 7.j. Impacts on Outdoor Sports
- 8.c. Noise and Vibration Impacts to Cultural Resources

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

SEE ATTACHED DOCUMENT

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

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[Redacted]
LANSELY WA 98260
[Redacted] (C11110001)
[Redacted] (98260)

**Comments on the Navy DEIS re: impacts on Whidbey Island
and the Pacific Northwest**

SECTIONS IN THIS DOCUMENT:

1. SUBJECTS ADDRESSED IN THE DEIS:
 - A. Airspace and Airfield Operations
 - B. Noise associated with Aircraft Operations
 - C. Public Health and Safety
 - D. Education Impact – local schools
 - E. Air Quality
 - F. Land Use
 - G. Biological Resources
 - H. Water Issues
 - I. Socioeconomics
 - J. Hazardous materials and wastes
 - K. Environmental impact
 - L. Impact on Wildlife and domestic animals
 - M. Effects of increased waste production and toxic chemical usage in planned training operations

2. SUBJECTS NOT ADDRESSED IN THE DEIS:
 - A. Impact of jet noise on patient care at Whidbey Health
 - B. Dumping of Fuel
 - C. Impact on Tourism
 - D. Impact on National Park and National Forest lands
 - E. Noncompliance with NEPA standards for content and length of DEIS
 - F. Briefness of Response Time vs. Length of DEIS
 - G. Rationale for having 100% of all Growler jets stationed at NAS
 - H. Impact on historic structures
 - I. Additional Alternatives
 - J. Actual need for additional Growlers
 - K. Use of public lands for training
 - L. Larger scope of noise evaluation
 - M. Bluff Instability vs. Low Frequency Vibrations
 - N. Compensation
 - O. Flights outside planned flight zones
 - P. Confusion on actual number of jets planned

ISSUES ADDRESSED IN THE DEIS

1A: AIRSPACE AND AIRFIELD OPERATIONS

The Navy DEIS states that flight operations on Whidbey Island will increase from 6100 to 35,100, a 575% increase. There are already issues and problems with the current operations. An increase of any amount is problematic. Details and data explaining these problems appear throughout this document.

1B: NOISE ASSOCIATED WITH AIRCRAFT OPERATIONS

In the DEIS Executive Summary, page E-5 the following is written:

"These include additional events of indoor and outdoor speech interference, an increase in the number of events causing classroom/learning interference, an increase in the probability of awakening, and an increase in the population that may be vulnerable to a potential hearing loss of 5 dB or more. Therefore, the Proposed Action would have a significant impact on the noise environment as it relates to aircraft operations at Ault Field and OLF Coupeville."

The Navy DEIS states that between 1,658 and 1,803 residents potentially risk hearing loss, directly due to aircraft noise exposure. *Any* risk of hearing loss to residents is unacceptable, but the intensity of noise from training flights actually poses greater harm than stated in the DEIS. For instance, children suffer disproportional harm due to higher vulnerability. (Reference: EPA - *Noise and Its Effects on Children*)

Calculation of decibels:

The Navy uses a computer simulation to determine the average daily decibel level (which includes non-flight time), and then spreads that over the year. They don't measure the actual noise generated on training days. Their finding: 90 dBA. However, the National Park Service, in a federally funded study, measured actual dBA at the actual locations in question to be as high as 113 Dba, Sound Exposure Level (SEL) of 117.2 dBA (at the historic site known as Reuble Farm).

Instead of dividing the averaged number by the actual number of days training operations happen at OLF, that averaged number is divided by 365 days, so that the

decibel level described in the DEIS appears much lower than it actually is when training operations are being conducted.

The computer modeling program used by the Navy to calculate aircraft noise levels (NOISEMAP Version 7.2) has been in use for at least 12 years, and was found by the Department of Defense's Strategic Environmental Research and Development Program (SERDP) to be outdated and might not be able to "provide legally defensible aircraft noise assessments of current and future aircraft operations."

The company that makes NOISEMAP 7.2 stated that a new aircraft noise model, the Advanced Acoustic Model (AAM), "...produces more physical realism and detail than the traditional integrated model."

The Naval Research Advisory Committee acknowledges that variations in noise from tactical aircraft measurement standards are not addressed because this program was developed measuring *commercial* aircraft noise, and that there are no standards for acquiring near-field aircraft noise data.

Therefore, the Navy's methodology is outdated, inconsistent with current noise measuring technology, and does not allow the transparency needed to establish baselines for risks to public health. The DEIS should use currently available best-practice models and technique to achieve a realistic assessment of impact.

Federal Interagency Committee on Urban Noise (FICUN) standards are invoked to justify the additional operational noise of between 2200 to 29,000 flight operations. These average the noise over non-flight days to an average of 65 Db. But the FICUN standards are for *urban airports* with flights regularly spaced throughout the 24/7, rather than bursts of 115 dB during some days and parts of days, which if averaged over those actual times qualify as intolerable and unlawful even by Navy standards. The DEIS should call out either training days or specific events with impacts analyzed.

Furthermore FICUN is outdated, and by new standards anything over 50 dB average is damaging to public health.

The DEIS projects that from 8 to 26% additional locations will experience higher than sound criterion used for the DEIS.

The DEIS uses no on-the-ground data collection method but states that many thousands more flight operations above the current number, as well as an expanded footprint of land these operations will require, cause no meaningful negative effects on the population.

In fact, the current number of flight operations is already intolerable to many Whidbey residents. An actual noise study by the National Park Service in 2015 measured the noise at two different points in Ebey's Reserve over a 30 day period. One representative 24-hour period cited in the study recorded 281 "military aircraft events" that exceeded 70 Dba, which is 10 dBA over the limit of speech interruption.

Because the DEIS relies on sound level *averages*, either for example in regard to the noise the aircraft themselves produce or the ambient background noise levels in the study area, it understates the amount of actual noise produced by each aircraft.

The Environmental Protection Agency (EPA) states 60 DB is the level of speech interruption for normal conversation (U.S. Environmental Protection Agency, 1974), meaning a human voice cannot be heard above the interrupting noise.

For comparison, the noise volume of a jackhammer at 2 meters distance is approx. 100 DB. In a Navy report from 2005 on establishing AICUZ areas for NAS-WI the EA-18G (growler) jet on departure produces 117 DB, and on approach 114 DB, at 1000 ft. distance.

The Growlers fly directly over occupied houses, a middle school, and within 1000 feet of the hospital in Coupeville. People in these locales are exposed to these sound pressure levels up to 60-80 times a day (and night) when they are doing Field Carrier Landing Practice (FCLP). At pattern altitude, they get 115 dBA or more if they live close to the end of the downwind leg.

From the Ebey's Landing National Historical Reserve Acoustical Monitoring Report (EBLA):

Two acoustic monitoring systems were set up, and recorded data for 28 days on NPS property in the Reserve. The systems were deployed near the Reuble Farmstead (EBLA001) and adjacent to Ebey's Landing at the Ferry House (EBLA002). These systems collected continuous audio and sound pressure level (SPL) data for 731

hours and 741 hours respectively. A total of 1,853 Growler overflight events were identified during the measurement period. A single deployment of a Growler may have resulted in multiple events depending on the flight path. Some results were:

- Impact on citizens and animals: 2243 additional residential acres will be significantly affected by excessive sound levels
- Impact on farms: 1183 additional agricultural acres, many of which raise livestock, will be significantly affected by sound levels

EBLA provided a table showing effects at discrete acoustic levels SPL (dBA)
Relevance:

- 35: Blood pressure and heart rate increase in sleeping humans (Haralabidis et al., 2008)
- 1: Desired background sound level in classrooms (ANSI S12.60-2002)
- 45: World Health Organization's recommendation for maximum noise levels inside bedrooms (Berglund, Lindvall, and Schwela, 1999)
- 52: Speech interference for interpretive programs (U.S. Environmental Protection Agency, 1974)
- 60: Speech interruption for normal conversation (U.S. Environmental Protection Agency, 1974)

EBLA provided a table showing how much time sound levels were above acceptable levels at night at two locations. The most outstanding figures were:

% Time above sound level: 19:00-07:00 (night times)

Location: EBLA001* - 20-1250 Hz at 35dBA 36.87% of the time

12.5-20,000 at 35 dBA 57.32 % of the time

Location: EBLA002** - 20-1250 at 35dBA 62.11% of the time

12.5-20,000 at 35 dBA 77.52% of the time

*EBLA001= Reuble Farmstead 6/19/2015- 7/21/2015 Agricultural Field 19 m
48.1893 -122.6664

**EBLA002 = Ferry House 6/19/2015- 7/21/2015 Agricultural Field and Ruderal
Shrubland)

The highest recorded SPL and SEL at EBLA001 were 113 and 117.2 and at EBLA002 were 85 and 96.6, respectively; both of these were from aircraft. Figures 10 and 11 show the LA_{max} recorded during an event, different from the SEL (sound exposure level) which is equivalent to the total sound energy of the event, which is calculated as opposed to recorded. SEL is better when considering the intrusiveness of a single noise event. Where noise consists of discrete events the LA_{max} of the event will be a good indicator of disturbance to activities and sleep (Berglund, Lindvall, and Schwela, 1999). Nearly 100% of aircraft events exceed the hourly existing median ambient (L50). Levels of 70 dBA LA_{max} were exceeded by 281 military aircraft events at EBLA001 and 125 military aircraft events at EBLA002.

At EBLA001, there is a peak occurrence of military overflights at 14:00 to 17:00 and 22:00 to 1:00. The aircraft recorded during these hours were the loudest recorded for the entire monitoring period.

From EBLA report: "Recent studies suggest that sound events as low as 35 dBA can have adverse effects on blood pressure while sleeping (Haralabidis, 2008)... The second level addresses the World Health Organization's recommendations that noise levels inside bedrooms remain below 45 dBA (Berglund et al., 1999)"

The National Park Service and Navy met in March 2015 to discuss operations on Whidbey Island and potential impacts of Growler noise at the reserve. The NPS and Navy agreed that additional acoustic information, collected at the Reserve, would be beneficial for the NPS to adequately respond to the NEPA (National Environmental Policy Act) document being prepared by the Navy. In July 2015, NPS started the above acoustic data collection. These data should be considered as valid for usage in a true DEIS.

Natural and cultural sounds are integral to ecosystem function and are one of the many resources and values that National Park Service (NPS) managers are responsible for preserving and restoring. NPS evaluates federal actions that may impact the human and natural environment within our public lands. Air, water and wildlife are valuable resources that can quickly be substantially harmed by inappropriate sound levels and frequencies. Intrusive sounds are of concern to the management of the National Park system because they impede the ability to accomplish the NPS mission of resource protection and public enjoyment. Anthropogenic noise may also disrupt ecosystem processes by interfering with

predator prey relationships and the ability of wildlife to communicate, establish territory, reproduce, support and protect offspring (Siemers and Schaub, 2011; Schroeder et al., 2012; McClure et al., 2013).

Visitors to many NPS units come with expectations of seeing, hearing, and experiencing phenomena associated with a specific natural or cultural environment, yet in many cases these environments are being increasingly impacted by anthropogenic noise altering their experience (Lynch, Joyce, and Fristrup, 2011).

According to table 4.1-2 the greatest increase in an average year for flight operations at OLF would be 547 percent. The metric for measuring the impact of this is calculated in conversation interruptions per hour averaged over 15 hours. Three to five planes run a touch and go pattern for up to 45 minutes. Being outside under an accelerating aircraft generating 104 to 127 db of noise is more than a conversation interrupter. It hurts and you must cover your ears. Increasing these 45 minute barrages by 547 % will have a significant impact. People live in central Whidbey because of its quiet rural atmosphere. The DEIS does not address the damaged quality of life, what is termed aesthetics by NEPA.

Presently, The noise has already increased because there are now two squadrons flying at a time, so while there used to be refueling breaks, they can now fly continuously, and do so for up to 6 hours per day, often as late as 1:00 a.m.

Calculating Sound Averages That More Accurately Describe Environmental Impact Introduction Currently accepted practices of using A-weighted noise profiles, NOISEMAP simulation software and annual noise weighting to create sound contours contain assumptions that mask the experience of unwanted noise as reported by many residents of Whidbey Island and the surrounding communities. This situation has created a discrepancy between what the draft EIS purports as reasonable noise metrics and what the local residents report as experiencing. This report outlines shortcomings in the current Growler noise modeling averaging techniques and proposes changes in the DEIS to more accurately reflect the impact of the noise on the community so that a more accurate and realistic impact can be described in the final EIS. Airport noise has been analyzed as it relates to "annoyance" of the local residents. Day-Night average contours have been used to assess the potential annoyance based a relatively steady level of sound throughout a day and over a year. Averaging the noise over a year has been shown to equate

well to annoyance levels when the noise is relatively constant throughout the year. However, the annoyance levels experienced and reported by residents near the Growler flight path seem to exhibit a much higher degree of annoyance than the literature and accepted practices would explain. The following factors are postulated to explain the discrepancy: 1. The Growler, based on the F/A-18F airframe, is equipped with engines that produce 44,000 pounds of thrust having a significant low-frequency content that is not modeled when using dBA noise metrics. The result is that the noise modeling, capturing only sound in the human-hearing frequency range, does not account for the effects of lower frequencies which are experienced as "felt" rather than "heard." 2. Training occurs in periods of peak intensity in order to support deployment requirements. Squadrons deploy (five jets per squadron currently and seven to eight proposed in the DEIS) within a narrow time window so that the pilots are all carrier-qualified in a narrow time window. This has the effect of lumping flight operations (eg. Field Carrier Landing Practice, FCLP) into a few days with up to 200 flight operations per day, including night operations. 3. Noise contours based on a 365-day averaging work for operations of a fairly continuous nature and are not as useful for a few, very loud events. The intense sound of the Growler, Sound Event Level (SEL) of 118 dBA at 600 Ft¹ is equivalent to a leaf blower or rock concert, both 1 "Air Installations Compatible Use Zones Report", Naval Air Station Lemoore, California, November 2010, Page 4-14 Calculating Sound Averages That More Accurately Describe Environmental Impact 2 recommended to have ear protection. Other DoD agencies use daily noise averages routinely to remain below acceptable community noise levels when generating a few loud events per day². Discussion Impact of Low Frequency Noise The Growler noise profile, when compared to the A-6B, Prowler, has significantly higher sound pressure energy at lower frequencies. Figure 1 shows the Growler having 15-20 dB greater levels over the Prowler at 10 - 15 Hz. The power levels used for FCLP in the DEIS are modeled at 85 %NC, similar to the data in the chart. Figure 1 Sound Profile of EA-18G This lower frequency component also travels farther, i.e. experiences less atmospheric attenuation, than higher frequencies. However, this effect is not carried forward if dBA weighting is used since dBA weighting filters the frequencies below 1000 Hz. C-weighting includes the lower frequencies and better captures the sound energy of the event. Figure 2 depicts the sound energy that is included (to the right of the curved line) and excluded (to the left of the curved line) in A-weighted metrics. The Growler has a

significant amount of sound energy excluded from the modeling using A-weighting metrics. The result is an understated amount sound energy used to calculate sound contours, which, in turn, results in sound contours encompassing smaller areas in modeling than experienced in practice. 2 Fort Bliss Mission and Master Plan (TX, NM); Final Programmatic Environmental Impact Statement; Volume II, Appendices A through K, December, 2000, pg G-17. Calculating Sound Averages That More Accurately Describe Environmental Impact 3 The additional effect of excluding low frequency sound is to understate the distance the sound pressure can be experienced. Lower frequencies travel considerably farther as explained in Fort Bliss Mission and Master Plan: 3 "The atmosphere absorbs sound energy. However, this absorption is not a significant factor for sounds with frequencies of 500 Hz or less. For example, at 10 Hz, approximately 0.04dB is lost to atmospheric absorption over a 6.2-mile distance, and for a sound at 100 Hz, about 3.5 dB is attenuated over the same distance. Conversely, for a sound at 1,000 Hz, approximately 100 dB would be lost over the same 6.2 miles." In addition, water is a very good reflector of sound waves, resulting in even farther propagation of sound energy to surrounding communities. It is not clear how this modeling is included in NOISEMAP since most airport modeling is typically for airports surrounded by land. Figure 2 Discarded Sound Energy Using A-Weighting 3 Fort Bliss Mission and Master Plan (TX, NM); Final Programmatic Environmental Impact Statement; Volume II, Appendices A through K, December, 2000, pg G-18 Calculating Sound Averages That More Accurately Describe Environmental Impact 4 Operational Training Peaks From the Draft EIS: " Per Navy guidelines, pilots must perform FCLP before initial carrier qualification (ship) lands or requalification landings. The first carrier landing needs to occur with 10 days of completion of FCLP." Growler Squadrons currently have five Growlers each and the DEIS proposes adding either two or three Growlers to each VAQ squadron; meaning a squadron would then deploy with seven or eight planes. A pilot typically requires, on average, 150 "bounces" (a simulated carrier landing) to become proficient at one of the most challenging tasks in aviation. For a squadron of 8 planes, this totals 1200 bounces and is counted as 2400 Flight Operations in the DEIS. The DEIS further explains that a typical FCLP lasts 45 minutes with three to five aircraft participating the training. Using an average of four planes per exercise, 45 minutes would permit 8-10 FCLP loops per session, or a total of 32 to 40 FCLP landings and takeoffs. If there are few minutes between sessions, one could assume a session occupies an hour, therefore, the number of

sessions required to train a squadron equals the number of hours of FLCP required. This totals about 24 hours for a 5-jet squadron and 37.5 hours for an 8-jet squadron. At three training sessions per day, each day has 96 bounces. The training scenario outlined above would occur for 8-10 days over a two-week period to prepare all pilots in a five-jet squadron for deployment. Alternative1A in the DEIS would generate 183 days of training using the scenario described above, approximately two weeks of training followed by two weeks of no activity, on average, in order to accommodate the larger squadrons. Calculating Sound Averages That More Accurately Describe Environmental Impact 5 Typical Training Day Noise Averaging Using SEL data for F/A-18E/F, the same platform as the Growler, the value for a daily noise level average can be calculated. Table 4-4 from the AICUZ for NAS Lemoore is partially reproduced below in Table 1. 4 Table 4-4* Sound Exposure Levels and Maximum Sound Levels for Representative Flight Conditions F/A-18C/D F/A-18E/F Condition Power %NC Speed (knots) SEL (dBA) Lmax (dBA) Power %NC Speed (knots) SEL (dBA) Lmax (dBA) Departure through 1,000 ft AGL (not co-located) 97 300 114 108 97 250 116 113 Departure through 10,000 ft MSL (prior to Hwy 41) 97 310 91 77 97 350 91 83 Non-Break Arrival through 1,800 ft MSL (near Initial Points) 88 135 103 95 85 135 110 103 FCLP on Downwind (600 ft AGL) 88 135 114 108 85 135 118 113 GCA Box mid-downwind (1,800 ft MSL) 83 200 91 84 83 200 102 93 Table 1 - Excerpt from AICUZ, NAS Lemoore, 2010 Note: SEL of 118 dBA correlates well with the Nation Park Service calculation of SEL at 117.2 dBA at Reuble Farmstead during an overflight at EBLA001 during the measurement period⁵. The calculation for daily average of multiple events spread over a day is given by⁶ $LCdn = CSEL + \{ 10\log_{10} (ND + 10 NN) \} - 49.4$ Equation 1 Where: CSEL = C-weighted Sound Exposure Level for a single event ND = Number of events per 24-hour period occurring between 7:00 a.m. and 10:00 p.m. (daytime) NN = Number of events per 24-hour period occurring between 10:01 p.m. and 6:59 a.m. (nighttime) Multiplying the events by 10 assigns a 10 dB penalty for noise events at night. 49.4 = 10 Log₁₀ of 86,400 (the number of seconds in a 24-hour period). Source: U.S. Army, 1986b Using the A-weighted SEL from Table 1, the daily average for a training day can be calculated using Equation 1 with various scenarios spread between day and night FCLP loops. 4 Air Installations Compatible Use Zones Report, Naval Air Station Lemoore, California, November 2010, Page 4-14 5 Ebey's Landing National Historical Reserve, Acoustical Monitoring Report, Natural Resource Report NPS/ELBA/NRR—2016/1299, pg viii 6 Fort Bliss Mission and Master Plan, pg

18 Calculating Sound Averages That More Accurately Describe Environmental Impact 6 SEL (dBA) ND NN Total FCLP Loops Lcdn (dBA) 118 96 0 96 88.5 118 80 16 96 92.4 118 60 36 96 94.9 Table 2 Daily Average Noise Level for Typical Training Day Table 2 Daily Average Noise Level for Typical Training Day shows that for points below the flight path for a Growler at 600 feet, a typical altitude for an FLPC training loop, the daily average for a typical training day is between 88 dBA and 95 dBA. As discussed above, using A-weighted sound levels understates the amount of energy of Sound Exposure Level since the A-weighting excludes a significant amount of sound energy. Therefore the amount of sound energy experienced by structures (including biological bodies) is even higher. Using the Reubel Farmstead as a benchmark, it is in the 75dBA noise contour in the DEIS in all alternatives, however, the daily experienced sound average on training days is over 90dBA using calculations for daily averaging. The World Health Organization, the EPA and the DoD all recommend sound protection at levels of 80 dBA. At over 90 dBA the daily average at Reuble Farmstead is ten times the level recommended for sound protection. Calculating Sound Averages That More Accurately Describe Environmental Impact 7 Conclusion Residents near the flight paths report significantly higher annoyance levels than predictions by standard annual noise modeling indicate. This report demonstrates that the sound exposure levels of the Growler are significantly higher than the DEIS reports using annual averaging. C-Weighted noise contours would be more useful for non-human impacts. The EA-18G has considerable amount of sound energy at low frequencies and excluding low frequency sound pressure energy may understate the impact on animals, birds, marine life, and physical structures and should be examined for impact in the final EIS. Using DoD-sourced information and calculations, the daily sound averages are significantly higher to the point that sound protection is essential to prevent permanent hearing loss for any residents, visitors or workers under or near the flight path when FCLP operations are underway. Recommendations to incorporate in the Final EIS 1. C-Weighted Typical Training Day noise averages should be generated in the Final EIS to better inform the public of the requirements for sound protection to prevent adverse health impacts. The public and public health officials would then be better able to prepare for the impacts to minimize long term exposure effects. 2. Residential populations and businesses within Daily Typical Training Day noise contours over 80 dBC should be specifically notified so that appropriate precautions can be taken. 3. Residential populations within the 80 dBC

and higher Daily Typical Training Day contours should be monitored for adverse health effects since long term exposure could produce chronic conditions.

Effects of Low Frequency Noise:

Although some low frequencies produces at high amplitude are felt more than heard by people, their effects are significant. Here is a responsibly researched report on the effects of low frequencies on the human ear and body:

Low-frequency noise: a biophysical phenomenon M. Oud (medical physicist / consultant)* * Mireille.Oud@gmail.com, <http://nl.linkedin.com/in/mireilleoud>, the Netherlands Abstract Complaints on low-frequency noise were till recently fairly unexplained, but audiological research shed light on the mechanisms that enable perception of frequencies below the threshold of average normal hearing. It was shown that exposure to low-frequency sound may alter the inner ear. This results in an increase of sensitivity to low-frequency sounds, and as a result, previously imperceptible sounds becomes audible to the exposed person. Interactions between inner-ear responses to low and higher frequencies furthermore account for perception of low-frequency sound, as well as the property of the hearing system to perceive so-called difference tones. Introduction A growing minority of people experiences an increased sensitivity for low-frequency sound. Not surprisingly, they complain about noise, even about loud noise in some cases. Their complaints about the presence of hum, buzz, and rumble are often not recognized as a nuisance, since the majority of people does not perceive the very low frequencies. Low-frequency noise (LFN) may have serious health effects like vertigo, disturbed sleep, stress, hypertension, and heart rhythm disorders [1]. The number of sufferers is growing, and this has two possible causes. The sources of lowfrequency sounds increased in volume and dimension over the past decades, and auditory sensitisation takes years to develop. Nowadays, the main source of low-frequency noise is the public infrastructure: wind turbines, gas transmission grid, industrial plants, road and railway traffic, sewerage, and so on. Their expansion is enormous as it keeps pace with our rapidly increasing welfare and industrialization. Recent inventions like district heating (citywide hot water pipeline grids for home warming and hot tap water) and underground waste transportation furthermore add on to the sources of LFN. In recent years, more insight has been gained into the biophysical explanation for sensitisation of the hearing system for low sound frequencies. This paper

discusses several of the proposed mechanisms for this biophysical phenomenon. Biophysics of low-frequency sound perceptibility Sound audible to the human ear is in the frequency range 20 -20.000 Hz, and the ends of this spectrum are barely audible. In audiology, the measured range is restricted to the frequencies relevant to speech 125 - 8000 Hz [2]. LFN may be loosely defined as having frequencies below this range. Sounds of all frequencies can also be transmitted via the skull, thus bypassing the eardrum. This is called bone conduction and it occurs most with low frequencies. Tones with low frequencies therefore contain no spatial information for our hearing system. (For this reason stereo equipment has only one subwoofer.) The maximum amount of sound pressure that is bearable is 140 dB (ref. 20 μ Pa), the threshold of pain. As illustration: heavy traffic generates about 80 dB, and a normal conversation 60 dB [2]. At average sound pressure levels, frequencies within the range of speech are better perceived than very low or very high frequencies with the same sound-pressure level. This is what the widely used dBAweighting standard refers to. Figure 3 shows the low-frequency part of this standard. The cochlea is a bony structure, with three fluid-filled compartments that are separated by membranes. The basilar membrane is set into motion by sound-pressure waves in the upper compartment. This excites the outer hair cells of the sense organ on the basilar membrane, the organ of Corti. This organ lies in the middle compartment of the cochlea. The outer hair cells act as preamplifiers, and they excite the inner hair cells. The inner hairs cells transduce the mechanical activity into electrical stimuli to the brain. In Figure 2 the sensitivity curves of the inner and the outer hair cells are shown, along with the noise spectrum of a Dutch wind turbine. It is seen that noise above 50 Hz can be heard by the average normal hearing person. Noise below 5 Hz is not audible for anyone. The region in between is not audible, unless the sensitivity of a persons outer hairs cells are altered. Frequency sensitivity of the cochlea is distributed over the basilar membrane from high frequencies at the basis (i.e. where the sound-pressure waves enter the upper compartment) to low frequencies at the apex (end point). At the apex, the cochlear upper compartment is connected with the lower compartment through a passage called the helicotrema. The pressure waves pass through the helicotrema into the lower compartment, in order to dispose of their remaining energy and extinguish. Frequencies lower than about 20 Hz cannot be heard by the average person, but they can be sensed as

vibrations, as most people will have experienced when standing near e.g. a subwoofer. A minority of people, however, are able to hear these frequencies as well. Low-frequency audiograms of three very sensitive persons are shown in Figure 1. These three subjects show to be able to hear sounds below about 20 Hz, sounds with pressure levels more than 20 dB less than the hearing threshold for normal-hearing persons. Several mechanisms in the cochlea may be responsible for this increased sensitivity and for other health effects. We will describe two hydromechanical mechanisms and two neural mechanisms. Figure 1: Hearing thresholds of three especially sensitive persons (from [5]). Figure 2: Unweighted noise spectrum of a Dutch wind turbine [7], hearing thresholds from Figure 1, and sensitivity curves of inner and outer hair cells [6]. The latter are based on animal hair-cell response characteristics, but with helicotrema and middle-ear characteristics for the human. Stimulation of the cochlea has been shown to result in swelling (hydrops) of the middlecompartment fluid (endolymph) [3]. The swelling results in flow of endolymph through a narrow duct that is connected with the sacculus. The sacculus is a compliant chamber with sensory cells that generate neural impulses to the brain when the head makes movements. When these cells are excited due to the endolymphatic flow, this is experienced as vertigo (dizziness) [4]. Endolymphatic hydrops is also known to contribute to occlusion of the helicotrema. When the helicotrema is blocked, the pressure waves bounce at the helicotrema and travel back through the upper compartment. They interfere with incoming waves and, with that, intensify the pressure waves in the upper compartment. The returning waves start at the apex and will lose their energy along their way to the basis. As they have most energy near the apex, they will excite the cochlear area near the Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 3/5 M. Oud (medical physicist / consultant) apex most: and this is the area with sensitivity for low frequencies. This may make the ear 20 to 30 dB more sensitive to low-frequency sounds [8]. The distance between the sensitivity curves of the inner and the outer hair cells is indeed about 20 dB; this supports the idea of LFN-induced sensitivity enhancement. As we saw from the dBA curve, higher frequencies are better perceived than low frequencies, at most sound pressure levels. However, at sound-pressure levels higher than about 85 dB SPL, the opposite was seen to occur: in measurements on the cochlear response of laboratory animals, the low-frequency part of the cochlea then showed more response to 5 and 50 Hz tones than to a 500

Hz tone [9]. Another interesting finding in this laboratory experiment is the observation of biological amplitude modulation: sounds with higher frequencies could suppress the response of the cochlea to very low frequencies. With low frequencies at pressure levels that do not yield cochlear response (and thus no nuisance), a remarkable observation was made. A tone of e.g. 50 Hz could still exert its influence: it was able to suppress the response of the cochlea to higher frequencies [9]. When the spectrum of a noise source contains two coherent higher-frequency tones with only slightly different frequencies, their interference pattern show a beat with low frequency. Our hearing system perceives this form of amplitude modulation as a so-called difference tone. Normal-hearing persons can, under certain circumstances, hear this form of low-frequency sound too, e.g. when tuning a musical instrument. Musicians know these tones as ‘Tartini tones’. Readers unfamiliar with this biophysical phenomenon are invited to listen to a sound example that we present online [10].

