

see comments, WA 98038

1.a. Thank You  
12.n. Quality of Life  
4.r. Nonauditory Health Effects

To Whom It May Concern: I write as a former resident of North Whidbey Island: Coupeville & Long Point for seven years, and Oak Harbor for almost 20 years. Coer's arguments challenging the suitability of, safety of, and necessity for the OLF at Coupeville are compelling, and their descriptions of the ecological harm and personal trauma caused by exposure to Growler overflights are not over-stated. Those impacted by these ongoing challenges to quality of life include school children, the elderly, those in hospital, and all others who work in, or visit, this once quiet and beautiful area. A natural soundscape is vital to the well being of all creatures that live within it. Yet, the soundscape of this area is shredded whenever the Growlers become active. If the military's mission is to protect citizens from harm and safeguard their quality of life, then it is clear that OLF undermines that mission. The anticipated increase in the number of overflights is a footprint much, much too large for this unique and treasured part of the world. [REDACTED]

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Anacortes, WA 98221

1.a. Thank You  
12.j. Property Values  
12.n. Quality of Life

I am very concerned about the increased level of noise in our communities as it affects children and the peace and tranquility that we seek. Also the value of our homes is adversely affected which, in turn, means that the tax base that supports our county and state governments also shrinks.

Lopez Island, WA 98261

1.a. Thank You

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

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).



# 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](http://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 University of British Columbia

3. Address [REDACTED]

4. E-mail [REDACTED]

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

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

Please consider

① measure sound impact not on an average basis but on an incident basis

② consider spending part of the year training elsewhere - and publicize that. Call it being good neighbors. Call it training in different conditions

③ develop a runway at a different angle to fly over the ocean as much as possible

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
- 2.n. Alternatives Considered But Eliminated
- 4.m. Supplemental Metrics
- 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) Only do night flights if its absolutely necessary - simulated night flights are great, too.

(5) spend the money to design quieter airplanes

(6) Consider that you are ruining a beautiful pristine environment and stop being defensive about how your war games are necessary

(7) consider just stopping all of this training is all your war maneuvering & wasting American resources on this ridiculousness

For more information, please visit the project website at [whidbeyis.com](http://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**

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Whidbey 2016\_Comment Sheet al-GRA-6/23/16

Clinton, WA 98236

- 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).

Clinton , WA 98236

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"



Clinton , WA 98236

1.a. Thank You  
7.c. Noise Disclosure

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.

Clinton , WA 98236

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

Clinton , WA 98236

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.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Clinton , WA Clinton

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.

Clinton , WA 98236

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.

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

Clinton , WA 98236

- 1.a. Thank You
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects

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.

Clinton , WA 982236

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

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.

1.a. Thank You  
4.q. Potential Hearing Loss

Clinton , WA 98236

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.



Clinton , WA 98236

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.

Clinton , WA 98236

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 busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance.

Clinton , WA 98236

- 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 unsupportable, whereas in actuality the Wyle modeled noise levels have not been validated with on-site noise data.

Clinton , WA 98236

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 misconstruction has to be credibly revised to properly characterize the real impacts

port townsend, WA 98368

Jet noise outside the immediate environs of the runways on Whidbey Island is not being evaluated. According to the Navy, the [Growler] Draft Environmental Impact Statement (DEIS) "...evaluates the potential direct, indirect, and cumulative environmental impacts of the Proposed Action under three action alternatives." However, not all direct, indirect and cumulative impacts are being examined in this EIS; for example, jet noise is directly impacting communities, Tribes and wildlands well outside the immediate environs of Naval Air Station Whidbey Island (NASWI); yet the only area the 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 OLF Coupeville, 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. By failing to enlarge the scope of its analysis beyond NASWI, the DEIS also violates NEPA by failing to consider the interdependent parts of a larger action, that cannot proceed without takeoffs and landings. By failing to consider these automatically triggered additional impacts resulting from activities beyond the runways that cannot be conducted without takeoffs and landings, the DEIS also fails to evaluate cumulative effects. By failing to initiate consultation under Section 7 of the Endangered Species Act with the US Fish and Wildlife Service on potential impacts from the 47 percent increase in flights to 130,000 per year, including 79,000 Growler flights, the DEIS fails to evaluate direct, indirect and cumulative impacts on threatened and endangered species. 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. The Navy's claim that these areas 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

- 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.c. Wildlife Sensory Disturbance and Habituation
- 10.f. Endangered Species Impact Analysis Adequacy
- 12.k. Compensation to Citizens for Private Property
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.g. Cumulative Impacts of Noise
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 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

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. While DNL is the FAA standard and is used at commercial airports, 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 Effective Perceived Noise Level as the standard, nor are local jurisdictions prevented from setting a lower threshold of compatibility for new land-use developments. The FAA policy allows for supplemental or alternative measurements.<sup>7</sup> So the continued use of DNL may be to the Navy’s benefit, but does not benefit the public. The Navy’s analysis does not allow for peak noise experiences, nor does the DNL method take into account low-frequency noise, which is produced at tremendous levels <sup>7</sup> Report No. DOT/FAA/AEE/2011-02, Technical Support for Day/Night Average Sound Level (DNL) Replacement Metric Research, June 14, 2011. Mestre, Schomer, Fidell & Berry, Authors. <sup>7</sup> by Growlers. Finally, and most troubling, 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.<sup>8</sup> Some of these affected communities and wildlands may not hear takeoffs and landings, but they are severely affected by military flight operations. In one example, the Navy’s 244 percent increase in aerial combat maneuvers (dogfighting) from 160 to 550 “events” per year as mentioned in the previous EIS for Northwest Training and Testing, is not addressed, nor does the Navy define the time, duration, and number of jets in a single “event.” Therefore, impacts from this increase 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. 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<sup>9</sup>) along with the planned arrival of approximately 42 more Growlers in addition to the 36 evaluated in this DEIS, bringing the total to 160, not the 118 Growlers the public has been led to believe would be the final number. 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 public is going to become upset when they learn that this additional 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.”<sup>10</sup> 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, will not view this new information favorably. Further, 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. Moreover, 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. 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." These mitigation measures will be "...identified in the Final EIS or Record of Decision." Such information would be new, could significantly alter the Proposed Actions, and would 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. The current DNL noise modeling method and data in no way reflect exposure accuracy, given this new information. 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. With no alternatives provided to the public that reduce noise, and with such permissive guidance that allows such low-altitude flight, the potential for these student pilots causing physical, physiological, economic and other harms to communities and wildlands, whether accidentally or on purpose, is unacceptable. Impacts to wildlife are not being addressed in the DEIS. Because the scope 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 study area. For example, the previously mentioned 244 percent increase in aerial combat maneuvers (dogfighting), which by their erratic nature cannot safely occur in the study zone, has been neither examined nor analyzed in any current or 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. It does not make sense to segment impacts from just one portion of an aircraft's flight operations and say that's all you're looking at. But except for boilerplate language about species life histories and citations 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. 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.<sup>12</sup> The DEIS also failed to consider an important 2014 study called “Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,” (Engels, S. et al (2014) *Nature* 509, 353 - 356 (doi 10.1038/nature13290)). A federal agency cannot cherry-pick scientific research for its own convenience; it must consider the best available science. This DEIS fails that test. It’s an established fact that the federally listed marbled murrelet has been declining at an unsustainable rate of 4.4% per year, or 44% since 2001. So significant is this decline that the State of Washington “up-listed” them from threatened to endangered in December 2016, citing loss of habitat as the primary reason. There is no disputing the fact that noise alters habitat. Neither the Navy nor the Fish and Wildlife Service fully considered the significant physiological effect that elevated stress levels have to immune response; rather, the agencies claimed there is insufficient evidence to show that noise-induced stress threatens survival and reproductive success. In the most recent Biological Opinion (July 2016) the study they cited (Busch and Hayward, 2009) actually contradicted them, stating that suppression of the immune system, severe protein loss, deposition of fat and atherosclerotic plaques, hypertension and other effects were possible, especially when noise is sporadic and the species could not acclimate to it. It is irresponsible and scientifically invalid to conclude without corroborating scientific evidence, as this DEIS has failed to do, that all birds, including marbled murrelets, and in fact all wildlife in the study area, are “presumably habituated to the very high level of noise and visual disturbances at NAS Whidbey Island.” Marbled murrelets and many of the species mentioned in the DEIS also occur outside the study area. It is irresponsible to fail to acknowledge and analyze the impacts to them by assuming that just because they don’t live under a runway, they are not being adversely impacted. Thank you for your consideration of these comments. Sincerely, [REDACTED]





# Public Meeting Comment Form

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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](http://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

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

How can it be determined that there will be no impact on ~~the~~ the environment or living beings? - We all know that to be a lie. The overwhelming use of fuel, the noise impact, the emissions from jets, the use/abuse of sacred national park lands, the disturbances, toxic and otherwise of all of us living in this area - health issues from this - this is a clearly unliveable proposal anywhere on this planet, and is completely outdated and unnecessary - promotion of war and warfare is not the answer to today's issues on Earth.

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

1 SAY NO

TO THIS.

**YOUR INPUT MATTERS**

- 1.a. Thank You
- 1.d. General Project Concerns
- 2.a. Purpose and Need
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted

Anacortes, WA 98221

- 1.a. Thank You
- 1.d. General Project Concerns

Regarding Whidbey Naval Air Station I would like to express my feelings on the proposed increase of Growler Aircraft. Yes, I understand the base was there long before I moved into the area. But it operated under different circumstances. Different number of planes, different type of planes. And yes, the Navy is protecting our way of life (Sound of Freedom etc). But at the same time the Navy is destroying our way of life. Regards, [REDACTED]  
[REDACTED] Anacortes, WA

Anacortes, WA 98221-3287

I think the addition of 36 more Growler jets would be detrimental both to humans living in the area and to wildlife because of excessive noise. Noise is stressful and harmful to both, and impacts our health. Please relocate the Growlers to a more suitable, uninhabited area. Thank you!

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 2.k. Range of Alternatives
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You

Langley, WA 98260

Langley, WA 98260

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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.

1.a. Thank You

Coupeville, WA 98239

The Carrier Landing Practice that occurs at Coupeville is crucial to the US Navy and the training and readiness of all EA-18G squadrons and aircrew. The noise abatement procedures are strictly enforced and the professionalism of the crews minimize the impact to the community as can best be expected. Everyone who lives on the island is well aware of the footprint of the Navy and actively chooses to live there.



**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](http://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.**



Clinton, WA 98236

Human Effects The Navy 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. I have to say that those are already at a level that some people in the affected area already find unacceptable, particularly in terms of annoyance and sleep interruption/deprivation. Additional operations will obviously increase these incrementally, but the EIS does not discuss that. It also expends the bulk of discussion on these human effects, which brings little to the table that is not already well known. Not considered is the potential socio-economic impact of degrading the area for human habitation. Non-Human (Wildlife) Effects The EIS confines itself to mid-air collisions (birds and bats), and no mention is made of 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. For both human and non-human effects it would be well to compare Ault Field/OLF operations to other locations that have experienced expanded operations in environmentally sensitive areas. It is doubtful that NAS Whidbey will ever experience the expansion of NAS Oceana (Norfolk/Virginia Beach), but as a personal comment I found the low level operations there extremely annoying, out to a perimeter of 200+ miles. Housing, schools and other human activities in the more immediate area have become let us say "undesirable." It seems self-evident that existing home values will be further degraded and future housing developments discouraged.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 12.i. Housing Access and Affordability
- 12.j. Property Values
- 12.n. Quality of Life
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You

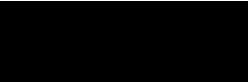


# Public Meeting Comment Form

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1. Name 

2. Organization/Affiliation *Self*

3. Address  *Anacortes WA 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

*Keep flying we enjoy watching.*

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**



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1. Name [REDACTED]

2. Organization/Affiliation [REDACTED]

3. Address [REDACTED] Roundville

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

WE NEED MORE EIS  
TIME TO RESPOND TO  
THE EIS

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6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS  
**YOUR INPUT MATTERS**

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

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 98039*  
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.
- 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:**

*The noise is terrible now without the increase*

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](http://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 88277

I feel that training of our pilots is crucial to keeping them no us safe. My husband is a former submariner and I would have lost my mind sending him out to sea without his full training. Keep our pilots safe so they can keep us safe



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1. Name
2. Organization/Affiliation Lopez Island Resident
3. Address  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

I am strongly opposed to the increased number of growlers in the skies over the Salish Sea. The name "growler" is a misnomer. These aircraft create a thunderous noise that is disruptive to all beings within the flyover area. The sound is deafening. I live on the north end of Lopez, and the growlers that already fly over my home have woken up my sleeping baby - late at night as well as in the middle of the day. I DO NOT WANT MY TAX DOLLARS PAYING FOR DISRUPTIVE & DETRIMENTAL & DESTRUCTIVE NOISE MACHINES THAT

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
- 3.f. Field Carrier Landing Practice Operation Totals
- 4.p. Sleep Disturbance
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

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WAKE UP MY FAMILY AND UNDOUBTEDLY AFFECT THE SURROUNDING WILDLIFE.

My understanding is that the Navy is not supposed to fly over Lopez Island, so why are they doing so? Where are they flying - Canada? why?

For more information, please visit the project website at [whidbeyeis.com](http://whidbeyeis.com)

Please print

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**YOUR INPUT MATTERS**



Victoria, British Columbia V8N6L3

1.a. Thank You  
4.p. Sleep Disturbance

The rumbling noise is very loud tha normally occurs late night. It gives a feeling of an earthquake in your backyard. Some nights it is difficult to sleep with continuous sounds. During the day time you can feel it but it is not that bad because there are other noise factors such as ships going and coming. I really appreciate consulting with me and seeking my opinion. Thank you.



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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 ~~think~~ Please assure adequate studies of noise have been done. Consider checking your findings with the subjective experiences of those in the flight paths - for there seems to be a disconnect here. Thank you.*

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**YOUR INPUT MATTERS**

*1500 pages  
PIC*



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1. Name

2. Organization/Affiliation

3. Address  Lopez, VA USA

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 concerned about the fuel dumping - and was told this may or may not happen from time to time. - Please explain this seems harmful and unnecessary.

Please print - Additional room is provided on back  
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**YOUR INPUT MATTERS**

1.a. Thank You  
6.f. Fuel Dumping

Seattle, WA 98106

The Olympic Peninsula is a National Park, wildlife corridor for birds and recreational area for outdoors enthusiasts. The Navy's proposed war games disrupt all these activities as well as daily quality of life for permanent residents and wildlife. Tell them to go play war elsewhere.

1.a. Thank You

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

19.d. Electronic Warfare



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1. Name [REDACTED]
2. Organization/Affiliation LAND OWNER
3. Address [REDACTED] OAK HARBOR, WA
4. E-mail [REDACTED] 98277
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 BELIEVE THERE NEEDS TO REAL MONITORS  
OF THE DECIBEL LEVELS OF MY END OF THE  
AIRFIELD/AIRSTRIIP TO INCLUDE THE LEVELS FROM  
MAINTENANCE + THE FLIGHT DECK. I ALSO BELIEVE  
CLOSER SUPERVISION OF HEIGHT OF THE PLANES  
TAKING OFF AS THEY BANK OVER MY HOUSE  
ON THE ~~FLY~~ FCLP TRACK

I AM MORE IN FAVOR OF EXPANDED USE  
OF THE OLF BECAUSE OF THE STATED  
REASONS IN THE EIS, ESPECIALL REGARDING

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

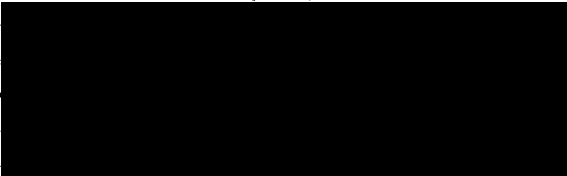
6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

**YOUR INPUT MATTERS**

- 1.a. Thank You
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 3.a. Aircraft Operations
- 4.f. Noise Measurements/Modeling/On-Site Validation

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THE SAFETY OF PILOTS AND THE OTHER FLIGHT TRAFFIC WHICH WOULD BE ACCESSING WAS WHIDBEY AIRFIELD  
IF THE CHOICE IS WAS THEN I RECOMMEND THE FEDERAL GOVERNMENT PURCHASE THE PRIVATE LAND THAT LIES OUTSIDE NAVY BOUNDARIES AND ENCLOSED BY HWY 90. I BELIEVE EXPANDING THE BASE IS THE BEST SOLUTION. THE SOLUTION WOULD INCLUDE EXPANDED FACILITIES AND MORE IMPORTANTLY A THIRD RUNWAY TO DEAL WITH THE EXPANDED FLIGHT TRAFFIC. THE BASE EXPANSION WOULD CREATE A MORE IDEAL TRAINING FACILITY AND CONTROL LIGHT POLLUTION IN THE EVENING.



For more information, please visit the project website at [whidbeyis.com](http://whidbeyis.com)

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1. Name [REDACTED]
2. Organization/Affiliation \_\_\_\_\_
3. Address [REDACTED] Coupeville
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

*Your "precious" jets have ruined my hopes for a peaceful, joyful, stress free retirement. I just buried my best friend this afternoon. I am convinced you killed her from the stress associated with the outrageous, insane, torturous, noxious noise from the filthy jet planes. Our property values are lower, our soil & water are contaminated, children cannot study or play without the fear of hearing loss.*

*Your joke of an EIS is ridiculous. Filthy Stinking*

Please print • Additional room is provided on back

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6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

**YOUR INPUT MATTERS**

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.j. Property Values
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 4.o. Classroom Learning Interference

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files regarding the new house  
Set off this island

For more information, please visit the project website at [whidbeyis.com](http://whidbeyis.com)

Please print

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6506 Hampton Boulevard, Norfolk, VA 23508, Attn: Code EV21/SS

**YOUR INPUT MATTERS**



Clinton , WA 98236

- 1.a. Thank You
- 12.n. Quality of Life
- 2.n. Alternatives Considered But Eliminated

The noise pollution and water pollution of water from wells is unacceptable. The high noise levels alone affect the quality of life of every person and animal subjected to the unhealthy and unlawful noise. Please move the growlers to a base ornarea that is not populated with people. Whidbey island is a tourist destination and one of the most pristine environmental areas on the planet. We must preserve the quality of living for the people who have lived here and invested in this community long before the growler were proposed to be moved here.

Coupeville, WA 98239

As a Penn Cove resident I am very much negatively impacted by the noise levels of flyovers, and concerned by the possibility of those increasing for a multitude of reasons. 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

1.a. Thank You

Oak Harbor, WA 98277

Without NAS Whidbey Island, this place in which we live would not be as safe, sane or thriving. It takes a strong work ethic to be military, a commitment to God and Country and a healthy respect for others which shows in every aspect of their lives. I would not want to live here without the Navy Base also being a firm part of the ground crew.

Coupeville, WA 98239

Having lived on Whidbey Island since the late 1980's, I've been impacted by OLF Coupeville activities many times. On several occasions while walking my dogs, I've had to stop and cover my ears when jets using our flight pattern flow overhead. The noise is truly deafening! Even indoors, with all windows and doors closed, there is little relief. On many occasions, I've had to halt telephone conversations until the jets passed. It is simply impossible to hear. Nor is it possible to converse with people sitting in the same room - conversation stops until the jets pass. Knowing my personal response from the current level of OLF flights, I find it impossible to imagine what any proposed increase would mean, particularly with respect to hearing damage and mental health impacts. It is especially concerning to consider the impacts of young children's hearing. The proposed Bordman, OR alternative appears to make more better sense. Please listen to those of us who, while respecting the need for pilot training, will have our lives irreparably harmed should any of the proposed alternatives be selected.

1.a. Thank You

2.k. Range of Alternatives

4.q. Potential Hearing Loss

4.r. Nonauditory Health Effects

Richmond, British Columbia V6Y 3T9

I travel through Washington 4 to 6 times a year and would like a proper opportunity to comment on on the addition of 36 more Growlers to the fleet on Whidbey Island. Thus, I would like to kindly request an extension of 45 more days for comments before your decision. Many thanks, [REDACTED]

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

Clinton, WA 98236

The noise impact will be intolerable.classrooms in Coupeville will be interrupted hourly.  
the food that farmers grow will be contaminated. please do not allow this to happen.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 17.a. Hazardous Materials and Waste Impacts
- 4.o. Classroom Learning Interference

Anacortes, WA 98221

These are some of the impacts that we have experienced due to previous Prowler and Growler flight operations over our home in Anacortes: - For multiple weeks in a row, we have been unable to sleep during every work night, typically from 10PM until 2AM. - This occurred in spite of many calls to the Base asking them to do Something to let us sleep. - The only relief we got occurred when we would submit complaints to our US Senators We urge the Navy to undertake all possible measures to mitigate the impact of flight noise on residents of densely populated areas, including Fidalgo Island and Whidbey Island. These measures should include the following: - Require pilots to raise landing gear to reduce extra noise - Require pilots to avoid noisy hard turns over densely populated areas - Minimizing flight time over densely populated areas during noisy carrier landing operations, possibly by stationing the carrier outside of Puget Sound - Conduct a major portion of the touch and go training at an airfield that is not located within 30 miles of a densely populated area

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation

1.a. Thank You

Sequim, WA 98382

We live on Miller peninsula near the Strait of Juan de Fuca. The repeated roar from the growler jets based on Whidbey Island is invasive and disrupting.



La conner, WA 98257

Based on what I can understand of the proposed actions and findings I would vote for no action regarding the acquisition of more Growlers. We are exposed to an intolerable level of noise already and it would probably be life threatening to have more added. If it turns out that this alternative is not possible, then I would vote for keeping to 20% Ault and 80% OLF. They have a much smaller population that is just more vocal about the noise. It is equally bad when they fly over our house during touch and goes or are coming in for a landing on runway 25.

1.a. Thank You

2.l. No Action Alternative

2.m. Record of Decision/Preferred Alternative

Freeland, WA 98249

I am opposed to the Expansion of Growlers on Whidbey Island for many reasons. I believe that the expansion of the Growlers will be environmentally and economically destructive to the present and future life of residents, school children, land animals, sea life, landscape, water and biosphere of Whidbey Island and the surrounding Puget Sound area. The increase of Growler noise will negatively impact school children and classes in Coupeville; sea animals and wildlife in the Puget Sound area, and the beauty and enjoyment of the wonderful public lands on Whidbey Island, the Olympic Peninsula, and San Juan Islands. The growing impact of water contamination threatens the health, economy and future of Whidbey communities and citizens. For these reasons and more, I am opposed to the Expansion of Growlers on Whidbey Island. [REDACTED] Freeland WA

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 11.d. Per- and Polyfluoroalkyl Substances
- 4.o. Classroom Learning Interference
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Bainbridge Island, WA 98110

I am writing to comment on the plans to expand use of the OLF on Whidbey Island. In the past, I lived in Norfolk VA and have seen how integral the Navy is to that community. Similarly, the Naval base in Oak Harbor is vital to its community. A certain level of jet noise is expected on the approaches to and from the Oak Harbor fields. In contrast, the OLF is situated in a community known for its tranquility and local history. An airfield built in the 1940s and being used occasionally was a reasonable neighbor for Coupeville and Ebey's Landing. However, the Growler has truly changed the "footprint" of the Navy. The noise impact of this plane results in a much larger working environment. Large areas of previously quiet land are subject to noise levels previously associated only with base proximity. Given this expansion of the base footprint, a solution is to have the military either outright purchase the land impacted or, at least, offer fair market compensation to those impacted by these noise levels. Residents in the impacted area have seen a significant plunge in their property values since the arrival of Growlers to the island. Businesses whose foundation has been the tranquility of Coupeville are going to be even more impacted by the continued expansion of OLF use. Thank you for your consideration, [REDACTED] (Coupeville Landowner)

1.a. Thank You  
12.h. Tourism  
12.j. Property Values  
12.k. Compensation to Citizens for Private Property  
7.a. Regional Land Use and Community Character

Victoria, Cordova Bay, British Columbia V8Y 2J2

We regularly hear/feel the rumble of jets taking off from or near Whidbey Island. We very much look forward to new technologies to minimize the very low frequency sound/feel. Thanks.

1.a. Thank You  
4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations  
4.t. Noise Mitigation

Coupeville, WA 98239

I am very concerned about the environmental impact the massive increase in flights and exercises at OLF. Our house is less than five miles from the field and the proposed increase is alarming. We are concerned about the long term effects that amount of flyovers, noise pollution, and other safety risks will have on our young children. The increased noise pollution has the power to drop local housing prices and make this beautiful island an undesirable area. We are also passionate about the small scale agriculture of this community. These flights affect the safety and livelihood of the local farmers. Findings of water pollution have been released recently due to the training activity on the island. It is crucial that we protect our water sources. This island is far too beautiful to allow it to be polluted by both noise and chemicals.

1.a. Thank You  
11.d. Per- and Polyfluoroalkyl Substances  
12.e. Agriculture Analysis  
12.j. Property Values



# 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](http://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 asked at the last meeting here in coupeville, who could I talk to about the 30 thousand dollars damage done to my house by the back wash from the jets. I was told some would get back to me. This has not happened yet. I'm hopeful still I will be contacted.

Since then we have have this water issue added to all the other concerns.

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
- 11.d. Per- and Polyfluoroalkyl Substances
- 17.a. Hazardous Materials and Waste Impacts

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 Landowners  
4. City, State, ZIP Shaw Is Wa 98286  
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
- 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](http://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 can't believe in this day and age when commercial airliners are so much quieter than they were 30 years ago, that the Navy can't figure out a way to bring these aircraft up to a similar standard. They make the earth tremble when they fly overhead.

Anacortes, WA 98221

1.a. Thank You  
12.n. Quality of Life  
4.t. Noise Mitigation

The Jets have been too loud here. You must do more to reduce their noise impact as you expand the squadron. More practice outside of Puget Sound. Wheels up flying. Anacortes was here before your base. We deserve to live in peace.

Port Angeles, WA 98362

As an avid and frequent hiker, fisherman and skier within the Olympic National Park and its surrounding areas, I am deeply concerned with the levels of noise and electromagnetic radiation I and my family may be exposed to during Growler operations. As such, I would like to address some of the many deficiencies in the current draft EIPS for the EA-18G program for Operations at Whidbey Island and the surrounding areas of the Puget Sound and Olympic National Park. In doing so, I also ask that the public comment period be extended and improved to allow public examination and commenting throughout process of development of Growler operations in the aforementioned areas. As you are aware, 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). 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. 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.” i.e. this draft EIS is in violation of the law. 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. There is no mention of intensities of electromagnetic radiation being deployed or its potential impact on wildlife. 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.” 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

- 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
- 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.f. Use of Public Comments
- 2.h. Next Steps
- 2.i. Proposed Action
- 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.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.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area
- 8.b. Section 106 Process

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. 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. 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. 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. 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 Draft concedes that many protected marine and terrestrial animals within the operational area will be subjected to louder and more frequent noise, but dismisses the relevance of this conclusion by stating, repeatedly, that animals have "presumably habituated" to current aircraft noise, implying that animals will surely tolerate even greater noise levels (4-307, 4-308). This is the pivotal scientific assertion in the Draft with regard to environmental impacts, and it is both speculative and illogical. No evidence of habituation by the species concerned is provided. Moreover, if something is capable of causing harm--whether it is a chemical compound, or a physical

force such as sound pressure--greater exposure is likely to increase stress on organisms, and eventually exceed their ability to adapt. The proper scientific question is "How much noise can species X habituate to in these circumstances?" This is a question of fact that can only be determined by observation. Hence the Draft is merely speculating (presuming) that species in the operational area have already adapted to existing levels of aircraft noise, i.e., they are no longer stressed or responding adversely to overflights. Having speculated that past aircraft operations have had no effect, the Draft asks the reader to assume that raising the noise level will have no impact either, which is nonsense. My personal observations of my own dogs cowering and hiding when they hear loud noises at db levels much than those produced by the Growler; prove they are not "habituated" to loud sounds at all. Without specific research, it is completely unrealistic to draw conclusions about wildlife being "habituated" to these sound levels. Additionally, 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." In fact, 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>) 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. The Airman's Information Manual 7-4-6 (b.) Flights Over Charted U.S. Wildlife Refuges, Parks, and Forest Service Areas requests pilots to maintain a minimum altitude of 2,000 feet above the surface of National Parks, Monuments, Seashores, Lakeshores, Recreation Areas and Scenic Riverways administered by the National Park Service, National Wildlife Refuges, Big Game Refuges, Game Ranges and Wildlife Ranges administered by the U.S. Fish and Wildlife Service, and Wilderness and Primitive areas administered by the U.S. Forest Service. In the DEIS, 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. Another failing of the DEIS involves the citing of old research cited

while ignoring current research: 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. The Navy also 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. For all of the deficiencies, omissions, and failures to properly implement NEPA, as cited above, as a concerned citizen and former Naval Officer, I am asking the Navy to issue a revised, second draft EIS with a new public comment period. I appreciate the opportunity to comment on this draft EIS.