Figure 3: Equal-perception level curves used for weighting spectra, according to three standards. Figure 4: Wind turbine spectrum of Figure 2, with four different weightings. Discussion and recommendations

Legislatory control of noise necessarily rests on noise-level standards for the average person, as these standards cover the majority of people. The ear of the average person is generally assumed to have a frequency-sensitivity characteristic according to the dBA-standard. When this standard is applied in the assessment of noise, as a weighting, the amount of low-frequency noise produced by public infrastructure seems small. The unweighted low-frequency level, however, can be considerable. For wind-turbine noise, this is shown in Figure 4. A growing number of people suffers from LFN-induced enhanced hearing sensitivity for low frequencies, with enhancements of 20 dB or more. The experiments discussed in this paper furthermore showed that low frequencies can generate more cochlear response than higher frequencies, when Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 4/5 M. Oud (medical physicist / consultant) their sound-pressure levels are considerable. At the time of construction of the dBA standard, highpowered low-frequency noise was not as common as today. It is likely that the phenomenon of reversal of sensitivity was not taken into account in the construction of the dBA curve. Therefore, for assessing low-frequency noise, other standards than dBA are required. The dBC-standard might be considered for this purpose, or the more recent dBG standard. The dBG weighting is an ISO-standard and is especially designed for assessing low-

frequency sounds [12], [13]. For a comparison, see Figure 4. The elder generation has been exposed longest to the noise of public infrastructure. It was found that the prevalence of LFN-complaints increases with age [1]. This supports the conclusion that long-lasting exposure to low-frequency noise, inaudible for years to the exposed persons, may at the long term result in alteration of the cochlea; such alterations could already be demonstrated in laboratory animals. When sensitisation finally occurs, the LFN “suddenly” becomes audible to the exposed person. This person will try and search for recent changes in his immediate surroundings that can be pointed to as “the” cause of his LFN problem. But not necessarily recent and nearby changes are the main and only cause. Ground-borne vibrations have a propagation length of tens of kilometres. In a small and densely built-on country as the Netherlands, the large propagation length inevitably causes the noise from the different numerous elements of the infrastructure to interfere and accumulate. So, looking for one unique structure as the source of nuisance may often be impossible and illogical. This explains why engineering attempts to localize “the” noise source are often fruitless. A single subset of infrastructure may in itself not produce sufficient low-frequency sound to cause problems, their combination may. In regulatory debates on combatting LFN, the discussion should therefore not focus on finding “the” industrial culprit (like “wind turbines”), but rather on the relative contribution of each industry. A special type of interference is the difference tone that appears when two sine waves are coherent and close in frequency. This tone is not present as an individual frequency in the sound spectrum. In order to detect the presence of low-frequency difference tones, measuring power spectra does not suffice. Coherence should be detected and therefore the time-evolution of phase spectra should be studied. This should be done at an appropriate frequency resolution. Sound spectra are often presented with logarithmically-spaced frequencies, because this is in accordance with the frequencydiscrimination characteristic of the ear. However, low-frequency beats arise from pairs of tones that are usually not distinguishable for the ear. To detect the presence of difference tones, spectral information with a high frequency resolution has to be gathered. The sufferer can indicate what beat period he hears, and this may serve as a guide to determine the in-situ required frequency resolution. If low frequencies are actually present in the spectrum, they do not necessarily have to be audible, or even be continually present, to be perceived. This paradoxical fact was shown in the experiments, and is a property of the cochlea. When a low-frequency sound does

not yield any cochlear response (and therefore no nuisance), it could still suppress the response to sounds with higher frequencies. In case the inaudible low-frequency sound shows up in intervals, the higher frequencies will seem modulated in amplitude. This may give rise to a perceptible beat with a period of the intervals mentioned. Low-frequency sound may cause endolymphatic hydrops, which may result in vertigo. We assume that physiological process as lymphatic flow and helicotrema blockage cannot resolve as quickly as sound can be turned off. Therefore, the dizziness may persist after the low-frequency sound vanished. As a consequence, LFN-measurement may yield zero result while the sufferer still has the physical complaint. Higher frequencies were found able to suppress cochlear response to low-frequency sounds. This form of masking may be an advantage for the LFN sufferer when there is a continuous presence of higher frequencies in the ambient noise. However, when high-frequency sounds show up in intervals, the amplitudes of the low-frequency sounds are modulated with the same period. Then, we Congres Geluid, Trillingen, Luchtkwaliteit en Gebied & Gebouw 2012 Low-frequency noise: a biophysical phenomenon 5/5 M. Oud (medical physicist / consultant) expect, another low-frequency beat will be perceived, with a period equal to the modulation interval. The above three effects are all due to cochlear properties, but they cannot be solely ascribed to cochlear problems: they still require the presence of low-frequency sound in order to manifest themselves. Data on the prevalence of LFN in the Netherlands do not exist. Systematic investigations have not yet taken place. The need to do so has become fairly apparent, but suitable measurement protocols still need to be developed. In addition, a dedicated nuisance-assessment methodology needs to be developed for LFN. This is because LFN-sufferers miss many of the coping strategies that sufferers from traditional noise have. First, they do not have any means of shielding against LFN. Since LFN propagation is mainly structure-borne, closing doors and windows is not effective. Earplugs are of no use, because LFN bypasses the eardrum. Secondly, LFN has no spatiality and is therefore perceived as being located "within the head". The sufferer literally cannot distance himself from the unwanted sound. Thirdly, LFN never lets up, since public infrastructure is continuously in operation. Fourthly, social control, like talking to the neighbours in case of music nuisance, is not applicable. Lastly, moving house will not bring a solution since the propagation depth of structure-borne low-frequency vibrations is large and the public infrastructure densely present in our small country. All this implies that LFN exceeds tolerable noise levels

and noise durations sooner than traditional noise does under comparable (but not yet established) noise loads. Acknowledgement The author kindly acknowledges Dirk van der Plas, Ellen Mulder and Lies Jonkman of the Dutch low-frequency noise vigilance group [14] for their constructive support. References [1] G. Leventhall, P. Peimear and S. Benton, A review of published research on low frequency noise and its effects, Report for Dept. for environment, food and rural affairs, London (2003) [2] F.N. Martin, Introduction to audiology, Needham Heights: Allyn and Bacon, (1997) [3] Salt, A.N. Acute endolymphatic hydrops generated by exposure of the ear to nontraumatic low frequency tone, JARO 5, 203-214 (2004) [4] A.N. Salt and J.T. Lichtenhan, Perception-based protection from low-frequency sounds may not be enough”, Proc. inter.noise, New York (19-22 Aug. 2012) [5] C.S. Pedersen, “Human hearing at low frequencies with focus on noise complaints”, Ph.D. thesis, Aalborg University, Denmark (2008) [6] A.N. Salt and T.E. Hullar, Responses of the ear to low-frequency sounds, infrasound and wind turbines, Hear. Res. 268, 12-21 (2010) [7] G.P. van den Berg, The sound of high winds: the effect of atmospheric stability on wind turbine sound and microphone noise, Ph.D. thesis, Rijksuniversiteit Groningen (2006) [8] A.N. Salt, D.J. Brown, J.J. Hartsock, S.K. Plontke, Displacements of the organ of Corti by gel injections into the cochlear apex, Hear Res. 250, 63-75 (2009) [9] A.N. Salt and J.T. Lichtenhan, Responses of the inner ear to infrasound, Proc. 4th Int. meeting on wind turbine noise, Rome (12-14 April 2011) [10] <http://tiny.cc/LFG2012NAG>: .ppt presentation with graphs, pictures and sound examples associated with present paper (Dutch text) [11] A.N. Salt, Infrasound: yours ear “hear” it but they don’t tell your brain, Proc. 1st int. symposium ‘The global wind industry and adverse health effects’, Picton, Canada (29-31 Oct. 2009) [12] R. Cedric R., Ecoaccess guideline for the assessment of low frequency noise, Proc. of Acoustics 2004, 619– 624, Gold Coast, Australia (3-5 Nov. 2004) [13] ISO norm dBG: http://www.iso.org/iso/catalogue_detail.htm?csnumber=13813 [14] Belangengroep Laagfrequentgeluid <http://www.laagfrequentgeluid.nl>

1C: PUBLIC HEALTH AND SAFETY

(See Also 1H: water issues)

The human body perceives jarring noise as a danger cue, which triggers a stress response—even during sleep, and even in people who have lived in noisy environments for years. When exposed to short, intermittent noises during sleep, study subjects experienced heightened heart rate, blood pressure, and stress hormones. Long-term exposure is even associated with long-term cardiovascular problems.

The DEIS refers to health effects on the average person: someone in their 30's or 40's with no particular physical and/or emotional vulnerabilities. The demographic groups most vulnerable to the Growler's noise are children/youth whose bodies are not yet fully developed and the aging, which by definition are not at their best, but nevertheless make up a significant proportion since we have a large retired population.

Accident Potential Zones for Navy airfields:

APZs are required to be assessed for any DoD fields with 5000 operations per year. In 2004 the Whidbey AICUZ determined that an APZ wasn't required at the OLF due to the level of operations the *previous* year. This conclusion of course proved inaccurate. In fact the OLF most likely has been out of compliance for many years, according to the Navy's own requirements.

From DEIS, page 4-261: "... While it is generally difficult to project future safety/mishap rates for any aircraft, the Growler has a well-documented and established safety record as a reliable aircraft."

The DEIS provides no data on accident history or mishap rate of EA-18G or the F-18 Hornet platform. In actuality the All-Navy Class A Mishap Rate over the past ten years is 1.27 mishaps per 100,000 hours flown. At the rates in the DEIS, the translates to 3-4 "mishaps" over the next 10 years. (See the graphic for the NAS stats available in a 2003 DEIS.)

Additionally, ignoring pilot error as a potential cause for a mishap creates an unrealistic view of accident potential.

The above quote is the extent of effort expended on an accident risk analysis in the DEIS. Yet a thorough risk analysis must accompany every credible EIS. A manual from the Department of Energy on EIS preparation says an EIS must include treating a “maximum foreseeable” (different from worst-case) accident, its probability of happening, its potential adverse consequences and its remediation. The magnitude of a risk must be calculated from its probability and its consequences; comparisons of risks for each alternative should be done.*

Stating “reliable aircraft” and “well-documented safety record” is not appropriately backed up by data. The Navy withheld important statistics (i.e. 22 crashes since 2000 of the EA-18G and its closely related F/A-18 E, F aircraft) from the DEIS.

Several aggravating factors at OLF are conducive to accidents, thus endangering the populace, the environment, local properties and the airmen themselves. The EIS accident risk analysis for all four action alternatives must include factors such as facility shortfalls, unique Whidbey atmospheric challenges, scheduling compromises, contributors to pilot error such as night flying, and must include the most pernicious Growler technical problem: hypoxia effects.

Furthermore all EISs must include the potential harms and disruptions resulting from use of the dated OLF facility as well as outline the consequences of accidents of various levels of complexity and intensity. Omitting such an analysis fosters a tone of unrealistic optimism that prompts the proposal to multiply flight operations sixfold while pronouncing “no significant impact.” There is no realism here: it is obvious that amplifying flight operations will severely escalate the likelihood of a significant life- and property-destroying “impact.”

The following EIS-omitted factors are amplifiers of, and results of, accident risk:

Compromises on facilities:

- 35% shorter than regulation Growler runway-length
- 1/40 of the required open acreage surrounding the runway-length
- residences, fuel depot, businesses, county facilities, a highway and a city are within accident-risk areas near runways and often within short distances of their ends.

Atmospheric conditions:

- Frequent wind shifts, creating dangerous tail-winds for allowed T & G's, some witnessed so far as even exceeding strict wind-speed regulations
- Common presence of birds that endanger engines
- Frequent fog, rain events, and wind that can force “edgy” calls on permitted flights.
- A six-fold increase on demand for precious flight times (meaning half the days of the year are needed for flights); this is very likely to result in further tightening the line between “flight go” and “flight abort” calls, leading to decreasing the safety envelope.
- A vast “*density altitude*” difference between OLF (d.a. 337) and typical Middle East sortie locations (Persian Gulf d.a.2182). While not endangering pilots in training it endangers them in a war theater: increases their risk of hitting a Persian Gulf carrier deck too hard or not soon enough by misjudging the lift of the air.

Pilots and planes – circumstances contributing to risk:

- Night flights with tired pilots (tiredness welcomed for realistic practice)
- The troubling rise in the number of breathing and pressurization problems in FA-18G and Hornets; the pilots rate the Growler's tendency toward hypoxia their most pressing problem.
- Pilots are trainees learning new, dangerous maneuvers, automatically increasing accident risk above routine flights done by seasoned pilots.
- The Growlers are part of a family of similar planes that have a significant accident rate: 38 crashes (and numerous incidents of dropping pieces from flight) since 2000. (The F-18 series, of which the Growler is part, is rated at a minimum 5.6 times as likely to have *mishaps* than its predecessor, the Prowler.)

Potential effects of catastrophic accidents on the Whidbey Island Community

- Dispersal into the water table of fire-fighting Type B foam with health-endangering, banned, toxic ingredients. Training and accidents have already injected these into the Whidbey water table, rendering some vital citizen wells unusable, and endangering the Coupeville water supply (toxins detected at barely acceptable level). These banned toxins are still being stored on Whidbey for emergency use and increased flight ops will risk their use.

- Increased economic, health and infrastructure damage from several catastrophic accident scenarios, intensified by training in a moderately crowded civilian setting.

Conclusions and Implications of risky conditions at the OLF: the Navy finds itself adjusting flights, limiting schedules, and handling constant noise complaints, all because it is training on an inadequate facility in a highly populated region, yet it intends to expand operations. Meanwhile, a catastrophic accident could, besides creating real health, economic and environmental damage, shatter the public's diminishing patience and faith in local Navy ops.

With a realistic assessment of substantial crash risk, the time is right now to scope and begin a transition of anticipated increased Growler training to an alternate, more appropriate facility.

Further information and discussion of the accident-risk factors outlined above:

Compromises on facilities:

- The OLF runway is 5,200 feet long and regulations from which it has been exempted (by a permanent waiver issued by the Navy!) demands that it be 8000 feet. Additionally the antiquated runway depth is thinner than regulation, courting the possibility that it could crack because of six-times-intensified use and occur during a rough landing with the currently heavier Growler aircraft than what it was designed for. and create a high speed accident Furthermore, there is a highway (average 9000 vehicles a day) just a few hundred yards ahead of the field's north end. Takeoffs and landings at a few hundred feet above those drivers can be very startling and contribute to driver accident risk. But more important here, the highway proximity considerably elevates the disaster risk from a Growler accident where there is a failure to ascend after landing and the short runway is exceeded before the plane can stop. This is further amplified by the fact that often crowds of parked cars and gawkers accumulate to watch the FCLPs. Result: more civilian risks.
- During the most recent attempt to build an outlying field in eastern North Carolina, the Navy sought 30,000 acres of relatively undeveloped land as the current-day threshold to provide civilian safety and to prevent unreasonable encroachment. So the Navy admits that a contemporary outlying field

demands at least 30,000 acres of relatively undeveloped surroundings. At only 700 acres (!) OLFC falls 29,300 acres short of standard, (i.e., having just 1/40 or 2.3% the desired acreage). Another way to put it is that a 30,000 acre circle would be 3.8 miles in all directions from OLF's center and this circle would include the majority of the town of Coupeville, and numerous] residences, parks, and facilities east and west of OLF clear to the waters of the sound. The operations at OLF are a large foot stuffed into a small shoe, raising the risk of accident to considerable heights. Yet mysteriously the Navy is year-by-year, decade-by-decade granted permission to go full bore with increased operations, and even propose yet a six-fold increase of these operations, while declaring "no significant impact" in the DEIS, all while completely omitting an accident risk analysis. Exacerbating the problem is that the County, with the Navy's tacit indulgence has not discouraged development in accident-prone zones and has not designated accident protection zones (APZs) at the ends of the OLFC runway, creating "an accident waiting to happen" scenario. Aggravating this, the County has not respected in its zoning the Navy's stipulation of no residences (zero) within a [high] Noise Zone 2 area, (which is arguably also more accident-prone due to near-roof-top trajectories). We have now the reality of over 600 residential homes and businesses in elevated harm's way and, in 2016 it is useless to argue whose negligence, Navy or County) has passively allowed these to be placed there with no comment dating years ago. Furthermore, the low-level FCLP touch-and-goes mean that planes approach over neighborhoods at altitudes under 500 feet, in some areas as low as 200-300 feet. The FAA, however, requires no flights below 500 feet over homes or people, as codified by the Supreme Court. The conditions around OLF require the Navy to strongly bend (and break) legal regulations (and their safety margins) in order to function at all.

- Challenging, potentially dangerous atmospheric conditions: Pilots land and take off often with a tailwind (discouraged for actual carrier landings but a common problem at OLF). There are frequent wind events, fog, and major rain events (less frequent in most US war theaters but a fixture at OLF). Although the Navy theoretically restricts OLFCs s at OLF to tailwinds of less than 5 knots, Growlers have been observed on a number of occasions practicing with tailwinds of up to 10 knots and on one occasion, about 15-knot tailwinds, which is patently dangerous. Additionally these atmospheric cause endless scheduling headaches, present more danger for training

flights, and their inconvenience could cause a dangerous stretching of the acceptable window of safety for flights (as illustrated in the tailwind example above). All such risk-elevators must be evaluated in the EIS.

More on the tailwind problem: If a malfunction were to necessitate a full-stop landing, the ground roll would be significantly longer with a tailwind (1.5% per knot). Because the OLF landing strip is only 5400 feet long, an aircraft needing to land could continue off the end of the runway. Directly ahead approximately a 1/4 of the runway length is Whidbey Island's Transit Fuel Depot, and then one more runway length further is the township of populated Coupeville. Loss of control in attempting to land could result in loss of aircraft crew and civilian residences. The other runway direction has the community of Admiral's Cove a runway length away as well. At a high approach speed of 160 to 180 knots (303 ft/sec), an out-of-control plane could reach the Fuel Depot (also many facilities and residences) in 17 seconds and, if flying low or with pilot ejection, the town of Coupeville in 34 seconds.

More on the Density Altitude problem: It is also worth mentioning that the Navy ignores the vast "density altitude" difference between OLF (d.a. 337) and typical Middle East sortie locations (Persian Gulf d.a.2182). Because aircraft behave according to density altitude rather than actual altitude, landing or taking off during high-density altitude conditions necessarily increases approach speed and involves longer landing roll and longer takeoff roll. This means fighters run the risk of hitting a Persian Gulf carrier deck too hard or missing it by flying too high with a pilot trained with the "feel," despite instrumentation, of the wrong air conditions. On May 29, 2016, a Growler landing aboard the carrier John C. Stennis in the South China Sea engaged the carrier arresting gear while still in flight. Result: millions in damage. (Yakima training area, for instance, a proposed OLF alternative with far greater area and, while 1400 feet above sea level, has a density altitude of 2963 (around that of the South China Sea). Could training there have prevented the costly Stennis accident?) The EIS needs to evaluate such factors in the interest of airmens' safety.

A note on the huge accident-risk reduction of an alternate field like Yakima: Risk considerations in a EIS must consider alternative actions that reduce

risk. As an alternative, the Yakima training field, for example, has near zero lethal civilian accident risk, infrastructure accident risk, civilian health risk from Growler nonise, and groundwater pollution risk (no aquifer running underneath it like at Coupeville). And a Yakima-like field's bonus: while higher than sea level, it supports the plane's weight much more typically of war theaters than the OLF, thus adding to the safety of airmen flying missions in the middle east. Previous vetting of alternatives has overlooked many of these risk-lowering benefits (assumed because risk was not even evaluated in the DEIS) and it appears that distance from Ault Field is one of Yakima's down-sides due to fuel limitations of the fighters. But aerial refueling is very common with the Growler missions—an everyday non-event. Yes, slightly more expensive to fly further for training but nowhere equivalent to the expense to health and safety born by Coupeville residents *and to the flying airmen.*

- Hypoxia problems raise the risk probability. According to the *Navy Times* 5/8/16: *"Nothing scares Hornet pilots more than losing oxygen — and it happens all the time."* This article details the hypoxia (low oxygen) problem in the Growlers, which pilots have identified as their *top concern.*

"Naval Air Systems Command is scrambling to implement fixes, but the brass has underplayed the severity and frequency of the danger since it emerged in a February 2016 congressional hearing, according to interviews with pilots and official reports."

"These show a troubling *rise* in the number of breathing and pressurization problems, and that Navy and Marine F/A-18 Hornet and EA-18G Growler aviators view the problematic On-Board Oxygen Generation System as the fleet's most pressing safety issue by far (10 times over). Despite these issues, aviation bosses have not grounded the fleet, a common response to aircraft safety issues."

It is not possible to ignore the hypoxia problem in an EIS. It is perhaps a background contributor to several of the 22 Growler and F/A-18 E/F accidents since 2000 but may have been left out of the accident descriptions in that it can simply contribute to pilot error: misjudgment, fatigue, and distraction.

- Accident statistics raise the risk estimate: The accident risk evaluation must include probability predictions related to the statistics of crashes. It is challenging to choose which metric best predicts the likelihood of Growler accidents. One way is to look at accidents for the Growler *and* its close "cousin" models the F/A-18 E/F series worldwide. A ratio with the number of flight ops done with those models would be illuminating. Crash records can be spotty on information but our a good estimate is 22 such crashes since 2002 of which 10 were midair collisions in training and 12 were a random mix of pilot error and mechanical failures, in air and during takeoffs and landings, often with ejections. Midair collisions are less likely in FCLP training but the other 12 crashes of these type could happen at or around OLF during FCLPs. Due to the crowded conditions of OLF they would be quite costly in lives, property and environmental damage. The percent risk as indicated by these accidents is definitely not near-zero as was implied in the DEIS. Yes, the OLF has not suffered one of these *yet*, but many circumstances present in the other accidents are even more pronounced at OLF due to many night flights, hypoxia problems, tight scheduling and challenging atmospheric conditions.

Another approach would be to look at all accidents since 2000 of fighters of all models flying in non-paired-combat-simulation in order to simulate the accident probabilities of a fighter doing FCLPs. Another is to look at all accidents of fighters of all types flying FCLP training. This information should be researched by the EIS writers. Here is yet another way: The All-Navy Class A Mishap Rate over the past ten years is 1.27 mishaps per 100,000 hours flown. At the rates projected in the DEIS, this translates to 3-4 "mishaps" over the next 10 years, some of which could be crash disasters. Finally, this statistic needs to be factored in: already there have been 24,000 operations at OLF with one accident, which translates to about 1.5 mishaps per 35,000 flight operations per year. Applying a proportion of "mishaps" that are crash disasters throughout the Navy could provide yet another estimate of probability of actual crashes. It is the Navy's obligation to choose the best estimation technique for crash disaster probabilities and present it in the EIS.

Note: It is important to keep in mind that the probabilities, regardless of which of these ways they are estimated, are elevated by a) some of the unique atmospheric and scheduling challenges of OLF discussed above and

b) by the sixfold increase of operations presented as a preferred alternative. A sixfold increase in operations can easily create a higher-than-six-fold increase in crash potential due to the complicated interaction of factors like tight scheduling, support staff fatigue, more crowded airspace, cutting the safety window too closely for weather events, etc. discussed above. In other words, it is not “if there is a crash disaster at OLF” but “when,” and the EIS, all about “impacts,” must describe the damage to life and property, and the disruption that follows, for the worst reasonably probable accident.

OLF operations court potentially highly destructive fatal accidents in a variety of ways:

- a shorter than regulation runway, with less open acreage surrounding it than regulation
- The OLF airfield was built for World War II planes and does not meet Navy requirements for use with modern jets, even though they have a waiver (see below).
- On page 4-9 of the DEIS states that one of the two runways at OLF has an “unacceptably steep angle of bank” and can be used only 30 percent of the time due to weather conditions.
- nearby neighborhoods and population centers are at risk
- there is a fuel depot straight ahead of the runway
- night flights with tired pilots (tiredness encouraged for realistic practice as part of training)
- dangerous touch-and-go maneuvers that require stable atmospheric conditions that Whidbey Island is short on.
- the “density altitude” of Whidbey is far different from that of the areas where the planes are currently deployed, thus creating risk when in an actual battle zone
- use of a fighter known to be accident-prone
- Three “Accident Potential Zones” - areas where crashes may occur - extend up to 5,000 feet from ends of the Outlying Field plus a 3,000-foot wide track located 1500 feet on either side of fields used for carrier landing practice, threatening hundreds of households with potential crashes and significant loss of property values.

- Already there have been 24,000 operations at OLF with one accident, which translates to 50 mishaps per 100,000 hours.

The Navy has statistics on the EA-18G mishap rate and is remiss in not including that information, or any forecast of future mishaps, in the DEIS in the interest of honest disclosure. From DEIS, page 4-261: "... While it is generally difficult to project future safety/mishap rates for any aircraft, the Growler has a well-documented and established safety record as a reliable aircraft." This is a contradiction.

The Navy provided the following information subsequent to the 2003 DEIS to convert the A-6 fleet to EA-18G:

From: AICUZ Study Update for Naval Air Station Whidbey Island's Ault Field and Outlying Landing Field Coupeville, Washington, Final Submission, May 2005

Table 5-2 Accident History Summary, 1975-Present

Aircraft Type	Date	Accident General Location	Type of Flight Operation
EA-6	August 1976	NAS Whidbey Island Golf Course	IFR departure
A-6	September 1976	Water west of Ault Field Runway 07	Instrument operation
EA-6B	February 1980	Water northwest of Ault Field Runway 13	FCLP (approach)
P-3A	January 1981	Hard landing on Ault Field runway	Landing (touchdown)
EA-6B	December 1982	OLF Coupeville off government property	FCLP (break maneuver)
EA-6B	October 1985	Landing on Ault Field runway	Landing (rollout)
A-6	August 1989	Ault Field runway	Practice air show flight demonstration
A-6	November 1989	Water northwest of Ault Field	Approach
A-6	January 1990	Ault Field Clear Zone	Post-maintenance flight

Notes:

Instrument Flight Rules (IFR), field carrier landing practice (FCLP)

Source:

Draft Environmental Impact Statement (DEIS) for proposed air operations associated with increased training activity at Ault Field and OLF Coupeville, August 2003

During the most recent attempt to build an outlying field in eastern North Carolina, the Navy sought 30,000 acres of relatively undeveloped land as the current-day threshold to provide civilian safety and to prevent unreasonable encroachment. By comparison OLF falls 29,300 acres short. At only 700 acres of land and a 5,200-foot-long runway (about 3000 feet short of Growler landing standard) OLF can only be classified as substandard and inadequate, and, neither acreage nor runway length are expandable. In fact, the Navy created for itself a permanent waiver to continue to use the OLF runway.

Centering a 30,000-acre mylar over a map of the OLF area would show inclusion of three public schools, the historic town of Coupeville (approximately 2000 residents), historic farms and homes, Admirals Cove with over 600 single home properties, a National Historic Reserve, a state park, several local parks, the island's main north-south highway averaging over 8,000 vehicles per day (route 20). An inflight emergency would be catastrophic. Accident Potential Zones (APZs) have not been designated at either end of the runway. If APZs were designated, they would violate Navy standards, because the APZ-1 would include over 600 residential homes and businesses.

In 1987, a Navy planning document (Navy document 101) reviewed and reported the status of the OLF for future use. It notes the depth of the concrete and below-standard length of the OLF landing strip as insufficient for new jets and increased use. The new, heavier aircraft cannot land at OLF safely. If a jet requires an emergency landing, it would not be allowed to take off, and would need to be trucked back to NASWI in Oak Harbor. That 1987 report recommended

alternatives to OLF be investigated by the Navy because of the encroachment issue. Instead, the Navy issued itself a permanent waiver.

In addition, both flight paths (14 and 32) require low-level approaches over neighborhoods at altitudes under 500 feet, in some areas as low as 200-300 feet. The FAA, however, requires no flights below 500 feet over homes or people, as codified by the Supreme Court. The court has ruled that a property owner controls use of the airspace 500 feet above their property and may make any legitimate use of their property that they want, even if it interferes with aircraft overflying the land (https://en.wikipedia.org/wiki/Air_rights). This is an FAA a regulation the Navy claims to honor as explained by this Oak Ridge National Laboratory Report:

The military services are committed to safety and to minimizing the collateral noise associated with low-level flight training. The U. S. Air Force, for example, has set numerous restrictions and tailored its training to reduce noise as much as possible. The DoD in general, in addition to following its own flying rules of low-level altitudes and airspeed, also follows those in Federal Aviation Regulation 91.79 which states that no plane may fly closer than "500 ft [152 m] from any person, vessel, vehicle, or structure." (USAF Fact Sheet 96-17) In addition, because of the greater potential for human annoyance during sleeping hours, low-level flying by military fixed-wing aircraft generally occurs during daylight hours; low-level flying near densely populated areas is prohibited.

On approach to and departure from an OLF bounce, Growlers cannot comply with this 500-foot rule, and must cross over hundreds of residence, a well-used children's athletic field, dog park, county park trail system, and crowded recycle center. It is an uncompensated taking.

Additionally, although the Navy claims it only conducts FCLPs at OLF in tailwinds of less than 5 knots, Growlers have been observed on a number of occasions practicing with southerly tailwinds of up to 10 knots and on one occasion, about 15-knot tailwinds, which is patently dangerous. If a malfunction were to necessitate a full-stop landing, the ground roll would be significantly longer with a

tailwind (1.5% per knot). Because the OLF landing strip is only 5400 feet long, an aircraft could continue off the end of the runway. This could result in loss of the aircraft and crew and civilian residences, as well as endanger traffic on the three adjacent roadways and crowds that park unsafely along those roads to watch the FCLPs.

Direct Downward Radiation from Weaponized Directed-Energy Emissions:

Nowhere do any Navy NEPA documents from the last 7 years discuss the risk of exposure to chronic downward-directed radiation from weaponized forms of directed energy to civilians, wildlife and habitat. (The only discussion was a brief mention in the 2014 EA, in reference to radio transmitters on the mobile emitter trucks and the stationary transmitter at Pacific Beach. The Navy referenced a paper by Focke et al, and concluded that links from radiation exposure to leukemia were speculative, when in fact, that same paper stated unequivocally that there are direct links between radiation exposure and childhood leukemia.)

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards are overlooked or believed irrelevant for civilians exposed to the same or greater levels of noise. This double standard must be addressed and corrected in the DEIS analysis of noise exposure/dose impacts.

1D: EDUCATION IMPACT

DEIS 6.3 p 6-13 Unavoidable Adverse Impacts: "This Environmental Impact Statement (DEIS) has determined that the alternatives considered may result in significant impacts with respect to noise and education from implementation of the action alternatives."

Since significant impacts are predicted, it is imperative to address them. Yet the DEIS offers no alternatives.

The DEIS does not thoroughly address the impact on children. No mention of Coupeville Middle School or the Coupeville High School which are close to the flight pattern. For Oak Harbor, figure 3.3.2 on p. 3-47. Exec Order 13045 (p 3-44) states that it is a high priority to identify and assess the environmental health risks

and safety risks that may disproportionately affect children. *This has not been done.*

Noise generated in any of the DEIS scenarios interrupts classroom instruction (pages 4-35, 4-120) and exposes children to noise levels known to cause health issues if exposure is prolonged.

The DEIS does not recommend any amelioration - i.e. restriction of flight operation during school hours, avoidance of schools during school sessions, funding for sound insulation or any other possible actions to reduce interruptions or noise exposure.

Children play outdoors, take lunch breaks, wait for buses and walk to/from school during school terms and are directly exposed to sound levels in excess of 90 dBA during flight operations. Studies (see reference) suggest that permanent hearing loss is likely for exposure of just a few minutes at these levels.

Reference: •Children's health and the environment: A review of evidence.

Tamburlini G et al., eds. EEA-WHO, 2002

(www.eea.europa.eu/publications/environmental_issue_report_2002_29)

A typical training day around OLF Coupeville would have 10 different Growlers doing 10 touch-and-goes each; for a total of 100 loops around the airfield. This would be spread over both day and night training and would happen on 175 days of the year. Since training is needed when squadrons are scheduled to deploy, this intense activity would be 5 days/week for 3-4 weeks at a time, then pause for 3-4 weeks, then resume.

The DEIS shows exposure of nearly 3,500 children to more noise at health-damaging levels, and interruptions in some classrooms at rates of up to 8 times per hour. (Reference: DEIS, Vol. II, Pg. A-133)

1E: AIR QUALITY

No information is presented in the DEIS on jet emissions and their impact on air quality. As an environmental concern, this should be addressed.

1F: LAND USE

NASWI has and continues to utilize sites other than OLF, reportedly including Fallon AFB in Nevada, Hanford NAS in California, North Island NAS near San Diego, China Lake Naval Air Weapons Station near Los Angeles, and Moses Lake's Grant County International Airport (once Larson AFB) in central Washington State. One or more of these options, as well as others not included here, are surely viable and would allow necessary FCLP training without continuing and exacerbating community discord and turmoil, which history has shown elsewhere to have led to base closures.

When asked why other locales are not used, Navy representatives have responded verbally that "it would put undue stress on Navy families for the trainees to be away for so long." This is not a valid response, since all the other locations already have housing for families or could easily construct it.