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
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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](http://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.  
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**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.  
**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 BELIEVE THOSE 12 COMMENTS ARE WELL WRITTEN AND SHOULD BE ADDRESSED.

- I AM A VETERAN, AND ~~AM~~ A VETERAN OF A FOREIGN WAR. I SUPPORT AND BELIEVE GREATLY IN OUR ARMED FORCES, BUT ALSO FEEL THAT THE DEFENCE DEPARTMENT SHOULD BE APPROPRIATELY SENSATIVE TO THE WELL BEING OF OUR POPULATION AT HOME.

Anacortes, WA 98221

1.a. Thank You

2.n. Alternatives Considered But Eliminated

Why do Growlers circle over the town of Anacortes to line up for their final approach to Ault Field when they could fly over Guemes Island? Their noise would affect a lot less residences, and noise sensitive places such as schools, the hospital, and senior housing.

1.a. Thank You  
19.d. Electronic Warfare

Portland, OR 97214

It is insane to even think of tainting this pristine part of the world with the pollution of war games. Please take the moral high ground and protect the earth for her people.

Seattle, WA 98115

1.a. Thank You

7.i. Deception Pass State Park and Other State Parks

The increase in number of flights over the public lands seems to violate the point of the public lands for public enjoyment. Fort Casey ST park, Ebey's landing, and deception pass are environmental treasures and amazing public lands. People travel from around the world to see these places.

Langley, WA 98260

I am writing to oppose the increase of flight operations and the Growler at the OLF Coupeville location. Tests have shown that the Navy has already contaminated the drinking water in the area by showing that there are significant levels of toxic contamination. Doesn't the Navy need to drink clean water also? Coupeville classrooms will be interrupted up to 5 times per hour by extreme noise "violence" and pollution from increased flights. How would you like that for your kids? almost 4000 people will be significantly impacted by the terrible noise and that is just humans, we don't know the MAJOR effect it will have on wildlife of the area. I am extremely concerned about this issue as a resident of the island, I can imagine that the countless military families and residents also will be heavily impacted by this expansion. THIS WOULD BE DEVASTATING FOR ALL IN THE AREA.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 4.o. Classroom Learning Interference
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Bryn Athyn, PA 19009

To whom it may concern: Please give very careful consideration to the impact of the proposed increase in Growler flights on the American men, women and children who must bear the effects of this decision. My daughter, her husband, and their four children recently moved to Coupeville to raise their family in accord with their beliefs. Increasing the number of flights will make life very difficult for them. Our grandchildren love the outdoors and will be forced to stay inside and have ear protection for long stretches. We are also worried that our daughter and son-in-law will lose their investment in their first home. The other risks posed by the flights are concerning as well. I respectfully request that those making this decision ask themselves if they would be willing to take these risks with their own families? Although we live in difficult times, the America I love cares for its people. Yes, our national defense needs to be strong. Some risks are unavoidable. But our future depends upon having just means as well as just ends in the way we conduct ourselves and in the decisions we make that effect our fellow citizens. Please take the lives of the people on Whidbey Island and those especially in the Coupeville area into thoughtful, deep and prayerful consideration. Thank you. And may God be with you, [REDACTED]

- 1.a. Thank You
- 1.d. General Project Concerns
- 12.j. Property Values
- 2.a. Purpose and Need
- 2.c. Compliance with the National Environmental Policy Act
- 4.r. Nonauditory Health Effects

Coupeville, WA 98239

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

The increase in the level of activity is going to be overwhelming. I love my life on Whidbey but the additional noise and pollution would be awful. Property values will plummet. Please don't do this

Island, WA 98249

Please consider the following comments: 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 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 findings 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 misconstruction 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 affected by overhead Growler noise. Perfluoroalkyl substances (PFAS) have been

- 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



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. Sincerely, [REDACTED]

Bellingham, WA 98226

1.a. Thank You  
2.k. Range of Alternatives

I am unalterably opposed to the navy's proposed program -- surely the DOD can find another place less disruptive to NA tribes and abundant wildlife

1.a. Thank You

Coupeville, WA 98239

Coupeville, WA 98239

NOISE – HEALTH IMPACTS I am not writing because I am anti-Navy, or anti-NAS Whidbey, or anti-OLF as it has been. I am writing because I have grave concerns about the proposals for Growler expansion at NAS Whidbey as presented in the Draft Environmental Impact Statement (DEIS), particularly as applies to OLF Coupeville. My husband and I live near Snakelum Point under one of the OLF flight paths. We rented our home in 1999, and bought it in 2001. When we purchased the house, we had lived two years with the touch-and-go field nearby. We knew and accepted the noise level and frequency of the Prowler EA-6B practice flights. If we were outdoors when jets flew over, we would cover our ears or come inside, and we learned to sleep through their necessarily late-night summer flights. When the Growler EA-18Gs started flying, we immediately noticed a profoundly different experience. Their engine noise penetrates the body. Covering the ears doesn't alleviate that discomfort. From my reading, this is the result of very low frequency sound waves. I was dismayed when I attended a Navy workshop at Coupeville H.S. a few years ago and was told by Navy personnel that there was "no noise difference between the Prowler and the Growler." Anyone standing under them can attest that the EA-18G feels quantitatively and qualitatively louder and more physically disturbing. According to the DEIS, the Navy is only considering A-weighted decibels. But the Growlers produce enhanced low frequency noise (LFN) which causes extreme physical discomfort. Many studies show this can be dangerous to health, but the DEIS does not address this at all. The EIS must incorporate actual on-the-ground tests, not averaging and modeling, and must consider the impact of infrasound and low frequency noise (together ILFN). The Navy has created a jet that is too loud, and is asking American citizens to suffer health damage from these new jet engines with no choice. The DEIS claims that no studies prove that there are health impacts from ILFN. Yet I have found numerous studies examining industrial windmills as well as jet noise and machinery noise that are indeed showing effects from long term exposure to ILFN. Also, just because the issue of health effects of ILFN hasn't been sufficiently studied does not mean harm isn't being done. It should really be incumbent upon the Navy to prove no harm, no detrimental health impacts, rather than to simply deny that any study to date has proved harm.

- 1.a. Thank You
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.k. Comparison of the Prowler to the Growler
- 4.r. Nonauditory Health Effects

Coupeville, WA 98239

APZ's The DEIS proposes three scenarios which vary the proportions of Field Carrier Landing Practice (FCLP) to occur at Ault Field and OLF. All of these scenarios will raise the number of flights at the OLF to more than 5000 annual operations, which means above the activity level that the Navy considers it advisable for the local community to establish Accident Potential Zones (APZs). The DoD says, ". . . residential development, educational facilities, and medical facilities are considered incompatible and are strongly discouraged in APZs." Yet all of this occurs within zones that could become APZs around OLF Coupeville. OUR HOUSE near Snakelum Point is already under the eastern flight path for the OLF. How with the EIS address the affect this would have on our property values, and on our ability to sell our house?

1.a. Thank You

12.j. Property Values

7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Coupeville, WA 98239

QUALITY OF LIFE ON CENTRAL WHIDBEY The DEIS assumes entirely too much that people on central Whidbey are indoors, whether in school, on the farm, at their residences, or taking advantage of the parks, trails and scenic byways. The majority of residents of central Whidbey had made our peace with the Prowler EA-6B jets, with the frequency of flights and with the impacts of their noise. It was not until the Growler EA-18s began flying, with their dramatically more disturbing noise and (at one time) increasing frequency of flights that concern and opposition arose. And with the release of the Draft EIS, and the proposal to increase the number of Growlers based at NAS Whidbey from the originally planned 57, then 82, to a new proposal of 118, that we realized the devastating impact threatening our way of life. And we are told that 42 more have been ordered. If all EA-18s are stationed at NAS Whidbey, that would be 160, more than triple the number we originally anticipated. Even Scenario C, which would have only 20% of the FCLPs at the OLF, is a significant increase in OLF annual operations, and Scenarios A and B are more than double and triple what has occurred in the past. Any honest assessment would recognize how such increases in FCLPs will affect life on central Whidbey. I cannot be outdoors when Growlers are flying nearby. With the Prowlers I would pause, stop talking, cover my ears, then return to normal activity. When the Growlers fly, covering my ears has no effect on the vibrations I feel in my body. My heart rate and breathing rate increase, and I must get indoors or flee the area as fast as possible. This means, whenever jets are practicing, there can be no gardening or other yard activities, no neighborhood walks, no hikes on the public trails at Pacific Rim Institute or Rhododendron Park or the Keystone Spit area of Fort Casey State Park. (While I am focusing on concerns about increased FCLPs at OLF Coupeville, increases in FCLPs at Ault Field just moves the problem to places on north Whidbey Island that are major recreation destinations. In particular, Deception Pass State Park, the most heavily visited state park in Washington. I understand that they lose thousands of dollars in camper fees as people abandon camp during nighttime FCLPs in the summer.)

- 1.a. Thank You
- 12.h. Tourism
- 12.n. Quality of Life
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.i. Deception Pass State Park and Other State Parks

Coupeville, WA 98239

APZ's The DEIS proposes three scenarios which vary the proportions of Field Carrier Landing Practice (FCLP) to occur at Ault Field and OLF. All of these scenarios will raise the number of flights at the OLF to more than 5000 annual operations, which means above the activity level that the Navy considers it advisable for the local community to establish Accident Potential Zones (APZs). The DoD says, ". . . residential development, educational facilities, and medical facilities are considered incompatible and are strongly discouraged in APZs." Yet all of this occurs within zones that could become APZs around OLF Coupeville. OUR HOUSE near Snakelum Point is already under the eastern flight path for the OLF. How with the EIS address the affect this would have on our property values, and on our ability to sell our house?

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

10.a. Biological Resources Study Area

10.b. Biological Resources Impacts

WILDLIFE AND ENVIRONMENT OLF Whidbey is located approximately 6,500 feet from Crockett Lake, which is a state of Washington Important Bird Area because of its importance to shorebirds, waterfowl and raptors. During their FCLPs, the majority of flights go directly over Crockett Lake. Both the Crockett Lake IBA and Penn Cove and Skagit IBAs are referenced in the DEIS. On Page ES-8, it says, "Wildlife inhabiting the study area through 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." I could not find a description of the NAS Whidbey BASH plan. I am concerned that if increasing frequency of FCLPs at OLF Coupeville leads to bird-animal aircraft strikes, the Navy will then seek to mitigate the problem by reducing the wildlife in the area. I know that this is regularly done at Ault Field. Because the DoD is authorized "to take migratory birds during authorized military readiness activities," birds are killed at NAS Whidbey in significant numbers to reduce the danger to pilots. I understand the need to protect pilots and aircraft, but I would not want to see similar steps taken on central Whidbey. And I fear that the great increase in annual FCLPs, particularly in scenarios A and B, could create a conflict that might be resolved to the detriment of the wildlife in the area. For example, flocks of migrating geese and shorebirds regularly pass through the airspace over Crockett Lake. The Final EIS must consider the implications of increasing the airstrike hazard with increasing numbers of flights.



Coupeville, WA 98239

1.a. Thank You

10.a. Biological Resources Study Area

10.b. Biological Resources Impacts

WILDLIFE AND ENVIRONMENT OLF Whidbey is located approximately 6,500 feet from Crockett Lake, which is a state of Washington Important Bird Area because of its importance to shorebirds, waterfowl and raptors. During their FCLPs, the majority of flights go directly over Crockett Lake. Both the Crockett Lake IBA and Penn Cove and Skagit IBAs are referenced in the DEIS. On Page ES-8, it says, "Wildlife inhabiting the study area through 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." I could not find a description of the NAS Whidbey BASH plan. I am concerned that if increasing frequency of FCLPs at OLF Coupeville leads to bird-animal aircraft strikes, the Navy will then seek to mitigate the problem by reducing the wildlife in the area. I know that this is regularly done at Ault Field. Because the DoD is authorized "to take migratory birds during authorized military readiness activities," birds are killed at NAS Whidbey in significant numbers to reduce the danger to pilots. I understand the need to protect pilots and aircraft, but I would not want to see similar steps taken on central Whidbey. And I fear that the great increase in annual FCLPs, particularly in scenarios A and B, could create a conflict that might be resolved to the detriment of the wildlife in the area. For example, flocks of migrating geese and shorebirds regularly pass through the airspace over Crockett Lake. The Final EIS must consider the implications of increasing the airstrike hazard with increasing numbers of flights.

Coupeville, WA 98239

1.a. Thank You

12.i. Housing Access and Affordability

HOUSING The DEIS does not address the devastating impact that increased Navy households residing off base is already having on the availability of affordable rental properties on Whidbey Island. The Final EIS must properly address the impact that increasing off-base Navy households will have on low income seniors and others with low and middle income, particularly those who need rental housing.

Coupeville, WA 98239

1.a. Thank You

2.n. Alternatives Considered But Eliminated

ALTERNATE SITES FOR FCLPs Why does the DEIS not consider any other sites for the landing practices? No options were offered for siting new Growler aircraft elsewhere despite this being one of the top issues from the community during prior scoping forums. The Navy owns land in other parts of Washington and Oregon that is in much less-developed regions. For example, why couldn't they do FCLPs at NWSTF Boardman in north-central Oregon? According to the NWSTF Boardman Final EIS, March 2015, EA-18G aircrews already conduct training activities in this area. Could they not conduct FCLTs there?

Coupeville, WA 98239

DANGERS OF CONCENTRATING ELECTRONIC WARFARE JETS The Final EIS should address the risks of siting the entire Growler fleet at NAS Whidbey. It is risky to single-site a whole fleet, on top of which the Navy is proposing to locate 96% of all US electronic warfare jets on a coastal island served by a bridge and two ferries. Ferries and bridges are vulnerable to terrorist attacks. Would it not improve safety and military readiness to site some of the Growler fleet on the East coast? See the Jan. 3, 2017 U.S. Naval Institute opinion piece by Col. H. Wayne Whitten, USMC (Retired), "Improve Land-based Electronic Warfare Aircraft Readiness: <https://news.usni.org/2017/01/03/opinion-improve-land-based-electronic-warfare-aircraft-readiness>. Col. Whitten says, "Luckily the former chief of naval operations, Adm. Jonathan Greenert, an avowed EW advocate, committed the Navy to taking additional EA-18Gs funded by a far-sighted Congress to support both carrier-based and expeditionary requirements. This will help bridge the capability gap but raises operational readiness issues given that all the EA-18Gs are destined to be homeported at NAS Whidbey Island. It's noble in intent but highly questionable from a roles and mission standpoint that all land-based EW aircraft will be owned by the Navy, the service with the least natural ties and expertise in ground combat operations. "To compound that issue is the imbalance in cross-training afforded joint forces if the entire expeditionary EW force is based on the Northwest coast. The inherent logistical advantages of single-site basing must be secondary to restoring joint force operational readiness and improving joint force warfighting capabilities, two key stated objectives of the Chairman of the Joint Chiefs of Staff Gen. Joseph Dunford. It is also counter to warfighting doctrine which calls for synergistic training of all combatants under train-as-you-will- fight scenarios. Bear in mind over half of the Army, Marine Corps, SOF and tactical Air Force units are in the eastern U.S. Additionally, DoD has a sizable investment in East Coast ranges that continue to be under-utilized for EW training."

- 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

SEISMIC ACTIVITY The DEIS suggests that the fault by NAS Whidbey “does not appear to pose any significant seismic hazard.” It’s hard to believe that the consultant who wrote this is familiar with the Pacific Northwest. We are in a major earthquake zone, as is well researched and described in Kathryn Schulz’s Pulitzer Prize-winning feature in The New Yorker article in July 2015, <http://www.newyorker.com/magazine/2015/07/20/the-really-big-one> Indeed, the Island County Liquefaction Map 2004 shows that the landing strips at Ault Field are in a zone with Moderate to High Liquefaction Susceptibility. And our area experiences a megathrust earthquake every 300-500 years, and the last one occurred in 1700. This is a real problem that is inadequately examined in the DEIS. Please address it in the final EIS.

1.a. Thank You

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

- 1.a. Thank You
- 4.o. Classroom Learning Interference

Coupeville, WA 98239

SCHOOLS AND EDUCATION The DEIS states that “No school would experience an increase of more than two learning-disrupting events per hour under any scenario...compared to the No Action Alternative.” It is stated as if such events are minor annoyances. School class periods are usually less than an hour. Any such disruption has a bigger impact than simply a pause in speech. Both teacher and students have had their focus and concentration interrupted. It can take many minutes to recover. T How is the Navy going to proceed with this large increase in FCLPs that fly over schools without having a negative impact on education? (While I personally would prefer any scenario that minimizes FCLPs at OLF Coupeville because that affects my home and my school district, I recognize that increasing the number of FCLPs at Ault Field would have a detrimental effect on Oak Harbor schools.) The DEIS mentioned Coupeville Elementary School, but omits Coupeville Middle and High Schools, which are located closer to the OFL Coupeville FCLP flight paths. This must also be corrected in the final EIS.

Coupeville, WA 98239

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

PFOA Contamination The DEIS does not mention or address the PFOA contamination that has been documented in wells. With greatly increased numbers of practice flights comes increased accident risk, thus greater risk of future use of PFOAs, and contamination of central Whidbey well water. Our aquifer is our sole source of water. Contamination is a grave issue, and could affect not only well water but soils and farming. This must be addressed in the Final EIS.

Coupeville, WA 98239

1.a. Thank You  
12.e. Agriculture Analysis  
12.h. Tourism  
12.n. Quality of Life

FARMING Central Whidbey has some of the prime soil for farming in the state of Washington. Farming has been central to the culture of Coupeville and the surrounding area since the first Europeans settled. And before that, this area was one of the most densely settled places in the Salish Sea by the Coast Salish inhabitants because of the variety and richness of the natural resources located here. This history predated the establishment of the Outlying Field. Central Whidbey is now the site of Ebey's Landing National Historical Reserve, and is a major destination for tourism, for hiking, and for birding. Humans CANNOT function outdoors without detrimental health effects under the flight paths of the Growlers. It is insulting that the DEIS language suggests that the only noise effect is that it interrupts conversation! The low frequency sound waves penetrate the body. I can't explain exactly what is occurring physiologically but I do know that I experience anxiety, uneasiness, and increased heart rate and breathing rate. Repeated flyovers become physically unbearable, even with heavy duty noise cancelling ear protectors. I have spoken with many area residents who have had the same experience since the Growlers replaced the Prowler jets. With the uniquely fertile soil that the glaciation events left on central Whidbey, we have at least five commercial organic farming operations in addition to a number of more conventional farms. Our farmers will be forced to leave if there is any significant increase in Growler FCLPs at Coupeville OLF, because of course their livelihood requires the spend their days outdoors. Why doesn't the DEIS examine the impact of increased FCLPs at the OLF on the farming community that is central to our cultural history and values?



Coupeville, WA 98239

1.a. Thank You

12.k. Compensation to Citizens for Private Property

PROPERTY VALUES While meeting with our Financial Advisor in Coupeville recently, he told us that he has clients moving away from Coupeville. When we asked why, he said it was because they are too worried about the increasing numbers of Growlers, with the resultant increased FCLPs at OLF Coupeville, to stay in the area. How can the Navy mitigate the economic impact of decreasing property values that will result from increased Growler operations at the OLF?

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.

Sir [Redacted]

Name: [Redacted]

Address: [Redacted] Sequim WA 98382

cc: Hon. Derek Kilmer, U.S. Congressman, 6<sup>th</sup> 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

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
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.a. Socioeconomic Study Area
- 12.h. Tourism
- 12.j. Property Values
- 18.b. Average Carbon Dioxide per Aircraft
- 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](http://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:

- How do 400,000 metric tons of CO<sub>2</sub>/year emitted by Growlers affect our carbon emissions and our quality?

- How can the Navy justify training to defend the lives, wellbeing and peace of US citizens by creating a war-zone like environment for the same citizens and attacking and bombarding them with excessive noise, and polluting their environment harmful chemicals?

Camano Island, WA 98282

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 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. 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. 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. 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 analyzed.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 7.c. Noise Disclosure

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).

Island County, 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.



Island County, 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.r. Nonauditory Health Effects

I was in the parking lot of the Nordic Hall at [REDACTED] when one of these planes approached from behind me. The sudden blast of high volume noise caused me to feel like my life was in danger. I had an instinctive fight or flight response. It is not reasonable to expose people in our community to this kind of experience.

Coupeville, WA 98239

1.a. Thank You

7.d. Recreation and Wilderness Analysis and Study Area

The community uses the Nordic Hall at 63 Jacobs Road for many group events. When the EA-18G Growlers are flying over it spoils these events because the jet noise drowns out the speaker, discussion, music, etc. associated with the events. These disruptions should be stopped. Increasing them as proposed in some of the alternatives proposed in the EIS would probably make the Nordic Hall unuseable.

Coupeville, WA 98239

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

The EIS does not take into consideration the reduction in property values and consequently reduced property tax revenue that will result if FCLPs are increased.

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

. 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

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").

Sequim, WA 98382

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

Please extend the deadline for these comments. 45 days is not enough time to respond in detail. Thank you, [REDACTED]



Lopez Island, WA 98261

STATION 2/Alternatives: 1. Why is there not an alternative that would achieve your mission without increasing aircraft. 2. Mitigation measures to reduce noise such as a "hush house," baffles to reduce engine noise are barely discussed. STATION 3/Airfield Operations: 1. Why do the growlers need to fly over the Lopez Island School? I have a child at the school so I know that the fly overs are frequent and that they interrupt learning/not to mention the safety concerns of planes being so close to our children. 2. I have regularly observed planes flying with the landing gear down when flying over the school - why is this allowed. STATION 4/Noise study results: 1. The E.I.S. compares increased flights to activity in the 70's, 80's and 90's suggesting that there is no significant increase in the impact of noise. However, the Growlers have "afterburners" which make the planes significantly louder and at times are deafening. I have had my sleep disturbed on a regular basis. I have often been stressed by the end of the work day when the planes and testing is going on all day. 2. The E.I.S. does not do any actual noise measurements on Lopez Island. All evaluations of noise are based on computer models which do not reflect what islanders actually experience. 3. The consequences of roughly doubling the number of Field Carrier Landing Practices will have severe impact on islanders. 4. Why is the signature low-frequency noise of the Growler not addressed? 5. Why is there no information evaluating the health effects on persons inundated with this noise on a constant basis? 6. Why is there no evaluation of the impact of vibration on humans? We are often exposed to vibration from the planes on a regular basis. STATION 5/Community Resources: 1. Already property values in San Juan County have been negatively impacted by the jet noise. How do you plan to preserve the well-being and economy of the islands while as the same time doubling the number of FCLP'S? Our islands are tourist destinations. The growlers are having a negative impact on tourism. STATION 6/Natural Resources 1. Have you studied the 'startle effects" of bird populations as the Growlers scream overhead? 2. The E.I.S. states that birds are habituated to the noise - do you have facts and studies to support this statement? 3. Our community is very concerned about Climate Change - what is the navy doing to significantly decrease their carbon footprint? It seems that doubling the activity at the base will have adverse impacts on the climate. What is the total C02 output per Growler annually? 4. What are you doing to assess and address the risks of the fault which runs under Ault Field - how will an earthquake impact the base and the surrounding area? STATION 8/Public Involvement: 1. Our Lopez Community would like to meet directly with the Navy decision makers so they can hear our concerns and discuss how they will try and address these concerns in a meaningful way. We would like the "top brass" to come to the island during FCLP'S and other testing to experience the low frequency noise first hand so they can have an understanding of what we are dealing with on a daily basis. I would like to see a meeting where community members can ask direct questions and the entire audience can hear the response. I feel the lack of this direct approach is concerning. The house station format is limiting as there are people crammed around the station and one person talking to one other person so few people get to participate. 2. When will you arrange for a community meeting and complete physical testing on island? I appreciate everyone coming to the island and taking the time. However, I felt that the whole presentation was a "dog and pony show" as the Navy representatives did not

1.a. Thank You  
 10.c. Wildlife Sensory Disturbance and Habituation  
 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.b. Average Carbon Dioxide per Aircraft  
 2.e. Public Involvement Process  
 2.h. Next Steps  
 2.k. Range of Alternatives  
 2.n. Alternatives Considered But Eliminated  
 4.a. General Noise Modeling  
 4.f. Noise Measurements/Modeling/On-Site Validation  
 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations  
 4.k. Comparison of the Prowler to the Growler  
 4.l. Points of Interest  
 4.m. Supplemental Metrics  
 4.o. Classroom Learning Interference  
 4.p. Sleep Disturbance  
 4.r. Nonauditory Health Effects  
 4.t. Noise Mitigation

seem to be open to a different viewpoint. I felt that they tried to talk over me or cram their viewpoint down my throat. They did not in any way seem willing to consider a different view.

Freeland, WA 98249

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.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 11.d. Per- and Polyfluoroalkyl Substances
- 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
- 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.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 6.f. Fuel Dumping
- 7.h. San Juan Islands National Monument

comments and offer further opportunity for public comment before the Final EIS is prepared. The impacts of fuel dumping need to be addressed as well, because increased operations increases the likelihood of a plane needing to dump fuel due to unforeseen circumstances. Contamination of wells near the OLF is a problem. Increased operations -- in Coupeville or Oak Harbor, either one -- increases the likelihood of a crash and subsequent use of flame retardants, which have shown themselves capable of dribbling down into the aquifer. On an island largely dependent on aquifer water, this is particularly relevant. Other sources of possible aquifer contamination also need to be addressed: where will fuel be stored, and what methods will be employed make sure it never spills? When a spill does happen, how will it be cleaned up? What would the effect be on the environment if all the fuel on-site spilled? What other chemicals will need to be stored on-site, how much will these increase with the increased operations? How much will risk of spill increase? There are a lot of people living in the Coupeville area and in the Oak Harbor area. Is NAS Whidbey the best place for these operations, when you take into account all the people that will be affected here as opposed to elsewhere? Realistic alternatives need to be addressed. The impacts on the schools need to be addressed. At either location, children are affected. How many times per week will class be interrupted? This is one area where the average noise level is less important than the amount of time per day the noise level surpassed a given threshold above which lessons are interrupted. Beyond the school day, there are sporting events to be considered, which are interrupted. Economic impacts need to be considered. It is not pleasant to most people to experience loud noises intermittently throughout the day, and people will not buy houses as readily in areas affected by the flight increases, driving property values down. Tourism will be affected -- people do not stay as long in areas where they experience intermittent loud noise, therefore they spend less money and patronize local businesses less. How will birds and other animals be affected by the increases in flights? Especially birds that nest in the area should be considered. Many kinds of birds are specially affected by having a flying thing overhead -- it triggers them to hide from an avian predator. Here are some of the species that I worry would be affected: Pigeon Guillemot, Peregrine Falcon, Red-tailed Hawk, Marbled Murrelet, Kestrel. Also we need to consider the impact on the little birds that nest in nearby wetlands, such as warblers, and those that nest on nearby Pacific Rim Institute lands, such as Western Bluebirds.

#1024



# 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](http://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 Lopez all my Life!