Additionally, The Navy has contracted with civilian airports and other government agencies for FCLP training elsewhere. For Example, NASA and the U.S. Navy have signed an agreement to conduct FCLPs at the Wallops Flight Facility on the Eastern Shore of Virginia. They have also signed an agreement to conduct FCLP training at Greenville Municipal Airport in Virginia. Grant County International Airport (GCI) at Moses Lake in Eastern Washington is one such alternative FCLP location for NASWI (assuming these locations do not have similar population density concerns to those at Whidbey, in which case there are still remote locations available).

The DOD owns thousands of square miles of desert land in both California and Nevada where a new FCLP training facility could be located. For example, the Nellis AFB range facility covers approximately 6000 square miles (3.8 million acres) of unpopulated desert area.

Another alternative: Growlers do not operate at OLF during low ceilings, low visibility, and high wind conditions, all of which would be encountered in actual cruise situations. Flight simulators, however, would allow training under such weather conditions. Simulators provide far more exacting carrier landing details than possible at OLF. That is, OLF cannot simulate aircraft carrier movement, severe weather conditions, and emergencies, but simulators can do all of those things at no risk to pilot, aircraft, or resident homes and life.

1G: BIOLOGICAL RESOURCES

No comment to date

1H: WATER ISSUES

The DEIS dismissed addressing past, present, and future problems associated with perfluoroalkyl substances (PFAS). Long-chain PFASs are persistent when introduced into the environment, bioaccumulate in animals, and are toxic to laboratory animals, the EPA reports.

The DEIS apparently did not consider these toxic chemicals associated with fire-retardant foam to be a relevant impact even though the EPA does (Health Advisory) and even though PFAS have been discovered in wells adjacent to OLFC. Firefighter trainings and possible crashes would likely instigate further foam use and contamination of wells.

The fire retardant foam used by the Navy contains perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). Perfluorooctanoic Acid has been found in wells near NAS and OLF. PFOA has been linked to kidney and testicular cancers, birth defects, damage to the immune system, heart and thyroid disease, and complications during pregnancy. The EPA's Science Advisory Board labeled it a likely human carcinogen.

Although the Navy describes the amounts found in its firefighting foam as "trace", PFOA is hazardous in tiny doses because it accumulates in the body and takes years to excrete.

The Navy judges "no significant impacts" to ground water from all its operations at Ault and OLF. In fact there has been detected a potential underground flow of some of the worst PFCs from a well on the OLF; testing of neighboring wells potentially affecting 10,000 people is currently underway by the Navy. To date significant toxins have been detected in some Coupeville wells. The OLF is situated on the one and only aquifer available to the whole of central Whidbey including the town of Coupeville.

All results of the well testing, including private testing as verification, must be disclosed in the DEIS. But the timing of the current testing does not support the comment period the Navy has allowed for the DEIS. Well testing results will be available "at the end of January" according to the Navy, while the DEIS comment period closes on Jan 25.

Vastly increased operations that include the new Growlers will increase likelihood of this kind of pollution, which has been problematic near several other military bases in the nation and has been the subject of class-action lawsuits.

The DEIS indicates that this would not be a problem because the Navy immediately cleans up after applying the flame retardant. But the well at Ault Field was tested to reveal more than 50,000 parts per million.

The NEPA Process requires that amelioration or contingency plans be in place wherever possible. The DEIS does not offer any realistic amelioration or contingency plans for well toxicity. The only plan mentioned is to provide bottled water.

In December 2016, the first of possibly many families was informed by the Navy that PFOA was found in their drinking water at more than six times the EPA's Health Advisory Level. A neighbor's well was also found contaminated, and the family warned against using their water for drinking or cooking.

The Navy has indicated through verbal statements by its personnel that a new formulation of firefighting foam has been adopted which is less toxic. However, there is no indication that they had disposed of their present stockpile of foam containing the older formulation.

In June 2016, the Navy announced they would be testing sites across the country for chemicals called Perfluoroalkyl Substances or PFAS, which are hazardous

chemicals used in the Navy's firefighting foam. PFASs have been known to be highly toxic since 2007 by the Environmental Protection Agency.

Navy documents show there are 13 possible toxic sites between Naval Air Station Whidbey and Naval Base Kitsap.

In May, the U.S. Environmental Protection Agency issued lifetime health advisory levels on two "long-chain" PFASs, perfluorooctane sulfonate and perfluorooctanoic acid, at 70 parts per trillion, individually and combined. Both of these chemicals are ingredients in "aqueous film forming foams," or AFFFs, a synthetic firefighting foam, according to the National Institute of Standards and Technology.

Welding explained that the foam is the most effective way to put out the petroleum-based fires that occur in aircraft accidents. The foam was used at the fire training area at NAS Whidbey and possibly on runways.

11: SOCIOECONOMIC IMPACTS

Costs of hearing loss

www.hear-it.org estimates the economic burden of severe to profound hearing loss is \$300,000 over a victim's lifetime, or \$43,000 if it occurs after retirement.

Costs to schools

The DEIS estimates income from taxes and additional economic activity from the presence of Navy families on the island, but makes no effort to quantify the costs of the new activities such as the proposed additional load on schools which are already overcrowded. For example: nationally, a K-12 student costs \$8-\$10K per year exclusive of capital costs. These costs are available by school district, yet, the DEIS authors made no effort to quantify these or other costs.

The US Government pays no local taxes, yet 25% of the school budget is from local sources (mostly property taxes). 50% of Oak Harbor students are from federal employee (military) families, so $(25\% \times 50\% =) 12.5\%$ should be expected from federal impact funds. The 2016-2017 Oak Harbor budget expects only 7.3% from federal impact funds, or about a \$3M annual shortfall.

Costs to Low Income Populations

In section 3.11 of the DEIS, the Navy has concluded that there are no significant impacts on low income communities and communities of color. But in fact, people who can afford to sell their homes and move out of the impacted area have a choice, whereas low income people do not have the same choice. This is a disproportionate impact.

The DEIS fails to forecast impact of jet noise on demographics. Growler noise has and will continue to drive out residents who can afford to relocate. Due to the falling housing costs in undesirable (i.e. high noise and toxic-well) areas, lower-income families will be forced to live in these unhealthy, undesirable areas. This represents a disproportionately negative impact on economically disadvantaged populations.

Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise.

Loss of Property Value

The principle subdivisions affected by Growler noise lost 6.64% of their property value between 2010 and 2015. In Island County as a whole, property values dropped about 3%. Therefore 3.64% of lost property value can be attributed to the Growlers—a taking of about \$9 million. This number will go up as the Growler program intensifies, and word of the problem spreads.

A recent evaluation of the properties affected by noise document a 3.6% reduction in property values -- at the current levels of noise. This amounts to a taking of approximately \$9,000,000.

The DEIS made no effort to compute the reduction in property values and only quoted academic work relating to commercial airport noise impact on property values. Data on assessment, sales and home values is available and can be computed on properties within and outside the impacted areas. This is how the \$9,000,000 was calculated.

This \$9,000,000 is computed only for Island county and will grow as more Growlers train and the noise become more pervasive and the reputation of the area is further harmed.

Additionally, all properties with wells that have tested as toxic cannot be sold, so those properties are now greatly diminished. This represents a devastating loss for many families and individuals.

Sales taxes

Island County receives nearly the lowest sales tax yield per capita in the state (and other military-dependent counties compete with it). If the tax yield from Navy families were the same as from average Washington state residents, the County would receive \$3.5 million more in tax revenue.

Opportunity costs

A military job has much less economic impact than the civilian equivalent – below we refine the models to determine how many civilian jobs it would take to equal the economic impact of the current & planned military jobs:

“In my economic model, I performed the following exercise. I removed all military jobs (the model has them at 6,170 in 2014), and redistributed them in sectors of the Island County where there was significant leakage (nonlocal expenditures). I distributed the jobs proportional to the leakages. The result was that the Island actually grows 5,511 MORE jobs (because of the indirect effects), with \$607 million in additional wages, \$1.6 billion in more value added, and \$151 million in new state and local taxes. “

1J: HAZARDOUS MATERIALS AND WASTES: see 1E: Air Quality and 1H Water Issues

1K: ENVIRONMENTAL IMPACT

Page 4-296 states Scenario A will increase the entire Whidbey Naval Station Co2 output by 57% which is .7% of all plane emissions in Washington state.

(See Air Quality Issues, above)

1L: IMPACT ON WILDLIFE AND DOMESTIC ANIMALS

Wildlife:

The DEIS contains an inventory of the plants and animals that live in the study area, but nowhere does it address the effects of increased exposure to loud sounds, low frequency vibration, or water toxicity on any of these organisms.

Birds and animals use the pitch and frequency of each animal's "voice" as a determinant of its place in its habitat – where to be at what times of day or night, and what other animals inhabit that space at that time. Very loud noise disrupts this communication, both intra-species and inter-species, thereby disrupting habitat occupation, reproduction, and behavior. Further, loud noise can affect animals – both marine and land – as profoundly as it does humans. Hearing and general health (related to stress and immune function) are vulnerable. The DEIS does not address this issue except to say that any animals not already impacted "have adapted". No proof is offered, nor any definition of "adaptation".

From the EBLA report: "Anthropogenic noise may also disrupt ecosystem processes by interfering with predator prey relationships and the ability of wildlife to communicate, establish territory, reproduce, support and protect offspring (Siemers and Schaub, 2011; Schroeder et al., 2012; McClure et al., 2013)... "Chronic noise exposure... may interfere with predator prey relationships and the ability of wildlife to communicate, forage, establish territory, and reproduce (Barber, 2010)."

Further, animals drinking from water sources polluted by PFOAS leaching from a crash site or from fire-fighting training sites are just as susceptible as humans to the effects of those toxins.

The DEIS confines its wildlife impact information to mid-air collisions (birds and bats), and no mention is made on terrestrial organisms. With respect to avian species, the area lies in a critical migratory and breeding area; there is no doubt that increased flight operations will impact both, particularly breeding activity. This will certainly be true for terrestrial species.

The impact of increased flights over Olympic National Park for electronic warfare training is not adequately addressed. This park has been measured to be one of the last quiet places on earth; the navy's added flights will change this and impact many species, some of them endangered, such as the marbled murrelet.

Nascent sound scientists were tasked with gathering field recordings of nature's auditory ensemble and using them to study the relationship between sound and functioning ecosystems. A groundbreaking 1993 news dispatch from Sweden detailed its effects on wild animals: when a military jet flew over a zoo, animals ate 23 of their own babies as a protective response. (Those affected included Siberian tigers, foxes, and lynxes.) Studies have since shown that animals carve out sonic "niches" to hear the information they need for mating, navigating, hunting, and not being hunted. "To interrupt that information flow, even for a few brief seconds, is dangerous," Hempton says. When exposed to sudden bursts of unfamiliar noise, they revert to survival instincts. In wild areas where noise persists, animals have been known to drop in numbers. According to a 2006 report from the U.S. Fish and Wildlife Service, the Northern spotted owl, an endangered species found in Hoh Rainforest, has been found to neglect feeding its young, or even to eject eggs and juveniles from the nest, when noises like passing trucks or electric tools are present.

Farm Animal and Domestic Pet Impact

No assessment is given in the DEIS on the impact of flight training on the nearby farm and domestic animal population. Citizens have reported significant anxiety issues with their animals. A study of the number of animals that have disappeared during times of high noise (flight trainings), animals that have injured themselves, and other occurrences such as decreases in milk production in dairy cows, sheep and goats should be included in the DEIS.

ISSUES NOT ADDRESSED IN THE DEIS

2A: IMPACT OF JET NOISE ON PATIENT CARE AT WHIDBEY HEALTH (HOSPITAL)

The DEIS does not address the impact of high noise events upon patient care at Whidbey Health. Flying directly over a hospital cannot help but affect patient stability and the ability of medical staff to communicate with patients and with each other. No statistics are cited regarding increase in heart attack, stroke, and accident patients seen in the emergency room during or as a result of high noise events. This must be thoroughly studied for the EIS to be valid.

2B: DUMPING OF FUEL

Dumping of fuel: There is no mention in the DEIS of the practice at NAS Whidbey of dumping jet fuel over both land and water. This practice is of significant concern and should be addressed in the EIS.

2C: IMPACT ON TOURISM

The tourism industry in Washington State employs 154,500 people, creates \$5 billion in earnings (payroll), generates total direct visitor spending of \$17.6 billion and generates \$1.1 billion in state and local tax revenue, and touches the community in countless other ways. Hotels and meeting facilities, attractions, restaurants, cultural institutions, tour companies and transportation providers are among the local businesses greatly impacted by travel to Washington State. *Source: Preliminary 2012 Travel Impacts Report / Washington Tourism Alliance*

Nationwide, the U.S. travel industry directly employees 7.4 million people, generates payroll of \$188 billion, travel expenditures of \$758 billion and tax revenues of approximately \$118 billion. The U.S. Travel Association ranks travel fifth among 20 major private industry sectors. Visitors to the U.S. spend more here than U.S. residents traveling abroad, creating a \$32 billion trade surplus for the national economy. *Sources: U.S. Travel Association, Bureau of Economic Analysis, U.S. Department of Commerce: Office of Travel & Tourism Industry*

From EBLA Report: "People visit national parks to see, hear and experience myriad phenomena associated with specific natural and cultural environments. Yet, in many cases, those environments are being increasingly impacted by anthropogenic noise altering their experience (Lynch, Joyce, and Fristrup, 2011)"

2D: IMPACT ON NATIONAL PARK AND NATIONAL FOREST LANDS

The Navy Plans to Construct an Electronic Warfare Range Covering Olympic National Park, Olympic National Forest and Western Clallam & Jefferson Counties

: 1. Periodic unannounced closures of portions of Olympic National Forest for war games, testing and training. 2. Up to 118 Growler jets flying over Olympic Peninsula communities 260 days/year, 8-16 hours/day, day or night, in 5,000 "events"/year. The Navy has not defined "event". Growlers fly in groups of three. This could mean 15,000 flights/year. Currently there are 1250 flights/year. The Navy must define "event". 3. Growlers, the loudest Navy jet, can produce 150 db, enough to cause instantaneous hearing loss. Navy statistics say they produce 113 db at an altitude of 1000 feet, well above the 85 db threshold for permanent hearing loss. Growlers can fly at 1200 feet above ground level in some areas of the Olympic Peninsula. With three Growlers flying together, local noise levels will be worse. 4. Ground-based equipment using 15 locations in the Olympic National Forest will emit enough electromagnetic radiation to melt eye tissue after brief exposure in close proximity. Growler jet electronic weaponry is far more powerful. 5. A National Park Service report issued in July 2014 showed that in 2013, 3,085,340 visitors to Olympic National Park spent \$245,894,100 in communities near the park. That spending supported 2,993 jobs in the local area. Visits to the Park increased 17.1% in 2014. Without a clean and quiet environment this economic success will be a thing of the past. Alarming effects of a warfare range: 1. A Navy supporting document says, "Friendly Electronic Attack could potentially deny essential services to a local population that, in turn, could result in loss of life and/or political ramifications." 2. Each jet burns 1304 gallons per hour and produces 12.5 metric tons of CO2 per hour. This is 23% more than the annual CO2 emissions of a Washington State citizen. 3. Aircraft aerial maneuvers and their resulting horrific noise on the western half of the Olympic Peninsula will have an overwhelming impact on people living in or visiting the area. 4. In both wildlife and humans, effects from loud noise include hearing loss,

increased stress hormones, cardiovascular disease, immune system compromise and behavioral/psychosocial impacts. 5. One billion birds fly up and down the Pacific Coast Flyway each year. The effects of loud noise and electromagnetic radiation on their ability to find resting places and to navigate has not been analyzed by the Navy or the Forest Service. Why you may not have heard about the Navy's plans: 1. No public notices were published in any media that directly serve the northern and western Olympic Peninsula. In the absence of public comment, the Navy issued a "Finding of No Significant Impact." 2. Neither DNR nor Olympic National Park was consulted in the early stages of the Navy's Environmental Assessment. The Navy has not applied for a permit to use DNR lands. 3. Destruction of neither the "wilderness soundscape" over Olympic National Park nor property values in areas subject to jet noise are discussed in any official documents. 4. The Navy's EA said the EWR would include electronic surveillance AND electronic attack, yet none of its environmental documents evaluate the impacts of either electronic surveillance OR electronic attack in the EWR. 5.

2E: NONCOMPLIANCE WITH NEPA STANDARDS FOR CONTENT AND LENGTH OF the DEIS

The Draft DEIS as published is not compliant to NEPA requirements:

In the DEIS, a cost-benefit analysis was not performed as required by 40 CFR 1502.23. Of the many significant impacts stated in the DEIS (e.g. Additional households are subjected to increased aircraft noise, school interruption due to aircraft noise, APZ establishment restricting property rights, additional overcrowding in Oak Harbor schools, an already-tight housing market that will be further stressed), none have had cost/benefit analysis performed. The DEIS lists total employee earnings, but has no discussion of the costs to the public (schools, sewage, roads, other infrastructure) as a reasonable cost/benefit analysis would normally have.

Page limits have been excessively exceeded over the "normal" limit of 300 pages(Sect. 1502.7) having the effect of obfuscating the issues the DEIS should address as reflected by comments received during the scoping period.

The NEPA Act states that the primary purpose of the statement is to allow for a "full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."

In order to accomplish its goals of a full and fair discussion, the Act sets out several requirements. Among them:

Sec. 1502.7 Page limits.

The text of final environmental impact statements (e.g., paragraphs (d) through (g) of Sec. 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages.

The referenced DEIS is five times longer than the act recommends.

Sec. 1502.14 Alternatives including the proposed action.

This section is the heart of the environmental impact statement. Based on the information and analysis presented in the sections on the Affected Environment (Sec. 1502.15) and the Environmental Consequences (Sec. 1502.16), it should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public. In this section agencies shall:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.
- (e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

The 9 different possible actions listed as alternatives are essentially one alternative (accept 35-36 new Growlers). Other alternatives for deployment, non-deployment or training dismissed with no analysis. "No action" is considered only as a baseline. There is virtually no substantive difference in the environmental impact of the 9 scenarios described. The Navy has not made a good faith effort to explore other alternatives as NEPA requires in Sect. 1502.14 (a).

2F: BRIEFNESS OF RESPONSE TIME VS. LENGTH OF DEIS

Reviewing and responding to the draft DEIS within the 75-day comment period determined by the Navy puts an undue hardship on other agencies and the public to have a "full and fair discussion" as required by the Act. This is particularly true because of the excessive length of the DEIS as discussed in the section above.

Since **Sec. 1502.7 (Page limits) of EPA regulations for an EIS states that** the text of final environmental impact statements (e.g., paragraphs (d) through (g) of Sec. 1502.10) shall normally be less than 150 pages and for proposals of unusual scope or complexity shall normally be less than 300 pages, the DEIS is far too large for the normal resident to absorb and understand in such a short period. Additionally, the fact that the comment period happened over a holiday period further complicates this because many will not have had a chance to voice their concerns in this timeframe. Actions that greatly impact a community require an appropriate amount of time to learn, understand and respond. The timing of this is not acceptable; the public needs more time.

2G: RATIONALE FOR HAVING 100% OF GROWLER JETS STATIONED AT NAS

No clear rationale for adding 35-36 aircraft to NAS Whidbey. Having all electronic warfare equipment in one locale creates a **maor taget** for those seeking to destroy electronic warfare capability, thereby putting both the public and national security at risk.

Another problem in using the OLF for exclusive military-wide electronic warfare flight training is the weather: frequent wind, fog, and **major** rain events. Winds for about 8 months in the year are predominantly from the south (i.e., tailwinds),

which means either canceling scheduled FCLPs or making pilots land and takeoff with a tailwind, something never done on carriers. More severe rain and wind events occur in the winter months, which compacts FCLP training into even fewer acceptable days, thereby forcing more FCLP sessions into summer days, when residents are outside and have windows open. Night flights must take off later during the summer, which exacerbates problems with late-night (10 PM to 1 AM) training, including sleep loss and annoyance.

The Navy argues that OLF is essential for simulating actual carrier landing conditions. The Navy states that FCLP training should be at conducted at <200 feet above sea level to simulate actual carrier landing elevation. That argument conveniently ignores “*density altitude*.” Aircraft performance is based on *density altitude*, not *true altitude* above sea level. Density altitude is pressure altitude corrected for nonstandard temperature—i.e., it is a combination of barometric pressure, temperature, and humidity. Higher temperatures, altitude, and increased moisture reduce the density of the air. So, in a sense, density altitude is the altitude at which the airplane “feels” it is flying. A reduction in air density reduces engine power, aerodynamic lift, and drag. The EA-18G flight manual cautions pilots to calculate density altitude before each takeoff. That is, because aircraft behave according to density altitude rather than actual altitude, landing or taking off during high-density altitude conditions necessarily increases approach speed and involves longer landing roll and longer takeoff roll.

Table 2 compares density altitude of four possible western U.S. sites where NASWI could conduct FCLP training and compares them to both OLF and actual real world carrier launch conditions in the troubled South China Sea and the Persian Gulf (the two most likely areas for carrier launches to occur). Compared to these other west coast Navy sites, the OLF offers the worst venue for “train as we fight” conditions.

Table 2.—Density altitude comparisons at four west coast FCLP training options versus actual carrier launch conditions in the Persian Gulf and South China Sea. These examples are based on an “average day” at each location [from www.USA.com].

Location	Elevation (feet) ¹	Air Temp. (°F)	Barometric Pressure ²	Dew Point	Density Altitude
FCLP Training at OLF Coupeville					
OLFC	200	51	29.92	35	337
FCLP Training Sites, U.S. West Coast					
Lemoore NAS, CA	230	62	29.92	56	678
Moses Lake, WA	1189	50	29.92	45	1010
El Centro, CA	-40	75	29.92	40	1284
Yakima Training Area	1370	77	29.92	43	2963
Actual Carrier Launch Sites					
Persian Gulf	60	88	29.92	88	2182
Manilla ³	60	88.2	29.92	79	2367
Ho Chi Minh City ³	60	90.3	29.92	81	2525

¹ Airfield elevations were taken from FAA Airfield Diagrams, and actual carrier elevations are mean sea level plus 60 feet to the flight deck.

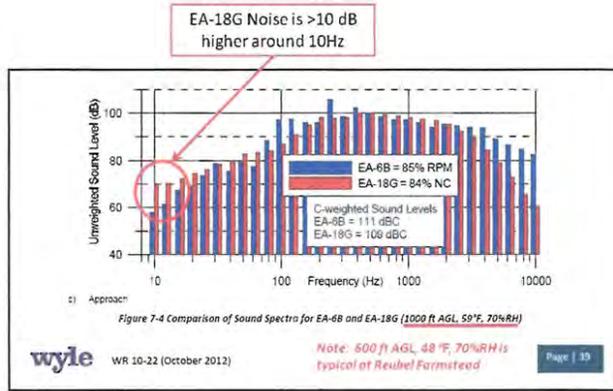
² FAA "standard day" barometric pressure is 29.92.

³Historical climatological data was not available for the South China Sea, as bounded by Manila and Ho Chi Minh City, but weather for these two cities should closely approximate.

2H: IMPACT ON HISTORIC STRUCTURES

Growler jets produce more low frequency noise (15-20dB more) than the A-6B they replaced, yet the impact of low frequency on historical structures isn't covered in the DEIS. Low frequency "rumble" below the range of human hearing can rattle buildings historical buildings are particularly vulnerable to weakening and structural failure. Low-flying Growlers generate damaging resonances which weaken structures, cause increased cracking and loosen joints, to make the structures more vulnerable to other deterioration causes (wind, rain).

The historic Reuble Farmstead at Ebey's Landing National Historical Reserve is directly under the FCLP flight path. EA-18G jets fly directly over Reuble Farmstead at 600 Feet for FCLP.



Source: Final VAQ EA October2012 Appendix C reduced.pdf

- Sound Exposure Level (SEL) over 100dB recorded by National Park Service for a single event monitored at Reuble Farmstead:

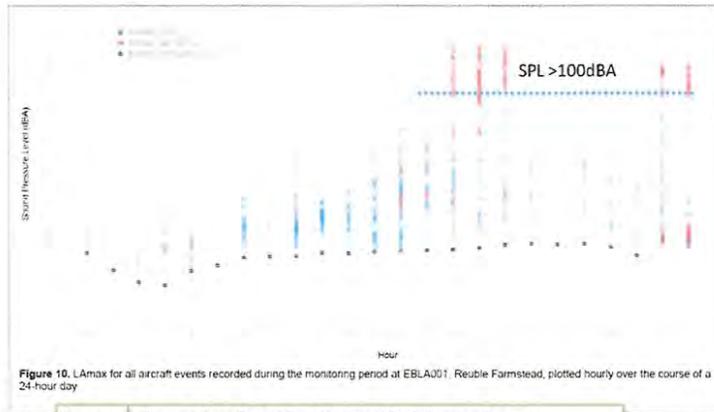


Figure 10. Lmax for all aircraft events recorded during the monitoring period at EBLA001, Reuble Farmstead, plotted hourly over the course of a 24-hour day

Source: Figure 10 on Page 15 of National Park Service: Ebey's Landing National Historical Reserve Acoustical Monitoring Report Natural Resource Report NPS/ELBA/NRR – 2016/1299

Increased low freq intensity of Growler may have an even greater impact on historic structure

Hanson et al reports that frequencies below 40Hz create potential resonances with wood-framed walls and that wood frame and plaster can become damaged at frequencies below 2.7 Hz with displacement greater than 0.03 inches.

*Reference:

Carl E. Hanson, Kenneth W. King*, Mary Ellen Eagan and Richard D. Horonjeff ,
AIRCRAFT NOISE EFFECTS ON CULTURAL RESOURCES: REVIEW OF TECHNICAL LITERATURE, NPOA Report No. 91-3, September 1991, HMMH Report No. 290940.04-1; pg 22, Table 2.3

We've measured 65 decibels and more, in back yards in Port Townsend, which is about 16 miles from Ault Field and 10 miles from the OLF airfield. Quilcene residents have measured 80 to 85 db. In addition to the serious health effects of which you are no doubt aware, sustained low-frequency noise from these jets has the power to compromise the structural integrity of buildings in historic districts, as the City of Port Townsend pointed out to you in a recent letter. This is not just a cultural concern; noise-weakened structures of any age are less safe in earthquakes and high wind events, and repairs will have to come out of municipal and Tribal budgets.

2I. ADDITIONAL ALTERNATIVES

The 9 different possible actions listed in the DEIS as alternatives are essentially one alternative (accept 35-36 new Growlers) with other alternatives for deployment, non-deployment or training dismissed with no analysis. "No action" is considered only as a baseline. There is virtually no substantive difference in the environmental impact of the 9 scenarios described. The Navy has not made a good faith effort to explore other alternatives as NEPA requires in S40 CFR 1502.14 (a), listed above. All of the Navy's 'alternative' scenarios will increase noise, harm health, and have other adverse impacts. The Navy's plan would increase Growler operations that already expose people in homes, schools, parks and businesses to noise that exceeds community standards set by the State of Washington, the EPA, the Occupational and Health Administration (OSHA), and the World Health Organization. Why is there no genuine no-action alternative?

" The Navy plans to buy 88 Growlers, which will replace the EA-6B Prowler as the fleet's primary electronic warfare aircraft." The DEIS makes no mention of an alternative to not use the additional aircraft for deployment. 88 aircraft were originally intended to replace the EA-6. The Navy did not originally request the additional 36 aircraft, and could reasonably be expected to use the additional aircraft as *replacements* as needed. The aircraft could be stored for future use. This option has not been addressed in the DEIS.

Training elsewhere:

The DEIS does not include consideration of acquiring property elsewhere to conduct safe flight operations with minimal impact to civilian populations.

40 CFR 1502.14, 'Alternatives Including the Proposed Action,' states:

- (a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.
- (b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.
- (c) Include reasonable alternatives not within the jurisdiction of the lead agency.
- (d) Include the alternative of no action.

The "no action alternative" is given only for comparison purposes and is not presented as a true alternative. All the actual alternatives given involve additional Growlers and training activity on Whidbey Island.

2J: ACTUAL NEED FOR ADDITIONAL GROWLERS

NEPA National Environmental Policy Act, 40 C.F.R. 1502.13 states that the "key aspect of a draft DEIS is the statement of purpose and need." Section 1-3 of the DEIS states that the need for the proposal is to maintain and expand growler operational readiness. The original DEIS was for 13 aircraft. The Whidbey DEIS.com website states that since congress has approved 35 or 36 new aircraft it would not

be rational to consider only 13 aircraft. That rationality requires the assumption that any expiation of military readiness is in itself necessary. The DEIS has not demonstrated a need for 35 or 36 new aircraft.

2K: USE OF PUBLIC LANDS FOR TRAINING

The Navy does not adequately substantiate its need for non Defense Department lands, as was required by the 1988 Master Agreement; instead of proving that no DoD lands were available or suitable, it said using the Olympic Peninsula's public lands was for the purpose of saving \$4 to \$5 million dollars of jet fuel per year. Saving fuel is a good goal, but this reason does not prove that DoD lands were either unavailable or unsuitable, which was the primary requirement of the Master Agreement.

2L: LARGER SCOPE OF NOISE EVALUATION

The geographic scope of noise evaluation for this DEIS as described on page 5-12 of the DEIS is limited to the immediate environs of the Naval Air Station Whidbey Island complex, yet Growler noise is chronic and loud in many communities and wildlands in other areas that these flight operations impact; they may not hear takeoffs and landings, but they do hear and are severely affected by jet noise, including the use of afterburners for aerial dogfighting.

2M: BLUFF INSTABILITY VS. LOW FREQUENCY VIBRATION

No data is provided in the DEIS on bluff instability concerns and how low frequency vibration at high amplitude produced by Growler jets can cause instantaneous or eventual bluff erosion along the coast. Citizens have observed bluff collapse immediately following fly-overs. This must be addressed.

2N: COMPENSATION

Regarding the possible establishment of new noise exposure zones, the DEIS' "Air Installations Compatible Use Zone" (AICUZ) guidance recommends "lower land-use density" within these noise zones. It says, "land uses previously considered compatible may become incompatible." In other words, farming and residential land uses, which are what largely surrounds OLF and NAS, could become "incompatible," whether they desire this or not. How will the Navy compensate these people for loss of property values, loss of livelihoods, and loss of traditional recreational opportunities?

2O: FLIGHTS OUTSIDE PLANNED ZONES

Although The DEIS states that flights will sometimes veer from planned flight zones, and citizens outside flight zones experience this to be true on a regular basis, all of the information in the DEIS relates only to planned zone impacts. Citizens in Anacortes, for instance, report Growlers often flying directly over the town. Clearly there are impacts from flights not within planned zones. This should be addressed.

2P: CONFUSION OVER ACTUAL NUMBER OF JETS PLANNED

The DEIS figures are for 35 or 36 more growlers to be added. However, in actuality *another* 35 growlers are being added by 2018 for a total of at least 70 added, making a total number of growlers on Whidbey Island 153. Therefore all of the calculations in the DEIS are incorrect and vastly understated.

82 here now, plus 35 more for 118 total discussed in EIS, PLUS another 35 by 2018 not mentioned in the DEIS, for a total of 153.