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 lived on Lopez Island all my life  
 THE NOISE OF THE WAR MACHINES AND THE  
 ENVIRONMENTAL IMPACT IS WORSE EVERY  
 YEAR. (WE LIVE IN A WAR ZONE!!) AND  
 WE ARE NOT BEING HEARD. WE PAY HIGH  
 PROPERTY TAXES, WE ARE NOW A NATIONAL  
 MONUMENT, BUT OUR LIVES ARE EXTREMELY IMPACTED  
 EVERY DAY! BY YOUR NOISE! WE DO NOT NEED WAR,  
 WE NEED PEACE, WE NEED TO BE HEARD! OUR LIVES*

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**

*matter, our  
 environment  
 matters!*

Port Townsend, WA 98368

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.

- 1.a. Thank You
- 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

Port Townsend, WA 98368

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.

- 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

Port Townsend, WA 98368

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.

- 1.a. Thank You
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects



Seabeck, WA 98380  
February 9, 2017

EA-18G EIS Project Manager  
Naval Facilities Engineering Command (NAVFAC) Atlantic  
6506 Hampton Blvd.  
Norfolk, VA 23508

Attn: Code EV21/SS

Dear Sir/Madam,

Thank you for extending the comment period to February 24, 2017 concerning the Navy's activities in the Pacific Northwest, Olympic Peninsula, Olympic National Park, and the people, wildlife, ecosystems, and other biological resources that may be affected by them.

We find it incomprehensible that the Navy is pushing relentlessly and with some dishonesty for the right to use the areas noted above for EA-18G Growler practice. It has previously been pointed out that there are other areas in the United States that the Navy can use for their Growler activity that would not have the adverse effects that would be accrued within the Olympic Peninsula – areas that do not include a national park that is a UNESCO Heritage Site, relatively densely populated areas with small populations in between, nor sensitive natural ecosystems.

The following are some of our main concerns. Numbers in parentheses refer to the attached document prepared by the West Coast Action Alliance.

**First, the importance of maintaining the integrity of the Olympic National Park as it was originally intended.** The Olympic National Park was established in 1938 as an ecosystem preserve to be honored and respected by all visitors in-perpetuity. It was nominated in 1981 as a UNESCO World Heritage Site and subsequently accepted. To be included on the World Heritage List, "sites must be of outstanding universal value and meet at least one out of ten selection criteria. The Olympic National Park met two of these criteria: **Criteria vii:** to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance. **Criteria ix:** to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals." **According to the World Heritage Center, "protection and management, authenticity and integrity of properties are also important considerations."** The Olympic National Park is listed in both "cultural" and "natural" criteria of Operational Guidelines of the World Heritage Center for 2002 and 2005.

- 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.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.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
- 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

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Noise and activity by the EA-18G Growlers would have a deleterious effect on the integrity of this unique ecosystem and its inhabitants to include the human residents of this area and “[t]hreatened and endangered species, sensitive species, and other wildlife and critical habitat areas” that would be “adversely impacted by noise from takeoffs, landings, and other flight operations well beyond the Navy’s study area” (25).

**Second, the people and wildlife who live in the areas that would be affected by Navy Growler noise and activity.** This would include the Olympic Peninsula, within which is the Olympic National Park, the communities of LaPush, Queets, Kalaloch, Clearwater, the Hoh village, Neah Bay, Forks, Port Angeles, Whidbey Island, Camano Island, Port Townsend, San Juan Islands, and small communities therein. The study area of the effects of Growler noise documented in the Navy’s Draft Environmental Impact Statement (DEIS) included only “6-10 miles of the corners of runways”, ignoring the effects of Growler noise outside this narrow study area. This noise would include that from afterburners of the jets during aerial combat maneuvers (dogfights, etc), flying at low altitudes, practicing landings on short runways, having weaponry that can make a “parcel of forest hum with electromagnetic energy”, and low-frequency noise “produced at tremendous levels by Growlers” (1, 12, 13).

The US Dept 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 dB as being ‘unacceptable’. Residents in these outlying areas (noted above) . . . have recorded noise at least twice that loud”. Guidance directing aircraft from the Aircraft Environmental Support Office was quoted by the DEIS and states that “Aircraft are directed to avoid towns and populated areas by 1 nm (nautical mile) or overfly 1000 feet AGL (above ground level) and to avoid airports by 3 nm or overfly 1500 AGL. Over sparsely populated areas, aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.” The Navy did not disclose these low-flying guidelines 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. 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 1000 feet is far too close, and 1500 feet over an airport is far too dangerous a proximity to supersonic Growler jets” (2, 17, 18).

**Third, the effects of the Navy’s use of hazardous chemicals and materials, such as firefighting foam and perfluorooctane sulfonate, aqueous film forming foam, and perfluoroalkyl substances on ground water, drinking water, and**

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**soil** have not been honestly acknowledged nor appropriately analyzed by the Navy in their DEIS (4, 22, 23 24). These highly toxic carcinogenic chemicals will not only affect the people in these areas, but also the terrestrial, fresh water, coastal and marine ecosystems and the organisms that live within them. (Note criteria ix of the World Heritage List mentioned in paragraph 4)

**Fourth, the purposeful attempt by the Navy to mislead the public by circumventing the law regarding public disclosure and input, deliberately leaving out important information, not disclosing new information regarding impacts of its activities, avoiding implementing impact studies and analysis, using old studies and outdated computer models to support their position, illegally piecemealing and segmenting projects and impacts on wildlife to avoid analyzing cumulative effects, and violating the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA) is COMPLETELY UNACCEPTABLE!**

**We leave you with this final thought:**

“One square inch of silence” is a concept investigated by its creator Gordon Hempton. In his book of the same title, he writes: “In the spring of 2005, my hearing restored, my career as the Sound Tracker back on track, I asked myself, ‘What good is perfect hearing in a world filled with noise pollution?’ After a good bit of thought, I resolved to make good on a quiet conservation project I’d conceived of years earlier.”

*“One Square Inch of Silence* was designated on Earth Day 2005 (April 22), when, with an audience of none, I placed a small red stone, a gift from an elder of the Quileute tribe, on a log in the Hoh Rain Forest at Olympic National Park, approximately three miles from the visitors center. With this marker in place, I hoped to protect and manage the natural soundscape in Olympic Park’s backcountry wilderness. My logic is simple and not simply symbolic: *If a loud noise, such as the passing of an aircraft, can affect many square miles, then a natural place, if maintained in a 100 percent noise-free condition, will likewise affect many square miles around it. Protect that single square inch of land from noise pollution, and quiet will prevail over a much larger area of the park.*” (Emphasis ours)

In a conversation with Kurt Fristrup, an ornithologist at Cornell University stationed at Fort Collins, Colorado to help improve the Natural Sounds Program’s data-collecting and analysis methods, Fristrup shared a final thought before Hempton left his office: ***“The loss of quiet is literally the loss of awareness. Quiet is being lost without people even becoming aware of what they’re losing. It’s tragic.”*** (Emphasis ours)

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A continuation of our concerns about the Navy using the Olympic Peninsula as a playground for their EA-18G Growlers is included within the following attachment prepared for the public by the West Coast Action Alliance, a summarized analysis of the 1400-page document of the Navy's Growler Environmental Impact Statement (EIS). We have highlighted specific sentences for emphasis.

Sincerely,



**On a personal note:** As a young child, I lived with my parents in a small apartment in the attic of the Queets-Clearwater School in the late 1940's. My parents were two of three teachers; my father was also the principal. This was an isolated area and teaching here was considered a hardship post so my parents received a little extra salary. The road to Forks hadn't yet been completed. The drive to Hoquim and Aberdeen was long and slow on a narrow 2-lane highway accommodating huge, fast-moving log trucks and slower passenger cars. The highway went through the Queets Village splitting it in two. Kalaloch Lodge had a small café mostly visited by the locals and offered only a few cabins overlooking the ocean.

This was a very transforming experience for me as a young girl deeply affecting me in all areas of my life. The quiet, peaceful, cathedral-like energy of the surrounding forests and the ever-changing energy of the ocean became an integral part of me. The sound of silence among the trees, bugling of rutting elk in September, a solitary scream of a cougar in late afternoon, the chorus of tree frogs on a spring night, and the scratchy scuttle of hermit crabs on my approach are audible memories. As an adult, I have returned to my place of childhood every year seeking that peacefulness and energy I know so well. I have not welcomed the changes I have observed over the years – large areas of trees I had known are gone and it's more and more difficult to find a place to wander with few or no people. This is the ancestral home of the Quileute and the Makah. This is not only their home, but also a sacred place. So it is for me.

**Attachment:** Summary analysis of the Navy's EIS by the West Coast Action Alliance

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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](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 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 #<sup>7</sup>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,

Mendocino, CA 95460

The aircraft noise assessment provided by the US Navy's DEIS is faulty and needs to be redone. The A-Weighted Sound Level scale used to assess noise is attenuated along the range of human hearing. It doesn't account for the noise produced outside of that range, but can still have deleterious effects to humans and other species. No one is even looking at the possible consequences of such effects. And this does not address concerns of the electromagnetic radiation people and living entities will have. This program, though sound in theory, is ill-planned. The same results could be obtained from setting up these tests in places where people and animals do not live. In addition, LiFi is coming, a technology that uses light waves instead of radio waves and cause no harm to living cells. The problems targeted by the Navy are real. But the solutions must not be tested in a way that do more harm than good. Go back to the drawing board. With the good brains that are working on this, better contexts and scenarios can be come up with. And do remember the long-range consequences that excessive noise has on living beings. This will not be a minor annoyance, but long-term fall-out with real damage. Thank you.

1.a. Thank You

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

4.r. Nonauditory Health Effects



# 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](http://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.a. Thank You
- 10.b. Biological Resources Impacts
- 12.n. Quality of Life
- 2.a. Purpose and Need
- 2.j. Costs of the Proposed Action
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

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

I am a resident and constituent of Port Townsend. I have endured the growler and prowler testing the past few years and have experienced extreme agitation, sleep disruptions and headaches. I am concerned not only for human life but also the environmental repercussions of the wildlife, marine life air quality and noise pollution. My other concerns regard the astronomical expense the Navy is making in the name of defending the country. It is time to re-allocate those funds to

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**

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.

Education, healthcare, environmental protection  
and funds for peaceful actions with all  
nations.

It is time to seek other ways.

No More Warfare !!!

No More War Games !!!

Stop the Testing !!!

Stop Spending Our Money !!!

For more information, please visit the project website at [whidbeyis.com](http://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**

Lopez Island, WA 98261

Note: For Draft EIS page citations and supporting references see [www.QuietSkies.info](http://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. NEPA 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 are 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

- 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



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

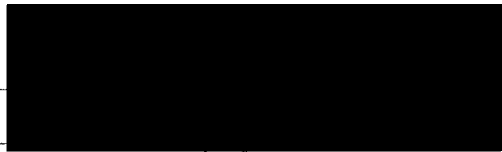
January, 2017 Comments

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
2.c. Compliance with the National Environmental Policy Act
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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 Ses Center for Sustainable Agriculture

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

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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](http://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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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.a. Thank You

Langley, WA 98260

As a nurse, Health Consultant, , mother and grandmother, I (and my husband) are very concerned about noise and polutting emissions of increased Growler airfield operations at NAS on Whidbey. . This increase threatens to have a negative impact on local farmers, workers, and residents. Please consider the overall impact to our beautiful island and our children and grandchildren's lives. Thank you, [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: Thursday, December 8, 2016

PLACE: Seafarers' Memorial Park Building  
601 Seafarers' Way  
Anacortes, 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.l. Points of Interest
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss

5 (The personal identifiable information disclosure  
6 statement was read by the following commenter.)

7 MR. [REDACTED]: I read the statement.

8 [REDACTED]. And the noise level has bothered me  
9 for a long time and it kind of upsets me that it's going to  
10 get louder. And it isn't what -- this is being treated as  
11 an average noise level, and to me I don't mind the average  
12 noise level. What's bothersome is the peak noise level.  
13 And the peak noise level is loud enough to cause hearing  
14 damage if it happens -- some days it's repeated all day  
15 long, and sometimes even -- I've -- I've had it as late as  
16 midnight. It will wake you up, no question, no matter how  
17 much you're asleep inside the house. I keep a set of  
18 hearing protectors on the kitchen table, and that's kind of  
19 irritating that I have to do that, but when the flights are  
20 going right over town, right over my house, it's just about  
21 deafening inside the house. It's an older house, but that  
22 doesn't matter. It is muted from outside.

23 And if I'm outside working in the yard I have to  
24 kind of stop. Even the hearing protection is not really  
25 enough, and of course I'm not always wearing hearing

1 protection. When you're around when they start flying you  
2 kind of stop whatever you're doing and close off your ears  
3 for a few minutes.

4           It seems to me that flying that kind of flight  
5 directly over an urban area ought to be changed. It doesn't  
6 seem to be something that I -- I appreciate that it has to  
7 be done, that these -- this -- this practice needs to go on,  
8 and I know that, you know, we need to be prepared, I mean,  
9 these guys need to be trained properly, but it seems to me  
10 that, for example, we don't do training flights for  
11 commercial jets over urban areas. They go over Moses Lake.  
12 Why do we have to do the training flights at that level  
13 right over an urban area? That seems to me pretty offensive  
14 kind of behavior. So that's kind of my synopsis.

15           (The Public Meeting concluded at 6:00 p.m.)  
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Sequim, WA 98382

Thank You for the opportunity to comment on the Draft EIS for EA-18G "Growler" Airfield Operations at NAS Whidbey Island Complex. And for holding one public hearing on the Olympic Peninsula. It is good to know you realize the activities at NAS Whidbey impact a much larger area. This draft EIS is incomplete. The EIS must consider; The impacts to people who live, work, go to school and visit the Olympic Peninsula. The impacts of the plane exhaust on climate change and what mitigation is planned Alternatives are needed that consider stationing some or all EA-18G elsewhere The consequences of manmade or natural disasters, earthquake, tsunami fire, bomb if all EA-18G are at NAS Whidbey vs at several locations. Flight patterns must keep plane noise from penetrating designated Wilderness areas. I am disappointed by the limited consideration of impacts to the people of the Olympic Peninsula. I would like you to understand that current activities greatly impact my daily life. I have been a full time resident for 24 years, before that we tent camped on this property. I live on the Miller Peninsula, the land between Discovery Bay and Sequim Bay. The house we built to be energy efficient so the walls are one foot thick, a double wall construction, with blown in insulation. Few outside sounds penetrate into my home. The USCG helicopter airlifting to Seattle goes directly overhead and we can hear it and now the current military planes. It is now a rare day when I can be outside for one hour and not hear the military planes. The noise from military planes has woken me up in the morning. The noise from these planes are constant reminders of the violence in the world, increasing my anxiety and apprehension. In April of 2016 I went to Kalaloch where the military plane noise drowned out the sound of the storm surf for one and a half hours straight. This was inside the National Park. The following day I went to the S Fork of the Hoh and hiked in to the Wilderness where again I heard multiple flights. I hear these military planes in the Buckhorn Wilderness area too. Wilderness areas are scared places for me and many other people. Military plane noise in a designated Wilderness is like the sound of jackhammers on the sidewalk outside a building holding a religious ceremony. What is the point if the military activities take away the citizen's ability to enjoy their home, yard, neighborhood, parks and Wilderness areas? I ask you to open your minds and hearts to consider alternatives, impacts, costs and logistics of the whole area impacted by NAS Whidbey activities to arrive at an alternative that is reasonable for the people who live here and NAS Whidbey mission. [REDACTED] Sequim, WA

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 12.a. Socioeconomic Study Area
- 12.d. Population Impacts
- 12.n. Quality of Life
- 18.a. Climate Change and Greenhouse Gases
- 18.d. Washington State Greenhouse Gas Goals
- 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
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area

1.a. Thank You

Seattle , WA 98122

This is not ok near a park of any kind. Go fly your planes where people don't care about their health or the planet. I know where!?! The states where they voted for Trump.

Friday Harbor, WA 98250

I am a local resident who frequently has to listen to the sound of Growlers disturbing what is otherwise a peaceful part of the region. Our tourist economy, on which the county DEPENDS, requires a pristine and quiet environment, and doubling Growler presence is going to severely impact this. We are under pressure on a myriad of fronts—including increased oil tanker traffic, and any EIS should take into account not just the burden of the increased Growler presence, but other impacts that when aggregated push the system beyond its limits. As outlined extensively by Quiet Skies Lopez in their submission, which I have read, my other concerns relate to the incompleteness of the EIS. In summary: "The draft EIS is incomplete and has such serious analytical deficiencies—including the usage of flawed, outdated NOISEMAP as the main modeling tool to produce all noise exposure assessments, the lack of transparency around "the library of noise data" from which the NOISEMAP model draws, and the lack of empirical noise measurements of Growler operations—that the noise assessment results are found to be untrustworthy. Such questionable noise exposure results preclude any meaningful review of consequent noise impacts. To achieve compliance with NEPA and other relevant laws, the Navy will need to redo the noise assessment analysis using an improved, updated model like AAM and possibly making necessary empirical noise measurements of Growler operations. Otherwise, the noise exposure and impact analyses are unlikely to be scientifically or legally defensible. CEQ Regulation 1502.9 (a) states that "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." In light of such inadequacies of this draft EIS as discussed above and the need for a significant revision, the Navy must issue a revised draft EIS, at least for the portions pertaining to noise impacts, to be compliant. Only after a properly revised EIS is issued can citizens and affected community members meaningfully review and comment on the Navy's analysis of noise impacts resulting from the proposed action and alternatives of adding 35 to 36 Growlers."

1.a. Thank You

12.h. Tourism

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

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model



# 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](http://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]

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

MOVED TO ANACORTES VS. WHIDBEY/OAK HARBOR WITH KNOWLEDGE  
 BY LOCALS/REACTIONS/PUBLIC INFO AIR FLIGHTS WERE "RARE" ONE DAY  
 A MONTH OR SO & LIMITED ON "TUES A MONTH" SINCE MOVING HERE 2 YRS  
 AGO I HAVE INDEED INITIALLY SEEN SOME ACTIVITY, THEN IT EXPLODING  
 INCREASED TO MULT TIMES PER WEEK AND ALL DAY & INTO EARLY AM.  
 I SERVED 30 YRS IN NAVY, LIVED ON CAMPUS/NEAR TO BASES & MOVED AROUND US,  
 AND YET THERE IS NOISE WITH AIRCRAFT, BUT, WE DID NOT HAVE TO SIGN NEW  
 AWAYS THAT THIS AREA (WE LIVE NORTH ANACORTES) WOULD BE IN "NOISE ZONE" AS IN AREAS  
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 OPERATIONS & VOLUME OF THESE "VERY NOISY" AIRCRAFT, I'M THINKING THAT U.S. NAVY  
 ALTER FLIGHT PATH OVER NORTH ISLAND AREA, DO 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
- 3.a. Aircraft Operations
- 7.c. Noise Disclosure

1.a. Thank You

CAMANO ISLAND, WA 98282

I support all air activity from NAS Whidbey. This is the sound of Freedom through training.

Freeland, WA 98249

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.r. Nonauditory Health Effects

I am not opposed to the training of Growler pilots. I am opposed to training them in this highly residential area, where the planes can cause health and psychological problems. I encourage the Navy to find an area in less populated regions in Eastern Washington for the training.

Langley, WA 98260

1.a. Thank You

2.n. Alternatives Considered But Eliminated

Please consider moving pilot training to areas in eastern Washington where the noise will not cause harm to people, property, children, and animals.

Freeland, WA 98249

I am concerned that the draft EIS does not sufficiently address the potential health risks the abundant noise and low-frequency sound associated with expanded Growler operations pose for residents Coupeville and Oak Harbor. It seems that the EIS also under represents the Growlers' true level of sound in terms of decibels. I hope that the Navy will properly address this issue.

- 1.a. Thank You
- 4.a. General Noise Modeling
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.r. Nonauditory Health Effects



Freeland, WA 98249

I am enormously concerned about the effects the proposed Growler Airfield Operations will have on the community of Coupeville. The noise associated with the increased use of the OLF will change the rural character of Central Whidbey, severely damaging its peaceful appeal and thus profoundly decreasing tourism and the associated economic viability of many of its residents.

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.o. Cost-Benefit Analysis
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Freeland, WA 98249

1.a. Thank You  
2.k. Range of Alternatives

I am disappointed that the Navy did not explore alternative sites for expanded Growler activity after receiving community feedback on the matter. The ecosystem is more fragile and the population is higher here than at potential alternative sites.

Freeland, WA 98249

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

I am deeply concerned about the potential for aquifer and well contamination due to Growler flame retardants.

Freeland, WA 98249

What will Growler Airfield Operations mean for social services throughout all of Island County as property values-- and thus tax revenue--plummets due to noise levels?

- 1.a. Thank You
- 12.j. Property Values
- 12.l. Community Service Impacts
- 12.m. Education Impacts

Freeland, WA 98249

1.a. Thank You

4.o. Classroom Learning Interference

I am concerned about the implications of the increased Growler operations on our school children. Noise will be too loud to conduct classroom activity more than once per hour. How will this effect our youth?

Freeland, WA 98249

1.a. Thank You  
6.f. Fuel Dumping

The draft EIS fails to address the frequency and effects of the fuel dumping associated with increased flying.

Freeland, WA 98249

The draft EIS fails to discuss the impact on our marine and wildlife. I am concerned what the low-frequency noise and potential pollutants will mean for local wildlife.

- 1.a. Thank You
- 10.c. Wildlife Sensory Disturbance and Habituation
- 11.c. Marine Waters and Sediment
- 6.f. Fuel Dumping
- 6.g. Chaff

**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)	_____
		<i>citizen</i>
3.	Address	_____ <i>Seattle WA 98117</i>
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.d. Population Impacts
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 12.j. Property Values
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- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 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:

One of the most concerning issues is the levels of PFOA in the water table. Messing with a life giving and necessary resource should not be something local residents should have to worry about. Have these chemicals in the water leached into the surrounding farms and farmlands? Does the effect of leaching impact the crops grown? <sup>Is the Navy</sup> ~~Are we~~ possibly tainting the food grown in this community and shipping or selling to others outside the community?

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Coupeville, WA 98239

Good Afternoon I am opposed to the expansion of growler squadrons at NAS Whidbey. I have many concerns with the expansion. currently my principle concern involves our water. My community well recently tested positive for several regulated and unregulated chemicals. This is of great concern to me as I have two children and several small pets. The expanded expansion and use of OLF would continue to raise levels of concern in the groundwater. The expanded flights would be disruptive disproportionately to the people of Coupeville. Many citizens support the Navy but do not wish to have the city of Coupeville be adversely effected. The expanded flights would have a negative impact on the children in school, the many children who live within the practice zone, as well as the ability of Coupeville businesses to support themselves through tourism. It would also contribute to the tensions already in the area concerning use of the outplaying field. This would put additional stress on family members of service members. The city of Oak Harbor lacks the proper infrastructure necessary to support the expansion. This also would put additional stress on family members of those serving. Access to and from the Island is via 2 lane bridge or ferry. Via the bridge the nearest additional resources, such as shopping, etc, is an hour away. I also firmly believe that our pilots deserve the best training possible in aircraft that are safe. Training them over civilian populations in aircraft that continue to have small mechanical mishaps seems inadequate. As a final note, the training area is over Crocket Lake, a lake part of a reserve where many migratory birds and local birds hunt and nest. Should a bird strike happen the likelihood of a crash in housing is very high. Costly for everyone. Of course it is of huge concern to me that the flights also disrupt the ability of the raptors at the lake to hunt properly. I urge you to find a suitable solution, not only for the citizens of Coupeville, but also for our pilots and their families. I also urge you to consider protection of our food and water supplies as being paramount for National Security. I thank you for your time. [REDACTED]

- 1.a. Thank You
- 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
- 15.a. Infrastructure
- 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
- 5.d. Environmental Health Risks and Safety Risks to Children

## Draft Environmental Impact Statement Comment Form

EA-18G Growler Airfield Operations at NAS Whidbey Island Complex

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Online at: [www.whidbeyeis.com](http://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)  
resident
3. Address [REDACTED] Coupeville, WA 98239
4. Email [REDACTED]
5. Phone [REDACTED]
6. Please check here  if you would NOT like to be on the Coupeville Community Allies email list

### Comments

Check all that concern you. For additional information see [www.facebook.com/whidbeyeis](http://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)

- 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.k. Compensation to Citizens for Private Property
- 12.l. Community Service Impacts
- 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
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- 4.q. Potential Hearing Loss
- 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
- 7.j. Impacts on Outdoor Sports

- 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:

I live 1 mile from The OLF and already experience the impact of 6100 flights/yr - they often fly from 10-12pm & it is difficult to get to sleep. <sup>(NOISE)</sup> When I ride my bike down the road, I have to literally stop to cover my ears. I am fearful of our property values as I doubt that I would be able to tolerate 35000 flights & concerned about our community which includes a High School & hospital & many

**What else you can do** *businesses catering to the tourist community. We already know that our water has been con-*

1. **Get involved.** To volunteer, email us: [coupevillecommunityallies@gmail.com](mailto:coupevillecommunityallies@gmail.com) *taminated*
2. **Call (best) or email your elected officials and share your concerns.** The number of *as well* calls are important. *I am very sad & scared.*
  - a. U.S. Senator Patty Murray: 206.553.5545; [www.murray.senate.gov](http://www.murray.senate.gov)
  - b. U.S. Senator Maria Cantwell: 425.303.0114; [www.cantwell.senate.gov](http://www.cantwell.senate.gov)
  - c. U.S. Congressman Rick Larson: 800.652.1385; [rick.larsen@mail.house.gov](mailto:rick.larsen@mail.house.gov)
  - d. Governor Jay Inslee: 360.902.4111; [governor.wa.gov](http://governor.wa.gov)

## To Learn More

- ✓ To receive email updates, or to get involved, **email us at** [coupevillecommunityallies@gmail.com](mailto:coupevillecommunityallies@gmail.com)
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at [www.whidbeyeis.com](http://www.whidbeyeis.com)

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1.a. Thank You

Anacortes, WA 98221

Please get rid of this aircraft. Get rid of this noise. Your servicemen playing games spying on their partners and crap. We are sick of the noise. Get rid of all this crap

Coupeville, WA 98239

1.a. Thank You

7.j. Impacts on Outdoor Sports

I am concerned about the noise of the growlers and its impact on the kids who practice and play on the Rhodendron Park playfields. A friend has measured decibel levels above 100, which is way above safe auditory limits, especially for children. How will you address this with the increase of operations that may occur as many as 135/day?

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
- 12.a. Socioeconomic Study Area
- 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.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.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](http://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:

The technology that growlers represent is outdated; the additional growlers waste too much money.

The EIS is based on incorrect / inadequate information.

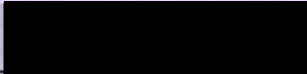

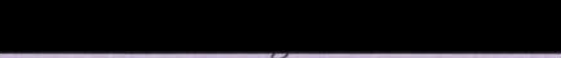
Stop this action. No more growlers, & less flyovers of existing growlers.

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1.	Name	
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3.	Address	 <u>Coupeville WA 98231</u>
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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:**

I am a member of The local Audubon Society and am concerned there is no mention in The EIS about the effects on our birds and other wild life. What is your plan to protect The habitat here - especially The multiple IBA's (Important Birding Areas) - at least 4 here on Whidbey alone?

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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]

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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:**

My wife is a teacher in the public school that is in range to be effected by the noise levels of the loud & numerous growlers you are thinking of placing in Coupeville. It is already incredibly difficult for these kids to learn. The school is relatively new. How will you mitigate the noise levels in this school which was not built to handle this level of noise.

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1. Name [REDACTED]

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*resident*

3. Address [REDACTED] *Coupeville WA 98239*

4. Email [REDACTED]

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- 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.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
- 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 work at the local hospital <sup>on Whidbey</sup> we are in the midst of adding a new wing to the building. why was there not a plan to address this issue of noise discussed earlier <sup>for the new wing</sup> what will you do to ~~take care~~ take care of this? How do you expect patients to heal/sleep with 135 flights per day & how do you expect the employees to deal with this stress? Do you care?

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](http://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.

**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*

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
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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:**

I understand the Navy has already ordered more growlers to make a total of 160 + plans to place them all on whidbey - I'm concerned about the folly of placing all the fleet of electronic warfare jets on one base - especially so far away from the East Coast bases - but more especially for the sake of security. We are a vulnerable island and are at risk of attack.