*At the Navy's Open House public meeting on Lopez Island on December 7, 2016, I had a chance to talk to a senior officer in uniform who I learned was from Norfolk, VA (Naval Facilities Engineering Command Atlantic?). He informed me that there were currently over 100 Growlers already stationed at NASWI, and that the number would increase to roughly 160 when all the procured Growlers were

manufactured, tested, and flown one by one to Whidbey Island. Based on the draft EIS, there will be a maximum of 118 Growlers in active operations. If the total number of procured Growlers to be stationed at NASWI is 160 as I was informed by the senior officer, this means the remaining 42 Growlers will be “spare”? Given the costs involved, it is difficult to believe that 42 spare Growlers are needed for an active fleet of 118. Is it possible that additional Growlers may be further added to the current proposed addition of 35-36 Growlers to the existing 82 in active operations? If so, why is there no mention in the current EIS process? If not, what kind of maintenance routines would be needed to keep spare Growlers in good working conditions year after year? Do they have to be “run” occasionally to keep engines in working order? At a minimum, the draft EIS should include a description of the maintenance routines of these spare Growlers and an analysis of their potential environmental impacts, including noise and air emissions.

*Recommendations: The Navy should provide details regarding plans for all the 160 Growlers at NASWI in the draft EIS, at least for the accumulative impact analysis to be complete and meaningful. The draft EIS should also include impact analysis of the maintenance routines of spare Growlers.

CONCLUSIONS

The summary of the draft DEIS for EA-18g airfield operations in section 6.1 states that the DEIS complies with National Environmental Policy Act, NEPA. It does not.

The Navy DEIS has simply reproduced studies that document the already well-known impact of excessive noise on human activities, and does not address incremental impacts of the additional aircraft.

None of the items in section 2 above have been addressed in the DEIS.

None of the following have been addressed in the DEIS:

- NEPA Sec. 101 [42 usc.4331] states that NEPA shall “assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.”
- NEPA 40 C.F.R. 1502.13 states that effects and impacts shall include “ecological, aesthetic, historic, cultural, Economic, social or health”
- The NEPA process - Sec. 1502.14 Requires Alternatives including the proposed action.

- Sec. 1502.23 Cost-benefit analysis.

If a cost-benefit analysis relevant to the choice among environmentally different alternatives is being considered for the proposed action, it shall be incorporated by reference or appended to the statement as an aid in evaluating the environmental consequences. To assess the adequacy of compliance with section 102(2)(B) of the Act the statement shall, when a cost-benefit analysis is prepared, discuss the relationship between that analysis and any analyses of unquantified environmental impacts, values, and amenities. For purposes of complying with the Act, the weighing of the merits and drawbacks of the various alternatives need not be displayed in a monetary cost-benefit analysis and should not be when there are important qualitative considerations. In any event, an environmental impact statement should at least indicate those considerations, including factors not related to environmental quality, which are likely to be relevant and important to a decision.

Greenbank, WA 98253

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

The water contamination to sole source aquifers is not adequately addressed in the Dels. There is already contamination in wells tested, This contamination has poisoned the water for any personal use, farming use, resource use, for current and future lifetimes. The impact to human and animal life is devastating. When active poisoning is taking place, you do not increase the source of that poisoning. Would you have your children or grandchildren living in these conditions?

January 6, 2017

EA-18G EIS Project Manager
 Naval Facilities Engineering Command (NAVFAC) Atlantic
 Attn: Code EV21/SS
 6506 Hampton Blvd.
 Norfolk, VA 23508

Re: Public Comment Against Draft EIS for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island

Dear Sir/Madam:

I am a resident of Clallam County Washington. I am extremely concerned about the effects of noise generated by the Electronic Attack Squadron (VAQ) 132 over the Olympic National Park and surrounding areas including populated areas. Every effort should be made to mitigate the noise to prevent injury to habitat for humans and other animals. I understand that there is no need for the pilots to be at an elevation (other than for landing and take-off) lower than ten-thousand feet, but pilots have been well below this elevation numerous times as evidenced by the flight records kept by the Whidbey NAS and by many complaints received by NAS Whidbey. Can you find a way to assure citizens that flights will not be lower than the ten-thousand foot level?

I also understand that a similar aircraft practices in Mountain Home Idaho AFB, home of the 366 Airforce wing. In fact, the 390th Electronic Combat Squadron, which I believe includes the Electronic Attack Squadron, located at Naval Air Station Whidbey Island, Wash., is assigned to the 366th Operations Group out of Mountain Home AFB. Is the duplication of such training facilities necessary?

I am sure you are aware of the December 16, 2016 incident at NAS Whidbey. The US Navy (USN) has grounded its fleet of Boeing F/A-18E/F Super Hornet and EA-18G Growler combat aircraft while it investigates the cause of a ground incident on 16 December that injured two flight-crew.

The incident at Naval Air Station (NAS) Whidbey Island in Washington state saw an EA-18G Growler from Electronic Attack Squadron (VAQ) 132 experience an unspecified "on-deck emergency" that required both crew members to be airlifted to hospital, a USN statement said.

The Olympic National Park is a National Heritage site, and citizens on the Olympic Peninsula deserve reasonable noise mitigation. I strongly urge appropriate, affective noise mitigation and high altitude only flights which the current draft EIS does not adequately address or resolve.

Sincerely,

Name:

Address:

Port Angeles WA 98362

cc: Hon. Derek Kilmer, U.S. Congressman, 6th CD, WA State

- 1.a. Thank You
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 2.a. Purpose and Need
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 4.l. Points of Interest
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children

Portland, OR 97215

It is irresponsible and unnecessary to continue these environmentally-damaging flights. The 80 Growler jets based at Whidbey Island are impacting people and animal's health with their super-loud noise and toxic jet streams. Anything under their flight path, and for miles around are affected. It's not right! In the San Juan Islands alone, a county website has received more than 6,500 noise reports since May 2014. Put an end to this torture!

1.a. Thank You

6.a. Air Quality Impacts from Mobile Source Emissions (Jet Engine and Vehicle)

Friday Harbor, WA 98250

The DEIS is completely inadequate, if not dishonest. It does not really address the air pollution, the terrible noise impacts over a very large area, or the community impacts on Whidbey Island caused by bringing even more people to the Island.

- 1.a. Thank You
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act

Coupeville, WA 98239

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

2. The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather than busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

1.The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP).

Coupeville, WA 98239

1.a. Thank You
4.j. Other Reports

4. The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconception has to be credibly revised to properly characterize the real impacts.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

5. Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

Coupeville, WA 98239

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports

3. The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupported, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

Port Townsend, WA 98368

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

I am requesting a 45 day extension for comments on the EIS for the EA-18G Growler Airfield Operations at NAS. The holidays interfere with the timing people need to comment appropriately. Thank you for your consideration.

Nordland, WA 98358

To: EA-18G EIS Project Manager Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508 Dear Sir/Madam, Thank you for extending the comment period to February 24, 2017, in order accommodate the fact that having four major public processes open over the holidays, all concerning Navy activities or the biological resources that may be affected by them, made it difficult to read, comprehend and prepare comments in a timely way. 1. Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated, yet impacts are significant. Noise from EA-18G Growlers is affecting communities far outside the vicinity of Naval Air Station Whidbey Island, yet the only area the Draft Environmental Impact Statement (DEIS) analyzes in its “study area” is what falls within 6 to 10 miles of the corners of runways. Growler aircraft, which are capable of 150 decibels (dB), use these runways to get airborne and to land; therefore, what happens outside the study area cannot be ignored as if it does not exist, because all flight operations are functionally connected to takeoffs and landings. By considering only takeoff and landing noise and exhaust emissions at Ault Field and Outlying Field (OLF) Coupeville, the DEIS fails to consider the wider area of functionally connected impacts caused by naval flight operations. By failing to consider the interdependent parts of a larger action that cannot proceed without takeoffs and landings, as well as their impacts, the DEIS fails to evaluate cumulative effects. 2. Impacts to cultural and historic sites are not adequately considered. The Navy so narrowly defined the Area of Potential Effect (APE) for cultural and historic resources that it also fails to consider significant nearby impacts. The State Historic Preservation Officer confirmed this in a January 9, 2017 letter to the Navy. (http://westcoastactionalliance.org/wp-content/uploads/2017/01/SHPO-Letter-102214-23-USN_122916-2.docx) She said that not only will cultural and historic properties within existing APE boundaries be adversely affected, but additional portions of Whidbey Island, Camano Island, Port Townsend vicinity and the San Juan Islands are also within noise areas that will receive harmful levels of sound and vibration from Growler activity. The US Department of Housing and Urban Development posted noise abatement and control standards that classify the 65 dB levels being used by the Navy as “normally unacceptable” and above 75 as being “unacceptable.” (<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>) Residents in these outlying areas, who live many miles from these runways, have recorded noise at least twice that loud. Therefore, by failing to include these areas, this DEIS violates both the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). 3. Piecemealing projects to avoid analyzing cumulative effects is illegal. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into at least six separate actions: 1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft; 2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers); 3. 2012 EA (26 Growlers including 5 from a reserve unit); 4. 2014 EA (Growler electronic warfare activity); 5. 2015 EIS discussing electronic warfare training and testing activity; 6. The current 2016-2017 DEIS (36 Growlers); 7. And, likely, a seventh process, as confirmed by news reports and a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160. Therefore, it has been impossible for the public to

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.c. Segmentation and Connected Actions
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.f. Endangered Species Impact Analysis Adequacy
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 19.a. Scope of Cumulative Analysis
- 19.b. Revised Cumulative Impacts Analysis
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.h. Cumulative Impacts on Biological Resources
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process
- 2.h. Next Steps
- 2.i. Proposed Action
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.d. Arrivals and Departures
- 4.a. General Noise Modeling
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.i. Other Noise Metrics Not Currently in Analysis
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish. In just four documents—the 2014 EA, Forest Service permit Draft Decision, and the 2010 and 2015 EISs, there are more than 6,000 pages of complex technical material. The number of Growler flights at Outlying Field (OLF) Coupeville alone went from 3,200 per year to a proposed 35,100 in 2017. That's more than a 1,000 percent increase at this runway alone, yet according to the Navy, there are "no significant impacts." The National Environmental Policy Act (NEPA 40 C.F.R. §1502.4) "...does not allow an approach that would permit dividing a project into multiple 'actions,' each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." The DEIS evaluates not the totality of impacts from the current fleet of 118 Growlers, nor the projected total of 160 of these aircraft, but slices out 36 of them for an incremental, piecemealed look, and concludes from both the construction activities and the addition of just these 36 new Growlers to the fleet, that no significant impacts will occur in the following categories: public health, bird-animal strike hazards to aircraft, accident potential zones, emissions of all types, archaeological resources, American Indian traditional resources, biological resources, marine species, groundwater, surface water, potable water, socioeconomics, housing, environmental justice, and hazardous waste. To state the obvious, impacts from this many Growlers, when taken together, are likely to be significant. Segmenting their impacts has allowed the Navy to avoid accountability. 4. The DEIS does not analyze impacts to groundwater or soil from use of firefighting foam on its runways during Growler operations, despite the fact that before this DEIS was published, the Navy began notifying 2,000 people on Whidbey Island that highly toxic carcinogenic chemicals had migrated from Navy property into their drinking water wells, contaminating them and rendering these people dependent on bottled water. 5. The DEIS fails to discuss, describe or even mention any potential impacts associated with electromagnetic radiation in devices employed by the Growlers in locating and interacting with the ground transmitters. It fails to mention any potential impacts associated with aircrew practicing using electromagnetic weaponry, that will allow the Navy to make good on its 2014 statement that this training and testing is "turning out fully trained, combat-ready Electronic Attack crews." 6. The current comment period on a Draft EIS should not be the last chance the public will have for input. However, Navy announced on its web site that it does not intend to allow a public comment period on the Final EIS. The "30-day waiting period" proposed for the Final EIS is not a public comment period, and thus would be unresponsive to serious and longstanding public concerns on matters that will affect our lives as well as the lives of people doing business throughout the region, plus the visitors who are the tourism lifeblood of our economy, and the wildlife that inhabits the region. The Navy must allow the public to participate throughout the process, in order to be able to be able to assess the full scope of direct, indirect and cumulative impacts. This is doubly important because so many impacts have been excluded from analysis. A federal agency is required to prepare a supplement to either a draft or final EIS, and allow the public to comment, if there are significant new circumstances or information relevant to environmental concerns, that bear on the proposed action or its impacts. 7. There are no alternatives proposed in this DEIS that would reduce noise. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." According to a memo from the President's Council on Environmental Quality (CEQ) to all federal agencies, "Reasonable alternatives include those that are practical or feasible from the

technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.”

(<https://energy.gov/sites/prod/files/G-CEQ-40Questions.pdf>) The three alternatives presented by the Navy are merely a shell game of choices among the same number of flights, but for different percentages of activity at runways. This pits communities against each other, as the runway that receives more flights will determine the “loser” among these communities. 8. The Navy has exacerbated the problem stated in #8 by not identifying a preferred alternative in the DEIS. According to the CEQ memo, “[NEPA] Section 1502.14(e) requires the section of the EIS on alternatives to “identify the agency’s preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement . . .” Since the Navy has not done this, communities cannot evaluate potential noise levels. Since the Navy has also announced that it will not provide a public comment period for the Final EIS, communities will have no chance to evaluate the consequences or even comment on the preferred alternative. 9. The Navy states that it evaluated noise for the Olympic Peninsula in 2010 with the Northwest Training Range Complex EIS, but that document did not do so. The Navy claims its documents are “tiered” for this purpose, but they are not. Had the activities contemplated by the proposed Electronic Warfare Range been evaluated by that EIS, the ground-based mobile emitters should have been listed as an emission source. They were not. For Electronic Combat and Electronic Attack, the only areas listed by activity and training area, warfare type, and Range and Training Site were the Darrington Area and W-237. Neither is on the Olympic Peninsula. Had noise been properly evaluated, the Olympic MOAs should have been listed. They were not. Therefore, noise from Growler activities has not been evaluated in this or any previous for the Olympic Peninsula. 10. The Navy has neither measured, modeled, nor considered direct, indirect or cumulative effects of jet noise in any areas outside the immediate environs of NASWI runways. Actual noise measurements have not been made anywhere. However, computer modeling for the 10-mile radius of the “Affected Noise Environment” around Naval Air Station Whidbey Island (NASWI) extends to the year 2021 and clearly demonstrates the Navy’s ability to model noise. Therefore it makes no sense to fail to measure or model highly impacted areas such as the West End of the Olympic Peninsula, with its very different terrain and weather conditions, as demonstrated by separate NOAA weather forecasts for each region. For example, the Hoh River is surrounded by steep-sloped mountains that amplify and echo noise. Port Townsend is on a peninsula surrounded on three sides by water, which echoes sound. Port Angeles gets reflected sound from the Strait of Juan de Fuca to its north and from the Olympic Mountains to its south. Yet no noise modeling or measurements have been done for these areas. 11. The Navy’s claim that areas outside the narrow boundaries of its study area do not exceed noise standards is suspect, first because the standards used by the Navy are unrealistic, second, because the Navy has never measured or modeled noise in these areas, and third, because the “library” of sounds that comprise the basis for the Navy’s computer modeling is not available for public inspection. The Navy uses the less realistic Day-Night Average Sound Level (DNL) rather than the Effective Perceived Noise Level, as provided in Federal Aviation Regulation 36. DNL uses A-weighting for the decibel measurement, which means jet noise is averaged with quiet over the course of a year to come up with a 65 dB average. This means peak noise levels in these un-measured and un-modeled communities and wildlands may far exceed 65 dB as long as the constant average with quiet periods over a year stays below 65 dB. This is unrealistic, and claims by the DEIS

that wildlife are “presumably habituated” to noise do not apply when that noise is sporadic and intense. 12. Commercial airport noise standards should not apply to military jets because commercial jets do not have afterburners, do not engage in aerial combat maneuvers, do not fly at low altitudes or practice landing on runways so short they can only be used for emergencies, do not possess the flight characteristics of Growlers, and do not have weaponry that is capable of making a parcel of forest hum with electromagnetic energy. FAA policy does not preclude use of the more accurate Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. FAA policy allows for supplemental or alternative measurements. So, the continued use of DNL may be to the Navy’s benefit, but does not benefit the public. 13. The Navy’s noise analysis does not allow for peak noise experiences, nor does the DNL method they use take into account low-frequency noise, which is produced at tremendous levels by Growlers. 14. The NOISEMAP software used for computer modeling is severely outdated, and a report from a Department of Defense commission concluded that noise measurements using this software “...do not properly account for the complex operational and noise characteristics of the new aircraft.” This report concluded that current computer models could be legally indefensible.

(<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>) 15. The Navy describes its activities using the term “event,” but does not define it. Therefore, the time, duration, and number of jets in a single “event” remain unknown, and real impacts from recent increases remain unevaluated. As a result of leaving out vast geographical areas where noise impacts will occur (and are occurring now), the DEIS eliminates far too many direct, indirect and cumulative effects to be considered a valid or complete analysis. Limiting the scope like this amounts to a segmentation of impacts that forecloses the public’s ability to comment and gain legal standing. By law, the public has the right to address the full scope of impacts, not just a narrow sliver of them. 16. New information that was not disclosed in previous Navy EISs include flight operations on weekends (not mentioned in the current DEIS but specified on page 11 of the Forest Service’s draft permit, viewable at: <https://www.fs.usda.gov/project/?project=42759>). It has long been understood that the Navy would cooperate with local governments, especially in communities that depend on tourism, by not conducting noise-producing operations on weekends. Further, the singling out of one user group for an exemption from noise is outrageous and unfair. According to the permit, weekend flying may be permitted so long as it does not interfere with “...opening day and associated opening weekend of Washington State’s Big Game Hunting Season for use of rifle/guns.” While such an exemption is under Forest Service and not Navy control, the Navy must realize that municipalities and local governments, along with economically viable and vulnerable tourism and recreation entities who are not being considered, have not been given the opportunity to comment. The impression is that our national forests are no longer under public control. 17. Low flights will make even more noise than before: While the Navy has repeatedly told the public over the past few years that Growlers will fly at a minimum of 6,000 feet above sea level, the DEIS quotes guidance from the Aircraft Environmental Support Office: “Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1,000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1,500 AGL.” This guidance further states, “Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.” If this official guidance directs Growlers to fly

at such low altitudes, why did the Navy not disclose this in any previous NEPA documents? For an aircraft capable of 150 decibels at takeoff, this new information represents a significant new level of noise impacts that have been neither previously disclosed nor analyzed. 18. Sound levels for these low flights are not listed in the DEIS: Table 3.1-2, titled "Representative Sound Levels for Growler Aircraft in Level Flight," on page 3-6, does not show sound exposure levels for Growlers flying at either 1,000 feet or 1,500 feet AGL, as mentioned in the official guidance. Why has this important information been omitted? The public needs to know how much actual noise exposure there will be, along with the threats posed to public and environmental health. This, therefore, is significant new information about impacts that were not disclosed in the DEIS, and requires either that a Supplemental EIS be prepared, or that a public comment period of adequate length be provided on the Final EIS. For public health and safety reasons, the Navy must revise its guidance to significantly increase the distances that Growler jets are currently allowed to fly over towns, airports, individual people, vessels, vehicles, and structures. 500 to 1,000 feet is far too close, and 1,500 feet over an airport is far too dangerous a proximity to supersonic Growler jets. 19. No mitigation for schools: The DEIS states that in the case of local schools, no mitigation measures for any of the 3 proposed alternatives were identified, "...but may be developed and altered based on comments received." Some schools will be interrupted by jet noise hundreds of times per day. Yet the Navy suggests that future mitigation measures might be brought up by the public (and subsequently ignored) and thus will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would therefore require another public comment period, in which case the Navy's proposal to not allow a comment period on the Final EIS would be unlawful. 20. The current DNL noise modeling method and data in no way reflect exposure accuracy, given the new information about low flight levels from official guidance. Therefore, such analyses must be included in a Supplemental EIS or in the Final EIS, with a new public process of adequate length, including an official comment period. 21. Crash potential is higher: With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for Navy Growler student pilots to create tragic outcomes or cause extreme physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable. 22. Contamination of drinking water in residential and commercial areas near the runways, due to use of hazardous chemicals, is completely ignored by the DEIS. It concludes, "No significant impacts related to hazardous waste and materials would occur due to construction activities or from the addition and operation of additional Growler aircraft." While these chemicals have never been analyzed, they have been used in conjunction with Growler training and other flight operations for years; therefore, hazardous materials analysis for these chemicals should not be excluded just because Growlers are not the only aircraft this foam has been used for. It is irresponsible for the DEIS to content that there are no significant impacts. As previously stated, with flights at OLF Coupeville alone increasing from 3,200 in 2010 to as many as 35,100, no one can claim that a 1,000 percent flight increase in 7 years for which no groundwater or soil contaminant analyses have been done is not significant. 23. Navy knew about contamination in advance: It is clear that before the November 10 publication of this DEIS, the Navy was well aware of potential problems with contamination of residential drinking water due to what it calls "historic" use of fire suppressants for flight operations. In May 2016 the USEPA issued drinking water health

advisories for two PFCs, and the Navy announced in June that it was in the process of “identifying and for removal and destruction all legacy perfluorooctane sulfonate (and PFOA) containing AFFF [aqueous film forming foam].” Yet the DEIS dismisses all concerns with an incredible statement about actions that took place nearly 20 years ago: “Remediation construction was completed in September 1997, human exposure and contaminated groundwater exposures are under control, and the OUs at Ault Field and the Seaplane Base are ready for anticipated use (USEPA, 2016e).” The statement is ludicrously outdated, and recent events refute it. Three days before the DEIS was published, on November 7, 2016, the Navy sent a letter to more than 100 private and public drinking water well owners expressing concern that perfluoroalkyl substances (PFAS) found beneath the OLF had spread beyond Navy property. Yet the word “perfluoroalkyl” or “PFAS” is not mentioned once in the entire 1400-page DEIS, nor is it mentioned the 2005 or 2012 EAs. A Department of Defense publication makes it clear that there is no current technology that can treat soil or groundwater that has been contaminated with these chemicals.

(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>) 24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. It is therefore puzzling to consider that while extensive evaluations for a variety of hazardous materials were included in the October 2015 Northwest Training and Testing Final EIS, why would the Navy omit such contaminants as the ones mentioned above, from the Growler DEIS? This is the equivalent of a doctor refusing to look at an EKG that clearly shows a heart attack, and diagnosing the patient with anxiety. The Navy needs to include this information in a public NEPA process as an impact of its flight activities. It needs to accept responsibility for this contamination, and pay the costs incurred by finding a permanent alternative source of water for affected residents, and by reimbursing these people for medical costs created by unwitting consumption of Navy-contaminated water. 25. Impacts to wildlife have been piecemealed: It does not make sense to separate impacts from just one portion of an aircraft’s flight operations and say that’s all you’re looking at. But because the scope of the DEIS is limited to areas adjacent to runways, analysis of impacts to wildlife from connected flight operations that occur outside these narrow confines are omitted. Threatened and endangered species, sensitive species and other wildlife and critical habitat areas are adversely impacted by noise from takeoffs, landings and other flight operations well beyond the Navy’s study area. For example, the increase in aerial combat maneuvers (dogfighting) from 160 to 550 annual “events,” which by their erratic nature cannot safely occur near runways, is a 244 percent increase that has been neither examined nor analyzed in this or any previous NEPA process. Dogfighting requires frequent use of afterburners, which are far louder and use as much as ten times the amount of fuel as normal flight does. Impacts to wildlife and habitat were completely omitted. 26. Pages of boilerplate language do not constitute analysis of impacts to wildlife: Except for standardized language copied from wildlife agencies about species life histories, along with lists of various county critical areas ordinances and state wildlife regulations, the DEIS fails to evaluate direct, indirect or cumulative impacts to wildlife. Instead, it offers the excruciating conclusion that the potential for noise impacts and collisions with birds is “greatest during flight operations.” However, continues the DEIS, except for the marbled murrelet, the occurrence of these sensitive species in the study area is “highly unlikely,” largely because “no suitable habitat is present.” This begs the

question: if the scope of this DEIS measured the true impacts of jet noise, it is highly likely that suitable habitat for many of these species would be found. And if impacts had not been segmented for decades, there might be suitable habitat remaining in the study area. 27. Old research cited but new research not: In citing published scientific research, the Navy included a 1988 synthesis of published literature on domestic animals and wildlife, but failed to consider the latest peer-reviewed research summarized in 2015, which lists multiple consequences of noise greater than 65 dB.

(<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,"

(<http://www.nature.com/nature/journal/v509/n7500/full/nature13290.html>) A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test. Thank you for considering these comments. Sincerely, [REDACTED], WA 98358

Nordland, WA 98358

To: EA-18G EIS Project Manager Naval Facilities Engineering Command (NAVFAC) Atlantic – Attn: Code EV21/SS 6506 Hampton Blvd. Norfolk, VA 23508 Dear Sir/Madam, Comments regarding the Draft Environmental Impact Statement (DEIS) were previously sent to your attention. Please consider these additional comments, which are more specific to the effects on the Marrowstone Island area, my home. 1. Sleep loss due to Growler noise. The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the “percent probability of awakening for all scenarios...” The EA-18G has a noise signature with elevated low frequencies. It is claimed that repeated exposure to high sound levels at these frequencies is detrimental to long term health according to the AMA and World Health Organization. Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, short-term memory loss, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep, and resulting antipathy toward the US Navy our tax dollars support. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations. 2. Marrowstone Island is home to a significant population of waterfowl, either resident, or resting during migration. Increased Growler overflights will disturb this wildlife, and increase the hazard of bird strikes. A resident population of 200+ harbor seals uses Rat Island adjacent to Indian Island Naval Magazine. These protected marine mammals would likely be displaced by increased jet noise. 3. Noise estimates based on Navy modeling understate and have little relation to measured ground-level noise levels. The National Park Service which oversees Ebey's Reserve measured actual aircraft noise within the Reserve boundaries over a one-month period in 2015 and determined that the park has the highest man-made noise of any national park in the contiguous 48 states. The noise measurements observed exceed the Navy's simulated noise estimates used in the EIS by 20–30 dB, which is a factor 10 to 100 on a logarithmic scale. Recreational hikers on nature walks at Deception Pass State Park report abandoning day hikes due to repeated fly-overs by Growlers. 4. Since DOD has deemed enhanced electronic warfare both real, is justified, this \$13 billion Growler deployment—a purely offensive weapon—should be subjected to a cost/benefit analysis which is lacking in the DEIS. Cost of sleep loss, lowered property values, reduced tourism and classroom disruption need to be modeled. We suggest that increasing flights over civilian population represents an avoidable wartime harm imposed unnecessarily on citizens who otherwise support our military. Seeking an alternative site that is not populated so heavily should be explored. Thank you for your consideration of these comments. Sincerely, [REDACTED] Nordland, WA 98358

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.m. Impacts to Marine Species and Habitat
- 12.o. Cost-Benefit Analysis
- 2.n. Alternatives Considered But Eliminated
- 4.j. Other Reports
- 4.l. Points of Interest
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.i. Deception Pass State Park and Other State Parks

Lake Oswego, OR 97035

This plan should not move forward. The Olympic Peninsula is my home - it is home to many species who deserve to NOT be polluted by the sounds/exhaust from your jets. PLEASE STOP! This is a flawed plan - find other places to fly your jets!

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 2.n. Alternatives Considered But Eliminated
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Coupeville, WA 98239

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated

The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP).

Coupeville, WA 98239

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Coupeville, WA 98239

The DEIS claim that the JGL noise study was “flawed” is disingenuous and unsupported, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports

Coupeville, WA 98239

1.a. Thank You
4.j. Other Reports

The DEIS misconstrued important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

Coupeville, WA 98239

1.a. Thank You

4.q. Potential Hearing Loss

The Navy has adopted standards that protect their personnel from health and hearing harm due to excessive noise, yet these standards were ignored by the DEIS for civilians exposed to the same or greater levels of noise. This DEIS needs to examine how many civilians would receive exposure doses that exceed the Navy's defined hazardous noise zone threshold (i.e., "an area where the 8-hour time-weighted average exceeds 84 dBA [or 140 dB peak sound pressure level, SPL, for impact or impulse noise] for more than 2 days in any month").

Coupeville, WA 98239

1.a. Thank You
7.c. Noise Disclosure

Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy's 2005 AICUZ directives for Outlying Field Coupeville, such as no residences in a noise zone 2. Whether due to willful intent to ignore by the County or to lack of Navy assertiveness, it aptly demonstrates the meaningless and ineffectiveness of the AICUZ and attendant land-use provisions in the DEIS. Given the alternatives under consideration in the DEIS, the Navy should be immediately advocating to the County to place a moratorium on all construction permits not compatible with the 2005 AICUZ and DEIS land-use stipulations until the final EIS is approved.

Coupeville, WA 98239

The two most dangerous aspects of flying are the approach, landing and takeoff -- in other words most of the OLFC flight path. The risks are significant (a) because of significant encroachment problems, (b) because OLFC is about 49,000 acres below and the runway about 3000 feet short of standard for Growlers, (c) because the pilots are mostly students flying the F-18 airframe which is 5.5 times more likely to crash than its EA-6B (Prowler) predecessor, and (d) FCLP operations occur at low elevations that increase likelihood of bird strikes with the significant shoreline bird population. These risks cannot be mitigated other than by moving the FCLPs off a suitable 21st century off-Whidbey site.

- 1.a. Thank You
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

Coupeville, WA 98239

1.a. Thank You

13.a. Environmental Justice Impacts

Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Coupeville, WA 98239

The DEIS noise levels were based on about 30% of the proposed 8800 to 35,000+ operations at OLFC being conducted on Path 14. Since 2013, when the transition to Growlers was complete, the highest use of Path 14 has been about 2 to 10% because, as base commander Captain Nortier explained Growlers are only rarely capable of using Path 14. The DEIS 30% overestimated use of path 14 greatly understates the DNL noise impacts for path 32 and overstates the impacts on Path 14. This mistake must be corrected.

1.a. Thank You

3.e. Field Carrier Landing Practice Patterns

3.f. Field Carrier Landing Practice Operation Totals

3.g. Field Carrier Landing Practice Evolutions and High Tempo

Coupeville, WA 98239

1.a. Thank You
4.p. Sleep Disturbance
4.r. Nonauditory Health Effects

The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the "percent probability of awakening for all scenarios..." While music torture is still permitted under US law, the United National Convention against Torture defines torture as "any act by which severe pain of suffering, whether physical or mental..." Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations.

Coupeville, WA 98239

- 1.a. Thank You
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects

The DEIS fails to address the potential effects of sleep disturbance due to Growler overflights, despite the admission that there will be an increase in the "percent probability of awakening for all scenarios..." While music torture is still permitted under US law, the United National Convention against Torture defines torture as "any act by which severe pain of suffering, whether physical or mental..." Sleep disturbance results in serious physical and emotional symptoms such as cognitive impairment, impaired immune system, adverse birth outcomes, risk of heart disease, risk of diabetes, not mentioning the number of work hours/days lost from lack of sleep. The DEIS must forthrightly address the impacts of sleep disturbance on residences affected by OLFC night operations.

Coupeville, WA 98239

1.a. Thank You

4.q. Potential Hearing Loss

The DEIS fails to address the effects of noise on hearing and tinnitus and consequential medical costs associated with hearing loss by stating that civilians would need to be exposed to noise emitted by the Growlers for 40 years before there is a permanent shift in hearing. This defies all scientific and audiological evidence to the contrary, even by the US military itself. Hearing loss and tinnitus are the MOST compensated injuries in the military and increasing annually (US Dept. of Veteran Affairs.) That and failure to address the effects of impact or sudden noise must be more fully delineated.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

The DEIS fails to adequately address the effects of high noise levels during pregnancy provoking significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss.