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](http://www.facebook.com/whidbeyeis)**

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Coupeville, WA 98239

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. Environmental Impact Concerns: \*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 and possible water contamination. \*Outdoor recreation limits, as well as children's and family health, at Rhododendron Park sport and recreation complex. \*Noise impact on commercial properties including vacation properties and agriculture. \*Impact on marine and terrestrial wildlife. The major security risk for Whidbey Island by siting all Growlers here. Single Siting Growlers at NAS Whidbey Island Risks Operational Security and Military Readiness Lori B. Taylor, Coupeville Community Allies, February 6, 2017 Unique Concentration of Electronic Warfare Jets: \*E/A-18G Growler is essentially the only electronic warfare (EW) jet in action, in any of the US military forces, after retirement of USAF EF-111 Raven and USMC E/A-6B Prowler •Growler is only Navy jet that is single sited. All others have at least 2 bases. •Currently there are 82 Growlers at NAS Whidbey Island; with 35-36 more planned in the draft EIS. •The Selected Acquisition Report shows that 42 more are on order', bringing number of Growlers planned for Whidbey to 153, with 7 forward deployed to Atsugi, Japan. •96 of US EW jet aircraft. On a coastal island served by a bridge and two ferries. In a post 9/11 world. Whidbey is Vulnerable Due to Access Only by Bridge or Ferry •Deception Pass Bridge links Whidbey to North; carries water main for all of NAS Whidbey Island and Oak Harbor. Historic bridge on public highway. •Bridge is only 24 hour vehicle entrance/egress to Whidbey •Bridge is part of DOD Strategic Highway Network (STRAHNET)2 •Bridge is a Federal Highway Administration "Critical Bridge" because of its span length, STRAHNET status, major evacuation route, and carrier of utilities.' •Terror attack of 100-500 lbs of TNT would damage the bridge' •Earthquake could severely damage bridge; limiting access for weeks to months Seattle Ferries FBI's Top Maritime Terrorist Target •Two WA State Ferries provide only other vehicle/passenger access to Whidbey •Clinton route serves 2.2 MM vehicles annually, Coupeville route 372K vehicles annually •2004 Navy analysis showed Seattle ferries vulnerable to terrorist attacks" •FBI lists Seattle ferries as #1 maritime terrorism target (along with Gulf Coast tankers' •Even with heightened WSF security measures, boats can still collide with ferries Single Siting limits Military Readiness •All military services are now dependent on Growler for EW functions •F-35 not online, USMC and USAF facing 3-5 year gap in capability •• Over half of Army, USMC, special Forces and tactical AF units are on East Coast • East or Gulf Coast siting would protect against attacks on Gulf Coast tankers 1 <http://www.dod.mil/pubs/foi/ReadingRoom/SelectedAcquisitionReports/16-F-0402DOC51EA-18GDEC2015SAR.pdf> 2<https://www.sddc.army.mil/sites/TEA/Functions/SpecialAssistance/STRAHNET/Washington.pdf> 3<https://blackboard.angelo.edu/bbcswebdav/institution/LFA/CSS/Course20Material/BOR6311/Readings/NatNeedsAssess-df4>

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 12.e. Agriculture Analysis
- 12.f. Economic Hardship and Impacts
- 12.h. Tourism
- 14.d. Bridges and Ferries
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 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
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- 7.j. Impacts on Outdoor Sports

<http://www.spokesman.com/stories/2004/oct/11/ferries-possible-terrorist-targill> 5

<https://oig.justice.gov/reports/FBI/a0626/final~clf>, p. 68. 6

<http://www.seattletimes.com/seattle-news/transportation/watch-boat-called-naP...:1yme-collides-with-washington-state-ferry-near-vashon-island/>

Sedro Woolley, WA 98284

I am writing to express my concern over more planes being stationed at NAS Whidbey. We have lived in Sedro Woolley, Washington near Highway 9 and Prairie Road for the past 24 years. Over the last several years the navy plane noise over our house has increased significantly. We have a 4 year old golden retriever who is totally traumatized by this noise to the point where we have to sedate him. The cost for 3 doses of sedative is \$46. We are retired and on a fixed income. This gets to be very costly as well as being harmful for our dog to be sedated all the time. We also don't have the money to move out of the area. In addition, we do a lot of hiking in the Mt. Baker wilderness area. On clear sunny days the navy planes are flying low over the wilderness area. I believe this is illegal. We go to the wilderness to escape the noise around us and to be quiet. This intrusion of jet noise is very frustrating to us. We would truly appreciate the navy being respectful of people's surroundings. I would welcome a response to these comments. Thank you for your time and consideration.

1.a. Thank You

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

Brinnon, WA 98320

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

The sound of Navy aircraft on training missions serves as a constant reminder of the fact that we have a strong force ready to respond to our nations needs. The pilots need constant training to hone their skills. The impact on the environment,if any, is small in regards to the benefits provided.

Oak Harbor, WA 98277

Growlers have been measured to exceed the OSHA maximum noise exposure limits. The military protects people from harm, that should include harm they cause themselves. Our own military should serve the people as well as possible in all aspects and not deteriorate quality of life in any regard.

- 1.a. Thank You
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects

Oak Harbor, WA 98277

1.a. Thank You  
4.q. Potential Hearing Loss

I worked at Jack's Auto repair for 15 years and the jet noise there has affected my hearing. I accept that from a business that's located right next to the Navy base. But I do not accept jet noise level in excess of OSHA standards at my home. The Navy is not an entity of its own, it must co-exist within its community, and support the humans it purports to protect.

Coupeville, WA 98239

As an employee at Fort Casey State Park I have experienced the excessive noise level of the Growlers as they fly over. The decibel level is at unhealthy level. Recently while riding my bicycle the jet noise was so loud, I had to stop and cover my ears. It is so loud it makes my whole inner body shake. This can not be an acceptable noise level! This noise level and the proposed plan to increase Growler flights in our area will also impact the campers at Fort Casey. This impact will hurt Fort Casey State Park with campers not wanting to camp here in the future. I also am concerned with the added Growler flights and the impact to the environment- it will be much more impactful then originally expected. I believe the impact will affect our ground water, which will then impact our sea life. When will we stop polluting our waterways? Above and beyond this issue of increased flights is the Navy's lack of being a good neighbor. I support the Navy, yet there is a limit to tolerance when jets are flying sometimes until nearly midnight. This is not being a good neighbor! Not only am I impacted at Fort Casey but also in LaConner where I live. This is not just a Whidbey Island issue. I have recorded decibel levels of over 125 at my home in LaConner. I believe there needs to be changes in your flight times to stop by 5pm. I moved to LaConner for the peace and quiet which has been taken away by the excessive jet noise. It has noticeably increased over the past 5 years. Please be a good neighbor. I believe you will gain a higher support level from your neighbors if you can lay out a plan that shows this consideration. Until then I will continue to be challenged with the high impact to my personal life and will continue to be a voice against this impact. Sincerely, [REDACTED]

- 1.a. Thank You
- 11.a. Groundwater
- 11.b. Floodplains and Wetlands
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects



1.a. Thank You

Seattle, WA 98112

Do not station additional Growler jets on Whidbey Island. They will cause irreparable harm to the native communities of the Olympic Peninsula when they practice war games, to the climate as they burn an inordinate amount of fuel, to millions of birds, and to all who use the Peninsula for work, living, and recreation.

1.a. Thank You

Lopez Island, WA 98261-8046

My husband and I live about one-quarter mile from the shoreline on the south east side of Lopez Island and are located in the flight path for training. I do not mind the noise at all, to me it is the "Sound of Freedom." I feel we need a strong military presence and more Growler training and planes are necessary to achieve this.

Coupeville, WA 98239

1.a. Thank You  
2.I. No Action Alternative

I have always been a supporter of the Navy and have never complained about the flights right over my house. Sometimes is a little bothersome but not much more than a barking dog running loose in our yard. When we moved into our house 12 years a go we understood the number 6200 flights a year and never had a problem with it. Until 2013 when flights increased substantially. Please keep the flights as they were before. I think the beauty of the island and the sanity of its residence are in jeopardy. Thank you.

Surrey, British Columbia V4A 9S3

I am EXTREMELY concerned with the US Military's decision to increase its fleet of growlers. First and foremost, EMFS are dangerous to ALL LIVING THINGS. Why on earth is there planning being done to increase our exposure to all species through electronic warfare? Secondly what about the noise pollution? And finally why is this planning being done during the busiest time of year Christmas and into the New Year? I find it highly suspicious behaviour on the part of the military in conducting themselves in such an underhanded way. I reiterate this is highly dangerous to all species and the environment. I recommend you cease and desist immediately.

- 1.a. Thank You
- 19.d. Electronic Warfare
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 2.I. No Action Alternative

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](http://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 none

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

After attending the Dec 7 Lopez Is meeting, I and my wife feel that the draft EIS more than addressed our few concerns. We both feel that 5 to 10 seconds of loud noise a few times a year will have little or no lasting environmental effects, even if the frequency increases 50%.  
Surely, the safe training of our Navy pilots is vastly more important than the minor irritation the noise causes a vocal few of my Lopez Island neighbors.

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**

Metchosin, British Columbia V9c3y7

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

When I first moved to this small community I couldn't believe how quite it was, well it's not quite anymore. Please do something to mitigate the noise. Concerned neighbor

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
10.b. Biological Resources Impacts
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.m. Supplemental Metrics
4.r. Nonauditory Health Effects
4.t. Noise Mitigation
4.v. Impacts to Domestic Pets, Livestock, or Wildlife
7.h. San Juan Islands National Monument

1. First Name [Redacted]

2. Last Name [Redacted]

3. Organization/Affiliation QUIET SKIES / CITIZEN OF LOPEZ IS., WA

4. City, State, ZIP LOPEZ ISLAND, WA 98110

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

**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](http://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:

Please see following page (4) for my comments.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Add your own comments:

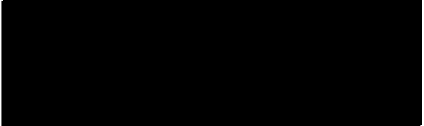
Lopez Island, the place my husband and I call "home," has been radically transformed by the number of EA-18G "Growler" jets flying over our island. Just a few days ago we were utterly startled by these planes as they flew over Lopez Village, even lower than usual. By day and by night, our lives are being altered in such a dramatic way that we worry about the impact to our hearing, to our general health and to our mental capacities.

Having examined the current EIS draft, we agree that there is a definite need for a more comprehensive examination of the specific 11 items listed above. With the seemingly increased number of regularly scheduled flights where we live, we note that the jets appear to be flying at a lower and lower altitude. The consequence for us (we are in our 70s) is that our sleep patterns are always interrupted and the resulting anxiety prevents us from getting back to sleep. Having lived decades ago in a war zone in the southern Philippines where military planes and helicopters often flew overhead, our family including our children were rattled and fearful then; and we now find ourselves living through a similar scenario once again. The frequent jet noise not only causes us to revisit a time of trauma for our family, but it also now causes us pain and suffering due to the abrupt interruption of very loud rumbles which prevent us from doing the creative work we each respectively had hoped would define this part of our lives as writer, artist and musician. This anxiety has altered the very basic functioning of our lives.

Likewise, the tremendous jet noise at a high vibration frequency apparently has a noticeable impact on the wildlife of our island habitats. As an artist who works out doors, I find the noise unbearable to the tranquility I need to do my work. The animals and birds that I focus on are always fewer in numbers whenever the jets fly overhead. How can this disturbance to work, creativity and animal life be measured?

I am not a scientist so I am registering my concerns from the perspective of a citizen whose daily life has been significantly, and I fear permanently, changed by the EA-18G jets.

Thank you for giving me this opportunity to express my lived concerns as a citizen trying to survive under this umbrella of jet noise. I am also concerned for the safety and welfare of my entire community, for it is all of us together who are committed to making ours a thriving and healthy community for all.

  
Lopez Island, WA 98261

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
2.c. Compliance with the National Environmental Policy Act
2.e. Public Involvement Process
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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 [Redacted]

2. Last Name [Redacted]

3. Organization/Affiliation Quiet Skies Lopez Island

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

## 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](http://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:

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Seattle, WA 98107

My husband and I have been considering retiring to Coupeville from Seattle. After reading about OLF's noise controversy, we have decided to postpone our decision, pending the outcome of the Navy's decision. Reading about how noise levels were measured has us very concerned: 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. As much as I fully support our armed forces, I believe the Navy should also be concerned about civilians and communities and their health. In short, I am against the continued operations at OLF -- I would certainly never move to Coupeville if these health hazards continue. Thanks for listening.

1.a. Thank You  
12.n. Quality of Life  
4.d. Day-Night Average Sound Level Metric  
4.g. Average Annual Day/Average Busy Day Noise Levels  
4.r. Nonauditory Health Effects

Island County, WA 98282

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 busy-day averaging, and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. the DEIS are misleading and fallacious for two reasons: (1) inappropriate use of 365-day averaging rather busy-day averaging, and , and (2) holding up as scientifically valid an outdated, misleading, and scientifically invalidated DNL threshold for high noise annoyance. 3. 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 misconstrue has to be credibly revised to properly characterize the real impacts. 4.. 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. 5.. 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"). 6.. Island County land-use policies, plans, as reflected by the construction permits issued, have largely defied the Navy's 2005 AICUZ directives for utlying 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. 6. 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 21<sup>st</sup> century off-Whidbey site. 7. 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. 8. Environmental Justice analysis overlooked the fact that farm workers, gardeners, and recycle center workers are almost entirely composed of low-income

- 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

and/or ethnic minorities, and because they must work outside, they are disproportionately affected by overhead Growler noise. 9.. 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 FAS, 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. 10. 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 11. 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. 12. 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. 13. 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.



[REDACTED]  
 Coupeville, WA 98239  
 1 January 2017

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

Dear Sir or Madam,

Here are my comments to NAS Whidbey Island Complex Growler DEIS, Volume 1, November 2016.