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. 12. The Draft EIS analysis does not include any mention of the impact on our work and how that might affect our income. I work from home; as part of my job, I record audio for training videos, I conduct conference calls, and I teach online. All of these activities are impossible to do when the jets are flying. My work is seriously impacted by the noise, and the EIS makes no statement about how residents should be compensated for loss of work time and subsequent loss of income.

1.a. Thank You

12.f. Economic Hardship and Impacts

Lopez Island, WA 98261

The DEIS fails to address the work interruptions, loss of work time, and impact to income on people who cannot work because of the noise levels of the Growler overflights. Many citizens in the area are at work during flight times when they may be engaged in teaching, conference calls, meetings, and other activities which need a certain level of quietness in order to conduct effectively. As an example: My job entails teaching online courses and recording audio voice overs for training videos. I also participate in frequent conference calls with clients. These activities take up at least 50% of my work day and often more. I am completely unable to work when the Growlers are flying. And because I have no idea when they will be flying, I am unable to schedule around the flights. These interruptions therefore impact my ability to earn income and make a living. It important that the DEIS address the loss of income to residents in the impacted areas and discuss how we are to be compensated for loss of income, or (in the best case scenario) reduce or eliminate flights.

1.a. Thank You

2.n. Alternatives Considered But Eliminated

To Whom It May Concern:

Please consider my comment regarding the Navy's use of the OLF in Coupeville as a training location for Growlers. When we purchase our property on Race Road, very near OLF, we knew we would hear Navy jet flights from time to time, and we were OK with that because we support our military in protecting our freedom.

Suddenly, however, our life here at our home is now threatened by the announced increase in Growler flights at OLF. These planes are MUCH louder than the ones we used to hear, and the number of flights being proposed is frightening. My husband and I realize we could not tolerate such a dramatic change in our daily lives. We feel we will not be able to stay in the home whete we have lived for 37 years. Moving at the age of 73 will be difficult, and the loss of equity in our home which we planned to leave to our children will be lost due to the increased noise.

Please abandon your plan to destroy the quality of life for Centrail Whidbey. Please move the new operations to the better option near the tri-cities where the reisdents won't lose their quality of life!

I request to be notified of any hearings or actions related to this proposal to increase use of OLF.

Thank you for your consideration.

██████████

1.a. Thank You

Oak Harbor, WA 98277

I strongly believe the Navy has far exceeded any reasonable efforts to listen and accommodate the complainers. I also believe the complainers are being absolutely ridiculous in their vocalizations, not unlike the shallow thinking of those who refuse to accept the shift in our government back toward the intent of our founders. Keep up the good work, [REDACTED]

Draft Environmental Impact Statement Comment Form

EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by January 25, 2017

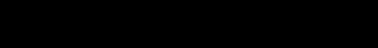
Online at: www.whidbeveis.com

By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name 

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Resident, citizen

3. Address  *Coupeville WA 98239*

4. Email 

5. Phone 

6. Please check here if you would NOT like to be on the Coupeville Community Allies email list

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.m. Education Impacts
- 12.n. Quality of Life
- 13.a. Environmental Justice Impacts
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.a. Regional Land Use and Community Character

Comments

Check all that concern you. For additional information see www.facebook.com/whidbeveis

- Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture.** Increasing OLF operations by 36 % to 475%, with up to 135 flight operations daily, will double the residential areas and increase by 10-fold the commercial areas impacted by noise. **This is a burden greater than the Coupeville/Central Whidbey community can bear.**
- Increased operations at OLF risk greater aquifer and well contamination.** Wells near OLF have now found to be contaminated with toxic PFOA compounds from Navy firefighting foam which the Navy continues to use for aircraft fires. The extent of contamination has not been determined nor have results been shared with the community. There is no mitigation plan in place.
- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.**

(over)

- The Navy did not adequately look at siting new Growler aircraft elsewhere**, despite this being the #1 request from the community during the Navy's prior scoping forums.
- An additional 880-1,574 personnel and dependents would severely impact our tight housing market, decreasing the already low stock of affordable housing on Whidbey Island.**
- Single-siting Growlers at NASWI presents a major terrorist risk to our Island, which is served by one bridge and two ferries.** All active electronic warfare jets in the US Military would be at NASWI.
- The Growlers are at risk for more mishaps and crashes due to problems with their onboard oxygen system that can cause pilot hypoxia**, with over 100 incidents in all F/A-18 airframes in 2015 alone. Increases in OLF operations increase the risk of crashes on Whidbey Island and in Puget Sound.

Please include any additional comments here:

What else you can do

1. **Get involved.** To volunteer, email us: coupevillecommunityallies@gmail.com
2. **Call (best) or email your elected officials and share your concerns.** The number of calls are important.
 - a. U.S. Senator Patty Murray: 206.553.5545; www.murray.senate.gov
 - b. U.S. Senator Maria Cantwell: 425.303.0114; www.cantwell.senate.gov
 - c. U.S. Congressman Rick Larson: 800.652.1385; rick.larsen@mail.house.gov
 - d. Governor Jay Inslee: 360.902.4111; governor.wa.gov

To Learn More

- ✓ To receive email updates, or to get involved, **email us** at coupevillecommunityallies@gmail.com
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at www.whidbeyeis.com

All comments submitted by January 25, 2017 will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

Coupeville, WA 98239

I support up to 5000 touch and go operations annually at Coupeville OLF. I am against any decision that exceeds 5000 operations annually at Coupeville OLF [REDACTED] Coupeville Wa.

1.a. Thank You

3.i. Runway Operating Hours and Flight Schedules

Dupont, WA 98327

I spend a lot of time at my parents' home on Whidbey Island, and one day the home will be mine. I am an Army officer. My husband is an officer in the Air Force. We strongly support our military, but we STRONGLY OPPOSE EA-18G Growler Airfield Operations at NAS Whidbey. The noise pollution will greatly decrease the quality of life for Coupeville and Central Whidbey residents and will likely lower their property values. The increase in flight operations in the area is not compatible with the rural tourism that Central Whidbey relies on for its economy.

1.a. Thank You
12.h. Tourism
12.j. Property Values
12.n. Quality of Life
7.e. Impacts to Recreation from Noise/Operations
7.g. Ebey's Landing National Historical Reserve

Langley, WA 98260

Coupeville and Ebey's Preserve are protected and cherished for their natural peaceful beauty. The area draws tourists for its epic views of the Olympics, its Victorian town, the history here. Increasing the use of the touch and go field will dramatically change this feeling and ruin what is now a very valuable asset. The water contamination underscores that we cannot afford an increase of flights in this area. Whidbey Island in general is already very short on available housing rentals and the prices have increased dramatically in the past 2 years. Bringing more people to this area pushes out the locals and fundamentally changes the social culture of the island. It's not a good fit for an increase in aircraft in this area.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

12.i. Housing Access and Affordability

7.g. Ebey's Landing National Historical Reserve

, WA 98118

Significantly increasing Growler operations to this level both negatively impacts the local communities you fly over and the ecosystem of our region. Adding this about of CO2, increasing noise pollution over our towns, cities, National Parks and Tribal lands isn't wanted. Not to mention this increase in activity having negative impact on the home values in the communities close to the base. We appreciate what the Navy does to keep Americans safe but the Navy operated well without this level of increase of war games on this community. What's the point of making us safe only to slowly kill us and the wildlife around us with such an increase in deafening noise and air pollution. I'm here to say enough and voice my opposition.

- 1.a. Thank You
- 1.d. General Project Concerns
- 12.j. Property Values
- 2.a. Purpose and Need

Port Angeles, WA 98363

The Draft EIS Improperly Segments the Navy's Expansion of Growler Activities The Draft Environmental Impact Statement (EIS) is deficient in not addressing 40 additional Growlers that are in the process of delivery beyond the 35 or 36 identified in the Proposed Action. The Navy has, to date, piecemealed its aircraft training and testing activities affecting Whidbey Island, the San Juans, and the Olympic Peninsula into multiple separate actions: 1. 4 squadrons of P-8A Poseidon Multi-Mission Aircraft; 2. A 2005 EA (57 Growler jets); 2010 EIS (reaffirming the 57 Growlers that replaced Prowlers); 3. 2012 EA (26 Growlers including 5 from a reserve unit); 4. 2014 EA (Growler electronic warfare activity); 5. 2015 EIS discussing electronic warfare training and testing activity; 6. The current 2016-2017 DEIS (36 Growlers); 7. And, a seventh likely process, as confirmed by a Navy official at a recent open house, for 42 more jets to bring the Growler fleet total to 160. As a result, it has been impossible for the public to know just how many Growlers there would be, or what their impacts would be, or what limits, if any, the Navy intends to establish to protect human health and the environment. Furthermore, this piecemeal approach to public involvement violates NEPA as 40 C.F.R. § 1502.4 "...does not allow an approach that would permit dividing a project into multiple 'actions,' each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." In public meetings, the Navy referred to these increases in Growler activities as "adjustments" to its mission, but "adjustments" to functionally and geographically related activities, each of which when taken individually might not rise to the level of "significance," are significant when taken together. This segmentation represents a significant but hidden erosion of environmental protection and public health. Citizens, elected officials, and tribes have reminded the Navy for years that its segmentation of impacts violates both the law and the public trust, but the Navy continues to ignore these concerns. The Draft EIS Fails to Consider All Impacts The draft EIS only analyzes potential impacts for 35 or 36 of potentially 160 Growlers, and is further confined to evaluating impacts only to areas immediately surrounding the runways. However, jet noise, emissions and other impacts from Growler operations adversely affect a wide area including Olympic National Park, state parks, tribal and private lands as well as Puget Sound and endangered Orcas and other species. By failing to enlarge the scope of its analysis beyond Naval Air Station Whidbey Island, the DEIS also violates NEPA by not considering all the interdependent parts of a larger action: Growler operations cannot proceed without takeoffs and landings, regional overflights, broadly distributed noise impacts, etc. By failing to consider these additional impacts, the DEIS also fails to evaluate cumulative effects as required by NEPA. The Draft EIS Fails to Consider All Alternatives The Navy has not made a good faith effort to explore other alternatives as NEPA requires in S40 CFR 1502.14 (a). All of the Navy's 'alternative' scenarios will increase noise, harm to health, and other adverse impacts. The Navy's "no action alternative" would continue Growler operations that currently expose people in homes, schools, parks and businesses to noise that exceeds community standards set by the State of Washington, the EPA, the Occupational and Health Administration (OSHA), and the World Health Organization. No genuine "no-action" alternative is proposed that would address these impacts. Furthermore, the draft EIS violates basic NEPA procedures, as it appears to improperly reflect procurement and

- 1.a. Thank You
- 1.d. General Project Concerns
- 10.f. Endangered Species Impact Analysis Adequacy
- 12.h. Tourism
- 18.b. Average Carbon Dioxide per Aircraft
- 18.d. Washington State Greenhouse Gas Goals
- 19.b. Revised Cumulative Impacts Analysis
- 19.d. Electronic Warfare
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 5.a. Accident Potential Zones
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.j. City of Port Townsend Cultural Resources

operational decisions already made by the Navy. Increased Air Emissions and Worsening Effects on Climate Change Not Adequately Addressed Growler jets use an extraordinary amount of fuel--a single Growler jet's emissions dwarf what thousands of citizens seek to reduce voluntarily by choosing to use electric cars, add solar collectors to their homes, and conserve energy in other ways. In its continuing and planned expansion of the Growler fleet, the Navy has ignored the cumulative impact of Growler emissions, including their effects on climate change. The military is the world's largest single user of fossil fuels, and exhaust emissions beyond the narrowly defined affected areas near runways are not being analyzed and should be. The Navy Has Failed to Document that DOD-Owned Lands Are Unsuited or Unavailable for Growler Operations The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to examine non-Whidbey Island sites to conduct flight carrier land practice (FCLP). Instead, it continues to assume that an outdated and dangerously small World War II landing strip on Whidbey, the OLFC, can be used for an increasing number of Growler and other training flights.¹ The two most dangerous aspects of flying are the approach, landing and takeoff. Because the OLFC is about 49,000 acres smaller and 3,000 feet short of the Growler standard for these maneuvers, it places nearby schools, hospitals, residences, a state ferry terminal and parks, and a state conference center at serious risk of accidents. This risk is greatly increased because FLCP maneuvers are, by their nature, conducted at low elevations where collision with birds is likely to occur, particularly since much of the surrounding area is a protected habitat for shore birds. The draft EIS, itself, acknowledges that one of the runways at OLFC has an "unacceptably steep angle of bank" and can only be used 30 percent of the time due to weather conditions. Yet knowing this, the Navy is significantly increasing the number of flights there and placing nearby communities at harm. Impact on Threaten Endangered Species Not Adequately Addressed The Navy needs to provide a more detailed and specific response on whether and how the additional Growlers will affect endangered species, particularly Marbled Murrelets, given that the acknowledged lack of scientific information on noise impacts to this species affects the ability to determine harm and cumulative effects. This is particularly urgent in light of their precipitous decline and the December 2016 decision by the State of Washington to reclassify Marbled Murrelets from threatened to endangered. More generally, by failing to initiate consultation under Section 7 of the Endangered Species Act with the US Fish and Wildlife Service on the potential impacts from the significant increase in Growler flights, the DEIS fails to evaluate direct, indirect and cumulative impacts on threatened and endangered species. Inadequate Consideration of Public Health Impacts Growler jets utilize the latest electronic warfare capabilities yet the risk of exposure to people and wildlife from downward-directed radiation is not considered. The only discussion we are aware of was a brief mention in a 2014 EA, in reference to radio transmitters on mobile emitter trucks and the stationary transmitter at Pacific Beach on the Olympic Peninsula. In that document, the Navy referenced a paper and concluded that links from radiation exposure to leukemia were speculative, when in fact, that same paper stated unequivocally that there are direct links between radiation exposure and childhood leukemia. Despite this, any mention or discussion of risks from exposure to electromagnetic radiation from Navy jets is completely missing from all discussions of potential impacts. The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading for two reasons: (1) the Navy inappropriately uses a 365-day averaging rather busy-day averaging, and (2) the Navy represents as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for

high noise annoyance. Furthermore, modeled noise levels by the Navy have not been validated with on-site noise data nor has the Navy made any actual noise measurements in the affected communities. In addition, the NOISEMAP software used for computer modeling is outdated, and a report from a DOD commission concluded that noise measurements using this software may be legally indefensible.² Additionally, the DEIS selectively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. Moreover, there are no alternatives proposed in this DEIS that would reduce noise. Therefore, it represents decisions already made. This violates NEPA §1506.1, which states, "...no action concerning the proposal shall be taken which would have an adverse environmental impact or limit the choice of reasonable alternatives." Also, as mentioned earlier in this letter, by narrowly considering only takeoff and landing noise and exhaust emissions at the runways themselves, the DEIS violates the National Environmental Policy Act (NEPA) §1508.25 by failing to consider the wider area of functionally connected impacts caused by naval flight operations. The DEIS Fails to Consider Historic and Economic Impacts The Navy has not responded to an August 2016 request for formal consultation under Section 106 of the National Historic Preservation Act, from the City of Port Townsend, in a letter also asking the Navy to expand its Area of Potential Effect (APE). The APE is so narrowly defined in this DEIS that the State Historic Preservation Officer (SHPO) wrote to the Navy in January 2017, confirming that not only would cultural and historic resources within the existing APE be adversely affected, but also recommended expanding the APE to include additional portions of Whidbey Island, Camano Island, Port Townsend, and the San Juan Islands, because the state is "...not convinced that the 65 dBA serves as the best or most appropriate measure for quantifying and assessing harmful levels of sound and vibrations from Growler activities."³ The SHPO went on to say, "Our concern is based upon what appears to be an averaging of sound levels over long time periods that does not adequately capture the real time experience of brief but more numerous exposures to higher decibel levels, as well as the cumulative effect of these events." Additionally, the addition of Growlers will have a deleterious effect on the economy of the region. The region is heavily dependent on recreation and tourism and Washington's overall economy is heavily dependent on tourism and outdoor recreation, accounting for: \$22.5 billion annually, 227,000 direct jobs, and \$1.6 billion in tax revenues.⁴ Accordingly, any expansion of the Growler fleet needs to address potential job loss, economic harm, and state revenue loss from decreased tourism and outdoor recreation. Conclusion For all of the deficiencies, omissions, and failures to properly implement NEPA, as cited above, we are asking the Navy to issue a revised, second draft EIS with a new public comment period. We appreciate the opportunity to comment on this draft EIS.

Draft Environmental Impact Statement Comment Form

EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by January 25, 2017

Online at: www.whidbeveis.com

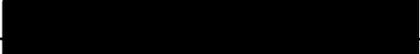
By mail at *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/55*

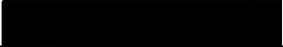
1. Name 

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)

Resident, Citizen

3. Address  *Coupeville WA 98239*

4. Email 

5. Phone 

6. Please check here if you would NOT like to be on the Coupeville Community Allies email list

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.m. Education Impacts
- 12.n. Quality of Life
- 13.a. Environmental Justice Impacts
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.a. Regional Land Use and Community Character

Comments

Check all that concern you. For additional information see www.facebook.com/whidbeveis

- Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture.** Increasing OLF operations by 36 % to 475%, with up to 135 flight operations daily, will double the residential areas and increase by 10-fold the commercial areas impacted by noise. **This is a burden greater than the Coupeville/Central Whidbey community can bear.**
- Increased operations at OLF risk greater aquifer and well contamination.** Wells near OLF have now found to be contaminated with toxic PFOA compounds from Navy firefighting foam which the Navy continues to use for aircraft fires. The extent of contamination has not been determined nor have results been shared with the community. There is no mitigation plan in place.
- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.**

(over)

- The Navy did not adequately look at siting new Growler aircraft elsewhere**, despite this being the #1 request from the community during the Navy's prior scoping forums.
- An additional 880-1,574 personnel and dependents would severely impact our tight housing market, decreasing the already low stock of affordable housing on Whidbey Island.**
- Single-siting Growlers at NASWI presents a major terrorist risk to our Island, which is served by one bridge and two ferries.** All active electronic warfare jets in the US Military would be at NASWI.
- The Growlers are at risk for more mishaps and crashes due to problems with their onboard oxygen system that can cause pilot hypoxia**, with over 100 incidents in all F/A-18 airframes in 2015 alone. Increases in OLF operations increase the risk of crashes on Whidbey Island and in Puget Sound.

Please include any additional comments here:

What else you can do

1. **Get involved.** To volunteer, email us: coupevillecommunityallies@gmail.com
2. **Call (best) or email your elected officials and share your concerns.** The number of calls are important.
 - a. U.S. Senator Patty Murray: 206.553.5545; www.murray.senate.gov
 - b. U.S. Senator Maria Cantwell: 425.303.0114; www.cantwell.senate.gov
 - c. U.S. Congressman Rick Larsen: 800.652.1385; rick.larsen@mail.house.gov
 - d. Governor Jay Inslee: 360.902.4111; governor.wa.gov

To Learn More

- ✓ To receive email updates, or to get involved, **email us** at coupevillecommunityallies@gmail.com
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at www.whidbeyeis.com

All comments submitted by January 25, 2017 will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

Quilcene, WA 98376

The Navy's DEIS ignores the harmful consequences of Growler operations taking place. It does not address the true environmental and public health consequences of planned Growler increases. The DEIS is flawed by design and prepared in violation of the National Environmental Policy Act. The Navy should relocate touch-and-go Growler training from Whidbey Island to another less populated and environmentally sensitive location.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.n. Alternatives Considered But Eliminated

Anacortes, WA 98221

The noise from NAS Whidbey is so bad, our windows shake at times - and we have installed the BEST windows Andersen Windows manufactures! Please move your operation to China Lake, where it belongs.

1.a. Thank You

2.n. Alternatives Considered But Eliminated

4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

Ellensburg , WA 98926

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.g. Average Annual Day/Average Busy Day Noise Levels

The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

I am [REDACTED] I live in Langley. I don't live under the planes but I live on this island in an era of rapid climate disruption and the carbon emissions of the Growler training flights matter to me. Harm is not what can be proven now. Harms from toxins in the soil and CO₂ in the atmosphere show up slowly, producing disease long before science proves it and much longer before corporations who profit from the harm are finally stopped legally.

When I grew up, doctors recommended smoking Camels. Now we know that smoking causes cancer. And know that RJ Reynolds suppressed the fact of harm for decades. Likewise, We banned DDT long long after the harm was revealed.

Likewise Shell knew decades ago about the climate disruption probability of burning fossil fuels – and suppressed that.

Likewise the Navy's own reports validate the health harms from persistent exposure to extreme sound. That the court did not validate the harm from sound pollution does not mean that people are not harmed. Eventually science will catch up with lived experience, long after people have lost their hearing and developed learning disabilities. The expedient is the enemy of the good.

The climate harms of the Growler training flights will befall our grandchildren's children. Let me make this vivid.

One hour of Growler flight burns 1300 gallons of jet fuel, emitting 12.5 Metric Tons CO₂. That is equal to 30,000 car miles driven! Last time I saw the Growlers training there were 4 in the air. I gleaned from the web that in 2013 training happened 3 hours a day, five days a week. That's 60 flight hours a week. Doing the math, that would equal 2 million car miles a week. That's every driver in the US going out and idling in the driveway for an hour.

That, my friends, is a climate disaster.

In summary, while we can't know for certain that choices today will create harms for our children and grandchildren in years to come, sane, compassionate and responsible people will not deny the harm in the absence of proof but do what medical people since Hippocrates have pledged: above all, do no harm.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

18.a. Climate Change and Greenhouse Gases

18.b. Average Carbon Dioxide per Aircraft

18.d. Washington State Greenhouse Gas Goals

4.o. Classroom Learning Interference

4.q. Potential Hearing Loss

4.r. Nonauditory Health Effects

5.d. Environmental Health Risks and Safety Risks to Children

Langley, WA 98260

I am a best selling author, expert of sustainable living/personal finance, cofounder of Sustainable Seattle that produced the first indicators of sustainability in the 1990s. From this I am a strong advocate for economic diversity rather than economies dominated by one large employer. I am part of the Sustainable Economy Collaborative that produced the Invisible Costs report recently submitted as a comment on the Draft EIS. I do not consider your DEIS adequate in quantifying the costs to our Island economy of how the Navy uses our true economic strengths - peace and quiet, beauty, shorelines for tourists, fisheries and shell fish harvesting, agriculture, a large educated and tech literate population, a potential for developing mid-scale industries like Nichols Brothers, possible value added processing of agricultural products. We have a good chance for a thriving, sustainable, diverse economy here in on the island and the Navy's footprint not only does nothing to help the people who are long time residents, it is diminishing our opportunities. I will also say that in an era when water is becoming the scarce resource and climate change is recognized as a threat to national security, it is inappropriate to increase the Navy's demand on our resources as well as the pollution of our land and water. Our prairie, where the OLF is located, is a geologically a fertile plain and is our breadbasket if supply lines are disrupted. OSHA requires our farmers to provide hearing protection; the Navy does not pay for this. With an increase in jet noise, some farmers whose margins are currently slim may go out of business and farming is something it takes 3 years to establish. Additionally, the contamination of our wells, depending on extent and flow from use of PFOAs is potentially death to some farms, which is in my view tragic and no arguments in the DEIS convince me that sacrificing the ability of the island to feed itself is in the national interest. In fact, the Navy worked off independent supply chains so Island farmers do not benefit from having the Navy as a local customer, making their farms viable. There is also the question of the impact of incomplete burning of jet fuel on our soils and to my knowledge the Navy has not tested soils for byproducts that filter down from training flights. We have many organic farms here and as with Monsanto and GMO seed, your operations have the potential of taking our soils out of certification. In the final EIS I would like to see you account for impact of soil and water contamination on our economic viability. Tourism is another major asset, both weekend bnb customers and hikers/birdwatchers. Increasing the Growler training at the OLF has no benefit for these industries and actually threatens their survival. I would like to see the final EIS account for the size of this industry in terms of dollars so we know what will be sacrificed. As the Invisible Costs report points out, the benefit the Navy offers to vets and service people of not paying taxes is not compensated through PILOT payments. I have no idea why these payments are not being made but IC is skimping on personnel, infrastructure and transit and in the final EIS I would like to see you commit to PILOT payments equal to the cost of educating your children in our schools and the loss of tax revenue when people live or shop on the base. Your people are not a separate island, they leave the base and use our roads. They supplement their income with our feeding programs. They use our mental health services, our domestic violence services and our clinics. We welcome all of this if it is compensated. A less well understood impact of a single large employer that bring in foreign low paid workers is that they kill off local businesses and make way for foreign stores like Walmart etc that may employ local cashiers but where all the profits go

- 1.a. Thank You
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.b. Invisible Costs
- 12.c. Socioeconomic Impacts
- 12.d. Population Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.o. Cost-Benefit Analysis
- 17.a. Hazardous Materials and Waste Impacts

to a foreign main office and do not return as benefit. Much like a physical ecology, this financial ecology results in the local living community being choked by industries over which the locals have no control. Should the base close for whatever reason, the big box stores may leave too, having killed off the local restaurants and lumber and hardware stores. I would like to see in the final EIS an accounting for how Navy revenues flow through our local economy, what businesses are made stronger and what weaker. If the Navy were aware that while they occupy our island it is their duty to protect the viability of locally rooted businesses, to not diminish local businesses opportunity to flourish (as with farming), to source from local merchants as much as possible, to build up an ecology of local businesses that would remain, capitalizing on our natural wealth. The Navy is such a large consumer that a carefully constructed economic development plan, partnering with Island County, could build a strong resilient ecology of interlocking businesses. You have the brain and financial power to direct resources towards this goal, "leaving our campground in better shape than you found it." The DEIS indicates no sense of responsibility for your impact on our local economy. Understandably people who are attached to the Navy are fearful of this approach. They want to believe you will always be here because they can't imagine how they would make money if you left or shrank. If they could see that family wage jobs would be available, perhaps with better pay than Navy, they would have less fear and more of a sense of choice. This is the fate of coal towns and other resource extractive towns, of CAFOs (concentrated animal feeding operations). You do not want to leave us with economic scorched earth and a big problem picking ourselves up. I am not saying the Navy should go. I am saying you should partner with IC to build a resilient economy and bring your deferred PILOT payments and intelligence to bear on making IC thrive. So far, this is not happening and frightened Navy boosters are lobbying death threats at citizens who assume and long for the peace and quiet and local economic prosperity they want. I see nothing in the DEIS that acknowledges this negative impact on the life of our county and would like to see a strong commitment that if you expand you will pay us compensation for the damages, back taxes and take our fragile ecology and strong culture and local businesses into account as you make plans to expand. You are not accountable for the increasing polarization on this island but you can do something about it. I understand our EW jets are crucial to our national defense and well trained pilots are key and you are simply doing what's required to train them up, but we are actually a small island in the pacific that fears being overrun by the US military and then left to our own devices. In the final EIS i want you to respond to all items in the Invisible Costs report and commit to compensating IC for your use of our services and to paying taxes and to paying to educate your children and restoring our water to potability so water dependent industries are not put out of businesses. You need and economic component that accounts for the costs we IC citizens bear.

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11.a. Groundwater

11.d. Per- and Polyfluoroalkyl Substances

12.b. Invisible Costs

12.c. Socioeconomic Impacts

12.d. Population Impacts

12.e. Agriculture Analysis

12.f. Economic Hardship and Impacts

12.h. Tourism

12.j. Property Values

12.l. Community Service Impacts

12.m. Education Impacts

12.o. Cost-Benefit Analysis

17.a. Hazardous Materials and Waste Impacts

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Public Meeting Comment Form

Thank you for attending the public meeting on the Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) Provide written comments at today's public meeting; (2) Speak with the stenographer, who will record your comments; (3) Submit your comments on the project website at www.whidbeyeis.com; or (4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]
2. Organization/Affiliation RESIDENT OF PORT TOWNSEND, WA
3. Address [REDACTED] PORT TOWNSEND, WA 98368
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

IN PORT TOWNSEND, RESIDENTS ALREADY HEAR AN INORDINATE AMOUNT OF NOISE FROM MILITARY AIRCRAFT. I UNDERSTAND THAT DURING THE NEXT 5 YEARS OF EMF WARFARE TRAINING, THAT NOISE WILL BE MORE OR LESS CONSTANT THIS IS UNACCEPTABLE AND WILL SIGNIFICANTLY REDUCE REAL ESTATE VALUES. AS FAR AS THE ELECTROMAGNETIC WEAPONS ARE CONCERNED DOES ANYONE KNOW FOR SURE WHAT EFFECTS EMF_s WILL HAVE ON WILDLIFE

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 12.j. Property Values
- 12.n. Quality of Life
- 19.d. Electronic Warfare
- 7.d. Recreation and Wilderness Analysis and Study Area

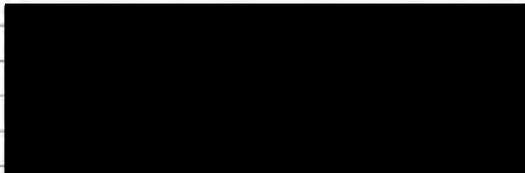
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POPULATIONS, NOT ONLY IN WILDERNESS AREAS,
BUT ALSO IN RESIDENTIAL AREAS?

~~✱~~

MANY OF US MOVED FROM MORE CROWDED AREAS
SO THAT WE COULD BE CLOSER TO WILD LIFE
AND WILDERNESS AREAS. IF THE NOISE
FROM LOUD CRAWLER AIRCRAFT AFFECTS
MY QUALITY OF LIFE NOW, IT WILL
AFFECT IT EVEN MORE DURING THE NEXT
5 YEARS OF NAVY TRAINING IN AND AROUND
THE PRISTINE OLYMPIC FOREST.

IT IS TIME FOR THE MILITARY TO STOP
THE DESTRUCTION OF EARTH.



For more information, please visit the project website at whidbeyis.com

Please print
Please drop this form into one of the comment boxes here at the public meeting or mail to:
Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

1.a. Thank You
11.a. Groundwater

IN THE MATTER OF:
The Open House Public Meeting for the Draft Environmental
Impact Statement (EIS) for EA-18G "Growler" Airfield
Operations at Naval Air Station (NAS) Whidbey Island Complex

DATE TAKEN: Friday, December 9, 2016

PLACE: Coupeville High School
501 South Main Street
Commons
Coupeville, Washington

TIME: 4:00 p.m. to 7:00 p.m.

REPORTED BY: Mary Mejlaender, CCR No. 2056
Likkell & Associates
Court Reporters & Legal Video
2722 Colby Avenue
Suite 706
Everett, WA 98201
depos@likkellcourtreporters.com

LIKKEL & ASSOCIATES, COURT REPORTERS & LEGAL VIDEO
2722 Colby Avenue, Suite 706, Everett, WA, 98201

(425) 259-3330

1 PUBLIC MEETING

2 (4:00 p.m.)

3 (The personal identifiable information disclosure
4 statement was read by the following commenter.)

5 MS. [REDACTED]: I read the statement.

6 My concern is the water on Whidbey Island with
7 the additional personnel that the Navy is planning on
8 bringing in. Whidbey Island only has one aquifer, and these
9 additional people, if the water gets drawn down, like we
10 have a couple of years where it's dry and the aquifer has
11 not been recharged as fast and you've lowered that level of
12 water in the aquifer, then seawater starts coming in,
13 saltwater. That means at that point people that live on
14 this island are either going to have to catch rainwater or
15 they're going to have to truck in water.

16 And the only other thing I can see that the Navy
17 can do is to put in desalinization, furnish the fresh water
18 that they need for their personnel. But it just really
19 worries bunches of us that we moved here to this island and
20 we -- we love it the way it is. We understand that the Navy
21 is up there and -- but I guess we never expected that the
22 Navy base, in peace time, is going to get as large as it
23 seems to be getting. And you're bringing in 20,000 people
24 this year. In a couple of years how many more people are
25 you guys going to bring in? So it's going to end up, I'm

1 afraid, with water shortages on this island. And most of
2 the people that live on the island cannot afford to truck in
3 water, to build water cisterns for water. They just can't
4 afford it. So that's my concern.

5 And if the Navy would say to me, okay, we're
6 going to put in a desalinization facility up there, we'll
7 furnish all our own drinking water for our Navy personnel, I
8 would be happy with that. It wouldn't bother me so much
9 that that many people are going to be moving here, but my
10 big concern is the water. And I don't know if the Navy is
11 even really giving thought to that. Right now they're
12 concerned with some chemicals in the water, in the water --
13 some of the private wells and all.

14 So I know that we lived in Florida, and one of
15 the big concerns they had there in dry years was saltwater
16 intruding into the aquifer that furnishes the water for
17 Miami and all of south Florida. It comes out of the
18 Everglades, goes down into the aquifer, and then it goes --
19 gets drawn out to wells and things.

20 So I don't know what the Navy is planning on
21 doing here, if anything. And with our political system the
22 way it is right this minute, I know the Navy is really tight
23 and they're more likely to be conservative Republican people
24 because that's just -- that's just the way it operates. And
25 I know that's true because my husband used to work for the

1 Navy. So I just don't feel like there will be that much --
2 you know, sometimes I feel like I probably shouldn't have
3 even come tonight because I -- in my heart I just really
4 feel like the Navy is not going to do anything about it, and
5 that's sad.

6 * * *

Seattle, WA 98122

- 1.a. Thank You
- 1.d. General Project Concerns

Due to extreme noise and air pollution, sovereignty of native lands, and for protecting land and wildlife, please reconsider airfield operations and mock warfare exercises in this area.

1.a. Thank You

La Center, WA 98629

My family moved to Whidbey Island to be near extended family in late 1994. We lived on the island for 6 years, during which time the extreme noise from Navy operations at all hours of the day and night, all days of the week, made our lives a living nightmare. We had a lovely home, which we sold, and moved away because as beautiful as the island is, the airplanes made life simply unbearable. It was unsafe and unhealthy for our children, who covered their ears and cried whenever the jets flew over our house. The current proposed decibel level and flying schedule is far and above what we experienced a decade and a half ago; I simply can't imagine living with that day and night. Our sole reason for leaving Whidbey Island was because we could no longer live in such an environment and we will never live there again. The Navy has already ruined one of the most beautiful places in the Pacific Northwest, and now they want to further impact the lives and health of island residents. Enough is enough.

Port Townsend, WA 98368

1.a. Thank You

4.r. Nonauditory Health Effects

Our military which is by all relative statutes directed to protect its citizens is instead wreaking untold damage on our mental and physical health with their Navy Growlers.

Freeland, WA 98249

1.a. Thank You

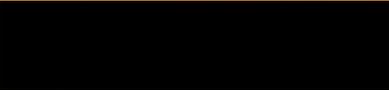
4.k. Comparison of the Prowler to the Growler

My wife and I have owned a house at Bush Point since 1998. The OLF is several miles from our home. We never heard the OLF operations until a few years ago. Thus, I must conclude that the noise from the Growler aircraft carries much further than that of the older Prowler aircraft. Even if their total dB ratings are similar, I'm concerned that their respective noise signatures differ to the extent that the Growlers' noise output is much more impactful to humans and animals.

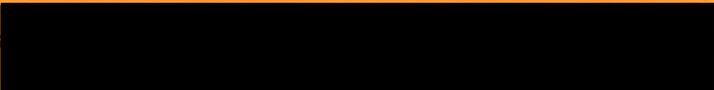
Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

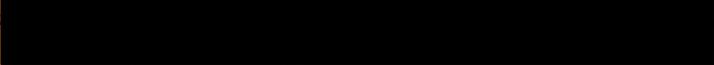
Comments must be postmarked or submitted online by February 24, 2017
SEND COPIES OF YOUR COMMENTS TO OUR ELECTED OFFICIALS

Online at: <http://www.whidbeyeis.com/Comment.aspx>
 By mail at: *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

1. Name 

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Resident, citizen

3. Address  *ICFul 98239*

4. Email 

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquifer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

Please address all the above concerns in detail and the fact that this Central Whidbey area is a reserve and aquifer-dependent. Also these jets are way more loud than I can work under, in my job in stress-reduction, as a weekend gardener & as a hiker & birdwatcher. I'm concerned for all the above reasons for myself & family, friends, community, & visitors. Please locate the practice field in a less-populated area.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

[REDACTED]
 Coupeville WA 98239

I appreciate the service of our men and women in the military and submit my concerns with respect and hope for a fair and balanced outcome.

I live at [REDACTED] 98239. We have well water I'm worried about, from the spill accidents of fire retardant chemicals.

I'm concerned about Growler noise, under the EIS. It doesn't address these issues.

- What alternatives ^{to other bases} have been evaluated?
- Actual noise measurements weren't made.
- How can jet noise be reduced?
- What about ~~of~~ accidents? Accident potential?
- Impact on property values - we've worked hard to earn a living & own our home. If flights increase from 4,100 to 35,100, how does that affect our home's value?
- By basing all the Growlers at NASWI, doesn't that increase risk for attacks?
- How does increased jet noise affect the unique rural character that sustains nature, agriculture, tourism, ^{schools} ~~areas~~ and small businesses here?

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.j. Property Values
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 3.a. Aircraft Operations
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.o. Classroom Learning Interference
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.a. Regional Land Use and Community Character

Coupeville, WA 98239

Here is my attempt to summarize all of my concerns about the increase in number of growlers at NAS Whidbey. I will try to do so as succinctly as possible... 1. Impact on low-income housing: 55% of our subsidized housing in North Whidbey is slated to fulfill their contractual agreements as of 2017. At that time they have the choice to convert to regular rental rates.... in 2015 two complexes did just that because the property owners knew that with the increase in military personnel coming to Whidbey, they could get market rate rents from said members because they receive a housing allowance. This is forcing our low-income community members into homeless situations, as they are not able to meet the income requirements necessary to qualify for the higher market rental rates when it is time to renew their leases. Available housing for lower middle class and income-constrained citizens is already a critical issue in every county surrounding NAS Whidbey Island. 2. NASWI is an EFM Category 5 Base: As a result, of being a Cat. 5 Base, the Oak Harbor Schools serve a disproportionately high number of children with autistic spectrum disorder. Children with autism often have sensory processing disorder as a co-occurring disorder. Children with sensory processing disorder are often negatively impacted by loud noises (such a jet noise). Is there any plan to compensate the schools and families financially for special needs youth that are impacted by increased jet noise in both Oak Harbor and Coupeville? 3. Economic Impact of increased Growler Traffic: While the economy of the Oak Harbor Community and most of North Whidbey are positively impacted by increased military personnel, the Central Whidbey community relies heavily on tourism to support its' economy. Jet noise during the summer, which is the prime time to qualify pilots, is also peak tourist season for the Central Whidbey community. This deters tourists from wanting to come and stay when they have to listen to jets fly over repeatedly, and late into the evening. 4. Opportunities for affordable housing construction: The reality is that most affordable land for development is located near airstrips. If there are increased flights, there are increased risks of crashes. As a result, the military buys up the "affordable" land, in an effort to reduced development around the airstrip, which makes very good sense. BUT it also means that the only land available for development is primarily the most costly properties, which means that affordable housing, which is a desperate need on Whidbey for those who are asset limited, income constrained and employed, will not be possible as the property costs will be out of reach for most affordable housing developers. 5. Jet Noise and PTSD: It is no secret that many military members who have retired here have PTSD to some extent as a result of the service in recent wars. Many of these retired members have settled in North and Central Whidbey with their families... loud noise is a well known trigger for PTSD survivors. Have you looked into how increased traffic will impact suffers of PTSD? 6. Poor water quality as a result of jet traffic impacts agriculture, one of the major industries of the Central Whidbey Area. How thoroughly has this been investigated and is there more investigation that needs to be done? I am not bringing these comments to you as a protest, but in hopes that they will increase your understanding of other ways that increased personnel and aircraft are likely to impact the communities closest to the base and to places where pilots must train. I am also hoping they will encourage you to think about how you can mitigate these impacts on our communities. My spouse retired as an E6 from VAQ-129 at NAS Whidbey Island. I was an ombudsman for VAQ-133. I

- 1.a. Thank You
- 11.a. Groundwater
- 11.b. Floodplains and Wetlands
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 2.k. Range of Alternatives
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects

have spent the last 26 years on Whidbey, and came here with the military. I can appreciate the benefits of Navy, but I am also not blind to its' challenges. I am currently the student support specialist and homeless liaison for [REDACTED] Public Schools, and held the same position in the Coupeville School District prior to coming to [REDACTED] 5 years ago. In addition, I am currently the president and founder of [REDACTED], a local non profit serving people in need and those who are housing challenged. I am on the board of the [REDACTED], and am participating in the development of the Housing Portion of the Island County Community Health Improvement Plan. Prior to working as a student support specialist, I worked in Special Education for Coupeville and Oak Harbor, particularly with youth who have Autistic Spectrum Disorder. And I lead trainings on the impact of trauma and the brain, so I have a range of experience that contributes to my concerns that I have expressed here. I also feel it is important to disclose that my husband and I live on the North East side of the Outlying Field in Coupeville. The reality is that with these increased jets, we are going to experience a significant decrease in our own quality of life as a result of increased training maneuvers. And while that is a factor we need to consider, it is not my primary concern. While I know that it is costly to detach squadron personnel for training in other communities, I hope that sharing the burden of these increased maneuvers with other airstrips in other places, will be a consideration, like China Lake and Moses Lake. I also hope that you will weigh the costs of detachments against the costs to the communities, both in terms of economic impact and environmental/ health impacts and find a compromise. Thank you for this opportunity to express my concerns. I am happy to meet with you if you have questions regarding any of my comments. [REDACTED]

IN THE MATTER OF:
The Open House Public Meeting for the Draft Environmental
Impact Statement (EIS) for EA-18G "Growler" Airfield
Operations at Naval Air Station (NAS) Whidbey Island Complex

DATE TAKEN: Tuesday, December 6, 2016

PLACE: Elks Lodge Grand Hall
155 North Ernst Street
Oak Harbor, Washington

TIME: 4:00 p.m. to 7:00 p.m.

REPORTED BY: Mary Mejlaender, CCR No. 2056
Likkell & Associates
Court Reporters & Legal Video
2722 Colby Avenue
Suite 706
Everett, WA 98201
depos@likkellcourtreporters.com

LIKKEL & ASSOCIATES, COURT REPORTERS & LEGAL VIDEO
2722 Colby Avenue, Suite 706, Everett, WA, 98201

(425) 259-3330

- 1.a. Thank You
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects

1 PUBLIC MEETING

2 (4:00 p.m.)

3 (The personal identifiable information disclosure
4 statement was read to the following commenter.)

5 MR. [REDACTED]: My name is [REDACTED],
6 and my wife [REDACTED] and I live on Moran Beach, just north of
7 Ault Field, about a quarter mile from the end of the runway.
8 And my grandma and grandpa purchased the property and built
9 the house when Eisenhower was president. So it's been in
10 our family for a long time, many, many decades. So I have
11 about five facts I wanted to give and then an opinion.

12 And so the first fact is that every single one of
13 our neighbors who has lived there for more than ten years
14 has hearing loss, and many of them have very significant
15 hearing loss. The second fact is a County employee came to
16 our house to do -- she was with the treasurer's department
17 for the assessor's office and she did just a little annual
18 review. And when the jet flew by she put her clipboard
19 under her arm and couldn't work. She stopped working. She
20 had to cover her ears. So when the jets are flying you
21 can't function in the yard.

22 Third is that I'm just looking around the room
23 and I'm guessing the salaries of the people here from
24 government are probably about \$200,000 a day or something
25 like that. And so there's lot of money here right now, but

1 not one single person in this room who is with the Navy or
2 with the government would let his or her child or his or her
3 grandchild play in my front yard when the jets are flying.

4 The next fact I'd like to state is that our
5 daughter is a -- an urban planner in San Diego, and when she
6 was up here she told my wife the Navy would never do this in
7 San Diego. And one other fact is we understand that there
8 have been no flights at the outlying field for a couple of
9 months now, and we understand that some deal was made with
10 the residents of the outlying field. So we've gotten all
11 the flights, including nearly until 1:00 a.m. in the morning
12 on occasion and there's nothing at the outlying field. And
13 all we wish is that -- the constitution talks about life,
14 liberty and the pursuit of happiness. Well, I can't live at
15 my house anymore. I'm not at liberty to take anyone or even
16 have my grandchildren there, and that really hurts my
17 pursuit -- ability to pursue happiness.

18 So I wish they could find another way instead of
19 bringing all the Growlers here, all the EA-18s or whatever
20 they are. I wish they could find another way other than
21 putting everything right here because the beautiful little
22 piece of property my grandma and grandpa bought is now --
23 it's almost uninhabitable now. It shakes. Our house shakes
24 when they fly over and I can't bring my grandchildren here.
25 And if it increases by 50 percent how am I going to live

1 here?

2 So that's really it. Thank you for listening.

3 God bless you all, and God bless the United States of

4 America.

5 * * *

16 (Further comment by Mr. [REDACTED].)

17 MR. [REDACTED]: [REDACTED]. And this

18 is just an addition, is we've looked at the -- my wife and I

19 have looked at the displays and we're in favor of

20 Alternative A on the proposal, which adds 8,800 flights to

21 Ault Field.

22 * * *

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

and continued until after 11 p.m. Of course, you are aware of the flight schedules. The idea of bringing more Growlers and ~~listening to~~ ^{hearing} more absolutely unbearable noise is very troubling to me and all my family. Thus far, the noise from the growlers has totally disrupted my life.

Please:

- 1) Don't make inequitable deals regarding the number of touch and goes between residents living near Milt Field and OLF. OLF neighbors bring law suits, go to the press, and harass. We respect our military, but don't put more on us please.
- 2) Please don't bring more growlers here without an approved, tested and effective noise solution such as the chevrons — not just a plan — but an application that works ^{installed}.
- 3) Don't make decisions about our health based on studies that show "no definitive evidence" that aircraft noise ~~affects~~ ^{affects} health. The noise does impact my health. Many of my neighbors have profound or severe hearing loss.
- 4) Create a Navy/Civilian Task Force to find a way to compensate ^{who are impacted} homeowners, so they can reinforce their homes against jet noise.

For more information, please visit the project website at whidbeyis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) **Provide written comments at today's public meeting;** (2) **Speak with the stenographer, who will record your comments;** (3) **Submit your comments on the project website at www.whidbeyeis.com;** or (4) **Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]
2. Organization/Affiliation Homeowner & Parent
3. Address [REDACTED] Port Townsend, WA 98368
4. E-mail [REDACTED]
5. Please check here if you would NOT like to be on the mailing list already on list
6. Please check here if you would like to receive a CD of the Final EIS when available

I am concerned that the only sound measurement reference point in Port Townsend seems to be at Old Fort Townsend Park. Fort Widem State Park & Port Townsend Schools need to be measured. Also the valleys on the west side of Olympic National Park (Hoh, Bogachiel, Queets) need to be measured. The shape of the valleys funnel the noise, increasing it so it drowns out all other sounds & is painful. These noise levels should not be determined by modeling but by actual measurements in the field. This is neither difficult nor expensive. Real data is needed.

My sleep & my children's sleep is disturbed by Growler over the OLF is comparable. It may not register as "damaged hearing" in the metrics but it is disturbing, interrupts learning & effectiveness at work.

Please print • Additional room is provided on back
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YOUR INPUT MATTERS

- 1.a. Thank You
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.l. Points of Interest
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance



Public Meeting Comment Form

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1. Name
2. Organization/Affiliation
3. Address Port Townsend, WA 98368
4. E-mail
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

I live in Port Townsend and am concerned that the draft EIS does not adequately address the noise impacts I experience. The noise studies use ~~models~~ computer models not actual data. It is very easy to measure real data with a noise meter during existing training flights at various altitudes & when multiple jets are flying at once. Different landforms - like the bluff of Port Townsend increase the noise levels so that my sleep is very interrupted. Also flights over the valleys of Olympic park have an effect from the shape of the valley that concentrates the noise making it deafening. These need to be addressed, using real measured on the ground data.
 Further, with existing locations for training - Fallon, Mountain Home, Yankton & Oregon - Boardman Range the Navy does not need to destroy a pristine, quiet

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YOUR INPUT MATTERS

- 1.a. Thank You
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.m. Supplemental Metrics
- 7.d. Recreation and Wilderness Analysis and Study Area

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

World Heritage site. The Navy is supposed to protect America, not destroy part of it in the process. I really want to support the Navy but can not when it despoils my sleep and the most pristine part of our state.

A strong Navy is one that is supported by its people. Please, for your sake and mine, consider being reasonable. If you are going to increase the number of planes to use louder ones, then fly them over existing Naval Training bases, not over lots of people & the quietest place in the country.

Finally, I hope you understand that if you base your EIS on computer predicted decibel levels, and it turns out the levels are higher when measured that you will be out of ~~scope~~ compliance with your EIS. Therefore you must do actual tests to save us all trouble & health effects.

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YOUR INPUT MATTERS

1.a. Thank You

Oak Harbor, WA 98277

The Navy has done an excellent job of presenting the EIS & the alternatives. This report affirms that the Navy is doing all that it can to cause minimal impact to the residents of the area. Living near the approaches to NAS Whidbey Island, I do not find the current or projected noise levels objectionable. I pray the Navy is not deterred by the objections of a few greedy property owners whom are seeking to enhance the values of their properties at the expense of critical training.

Portland, OR 97214

Do not use the Olympic Peninsula as a military playground by conducting war games and training in the Olympic National Forest. The noise and environmental pollution, as well as effect on wildlife is unconscionable.

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 19.d. Electronic Warfare
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You

Brentwood Bay , British Columbia V8m1p5

Knock it off jerks.

Coupeville, WA 98239

In response to your request for comments of the draft EIS of the proposed Growler expansion at OLF, my concerns are as follows: • My family arrived here in the 1800's and I am honored to be part of a multi-generational family, many of who have farmed this land since they settled here and still do today. I am the fifth generation, my daughter, the sixth. The extraordinary land, my 98 year old grandmother, my mother, myself and my daughter are all are part of the "unbroken historical record" that Ebey's Landing National Historical Reserve was created by Congress to protect in 1978. My Uncle still tills the land and plants seeds, like his father before him and back and back it goes. Of course, many of our family members left the area at some point to serve in the military. Our family's service (along with the many other multi-generational families who live here) is also embedded in our history. This is not an 'anti-military' stance, as so many of the good people here would reiterate, again and again. It is patriotism at its finest... this land that has been protected to preserve the way of life of an entire community. At its heart, the community is made of independent farmers, working to put food on our plates, stewards of the land. The expansion of the Growler operations that you are suggesting, from 6,000 flights to 36,000 flights would destroy our way of life. • Although I understand that your computer-generated model of decibels is the model that you use across the board, and that it is averaged in a 24-hour period, it simply does not accurately measure the sound of the Growlers during the touch and go practice. As you are aware, another federal entity, the National Park Service, measured sound on the Reserve and the decibels far exceeded your 'average' of 60 decibels. Its accurate measurement of the sound (not a computer generated calculation) of 115 decibels is literally deafening. Averaging an enormous sound that can cause permanent hearing loss over a 24 hour period is insulting to the health of the good citizens of this area. If someone hits you on the head with a hammer it will hurt you. If you average that pain over 24 hours it looks less painful, but does not negate the pain of being hit on the head with a hammer. Because much of the 1700 page document is based on this inaccurate model of measurement, the potential effects on our community are not accurately reflected in the Draft EIS. I urge you to reconsider your sound model and base the EIS on actual sound measurements. • Our children. In your proposed Alternative 1 for jet increases, according to table 4.2-3, the number of jets flying over Coupeville Elementary goes from the current level of 367 to 1,325. It is also admitted in the EIS that children's cognitive development can be affected by jet noise. How is it possible that there is no alternative considered other than exposing their own children to the 'shock and awe' brought on by the Growlers, risking the healthy growth of their minds and bodies. They are the future of this country. • APZ zones. It is distressing that you have not identified in the draft EIS the Accident Prone Zones that will be created with the jet expansion and what that will do to our property values, etc. Failing to determine those before a final EIS is proposed limits our ability to respond to something that we are not yet aware of. • No alternatives? It is difficult to understand how and why the Navy has not explored or listed any other alternatives than expanding the Growler operations at OLF Coupeville. The very freedoms that our great men and women in uniform are fighting to protect are threatened by this expansion, and by reading the EIS, it seems that no alternatives were considered. There are alternatives, rather than destroying a community and landscape that people visit from all over the world to

- 1.a. Thank You
- 2.k. Range of Alternatives
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 5.a. Accident Potential Zones
- 8.e. Outlying Landing Field Coupeville and Coupeville History
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

witness. The community is being punished for being good stewards of the land. In honor of the citizens who you are claiming to protect, I urge you to consider a no action alternative, to explore other options, to honor the enabling legislation that was brought about to preserve our community and our way of life. Respectfully, [REDACTED]

Coupeville, WA 98239

In response to your request for comments of the draft EIS of the proposed Growler expansion at OLF, my concerns are as follows:

- My family arrived here in the 1800's and I am honored to be part of a multi-generational family, many of who have farmed this land since they settled here and still do today. I am the fifth generation, my daughter, the sixth. The extraordinary land, my 98 year old grandmother, my mother, myself and my daughter are all are part of the "unbroken historical record" that Ebey's Landing National Historical Reserve was created by Congress to protect in 1978. My Uncle still tills the land and plants seeds, like his father before him and back and back it goes. Of course, many of our family members left the area at some point to serve in the military. Our family's service (along with the many other multi-generational families who live here) is also embedded in our history. This is not an 'anti-military' stance, as so many of the good people here would reiterate, again and again. It is patriotism at its finest... this land that has been protected to preserve the way of life of an entire community. At its heart, the community is made of independent farmers, working to put food on our plates, stewards of the land. The expansion of the Growler operations that you are suggesting, from 6,000 flights to 36,000 flights would destroy our way of life.
- Although I understand that your computer-generated model of decibels is the model that you use across the board, and that it is averaged in a 24-hour period, it simply does not accurately measure the sound of the Growlers during the touch and go practice. As you are aware, another federal entity, the National Park Service, measured sound on the Reserve and the decibels far exceeded your 'average' of 60 decibels. Its accurate measurement of the sound (not a computer generated calculation) of 115 decibels is literally deafening. Averaging an enormous sound that can cause permanent hearing loss over a 24 hour period is insulting to the health of the good citizens of this area. If someone hits you on the head with a hammer it will hurt you. If you average that pain over 24 hours it looks less painful, but does not negate the pain of being hit on the head with a hammer. Because much of the 1700 page document is based on this inaccurate model of measurement, the potential effects on our community are not accurately reflected in the Draft EIS. I urge you to reconsider your sound model and base the EIS on actual sound measurements.
- Our children. In your proposed Alternative 1 for jet increases, according to table 4.2-3, the number of jets flying over Coupeville Elementary goes from the current level of 367 to 1,325. It is also admitted in the EIS that children's cognitive development can be affected by jet noise. How is it possible that there is no alternative considered other than exposing their own children to the 'shock and awe' brought on by the Growlers, risking the healthy growth of their minds and bodies. They are the future of this country.
- APZ zones. It is distressing that you have not identified in the draft EIS the Accident Prone Zones that will be created with the jet expansion and what that will do to our property values, etc. Failing to determine those before a final EIS is proposed limits our ability to respond to something that we are not yet aware of.
- No alternatives? It is difficult to understand how and why the Navy has not explored or listed any other alternatives than expanding the Growler operations at OLF Coupeville. The very freedoms that our great men and women in uniform are fighting to protect are threatened by this expansion, and by reading the EIS, it seems that no alternatives were considered. There are alternatives, rather than destroying a community and landscape that people visit from all over the world to

- 1.a. Thank You
- 2.k. Range of Alternatives
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 5.a. Accident Potential Zones
- 8.e. Outlying Landing Field Coupeville and Coupeville History
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

witness. The community is being punished for being good stewards of the land. In honor of the citizens who you are claiming to protect, I urge you to consider a no action alternative, to explore other options, to honor the enabling legislation that was brought about to preserve our community and our way of life. Respectfully, [REDACTED]

Sequim, WA 98382

In response to your request for comments of the draft EIS of the proposed Growler expansion at OLF, my concerns are as follows: Coupeville is a community where my family lives and where I hope to retire soon, but I am very concerned about the Navy's plan of Growler Expansion. I urge you to use the report of the National Park Service, another federal entity, which accurately measured the actual sound of 115 decibels, a level which can cause permanent hearing loss, as opposed to a computer generated model which clearly "waters down" the impact on hearing. Using only computer generated data leads to faulty reasoning in this case. In your proposed Alternative 1 for jet increases, according to table 4.2-3, the number of jets flying over Coupeville Elementary goes from the current level of 367 to 1,325. It is also admitted in the EIS that children's cognitive development can be affected by jet noise. How can you ignore this very important data? I fear not only for my granddaughter's cognitive development and hearing but for all the children in the area. Please remember that they, too, may be your future soldiers. It is imperative that you protect them. Ebey's Landing National Historical Reserve was created 1978 by Congress for protection. The Reserve and the farms that surround it are the epitome of America. The independent farmers are stewards of the land and work hard to provide our food. Expanding the Growler operations will destroy the agrarian way of life of this patriotic community. Property values will plummet wreaking personal financial hardship. I urge you to please honor the legislation that created the Reserve, I urge you to protect the community, and I urge you to consider alternatives to expanding Growler operations.

- 1.a. Thank You
- 12.e. Agriculture Analysis
- 12.j. Property Values
- 2.k. Range of Alternatives
- 4.j. Other Reports
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss

Coupeville, WA 98239

Expanding OLF is a BIG MISTAKE. My father along with my both my grandfathers have been in the military in form or another. From the Air Force to the Army Corp of Engineers and everything in between, many friends and family are in, and have been involved in helping to protect this country over the last 100 years. I moved to Oak Harbor at 18 and lived in the area for 5 years, moved to Seattle and was drawn back to build a business and raise a family. I, like most people, whether they civilian, retired military or other, are drawn to this area for its beauty, history and tight-knit community. I also really appreciate the robust discourse, on both sides, that the entire community engages in. It shows an incredible love and caring for this community on both sides that you only see in special places. Steamrolling this plan over this community will destroy this fabric. I chose to raise a family here for the community and the surrounding landscape that Ebey's Reserve offers. The EIS is in clear contrast these ideals. Not only is the EIS fundamentally flawed in how it averages decibels over a 24 hour period or how it doesn't take into account the elementary, middle and high schools not to mention the younger age academies that would ALL be affected by the increased jet noise. Or, the individuals located in what would turn into "crash Zones" or that the runway is simply not up to standards for this type of training exercise. It simply does not fit nor take into account the cultural landscape of this community that was enshrined, through legislation, by congress. The military does have a place on this island. But, so do the 6th generation farmers, the "trinket peddlers" and everyone else in this area that chooses to make their living here. People visit here, want to eat food from here, and live here because they can appreciate one of the last great diverse small town communities in this country that has worked so hard since the earliest settlers, engaged and passed a MANDATE thru congress to work with local, state and federal government, and thrived in technological era the likes of which we have never seen, to protect this place. The EIS document is flawed from the very beginning, and fundamentally does not fit with this community. FIND AN ALTERNATIVE!

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.f. Economic Hardship and Impacts
- 12.n. Quality of Life
- 2.k. Range of Alternatives
- 4.d. Day-Night Average Sound Level Metric
- 4.l. Points of Interest
- 5.a. Accident Potential Zones

Coupeville, WA 98239

Expanding OLF is a BIG MISTAKE. My father along with my both my grandfathers have been in the military in form or another. From the Air Force to the Army Corp of Engineers and everything in between, many friends and family are in, and have been involved in helping to protect this country over the last 100 years. I moved to Oak Harbor at 18 and lived in the area for 5 years, moved to Seattle and was drawn back to build a business and raise a family. I, like most people, whether they civilian, retired military or other, are drawn to this area for its beauty, history and tight-knit community. I also really appreciate the robust discourse, on both sides, that the entire community engages in. It shows an incredible love and caring for this community on both sides that you only see in special places. Steamrolling this plan over this community will destroy this fabric. I chose to raise a family here for the community and the surrounding landscape that Ebey's Reserve offers. The EIS is in clear contrast these ideals. Not only is the EIS fundamentally flawed in how it averages decibels over a 24 hour period or how it doesn't take into account the elementary, middle and high schools not to mention the younger age academies that would ALL be affected by the increased jet noise. Or, the individuals located in what would turn into "crash Zones" or that the runway is simply not up to standards for this type of training exercise. It simply does not fit nor take into account the cultural landscape of this community that was enshrined, through legislation, by congress. The military does have a place on this island. But, so do the 6th generation farmers, the "trinket peddlers" and everyone else in this area that chooses to make their living here. People visit here, want to eat food from here, and live here because they can appreciate one of the last great diverse small town communities in this country that has worked so hard since the earliest settlers, engaged and passed a MANDATE thru congress to work with local, state and federal government, and thrived in technological era the likes of which we have never seen, to protect this place. The EIS document is flawed from the very beginning, and fundamentally does not fit with this community. FIND AN ALTERNATIVE!

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
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- 12.n. Quality of Life
- 2.k. Range of Alternatives
- 4.d. Day-Night Average Sound Level Metric
- 4.l. Points of Interest
- 5.a. Accident Potential Zones

Environmental Impact Statement Comment Form
EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name [redacted]
2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Resident/Citizen of Coupeville (within Town limits)
3. Address [redacted] Coupeville, WA 98239
4. Email [redacted]

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- X Health effects from noise and low-frequency sound.
- X Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- X A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- X A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.a. Socioeconomic Study Area
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

X Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.

X Noise impacts on commercial properties including agriculture.

X Aquafer and well contamination.

Additional Concerns:

X The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.

X The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.

X The impact on marine and terrestrial wildlife.

X The major security risk for Whidbey Island by siting all Growlers here.

X Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

Whidbey Island is limited by its size, and its natural resources including water availability and suitable soils for drainage. The indirect effects of increasing the population on Whidbey Island are profound and need additional study. Unintended consequences of new development to accommodate this population growth need further assessment and evaluation. As has been stated, the APE is not large enough.

Average sound decibel is not a helpful nor realistic measure for Whidbey island residents who experience the extreme close conversation-stopping noise of the jets, particularly in the Coupeville area. This is a public health issue for children, the elderly, and those disadvantaged and/or disabled who cannot speak for themselves.

SEE: WHO Training Package for the Health Sector 2010 World Health Organization www.who.int/ceh

As an Island, we (other than Oak Harbor) rely on *wells* for water supply. I am very concerned about the contamination of the groundwater with PFOA's from the use of fire-fighting foam at OLF and Ault Field. I have read that eight local wells have now tested well over the EPA limit. This issue has not been addressed in the Draft EIS. The increase in flights increases the potential for an accident and the further use of this toxic chemical and puts our aquifer at risk.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

Coupeville, WA 98239

I am a resident within the Town limits of Coupeville, WA, a member of the [REDACTED] [REDACTED], [REDACTED] of Whidbey Island, [REDACTED] on Ebey's Prairie and retired Teacher-Librarian. I give you my credentials as a background of why I'm very concerned about increased Growler flights over Ebey's Prairie and Ebey's Landing National Historical Reserve. Acting as a [REDACTED] within the National Parks system, on Ebey's Prairie, I encourage visitors to this historic site to imagine it as the pristine area that it had been for thousands of years, subsequently a "landing" for early European descent settlers. Imagine, if you will, how that educational and emotional experience is shattered by the noise of Growler flights over the prairie. Not only is it virtually impossible to speak to persons within close reach, but the quiet contemplation of what the Ebey's Prairie has meant to so many peoples of different cultures is completely lost and the experience irreparably altered. I am writing to emphasize the importance of preserving a unique area, part of the National Park System, and a first-of-its-kind cooperation among Town, County, Washington State, and the National Parks. Please don't destroy what so many have worked so very hard to achieve in this unique environment!

1.a. Thank You

8.c. Noise and Vibration Impacts to Cultural Resources

8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Coupeville, WA 98239

Please ponder what could be more important than air and water? Answer: Nothing is more important! Our lives are dependent on these two resources, and they both are being threatened by air flight and its attendant pollutants: extreme noise plus exhaust fumes, and flame retardant chemicals in the water table.

- 1.a. Thank You
- 11.a. Groundwater
- 11.b. Floodplains and Wetlands
- 11.d. Per- and Polyfluoroalkyl Substances
- 6.b. National Ambient Air Quality Standards Compliance



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at www.whidbeyeis.com;** or **(4) Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.**

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. *The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.*

- 1. Name
- 2. Organization/Affiliation
- 3. Address ANACORTES, WA 98021
- 4. E-mail
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

Noise levels are extremely disruptive for classrooms, normal human activity and sleep.
 These planes have a terrible design flaw!
 They are way too loud immediately and the residual noise after they pass over lasts for an extremely long time.
 Is any muffling of sound suppression possible?
 This is NOT the sound of freedom. It's an insult to human and animal ears. It's the sound of Hell.

Please print • Additional room is provided on back
Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 4.m. Supplemental Metrics
- 4.t. Noise Mitigation



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1. Name
2. Organization/Affiliation
3. Address ANACORTES 98221
4. E-mail
5. Please check here if you would NOT like to be on the mailing list
6. Please check here if you would like to receive a CD of the Final EIS when available

~~Community Resource~~ - BIG HOLE!
 MAP AT LISTENING STATION DOES NOT SHOW
 ± 2500 ACRES OF ANACORTES COMMUNITY
 FOREST LANDS (A PUBLIC PARK).
 FLIGHTS AND NOISE WILL AFFECT WILDLIFE AND
 PEOPLE. THESE AREAS INCLUDE SUMMIT OF
 MT ERIC, WHISTLE LAKE AND CRANBERRY LAKE.
 ALSO HEART LAKE, A STATE PARK MANAGED (UNDER
 AGREEMENT) BY CITY OF ANACORTES.

Please print • Additional room is provided on back
 Please drop this form into one of the comment boxes here at the public meeting or mail to:
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 7.d. Recreation and Wilderness Analysis and Study Area

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name [Redacted]

2. Last Name [Redacted]

3. Organization/Affiliation _____

4. City, State, ZIP [Redacted] Lopez Island, WA

5. E-mail _____

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

- 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument.

Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

- 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

- 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

- 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

- 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states “If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.”

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:



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- 1. Name [REDACTED]
- 2. Organization/Affiliation PSYCHOTHERAPIST IN PRIVATE PRACTICE
- 3. Address [REDACTED]
- 4. E-mail NA 1 CUMBER WA 98236
- 5. Please check here if you would NOT like to be on the mailing list
- 6. Please check here if you would like to receive a CD of the Final EIS when available

PLEASE "LISTEN" SO THAT WE CAN
 CONTINUE TO BE ABLE "TO LISTEN"
 AND HAVE A QUALITY OF LIFE -
 THE PLANES NEED TO FLY OVER LAND
 THAT PEOPLE ARE NOT LIVING ON -
 (MAKING HOMES, GROWING FAMILIES,
 WORKING -) THEY NEED TO FLY AWAY
 FROM A CITY / A COMMUNITY - TO SAY
 PEOPLE ARE NOT IMPACTED BY THE NOISE,
 BY THE DISRUPTION (IS) NOT TRUE - IT'S
 LIKE SAYING THE ATOMIC TESTS IN NEVADA

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

DIDN'T / OR WON'T IMPACT PEOPLE - THE TESTS

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 5.a. Accident Potential Zones

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

DID - THIS EXCESSIVE NOISE AND VIBRATION (S) - TOO IMPACTING, DISRUPTING ORDINARY LIVES - TAKE THE PLANES TO ANOTHER LOCATION -

NOT OVER WHIDBEY
NOT OVER THE OLYMPIC FOREST

AWAY FROM PEOPLE
THIS (S) NOT A WAR ZONE -
THIS (S) A COMMUNITY OF PEOPLE
THIS (S) AN ANCIENT SACRED FOREST -

"STOP" - AS A PSYCHOTHERAPIST I WORK WITH TRAUMA - THIS (S) CREATING TRAUMA - AND THERE (S) OTHER AIR SPACE THAT WILL NOT HARM OTHERS AS YOU PRACTICE -

12/15/14

For more information, please visit the project website at whidbeyis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

1.a. Thank You

Oak Harbor, WA 98155

We welcome the addition of Growler aircraft to the NAS Whidbey. We are proud to be in support of the US Navy effort to provide the needed support for our country. The noise is not excessive, is of no major concern.

Draft Environmental Impact Statement Comment Form EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>

By mail at Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)

Citizen

3. Address _____

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

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The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 10.b. Biological Resources Impacts
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.d. Arrivals and Departures
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.b. Overtasking/Overloading of Air Traffic Control at Ault Field and Elsewhere

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.

Additional Concerns:

- Risk of increased aquifer and well contamination.
- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife such as orcas and migratory birds.
- The major terrorist risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as the Growler onboard oxygen system.

Please include any additional comments and concerns here:

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, go to Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler EIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Environmental Impact Statement Comment Form EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by February 24, 2017

Online at: <http://www.whidbeyeis.com/Comment.aspx>
By mail at: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

1. Name _____

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Resident

3. Address _____, Coupeville 98234

4. Email _____

Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture. This is a burden greater than the Coupeville/Central Whidbey community can bear.

Comments

Please check all that concern you and add additional comments on the back.

The environmental impacts of the following issues due to increased flight operations at the OLF are not adequately addressed in the draft Environmental Impact Statement (EIS):

- Health effects from noise and low-frequency sound.
- Businesses, schools, hospital, and County and Town public government operations in the Coupeville area.
- A decrease in tourism including in the town of Coupeville, hiking and birding at Ebey's Landing National Historical Reserve, the Casey Conference Center, Fort Casey State Park, The Pacific Rim Institute.
- A decrease in private property values due to noise.

(over)

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts
- 12.n. Quality of Life
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports

- Outdoor recreation limits, as well as children's and family's health, at Rhododendron Park ball fields.
- Noise impacts on commercial properties including agriculture.
- Aquafer and well contamination.

Additional Concerns:

- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.
- The Navy did not adequately look at siting new Growler aircraft elsewhere despite this being one of the top issues from the community during the Navy's prior scoping forums.
- The impact on marine and terrestrial wildlife.
- The major security risk for Whidbey Island by siting all Growlers here.
- Mishaps and crash risks due to problems such as their onboard oxygen system.

Please include any additional comments and concerns here:

I am a home owner in the flight path of OLF. This property has been in my wife's family for 150 years. When the Growlers fly my wife becomes anxious and fearful. The worst part of it is the anticipation of how the noise affects her sleep and emotions.

All comments will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

For more information, see, Coupeville Community Allies, www.facebook.com/whidbeyeis

Coupeville Community Allies is a group of community members committed to sharing accurate information to all Coupeville and Whidbey Island residents regarding the Growler DEIS. We encourage everyone to get involved in the discussion of our future and to submit comments and concerns.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact must be addressed and the public must be given the opportunity to comment.

Coupeville, WA 98239

1.a. Thank You

4.r. Nonauditory Health Effects

Much like the tobacco industry did years ago, the DEIS selectively and reprehensively cites and relies on out-of-date medical research findings on impacts of noise on human health that are at odds with the overwhelming body of contemporary research. This obfuscation renders the DEIS findings incomplete and disingenuous and demands an honest, complete, forthright evaluation of the contemporary formal medical literature.

1.a. Thank You

Oak harbor , WA 98277

These people have been working for years to get rid of OLF . They have proved nothing of all the they have tried to close down OLF . Were they came from and why they chose to live their I don't know . But I do know they knew there was a posablity of aircraft noise befor they did it was in the real estate contract they signed . Their best bet would is to move out or deal with it. I and hundreds other have been here forty plus years and have had no trouble putting up with aircraft noise . If ithey knew how vitel this field was to the training and safety of these pilot and air crew to train for carrer landings Day and night. The short time they get the noise should not be a problem.

Brinnon, WA 98320

I strongly oppose the three alternatives to increase the number of growler aircraft. I would prefer an alternative to reduce or eliminate growler operations in this area, but that not being an option at this time, I would support the "No Action Alternative". I live in Jefferson County, and am a frequent visitor to the Olympic National Park and Whidbey Island. Noise pollution is distressing and physically and mentally harmful to people and wildlife, and is inconsistent with the qualities of Puget Sound and the Olympic Peninsula. I agree with the comments of many others that the DEIS is fatally flawed.

- 1.a. Thank You
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.l. No Action Alternative
- 2.m. Record of Decision/Preferred Alternative
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

January 25, 2017

EA-18G EIS Project Manager
 NAVFAC Atlantic Attn: Code EV21/SS
 6506 Hampton Blvd.
 Norfolk, VA 23508

[REDACTED]
 (residential address)

[REDACTED]
 Lopez Island, WA 98261

(mail address)

[REDACTED]
 Pioneer, CA 95666

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex (DEIS). I can appreciate the time and effort that went into preparing the DEIS. Unfortunately, the DEIS falls far short in being able to fully inform the Secretary of the Navy about the actual level of community annoyance that is already being caused by the noise generated from the existing Growler training flights. I also believe that the DEIS fails to fully disclose how community annoyance levels will dramatically increase, especially in outlying areas, under the implementation of any of the action alternatives presented in the DEIS.

If the Secretary of the Navy is going to make a decision about adding additional Growlers to the Whidbey Air Station with the resultant increase in the number of training flights, then I would hope that decision would be based with full knowledge about the severity of the noise impacts created by the Growlers. The EA-18G is perhaps one of the loudest military jet aircraft ever developed. NEPA is about making informed decisions, and the DEIS barely scratches the surface in regards to the actual noise disturbances currently being caused by these extremely loud and terribly annoying aircraft.

The EA-18G may be exciting to fly for the young pilots, but when flying overhead the low frequency roar and rumble that emanates from the jet engines of this aircraft is very disturbing to the simple folks trying to live their lives on the ground. The name "Growler" is a vast understatement. It alludes me as to why the Navy desires to fly, over highly populated areas, a plane that is this incredibly rude in it's loudness. The Navy is not being a good neighbor to our local communities. Instead the Navy has their head stuck so deep in the sand that they can not hear the obnoxious unearthly roar that is coming out of their EA-18Gs.

From data given in the DEIS, it is difficult to try to compare the sound levels that emanate from the EA-18G Growler to other types of existing aircraft whether civilian or military. I realize that the FAA does not regulate military aircraft, but I would like to see the noise levels of the individual Growler expressed in the DEIS in the same manner that the FAA measures and approves noise levels that are generated from commercial aircraft. That would give some commonality for reasonable comparisons. Currently, the FAA mandates that nearly all aircraft that fly within the United States comply with their Stage 3 noise requirements. Does the Growler even meet the old FAA Stage 1 noise requirements?

I believe that if the Growler was flying out of commercial airports, then the FAA would prohibit it. Does it not seem that what is appropriate for commercial aviation should be appropriate for the military when using airfields adjacent to highly populated areas even if not expressly required by law? In particular, since the computer noise simulation models used in the DEIS were developed to describe noise and the resultant levels of community annoyance adjacent to commercial airports, is the DEIS using the correct aircraft noise baseline levels as input into a model developed for commercial aviation? It seems to me that the Growler EA-18G is so very loud in relation to commercial aircraft that it would blow past any normal assumptions made by the Day Night Level (DNL) computer modeling. This makes all of the computer model outputs in the DEIS suspect as not truly reflective of the existing condition let alone what would result from increasing the number of Growlers based at Whidbey.

- 1.a. Thank You
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.k. Comparison of the Prowler to the Growler
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation

The DEIS is of particular interest to me as I own property on Lopez Island in San Juan County. I purchased that property in order to enjoy a rural lifestyle away from the bustle and noise of busy urban environments. Lopez Island is a small community that values a natural environment composed of predominately quiet agricultural and non-industrial activities. But since the Navy began conducting training flights using the EA-18G Growler aircraft, out of the airfields of the Whidbey Naval Air Station, disturbance due to military jet noise along with correlated levels of community annoyance has increased dramatically on Lopez Island. It is difficult to simply ignore the roar of the military jets passing overhead at low elevations. The noise levels and the number of low level flights over Lopez Island now greatly exceeds what was occurring just a few years ago when the Navy was flying the EA-6B aircraft out of Whidbey for the same type of training missions. In analyzing the noise effects of the no action alternative, the DEIS should disclose existing conditions from a few years ago before Growler deployment.

The 65 Db DNL contour maps shown in the DEIS do not even reach over Lopez Island. Thus, the DEIS seems to contend that (using the Schultz and Finegold annoyance curves presented in the DEIS Appendix) that the number of highly annoyed residents on Lopez Island would be far less than 15% of that population. I personally know that many residents of Lopez Island indeed are highly annoyed by the noise currently being generated from the existing Growler over-flights and many of those residents have submitted complaints to the Navy. Consequently, the contention of the DEIS that Lopez Island has very few highly annoyed residents seems incorrect. Either the computer noise models in the DEIS are misleading in predicting levels of community annoyance or the residents of Lopez Island with whom I have discussed this issue are not being frank with me. I tend to side with the actual residents then the alternate reality of the computer models. Many residents of Lopez Island are more highly annoyed by the Growler over flights than is reflected in the DEIS.

Lopez Island sits 10 miles from the Whidbey air fields, yet the once quiet and peaceful Lopez Island community is being significantly impacted by these very loud military Growler jets. Community annoyance levels will likely increase dramatically and the quality of life on Lopez Island will decrease under any of the action alternatives in the DEIS. This issue is not being analyzed adequately in the DEIS.

Through the use of DNL contour maps, the DEIS attempts to disclose the amount of annoyance that is currently occurring to residents of local communities due to these Growler over-flights. The DNL contour maps are generated by a computer noise simulation model that does not seem to correlate well with the actual community annoyance levels in the "real world" in outlying areas like Lopez Island. And the DEIS does an extremely poor job of explaining how the computer generated DNL contour levels portend to correspond to the predicted levels of community annoyance. The DEIS should instead portray these DNL contours as community annoyance levels to make the intent of these contours more meaningful to those reading the DEIS.

Why did the DEIS not conduct any social surveys in the local communities about the actual noise impacts of these extremely loud and annoying military jets? Why does the DEIS estimate "theoretical" annoyance levels only through the use of computer models instead of actually surveying and polling the local communities that are being so affected? Perhaps surveying real people is too big of a dose of reality for the DEIS that surrounds itself in computer simulations that underplay the actual level of annoyance. Why does the DEIS not summarize the numerous noise complaints that the Navy has received about the Growler over-flights and present that information in terms of "real" community annoyance levels? The DEIS does show that during the 2014-2015 DEIS scoping efforts, 85 percent of the total comments received were against the proposed action. Maybe it is time for the analysis in this DEIS to sit up and take notice to what our local communities are actually trying to say to the Navy.

My father served in the Navy during World War II and I am very proud of his service in that regards. I understand the necessity of military training, but that training should not be conducted at the expense of the emotional health and well being of the people living in neighboring communities. The Navy has become the neighbor from hell in regards to their use of the Growler. When the Navy so annoys and angers the local citizens they are trying to protect, then the purpose and need for their low level training flights no longer becomes relevant.

The United States Supreme Court in United States v. Causby (328 U.S.256) held that the U.S. Government was liable to property owners for the noise impacts from military aircraft. In that particular case, the plaintiffs argued that their property was taken (within the meaning of the Fifth Amendment of the US Constitution) by the U.S. Government as the plaintiff's property was no longer able to serve its intended purpose (a chicken farm in this case) due to excessive military aircraft noise. Now I am not a chicken farmer and I do not claim to have any rights to the airspace above my parcel, but many have purchased property on Lopez Island (where I own property) as a place of quiet residential refuge. The low level Growler over-flights have taken, for many, their property away from its intended use. The Growler over flights limit the utility that a private parcel may have to the land owner and the residents.

Consequently, the low level Growler training flights have caused a diminution of the value of property in the local communities. This issue is not addressed in the DEIS. This is a diminution of a parcel's value in the sense that it may no longer serve as a place to experience a quiet natural environment. Either a resident has to live with the awful noise or move. This is especially problematic for those that have lived for years on their parcels without previously suffering the annoyance of loud low level Growler over flights. The DEIS does not address how the Navy plans to compensate land owners in local communities for the loss of the utility of their private parcels, especially in outlying areas that were previously without much military jet noise.

Freedom from excessive air and water pollution is one of the freedoms we have in the United States. Extreme aircraft noise is a recognizable form of pollution to the human environment. The EA-18G Growlers are not the "sound of freedom" but rather the sound of freedom being taken away. It is a right of any citizen of our country to be free from the disturbing activities of their neighbors when those activities result in the degradation of the environment within and around one's private property.

The EA-18G Growler aircraft is probably one of the loudest military aircraft ever designed and flown. The DEIS does not discuss what possible purpose there is to have an aircraft that emanates such excessive noise levels. The DEIS does not discuss if there is a strategic advantage to having an aircraft that is so extremely loud. Is the Navy and its contractors so technologically unadvanced that they can not develop a quiet aircraft that would not disturb their neighboring residential communities? The DEIS does not explain why the Navy mission is so important that they have the right to deny their neighbors the freedom of quiet skies? The Navy is fouling their own nest and this is a nest that residents of our local communities are being forced to reside in alongside the Navy.

Environmental noise affects the human environment primarily through its adverse psychological effects. The DEIS makes note of this issue and the military certainly understands the psychological impact of noise. For years, the military used noise to break down the will of enemy combatants. That practice has been curtailed by the military to the best of my knowledge as it was deemed to be a form of torture. Not torture that caused physical harm, but rather torture that affected the human psyche. The DEIS is not correct in presuming that if the noise from the Growler training activities is not causing measurable physical harm (like permanent hearing loss or heart attacks) then there is no significant affect of those activities on the human environment. The issue here is annoyance and annoyance leads to stress which leads to a diminution in one's quality of life.

The psychological impacts of the Growler noise on residents of local communities is not adequately addressed in the DEIS. The fact that many residents of San Juan County (including Lopez Island) are significantly annoyed by the training flights of the Growler is demonstrated by the thousands of complaints that have been registered with the Navy about the excessive jet noise that emanates from the EA-18G Growler when flying overhead. The complaints are even more numerous from those living closer to the Navy air fields on Whidbey Island. Living in proximity to either of the Navy airfields at Whidbey must be awful. Yet, the DEIS turns a deaf ear to the complaints. The sheer number of existing complaints would help to describe in the DEIS the actual level of psychological long-term annoyance that is occurring due to the existing Grower training flights. Those complaints will increase dramatically under implementation of any of the action alternatives in the DEIS.

The DEIS looks to computer noise models without conducting any actual on-the-ground verification of the outputs of those models. This downplays the true impact that the EA-18G training flights are having on the human environment. Whether or not this military jet noise is causing physical damage to one's hearing or causing hypertension or heart attacks is irrelevant. The long term annoyance, the increased stress levels and the psychological impact is what is critical and what needs to be measured and portrayed in some relevant manner in the DEIS. The high levels of annoyance caused to local communities by the Growler over flights results in a significant reduction in the quality of life for local residents.

Unlike a computer model, I can tell you from experience that the noise generated by the existing low level military training flights that take place over Lopez Island by the Growlers are significantly disturbing to many people and visitors to the island, including myself. If the Growler aircraft were not so terribly loud and annoying, then there would not be thousands of citizens currently complaining to the Navy about the noise impacts under the Growler flight paths. I would love to look up and see a military jet aircraft passing overhead and marvel at its stealth. Instead I have to cover my ears in annoyance when a Growler passes overhead. It leaves me furious, annoyed and angered for hours at a time as a result of being so unwillingly disturbed by the jet noise and unexpectedly interrupted in my daily activities. I feel held down and hopeless from the assault of the noise, as do others.

The psychological impacts of the noise intrusion generated by the Growlers lasts far longer than the actual time period of the over flight. The DEIS Appendix points out that an individual's level of annoyance is influenced greatly when that person does not understand the necessity of the noise or believes that the noise is otherwise preventable. Levels of annoyance are also influenced by the predictability of the noise. In this regards, the DEIS makes no case as to why the noise being generated by the Growlers can not otherwise be prevented nor why flight schedules can not be more consistent.

A loud freight train passing by everyday at noon can be tolerated. Tolerating military jet noise that can occur anytime during the day or night is more problematic. But there may be potential solutions. Things like flying at higher elevations over out lying areas, working with the FAA to change flight paths away from outlying residential areas to areas over open water, not using jet engine afterburners, or changing jet engine designs are all potential solutions to this issue. None of the DEIS actions alternatives include any specific mitigation of this sort. The DEIS only indicates that these are mitigation measures that could be considered but otherwise not actually implemented with any of action alternatives.

The use of computer noise simulation models, in the DEIS, such as NOISEMAP to describe existing and future noise impacts, created by the Growlers, does not present, to the Secretary of the Navy, a true picture of the noise levels that would be wrought upon residents of local communities by stationing more Growlers at the Whidbey Naval Air Station. My understanding is that a Department of Defense report found that NOISEMAP is outdated and does not provide scientifically and legally defensible noise assessments of the high-thrust jet engines used in the Growlers? If so, then why does the DEIS use NOISEMAP?

The DEIS should better quantify the level of noise and the time periods and frequency of events actually occurring on the ground with in-situ sound pressure level monitoring rather than questionable computer simulations. Actual on the ground sound pressure level monitoring and actual verifiable accounts of the number of existing over flights occurring needs to be conducted not only adjacent to the Navy air fields but also in outlying areas. I am particularly concerned about the number of existing Growler over flights at the San Juan Islands National Monument located on Lopez Island which is listed as Point 10 in the affected environment of the DEIS. Without a good environmental baseline, the analysis of affects of the alternatives carried forward in the DEIS is faulty.

For example, I believe that P10 currently receives more than the 372 annual noise events per year shown in the DEIS. The Lmax of a EA-18G Growler flying only a few thousand feet above P10 is likely greater than 85 dB. There is a computer programmer's adage that states "garbage-in-garbage-out (GIGO)". The computer noise simulation models used in the DEIS are subject to GIGO. Because the noise data input into the computer model is not correct for the existing condition and because the actual number of over flights currently occurring in outlying areas is not accurate, then any predictions by the DEIS of the noise levels occurring under the action alternatives will subsequently also not likely be correct. None of this can be verified without actual on the ground measurements and a review of accurate existing flight records of the Growlers under the existing condition.

As another example, the DEIS shows that there is no probability of awakening from sleep for residents living near point SO5 (Lopez Island School). Now I personally know someone that lives near SO5 and who has reported to me numerous times that her sleep has been interrupted by the existing Growler over-flights. Maybe the DEIS should have actually questioned local residents if their sleep was being interrupted rather than using computer noise models that incorrectly estimate that there should be no such sleep disturbing events currently occurring due to existing Growler over flights. In rural areas, people often go to bed by 8PM or 9PM and get up at sunrise and this does not seem to be addressed in the sleep interruption predictions made by the DEIS.

I applaud the DEIS for using SEL, Lmax and Number of Annual Events to represent the noise impacts currently occurring and potentially occurring around schools and other points of interest in our local communities. Two of the points that I am most familiar with are Point 10 in the DEIS (San Juan Island National Monument at the south end of Lopez Island) and Point SO5 (Lopez Island School). But it is obvious to me from personal experience that the computer models are not correctly predicting the SEL, Lmax or the Number of Annual Events actually currently occurring at these points. The DEIS gives no evidence that the noise estimates and event estimates are correct.

Particularly misleading in the DEIS is the use of Day-Night Noise Level (DNL) to represent the potential for long term annoyance to local communities affected by the Growler over-flights. DNL was developed to analyze the noise impacts at commercial airports that operate 365 days a year. DNL does not seem appropriate for quantifying the effects of intermittent but intensive military jet flight noise occurring over otherwise quiet rural areas. Noise level averaging incorrectly assumes that the quiet days or hours mitigate for the noisy days or hours over the long run. I say that is hogwash if one is looking at otherwise quiet environments.

Let say that I blasted the Secretary of the Navy's quiet country residence with ear deafening noise 10 times per day for 5 minutes at a time (think Harley motorcycle without exhaust pipes). Could I defend myself from a harassment law suit by claiming that if averaged over the whole day then the noise that I was generating would only constitute the equivalent annoyance level of a bird chirp? Ridiculous of course, but that is what the DEIS is doing when using DNL to disclose the potential annoyance level to local residents from increased Growler flights especially over normally quiet rural areas. The DEIS should directly question and survey those residents about their annoyance levels and summarize the results accordingly.

The DEIS should have fully analyzed and carried forward at least one other action alternatives for stationing the Growler aircraft at a more remote airbase where noise disturbances would not be as severe as is currently occurring to the communities surrounding the Whidbey Naval Air Station. Although the action alternatives fully analyzed in the DEIS may meet the purpose of the DEIS to "augment the Navy's existing Electronic Attack community at NAS Whidbey Island", the need of the DEIS "to maintain and expand Growler operational readiness" is not being met by the narrow range of alternatives analyzed in the DEIS.

In order to meet the stated need of the DEIS, all opportunities to achieve "Growler operational readiness" should be fully analyzed by examining other possible Growler flight training operational sites at a more remote airfield than is Whidbey, such as China Lake. The cost and convenience reasons given in the DEIS are weak at best for not fully analyzing other Growler base locations. By fully analyzing alternatives for stationing all or some of the Growlers at a more remote airbase or conducting training at a more remote location, then the Secretary of the Navy would be given a chance to select an alternative that results in less noise disturbance to our local communities. One of the reasons that we have remote military installations is to enable the military to test their weapons and equipment and conduct training without otherwise impacting local communities. Why is the Growler training flights any different? One would hope that the Navy would want to move their show away from the general population rather than force residents to unwillingly suffer from the Navy's environmental noise pollution.

The DEIS also does not examine alternatives for reducing the actual number of Growlers stationed at the Whidbey Naval Air Base without otherwise needing to base Growlers at a different location. The DEIS states, "It would be unreasonable to continue considering alternatives that evaluate fewer aircraft than Congress has appropriated; therefore, these alternatives were removed from further analysis." There is no logic in that statement in the DEIS. Apparently the Navy has way more appropriations than they know what do with. How many Growlers are truly needed to accomplish "operational readiness"? How many Growlers have been deployed in the past and against what enemy? Do terrorist organizations have the types of sophisticated electronic communication that we anticipate will need to be destroyed? Against what nation or enemy will hundreds of Growlers conducting electronic warfare be needed? The DEIS makes no case for the necessity of having so many EA-18G Growlers in the arsenal and the DEIS makes no explanation as to why a quieter aircraft could not serve the same purpose.

If the Navy has extra Growlers due to the loose purse strings of Congress, then why not just put them in a hanger as reserves?. And if the Navy is so flush with appropriations, then why is the cost of moving the Growler airbase even an issue? How about not ordering as many Growlers and moving the Growler training airbase to a more remote location with the savings? Such an alternative is not fully analyzed in the DEIS.

The DEIS also makes no mention as to why such a loud aircraft as the EA-18G needs to be used for electronic warfare. Would not a stealthier aircraft have a greater strategic advantage? The Navy should have specified a quieter aircraft if they wanted to station them at Whidbey or instead develop methods to reduce the extremely loud roar that is generated by the Growlers when flying overhead. What is the Navy thinking by flying this loud of an aircraft over heavily populated areas? Why did the DEIS not develop an alternative that would examine the use of a quieter military aircraft rather than harassing neighbors with the Growler?

I would suggest that it is time for the Navy to go back to the drawing board in regards to the EA-18G aircraft and develop a quieter version of this military jet that would be welcomed instead of reviled. The DEIS should discuss alternative aircraft that might reduce ongoing and future noise impacts of the electronic warfare training activity being conducted out of the Whidbey Naval Air Station.

The DEIS does not fully develop a comprehensive range of mitigation measures that could reduce the noise impacts of the EA-18G training flights. An integral part of the NEPA process is not only describing the adverse environmental effects of a proposed action, but also incorporating mitigation measures into that action to reduce those environmental effects. Although the DEIS gives mouth to potential mitigation measures, none are expressly incorporated into the action alternatives presented in the DEIS. Thus, there is no guarantee that the Navy will actually attempt to mitigate their noise impacts. This may include redesigning the aircraft, replacing the engines, or changing flight paths away from residential areas or flying at higher elevations over outlying areas. But whatever mitigation is developed, it needs to be part of the decision rather than outlined as something that the Navy may or may not be do in association with any decision made using this EIS process.

Any decision made, based on the DEIS, would be capricious and arbitrary without further disclosure of how the noise, of the Growler training over-flights, is truly affecting the annoyance levels and the subsequent well being and quality of life of the residents in local communities. I urge you to revise the DEIS to correct these inadequacies in the analysis. Be truthful. The DEIS should let the Secretary of the Navy know the true impact of the noise disturbances caused by these Growler training flights to local communities before a decision is made. If the Secretary of the Navy wants to ignore the noise issue after being fully informed about it in the Final EIS, then so bet it, but to make a decision in ignorance is not bliss- but instead violates the very foundation of NEPA.

Sincerely,

A black rectangular redaction box covering the signature of the author.

Coupeville, WA 98239

In theory I support the importance of training and changes to the Growlers mission scope. However, in practice, I cannot support the EIS due to poor execution of the flight activities. I take exception on 2 points. 1) FCLP aircraft routinely fly BELOW the 600' AGL minimum, and 2) FCLP aircraft NEVER fly the departure pattern as depicted in the Navy's talking points (R14 approach). I am a parachutist with over 300 successful round and square jumps and feel very confident being able to estimate altitudes. The aircraft flying over our home on Edmonds Rd are below the 600' AGL minimum. I believe the aircraft are entering into the departure pattern too early, half-way down the R14 approach than staying in the designated pattern all the way through the departure threshold. The earlier entry into the departure pattern (left turn-out to the Base leg) brings the aircraft directly over our home and at a lower altitude. Has this ever been audited by the Navy? If not, the Navy would make friends if they self-policed themselves, keeping pilots to the designated patterns and altitudes. Increase your credibility and be a good partner by executing flight ops consistent with what you have advertised. In the end, isn't that what a professional organization does?

1.a. Thank You

3.b. Flight Tracks and Federal Aviation Administration Regulations

3.h. Runway Usage, Flight Tracks, and Altitudes

- 1.a. Thank You
- 12.n. Quality of Life
- 2.n. Alternatives Considered But Eliminated
- 7.d. Recreation and Wilderness Analysis and Study Area

[REDACTED]
Coupeville, WA 98239
February 21, 2017

EA-18G EIS Project Manager
Naval Facilities Engineering Command (NAVFAC) Atlantic, ATTN: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

Whidbey Island is a wonderful place to live and part of that wonderfulness comes from all of the opportunities to get out and enjoy the outdoors. I have been on a beach or hiking a trail when Navy jets fly over and the noise can be deafening -- causing extreme discomfort, interrupting conversations, and cutting short any activity.

I have lived on Whidbey Island for more than 30 years and have complained very little about jet noise. First of all, the Navy has been here longer than I have. Second, jet noise was an issue when I moved here; I knew about it and accepted it. Third, I chose to live in town (Coupeville) and I appreciate that it is a no-fly area.

Now there are proposed changes that, as I understand them, would mean more frequent flights using larger aircraft. This is a definite change from the status quo and not at all the same set of circumstances I accepted when I moved here.

I am not arguing that the Navy leave the island. I recognize the benefits of having a naval air station here and I also recognize the need for safe places to practice touch-and-go procedures.

The best solution in my mind is to honor all of us long-time, patient residents of the island who have lived peacefully alongside the Navy by striving for mutually workable solutions. This might mean fewer flights than previously planned, or fewer nighttime and weekend flights, or better notification systems. It might mean that some jets are based elsewhere than Whidbey Island.

There are some very vocal, very angry people who are asking the Navy to leave and I feel as if the more they attack, the less respect or attention it leaves for the rest of us. And the rest of us, I believe, are a majority -- a majority that lives with the Navy presence and will continue to do so, but would still appreciate any consideration and any amelioration you could offer.

Sincerely,

[REDACTED]

Coupeville, WA 98239

The DEIS did not comply with the National Environmental Policy Act (NEPA) by failing to judiciously examine off-Whidbey Island sites to conduct flight carrier land practice (FCLP). The annual Day-Night Noise Level (DNL) noise contours depicted in the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather than busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. The DEIS misconstrued an important finding of the National Park Service's 2015 noise study at Ebey's Landing Historic National Reserve and obfuscated a forthright analysis of the impacts on visitor experience. That misconstruct has to be credibly revised to properly characterize the real impacts. Perfluoroalkyl substances (PFAS) have been discovered in numerous wells adjacent to OLFC and are believed attributable to fire-retardant foam use at OLFC. The DEIS, however, dismissed addressing the past, present, and future impacts and problems associated with PFAS, even though the EPA has set a Health Advisory that has been exceeded by 16-fold in some of these wells. Leakage of PFAS in storage or use in a crash event is a hugely relevant environmental impact that must be addressed and the public must be given the opportunity to comment. The DEIS obfuscates the effects of FCLP jet noise on classroom interruptions by averaging interruptions with periods when jets are not practicing. The average understates interruption events compared with event frequency during FCLP sessions, which are as frequent as an interruption every 1-2 minutes. Interruptions of such frequency complicate teaching and thwart student concentration and break the focus of teacher and student. In addition, the EPA states "Noise can pose a serious threat to a child's physical and psychological health, including learning and behavior," but the DEIS has not recognized the contemporary research. These oversights and failings must be properly addressed and analyzed.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.d. Day-Night Average Sound Level Metric
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.j. Other Reports
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects

Camano Island, WA 98282

I live on Camano Island opposite Ault field on Whidbey overlooking Utsalady bay. The growlers fly directly over my house all the time. The noise is so bad I have to leave my deck to run inside. There is some odd resonance that follows the planes in a rolling wave of sound I think this is some kind of defect ! I have lived near airfields before but never have a heard such awful sound following a jet even though it is flying very high! Adding more Growlers will be a disaster for Whidbey and all the surrounding islands, I don't understand why the Navy doesnt move these planes to a more isolated airfield, in California the test fields are out in the desert away from populated areas. I can't imagine how bad it must be for whidbey island residents near the fields, the health effects must be very damaging ! please don't do this, it's not right !

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.l. Points of Interest
- 4.r. Nonauditory Health Effects

Lopez Island, WA 98261

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft gives insufficient consideration to the detrimental effects of noise on children's learning, including , despite the fact that the Wyle Aircraft Noise Study (DEIS Appendix A) recognizes these effects: "While there are many factors that can contribute to learning deficits in school-aged children, there is increasing awareness that chronic exposure to high aircraft noise levels may impair learning. This awareness has led WHO and a North Atlantic Treaty Organization (NATO) working group to conclude that daycare centers and schools should not be located near major sources of noise, such as highways, airports, and industrial sites." [DEIS at p. A-176; emphasis added.] Substantial research has been done on the impact of high noise levels from aircraft and other sources on children's learning (and health), and there is a growing consensus in the scientific community that such noise adversely affects academic performance. For example, Cohen et al. (American Psychologist 35(3):231-243, 1980) found that children from noisy schools had higher blood pressure, were more likely to fail on a cognitive task, and were more likely to give up. Students in the study were exposed to peak noise levels as high as 95 dB, similar to peak noise levels shown for Whidbey Island schools in Chapter 4 of the DEIS. A later study by Hygge et al. (Psychol. Sci. 13(5):469-474, 2002) found impairment of long-term memory and reading in noise-affected children. Many children residing on Lopez Island attend public school near the center of Lopez Island and many others are home-schooled at homes located throughout the Island, specifically in the southern portion of the Island and all these school children are affected by peak noise similar to that shown for Whidbey island schools in the study, and yet no such studies have been

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.m. Supplemental Metrics
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

conducted by the Navy concerning the noise effected on and In a 2008 review, Clark (Performance: 9th International Congress on Noise as a Public Health Problem (ICBEN) 2008) stated that "evidence for the effects of noise on children's cognition is strengthening . . . with over twenty studies having shown detrimental effects of noise on children's memory and reading." Significantly, Clark points to "a linear exposure-effect relationship between chronic aircraft noise exposure and impaired reading comprehension and recognition memory, after taking a range of confounding and socioeconomic factors into account." A 2013 review of more than 80 studies (Klatte et al., Front. Psychol. 4:578, 2013) found that noise exposure impaired children's abilities in speech perception, listening comprehension, short-term memory, reading, and writing. The authors state that these effects "have to be taken seriously in view of possible long-term effects and the accumulation of risk factors in noise-exposed children." Not one of the studies reviewed by Klatte et al. is cited in the DEIS (Ch. 7). In view of the large body of research showing harmful effects of aircraft noise on learning, the EIS must give greater attention to noise levels in the public school on Lopez Island and also the many the home schools throughout the Island, including a frank discussion of the documented effects. Mitigation measures must also be discussed as required by the applicable regulations (40 CFR §1502.14(f); 40 CFR §1502.16(h)).

8. The Draft correctly describe the earthquake hazard at NAS Whidbey based on best available science. The final EIS must also explain how the Navy will mitigate all earthquake hazards, including but limited to liquefaction . The Draft states in Section 3.14.2.3 Seismic Activity: "Five fault lines occur within 15 miles of Ault Field, including, in order of closest to farthest, Strawberry Point Fault (less than 1 mile to the south), Devil's Mountain Fault (approximately 1 mile to the north), Utsaladay Point Fault (approximately 2 miles to the south), unnamed faults in the Strait of Juan de Fuca and Puget Sound (approximately 4 miles to the north and northwest), and Southern Whidbey Island Fault (approximately 12 miles to the south and southwest) (USGS, 2016). An inactive fault discovered in the 1970s, known as the Northern Whidbey Island Fault, crosses the island in an east-west direction approximately 3 miles north of Oak Harbor. The most recent apparent significant activity was approximately 18,000 years ago (Cheney, 1987). Since earthquakes are a reflection of active tectonic processes, this fault does not appear to present any significant seismic hazard. Hazards associated with seismic activity on the faults include surface fault rupturing, strong ground motion or shaking, and liquefaction. The northern portion of Ault Field has a high liquefaction susceptibility, while the southern portion has a low to moderate liquefaction susceptibility (Palmer et al., 2004)." [DEIS, Page 3-187, Bold emphasis added]. AS STATED ABOVE, THE FINAL EIS MUST EXPLAIN HOW THEW NAVY WILL MITIGATE EARTHQUAKE HAZARDS ON NORTH WHIDBEY ISLAND AND ALL NEARBY LOCALES SUCH AS LOPEZ ISLAND.

9. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

10. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

11. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more

Growlers to significantly reduce the need for land-based carrier training. 12. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 13. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 14. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared. [REDACTED] Lopez Island, WA 98261

Lopez Island, WA 98261

Living UNDER GROWLER NOISE has degraded our life in the San Juan National Monument, effected land sales and tourist activity. I feel the EIS is flawed and should be amended. 1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft. ACTION: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA). 2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified. ACTION: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region. 3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. ACTION: Redo the noise simulation using the more recent Advanced Acoustic Model. 4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days. ACTION: Noise levels should only be averaged over active flying days. 5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. ACTION: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe." 6. The Draft includes some independent noise measurements and ignores others. ACTION: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis. 7. The Draft suggests that the lands and waters of the San Juan Islands (SJI) National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. ACTION: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA. 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing. ACTION: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training. 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation areas that are being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI. ACTION: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties. 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment. ACTION: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision. 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude

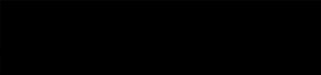
- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
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- 4.j. Other Reports
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion." ACTION: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

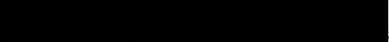
Open House Comments

Fill in and Submit at the Open House

1. Name 

2. Organization/Affiliation AMERICAN TAX PAYER

3. Address 

4. E-mail 

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like your name/address kept private

7. Please check here if you would like to receive a CD of the Final EIS

Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. Evaluate impacts of the Growler at low frequencies (C-weighted, dBC).
2. Recognize the impacts of low frequency Growler noise on health.
3. Incorporate San Juan County noise reports in the EIS analysis.
4. Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.
5. Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.
6. Commit to Mitigation Measures and timelines in the Record of Decision.
7. Add your own comments here:

WE & YOU NEED ON THE GROUND NOISE STUDIES
DONE ON SOUTH, CENTRAL & NORTH LOPEZ!
AT OUR SCHOOL / LIBRARY & VILLAGE

(Continue on the back)

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.l. Points of Interest
- 4.m. Supplemental Metrics
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

8. THE GROWLERS ARE SO MUCH LOUDER
THAN THE PROWLERS.

Draft Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex

January, 2017 Comments

Fill in and mail with comments to:

EA-18G EIS Project Manager
NAVFAC Atlantic Attn: Code EV21/SS
6506 Hampton Blvd.
Norfolk, VA 23508

1. First Name [redacted]

2. Last Name [redacted]

3. Organization/Affiliation [redacted]

4. City, State, ZIP Friday Harbor, WA 98250

5. E-mail [redacted]

6. Please check here if you would NOT like to be on the mailing list

7. Please check here if you would like your name/address kept private

- 1.a. Thank You
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
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- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
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- 7.h. San Juan Islands National Monument

**Draft Environmental Impact Statement for EA-18G "Growler" Airfield
Operations at Naval Air Station Whidbey Island Complex**

January, 2017 Comments

Note: For Draft EIS page citations and supporting references see www.QuietSkies.info

1. The Growler is known for its intense low frequency engine rumble, but low frequency noise impacts are ignored in the Draft.
Action: Evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. Analysis of noise impacts in the Draft is based solely on computer simulation. To be valid for decision making, models must be verified.
Action: Provide the data used for simulation. Provide Growler noise measurements with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. Calibrate the computer model with actual noise measurements in locations throughout the region.
3. NOISEMAP is the computer model used in the Draft to predict noise impacts. A Department of Defense report found that NOISEMAP is outdated and new software was needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers.
Action: Redo the noise simulation using the more recent Advanced Acoustic Model.
4. The annual Day-Night Noise Level (DNL) metric used in the Draft was developed for commercial airports that operate 365 days a year. DNL is inappropriate for the intermittent but intensive military flight activity at NASWI. Averaging over the year assumes, without studies, that the quiet days mitigate the noisy days.
Action: Noise levels should only be averaged over active flying days.
5. The Draft dismisses long-term health impacts of jet noise because some studies are not conclusive.
Action: Recognize the health impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise" and "Night Noise Guidelines for Europe."
6. The Draft includes some independent noise measurements and ignores others.
Action: Incorporate the San Juan County noise reports and the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.

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Action: Evaluate impacts of the Alternatives on the SJI National Monument and remove language stating that the Monument is exempt from NEPA.

- 8. The three Alternatives considered in the Draft are very similar and are based on old technology – a piloted jet that requires constant pilot training for safe carrier landing.

Action: Evaluate a new Alternative that deploys UCLASS jets (drones) instead of more Growlers to significantly reduce the need for land-based carrier training.

- 9. The Draft only examines socioeconomic impacts on Island and Skagit Counties. San Juan, Jefferson and Clallam Counties are or will be impacted by Growler noise. They are very dependent on outdoor recreation that is being harmed by Growler flight activity and receive little, if any, economic benefit from employment associated with NASWI.

Action: Examine socioeconomic impacts, including real estate values, on San Juan, Jefferson and Clallam Counties.

- 10. All Alternatives in the Draft are irrevocable decisions to add 35 or 36 Growlers at NASWI. While some potential noise Mitigation Measures addressed, there is no commitment.

Action: Commit to noise Mitigation Measures and their timelines in the Final EIS and Record of Decision.

- 11. The Draft EIS analysis is deficient in numerous areas. CEQ Regulation 1502.9 (a) states "If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion."

Action: Supplement the EIS to address deficiencies identified in comments and offer further opportunity for public comment before the Final EIS is prepared.

- 12. Add your own comments here:

This is an assault on our environment.

1.a. Thank You

Oak Harbor, WA 98277

Navy needs the training to keep pilots safe. I have lived under the flight path for over 20 years. A little inconvenience to keep our boys trained. LET THEM BOUNCE!!

Coupeville, WA 98239

I write this with a heavy heart. While I am a small business owner in Coupeville, I am also the mom of a disabled Navy vet and I have always been proud to be pro-Navy and pro-OLF. However, the Growlers are painfully louder than the Prowlers. And, I intentionally live in an area outside of the noise zone. But, I hear the Growlers in the historic shopping district where I own a shop and reside. I have had many tourists tell me they cannot stay in their vacation rental because of the noise. Local farm employees have to use ear protection. It has negatively affected my business sales. And, now, the Island County Commissioners have withdrawn funding for a green spaces grant because they have called the entire town of Coupeville "anti-Navy." As a result, local sailors are being encouraged to boycott Coupeville, no longer volunteer in Coupeville, etc. Coupeville is NOT anti-Navy! But, our historic village will be harmed financially and environmentally with a 46% increase in Growler flights. The Navy should choose the Option offered of 80% of the flights going to Ault Field and 20% of flights to Coupeville's OLF. Flights should also not take place on weekends and after 10 pm to respect the peaceful enjoyment of our environment. I fully recognize the necessity of training. However, this needs to be balanced with the sanctity of our fragile ecosystem in the Ebey National Reserve, along with the health and wellbeing of our rural community. We want to continue the good neighbor history! Please continue this tradition of mutual respect. Thank you.

1.a. Thank You
12.c. Socioeconomic Impacts
12.e. Agriculture Analysis
12.h. Tourism
2.m. Record of Decision/Preferred Alternative
4.t. Noise Mitigation

1.a. Thank You

New York, TN 27158

IDtdBL <http://www.FyLitCl7Pf7ojQdDUOLQOuaxTXbj5iNG.com>



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [REDACTED]

2. Organization/Affiliation _____

3. Address [REDACTED]

4. E-mail [REDACTED]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

I support "NO ACTION" ~~alternative~~ alternative or a reduction in growler flights.

AS A TAXPAYER,
I resent the expenditures for
1) Growlers
2) PR for this meeting
3) GROSS OVER STAFFING OF PR mtg.

Atto Why was this meeting scheduled 3-6 PM?
As a working person, this meeting was hard to attend.

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 2.e. Public Involvement Process
- 2.i. No Action Alternative

Clinton, WA 98236

Extend the deadline for the EIS!!! This is unacceptable and will impact the entire island. There must be alternatives. Water quality. Quality of Life. Crash frequency. Bird Migration. Ebey's Federal Preserve. Effects of fuel dumping. Tourism. This will be a disaster. Alternatives must be found. Knowingly destroying a unique and pristine environment is criminal.

- 1.a. Thank You
- 1.d. General Project Concerns
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 2.h. Next Steps
- 2.k. Range of Alternatives

Port Townsend, WA 98368

Living in Port Townsend, I am greatly affected by the noise from the US Navy's "Growler" flights. I understand from the DEIS, that 65 DB is considered a tolerable level of noise. But, I would argue that people living in a quiet area, such as Jefferson County, are unaccustomed to noise and would find 65 db more disturbing than people in your average urban-dwelling population. I would argue that relative background noise is a more important consideration. Jefferson County depends on a quiet environment for its tourist and outdoor activity trade. How many people want to recreate at Fort Worden or other state parks with aircraft rumbling overhead? How many want to shop in downtown Port Townsend with the same level (or more) of noise as Seattle? Doesn't that, by definition, ruin Port Townsend's allure as a quiet, small town escape? The DEIS mentions impacts to wildlife, but I see no mention of the impact on livestock. As a rural area with many small local farms existing on the fine edge of profitability, might not a consideration be made of the impact of aircraft noise on livestock productivity? Like many, I moved to Port Townsend to escape the noise of Seattle and am greatly disturbed by the idea of near continual aircraft noise. But, does aircraft noise not also affect my Port Townsend property value? Is this not another potential area of study for the DEIS? Thank you for this opportunity to comment. I hope you address my questions.

- 1.a. Thank You
- 12.h. Tourism
- 12.j. Property Values
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 4.d. Day-Night Average Sound Level Metric
- 4.e. Day-Night Average Sound Level Contours and Noise
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

COUPEVILLE, WA 98239

The noise data used to determine the decibels for flights is extremely flawed. The Navy includes quiet days as part of the equation to try and show there is a reduced impact on the decibel reporting and even the noise analyst at The Navy's public meetings agreed it is a flawed way to figure the impact but said that was how they were directed to do the study by the Navy who paid for it. The Navy should take only the days of flying and average the impact and NOT include the quiet days. The Navy has been a terrible neighbor to this island. The financial impact is detrimental, no matter what kind of data the Navy uses to make us all think that they contribute to the health of this island. More pilots of killed in training on this aircraft than in any kind of combat use and this was printed in your local Navy newspaper. The OLF is unsafe, the Navy has tainted the drinking water and the noise is unbearable.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 4.d. Day-Night Average Sound Level Metric
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

Coupeville, WA 98239

Quality of life, of business, tourism, environment are all threatened by increased flight operations at OLF.

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.n. Quality of Life

Blakely Island, WA 98222

1.a. Thank You

2.n. Alternatives Considered But Eliminated

The existing noise is almost intolerable but doubling the frequency is unimaginable. Animals are terrified, houses actually shake, telephone conversations are disrupted, in fact all conversation is stopped during the existing flyovers. Surely, alternative routing over non populated areas must be seriously considered.

Port Townsend, WA 98368

As a senior citizen and the owner of a home in the North Beach community in Port Townsend I've been repeatedly kept awake by the incredible roar of the Growlers, which now create anxiety even when I hear them in the daytime. They depress the tourist industry which our communities depend on, and threaten wild life, including whales and dolphins which depend on sonar to find direction.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 12.h. Tourism
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife



Public Meeting Comment Form

Thank you for attending the public meeting on the *Draft Environmental Impact Statement (EIS) for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.*

To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: (1) *Provide written comments at today's public meeting;* (2) *Speak with the stenographer, who will record your comments;* (3) *Submit your comments on the project website at www.whidbeyeis.com;* or (4) *Write your comments and mail them to: Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS.*

All comments submitted on the Draft EIS by January 25, 2017, will become part of the public record and will be addressed in the Final EIS. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

1. Name [Redacted]

2. Organization/Affiliation [Redacted]

3. Address [Redacted] Port Townsend

4. E-mail [Redacted]

5. Please check here if you would NOT like to be on the mailing list

6. Please check here if you would like to receive a CD of the Final EIS when available

① The process of comment:
I came prepared to make a public comment I left work to be here. I was not expecting a room of several dozen Navy personnel standing in front of promotional posters. This is not a genuine attempt to gather public sentiment, although I'm sure it fulfills your requirement.

② How do we justify these Growler?? Can someone explain to me how the world, the middle

Please print • Additional room is provided on back

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 2.a. Purpose and Need
- 2.e. Public Involvement Process
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

All comments must be received by January 25, 2017. The names, street addresses, email addresses and screen names, telephone numbers, and other personally identifiable information of individuals who provide comments will be kept confidential and will not be released, unless otherwise specifically indicated by the commenter or as required by law. The city, state, and five-digit zip code of individuals who provide comments may be released.

East especially, is being made more safe, more stable, less prone to violence by faster, ~~noisier~~ louder, more destructive aircraft.

Do we honestly believe we can make the world safer by continued expansion of the military?

History does not bear this out: subdue an enemy and it pops up somewhere else.

Faster noiser jets ~~absolutely not~~
- make us less safe, not more safe.

- Disrupt those things that are intrinsic to our well being, the survival of the natural world & our sustenance

For more information, please visit the project website at whidbeyis.com

Please print

Please drop this form into one of the comment boxes here at the public meeting or mail to:

Naval Facilities Engineering Command Atlantic
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

YOUR INPUT MATTERS

11/02/2016 10:43 AM
Whidbey2016_CommentForm001a-028-023116

Port Townsend, WA 98368

The Navy's DEIS does not adequately address many environmental and public health consequences of planned increases in Growler operations. Three which concern me most are: 1) EXTREMELY LOUD AND FREQUENT NOISE. No actual measurements were taken in communities—only computer modeling that averaged periods of noise with long periods of silence. We in Port Townsend are seriously impacted by this noise, people on Whidbey Island even more so. 2) ELECTRONIC WARFARE. Nowhere does the Navy discuss risks to civilians and wildlife of exposure to downward-directed electromagnetic radiation from Growlers. 3) CHILDREN AND EDUCATION. The DEIS states that increased operations will cause "between 45-55 disruptions per HOUR in the Coupeville Schools." I request that planned increases in Growler operations be CANCELED, and that the entire Growler program be MOVED AWAY FROM THE PUGET SOUND/OLYMPIC PENINSULA REGION.

- 1.a. Thank You
- 19.d. Electronic Warfare
- 2.n. Alternatives Considered But Eliminated
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.o. Classroom Learning Interference

1.a. Thank You

Clyo, GA 31303

I fully support what the DON needs to do in way of flight training and the addition of 36 aircraft to NAS Whidbey Island. In the enormous effort of protecting Americans and our Allies all over the globe, we must, at the very least, maintain aircrew and maintenance readiness so we are proficient in Electronic Attack tactics. Very respectfully, [REDACTED], LT, USN (Ret)

Draft Environmental Impact Statement Comment Form

EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

Comments must be postmarked or submitted online by January 25, 2017

Online at: www.whidbeyeis.com

By mail at: *Naval Facilities Engineering Command Atlantic, 6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS*

- 1. Name [REDACTED]
- 2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)
Residents
- 3. Address [REDACTED] *Coupeville WA 98239*
- 4. Email ~~_____~~
- 5. Phone _____
- 6. Please check here if you would NOT like to be on the Coupeville Community Allies email list

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.m. Education Impacts
- 12.n. Quality of Life
- 13.a. Environmental Justice Impacts
- 2.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 5.c. Condition of Outlying Landing Field Coupeville
- 5.d. Environmental Health Risks and Safety Risks to Children
- 5.e. Lack of First Responders at Outlying Landing Field Coupeville
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Comments

Check all that concern you. For additional information see www.facebook.com/whidbeyeis

- Increases in Outlying Field (OLF) operations will significantly harm our property values, health, schools and quality of life as well as severely impact our primary industries, tourism and agriculture.** Increasing OLF operations by 36 % to 475%, with up to 135 flight operations daily, will double the residential areas and increase by 10-fold the commercial areas impacted by noise. **This is a burden greater than the Coupeville/Central Whidbey community can bear.**
- Increased operations at OLF risk greater aquifer and well contamination.** Wells near OLF have now found to be contaminated with toxic PFOA compounds from Navy firefighting foam which the Navy continues to use for aircraft fires. The extent of contamination has not been determined nor have results been shared with the community. There is no mitigation plan in place.
- The addition of large, new, and undefined Accident Potential Zones (APZs) surrounding OLF will restrict property rights and significantly decrease property values.**

(over)

- The Navy did not adequately look at siting new Growler aircraft elsewhere, despite this being the #1 request from the community during the Navy's prior scoping forums.
- An additional 880-1,574 personnel and dependents would severely impact our tight housing market, decreasing the already low stock of affordable housing on Whidbey Island.
- Single-siting Growlers at NASWI presents a major terrorist risk to our Island, which is served by one bridge and two ferries. All active electronic warfare jets in the US Military would be at NASWI.
- The Growlers are at risk for more mishaps and crashes due to problems with their onboard oxygen system that can cause pilot hypoxia, with over 100 incidents in all F/A-18 airframes in 2015 alone. Increases in OLF operations increase the risk of crashes on Whidbey Island and in Puget Sound.

Please include any additional comments here:

The changes in engine noise has increased significantly in the last 8 years - I have lived in this area many years -

The night flying from 10:00 P.M. - 12:00 A.M. is particularly difficult on the residents. Now, we are concerned about water and air pollution for residents, & children.

What else you can do

Please Find a new facility -
Compromise

1. **Get involved.** To volunteer, email us: coupevillecommunityallies@gmail.com
2. **Call (best) or email your elected officials and share your concerns.** The number of calls are important.
 - a. U.S. Senator Patty Murray: 206.553.5545; www.murray.senate.gov
 - b. U.S. Senator Maria Cantwell: 425.303.0114; www.cantwell.senate.gov
 - c. U.S. Congressman Rick Larson: 800.652.1385; rick.larsen@mail.house.gov
 - d. Governor Jay Inslee: 360.902.4111; governor.wa.gov

To Learn More

- ✓ To receive email updates, or to get involved, **email us** at coupevillecommunityallies@gmail.com
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at www.whidbeyeis.com

All comments submitted by January 25, 2017 will become a part of the public record and will be addressed in the final EIS. Personally identifiable information of individuals will be kept confidential and not released, unless otherwise specifically indicated by the commenter or as required by law. City, state and five-digit zip code of individuals who provide comments may be released.

January 15, 2017

EA-18G Growler EIS Project Manager
 Naval Facilities Engineering Command Atlantic
 6506 Hampton Boulevard
 Norfolk, VA 23508
 Attn: Code EV21/SS

TO: A-18G Growler EIS Project Manager

RE: Comments on the U.S. Navy Draft EIS for EA-18G "Growler" Airfield Operations at NAS Whidbey Island Complex

I have submitted the following comments online at www.whidbeveis.com but wished to mail them as well.

I am a resident of the Long Point area in Coupeville, WA. Some of the flight paths for the EA-18G "Growler" planes currently go over our neighborhood. I attended the open house at NAS Whidbey this past summer as well as the Draft EIS public meeting in Coupeville on December 9, 2016.

After reviewing the Draft EIS documents, I appreciate the opportunity to offer the following comments on the Navy proposal.

1. **I only support the No Action alternative** - no additional planes flying over at OFL Coupeville. However, if that is taken off the table, then I would prefer Action Alternative 3, Scenario C as that would result in the least impact on our community. It would still increase flights from OLF from 6,100 to 8,300 per year, an increase of 184 flights per month (on average). This will be hard enough for us to deal with; anything greater will severely impact our quality of life.
2. **Noise Impact** - The noise studies cited in the Draft EIS are based on OLD data, not actual recent data from the EA-18G planes. We know the noise from the Growlers is much louder than that from the old planes. Also, no studies were conducted on the non-auditory impacts of frequent, loud noise spikes on humans (anxiety attacks, PTSD, etc.) These studies must be conducted. What engineering options are there to suppress the decibel output from the jets?
3. **Wildlife Impact** - NO studies were done on the impact of increased aircraft flights on wildlife in areas outside of the NAS base and OLF. I find this incredible, especially since we live on a relatively rural island with abundant wildlife. I volunteer with several organizations on the island who are trying to protect and minimize the human impact on the environment. If the Navy does not do their part, this island will become a toxic wasteland.
4. **Groundwater Impacts** - Near OLF, well testing has shown that the chemicals in the fire suppressant used by the Navy have appeared in well water nearby. We all rely on groundwater aquifers for our drinking water (the Navy base imports water from Anacortes). If our groundwater gets contaminated, we are doomed.
5. **Traffic Impact** - In talking to your experts at the meeting in December, they said that the data analyzed for the traffic impact of increased Navy & support personnel travelling over the Deception Pass Bridge was based on annual DOT data. Monthly data was not considered. Anyone who lives on this island knows that traffic over Deception Pass is radically different by month. The bridge is old and narrow; it is

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 10.a. Biological Resources Study Area
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 14.a. Transportation Impacts
- 2.l. No Action Alternative
- 2.m. Record of Decision/Preferred Alternative
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests
- 4.t. Noise Mitigation

our only northern escape route in the event of a natural disaster. A more in depth traffic study by month needs to be conducted. Structural improvements to the bridge should be studied as well.

Thank you for considering my comments. **Please keep confidential & do not release my name and address and other personal information.**

Sincerely,



Coupeville, WA 98239

CC:

Governor Jay Inslee
Office of the Governor
PO Box 40002
Olympia, WA 98504-0002

U.S. Senator Patty Murray
154 Russell Senate Office Building
Washington, D.C. 20510

U.S. Senator Maria Cantwell
511 Hart Senate Office Building
Washington, DC 20510

**State Representative, 10th District,
Norma Smith**
P.O. Box 40600
Olympia, WA 98504-0600

U.S. Congressman Rick Larson
2113 Rayburn House Office Building
Washington, DC 20515

**Island County Commissioner, District 1,
Helen Price-Johnson**
district1@co.island.wa.us

**State Senator, 10th District,
Barbara Bailey**
P.O. Box 40410, Olympia, WA 98504

Coupeville, WA 98239

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- 1.a. Thank You
- 1.b. Best Available Science and Data
- 10.a. Biological Resources Study Area
- 11.d. Per- and Polyfluoroalkyl Substances
- 14.a. Transportation Impacts
- 2.l. No Action Alternative
- 2.m. Record of Decision/Preferred Alternative
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.r. Nonauditory Health Effects
- 4.s. Health Impact Assessment and Long-term Health Study Requests

1.a. Thank You

Oak Harbor, WA 98277

We are in total support of Scenario A using OLF Coupeville as needed. We want the best training for our pilots and crew. We own a restaurant in Oak Harbor and see 100 people a day. 99% of the population here are Navy supporters. Thank you.