1. No one is attacking us.

“The Navy needs to effectively and efficiently increase electronic attack capabilities in order to counter increasingly sophisticated threats and provide more aircraft per squadron in order to give operational commanders more flexibility in addressing future threats and missions.” Navy NAS Whidbey Island Complex Growler DEIS, Volume 1, Nov 2016, section 1.3.

“Increasingly sophisticated threats” are threats and by definition not present attacks. It is a fact that no one is attacking us or appears at all likely to attack us. Pilots have been able to train sufficiently for years now with the Coupeville OLF used at current level. There is no indication that the level of sophisticated threats has changed recently. No actual need for any change is demonstrated by the navy.

2. There's nothing special or unique about the Coupeville OLF.

“The altitude above ground at which the aircraft fly the landing pattern at OLF Coupeville closely replicates the altitude of the aircraft carrier landing pattern. Practicing at an altitude that simulates the carrier environment is essential for pilots preparing to land on an aircraft carrier because such practice matches the visual cues as well as the required power settings needed to fly a safe approach for an actual landing on an aircraft carrier; however, Growlers do not normally land at OLF Coupeville. The proximity of OLF Coupeville to Ault Field allows for more training to be conducted per fuel load and provides a safe divert field if an emergency arises. Finally, OLF Coupeville is close enough to Ault Field so the LSO, who for safety and training reasons is required to be present at the field and in radio contact with the pilots performing FCLP, may brief the participating aircrew on training procedures and then drive to the OLF in a reasonable amount of time to be present for the training.” NAS Whidbey Island Complex Growler DEIS, Volume 1, section 1.4, Nov. 2016.

This excerpt boils down to reciting that pilots can fly anywhere in the training pattern at the Coupeville OLF at the same altitude as at sea, with similar “visual cues” and “power settings”. The balance of the navy's statement focuses on economic and safety issues.

There are plenty of areas in the USA with the required altitude for landing and the flight pattern. Obviously, flying at sea level is possible at sea, over the ocean. If there is some danger presented by the water spray that would be caused by jets close over water, then the jets could simply fly a bit higher at the altitude of the flight deck on an aircraft carrier, where no spray would be generated. The visual cues

1.a. Thank You  
 11.d. Per- and Polyfluoroalkyl Substances  
 2.a. Purpose and Need  
 2.k. Range of Alternatives  
 2.n. Alternatives Considered But Eliminated

and power settings would remain the same. Alternatively, because the jets don't actually land at the Coupeville OLF, the jets could fly over very remote flat land somewhere else while being controlled by mobile flight controllers in a truck. Terrorizing American citizens through operations at the Coupeville OLF is not justified.

The impact on the citizens near the Coupeville OLF from the noise cannot be justified ever by any economic considerations.

The first safety concern is that there is a “divert field” available close by. This is also true in many other places.

The second safety concern surrounds the LSO's presence, emphasizing that the LSO must be at the practice field. This concern does not justify the Coupeville OLF's use. For example, the navy could engage two LSO's, one at the take-off field and the other at the FCLP field. As a second alternative, the pilots could be briefed before take-off by the LSO by Skype or radio while the LSO is physically located at the FCLP field. A third alternative: A practice field could be found somewhere else that permits the LSO to brief the pilots before take-off and still be at the FCLP field, the same field being used for both take-off and landing training. The navy's case is not compelling.

3. Drones will replace the need for such training flights in the very near future.

Drones and rockets already have shown their ability to destroy with precision. Drones can land on moving aircraft carriers. Of all the aircraft available right now to respond to electronic attacks, drones surely have overwhelming advantages.

4. The navy's flight activities exacerbate societal divisions on Whidbey Island.

It's been bad. Public discourse on this subject here has been fractured; contempt between the opposing sides is mutual and open. The police attend your public forums on the EIS. It is not reasonable to provoke our community where recent history has shown no need for increasing the number of these flights in the first place.

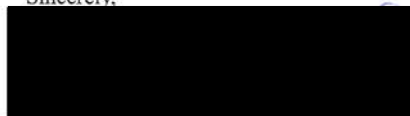
5. And now, the navy is slowly acknowledging the poisoning of local well water by its outdated fire-fighting foam.

A good neighbor would provide everyone affirmatively with all relevant information. The navy does not tell us that reverse-osmosis can effectively treat this contamination.<sup>1</sup> The navy tells us neighbors that it wants to continue testing local wells, apparently forever, and keeps silent on reverse-

<sup>1</sup> “Many home drinking water treatment units are certified by independent accredited third party organizations against American National Standards Institute (ANSI) standards to verify their contaminant removal claims. NSF International (NSF®) has developed a protocol for NSF/ANSI Standards 53 and 58 that establishes minimum requirements for materials, design and construction, and performance of point-of-use (POU) activated carbon drinking water treatment systems and reverse osmosis systems that are designed to reduce PFOA and PFOS in public water supplies. The protocol has been established to certify systems (e.g., home treatment systems) that meet the minimum requirements. The systems are evaluated for contaminant reduction by challenging them with an influent of 1.5±30% µg/L (total of both PFOA and PFOS) and must reduce this concentration by more than 95% to 0.07 µg/L or less (total of both PFOA and PFOS) throughout the manufacturer's stated life of the treatment system. Product certification to this protocol for testing home treatment systems verifies that devices effectively reduces PFOA and PFOS to acceptable levels.” US EPA “Fact Sheet PFOA and PFOS Drinking Water Health Advisories” November 2016.

osmosis. Who can trust the navy any longer?

Sincerely,



**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](http://www.whidbeyeis.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 (former) (current address)*

3. Address \_\_\_\_\_

*Freeland, WA 98249*

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.f. Economic Hardship and Impacts
- 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.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 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](http://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.**

- 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:

I lived in a trailer in coupeville which often rumbled and echoed in the presence of jet noise. I could not maintain conversations indoor or outdoor and was often forced to leave the property during flights to conduct business. Late night flights left little options and sleeplessness.

#### What else you can do

1. **Get involved.** To volunteer, email us: [coupevillecommunityallies@gmail.com](mailto: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](http://www.murray.senate.gov)
  - b. U.S. Senator Maria Cantwell: 425.303.0114; [www.cantwell.senate.gov](http://www.cantwell.senate.gov)
  - c. U.S. Congressman Rick Larson: 800.652.1385; [rick.larsen@mail.house.gov](mailto:rick.larsen@mail.house.gov)
  - d. Governor Jay Inslee: 360.902.4111; [governor.wa.gov](http://governor.wa.gov)

#### To Learn More

- ✓ To receive email updates, or to get involved, **email us** at [coupevillecommunityallies@gmail.com](mailto:coupevillecommunityallies@gmail.com)
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at [www.whidbeyeis.com](http://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.

[REDACTED]  
Coupeville WA 98239  
January 24, 2017

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

I live in Coupeville near Crockett Lake, in noise zone 2. In 2008, we built our home in accordance with the noise standards required by Island County. At the time we built, Prowlers flew occasionally and they were loud. We accepted that.

When Growlers started to fly, we noticed an increase in noise and also noticed that the planes were often directly or almost directly overhead. Sometimes we can see the pilot's head, suggesting the planes are lower than 200'. When the planes are flying near us, we cannot hold a conversation indoors, talk on the phone, watch television, or listen to music, let alone work or sit outside. We purchased hearing protection and wear it indoors when the planes fly. I have measured Growler sound levels over 100 decibels in my home, with the windows closed, in Noise Zone 2. Because this is a fairly infrequent occurrence, it is unpleasant but tolerable, especially when notice of the flights is given and we can leave the area.

If there are going to be many more planes, flying much more often, life for many of us on central Whidbey Island will become frequently miserable. Stress is a cumulative thing, and the noise is very stressful. Averaging decibel levels over 24 hours or 365 days is not an accurate reflection of the noise exposure, and yields a meaningless number. When four or five planes are flying in a loop, the noise is continuous, painful, and prolonged. Increasing this exposure by a factor of almost ten will cause grave economic harm as people who live here leave the area and the value of properties plunges. It can also cause physical harm: Central Whidbey farms employ outdoor workers, some low-income, who are exposed to extreme noise levels every time the planes fly. Repeated loud noise over the Coupeville schools interrupts teaching and stresses students. Children play on public fields directly beneath flight patterns.

Birds and animals have more sensitive hearing than humans; great increases in noise can affect their health, migration, breeding success and behaviors. Planes have the option of flying elsewhere, but many birds are hard-wired to stop at Crockett Lake and other locations on Whidbey Island on their flights north in the spring and south in the fall.

No increase in carrier-based planes; no increase in OLF flights. Move all training flights to less-developed areas. Replace all PCOS firefighting foam; monitor groundwater around Ault Field and OLF and replace water sources for all affected wells. Test Crockett Lake and Swantown Lake; mitigate any pollution.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.i. Bird Migration
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 12.j. Property Values
- 12.n. Quality of Life
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.b. Flight Tracks and Federal Aviation Administration Regulations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 3.i. Runway Operating Hours and Flight Schedules
- 4.d. Day-Night Average Sound Level Metric
- 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.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area
- 7.j. Impacts on Outdoor Sports

Anacortes, WA 98221

- 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).

Anacortes, WA 98221

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. As a physical therapist I use sound waves to treat patients, impact is not measured over time but by the seconds. The effect on the tissue occurs the moment of impact.

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

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



Anacortes, WA 98221

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

Anacortes, WA 98221

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 misconception has to be credibly revised to properly characterize the real impacts

Anacortes, WA 98221

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.

Anacortes, WA 98221

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).

Anacortes, WA 98221

1.a. Thank You  
7.b. Land Use Compatibility and Air Installations Compatible Use  
Zones

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.

Anacortes, WA 98221

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 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

Anacortes, WA 98221

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.

Anacortes, WA 98221

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 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



Anacortes, WA 98221

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

Anacortes, WA 98221

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.

Anacortesw, WA 98221

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.

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

Anacortes, WA 98221

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.

Anacortes, WA 98221

1.a. Thank You

4.r. Nonauditory Health Effects

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

1.a. Thank You

Brentwood Bay, British Columbia V8M 1A4

We are very concerned about the loud rumbling we hear and feel in our neighbourhood

Coupeville, WA 98239

February 24, 2017 EA-18G Growler EIS Project Manager Naval Facilities Engineering Command Atlantic Attn: Code EV21/SS 6506 Hampton Boulevard Norfolk, VA 23508 RE: Comments on Draft EIS for the continued and increased EA-18G Growler Operation at NAS Whidbey Island. Dear EA-18G Growler EIS Project Manager: The following are my comments on the Draft EIS for consideration in the development of the Final EIS: 1. NO ACTION ALTERNATIVE AND VIOLATION OF NEPA: The 57 Growlers identified in the EAs of 2006 and 2010 increased to 82 planes in 2012. In 2013 another 35 planes were added as the Navy made a decision to single-site all the Growlers at NASWI. In 2016, DOD has ordered an additional 42 Growlers, most of which are likely to be stationed at NASWI. The decision to base all the Growlers at NASWI was never in itself subject to an EIS. This increased number of planes renders any conclusions developed for the 2006 and 2010 EA/EIS moot. This current EIS justifies the increased impact after the fact. The Navy apparently violated NEPA by not subjecting the earlier decision to concentrate all the Growlers on Whidbey Island to the NEPA process. The failure to include a No Action Alternative in this EIS only compounds the original error. 2. NOISE IMPACTS: The EIS standard for measurement (NOISEMAP ver. 7.2) of noise impact is outdated and inappropriate for the Growler aircraft, as noted by DoD's Strategic Environmental Research and Development Program (SERDP) It was developed to assess civilian airport noise, not the intense variations in noise measured from Growlers compared to commercial aircraft. Studies by the National Park Service and others in the Central Whidbey community show noise levels far in excess of that predicted by DEIS modeling. Actual on the ground measurements measuring peak noise should be done by the Navy, rather than relying on an outdated model. Additionally use of an outdated noise impact model greatly influences the development of Area of Potential Effect (APE) zones which influences the rest of the EIS analysis. The APE may be considerably larger than that developed under the outdated model. Contrary to statements in the EIS, the health impacts of excessive noise are becoming increasingly clear. Recently, a report by the Washington Department of Health found a connection between jet noise and health issues. The impacts on children and schools needs better evaluation. The impacts on patients at Whidbey Health hospital (a hospital serving all of Whidbey Island) needs to have a more in-depth evaluation. 3. RISK OF SINGLE SITING OF EA-18G: Under the proposed decision all of the Navy's EA-18Gs will be sited at NAS Whidbey Island. Nowhere are the risks of this decision adequately addressed. These include: Seismic Events: NAS Whidbey Island is located in an area of possible significant seismic events. A least three fault zones can impact the base with earthquakes as high as magnitude 9. At a level 7.5 and above, significant damage can be expected to the runways and support facilities at NAS Whidbey Island. With all the Growlers and their support facilities in one place, the ability to meet national security needs and ongoing operations would be severely compromised. In addition, many personnel live off-island. The loss of the 86 year-old Deception Pass Bridge and ferries would severely constrain needed personnel access to the base after the seismic event. While the benefits of concentrating the Growlers is extolled in the DEIS, no mention is made of the benefits of mission redundancy, i.e., having another contingent of aircraft and support services available elsewhere in the case of natural disaster. Terrorism Events: The warning against putting

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 12.a. Socioeconomic Study Area
- 12.d. Population 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
- 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.l. No Action Alternative
- 3.a. Aircraft Operations
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 3.j. Flight Simulators
- 4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources
- 4.c. Advanced Acoustic Model
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 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.e. Impacts to Recreation from Noise/Operations

all ones eggs in one basket is a timeworn saying, yet it persists because it's true. The concentration of Growlers all in one area makes NAS Whidbey Island a tempting terrorist target. If we have learned anything since 9/11, it's that terrorist foes have become more determined and ingenious about attacking targets. Again mission redundancy, would mitigate a possibly catastrophic loss. Utilities: Because the entire electricity supply for Whidbey Island crosses at Deception Pass Bridge, as well as water and natural gas lines that feed Oak Harbor and NAS Whidbey Island, this corridor is very susceptible to loss from either of the above two events. A single, catastrophic event at Deception Pass could affect all these utilities, and operations at NAS Whidbey Island.

4. INCREASE CRASH FREQUENCY AND ACCIDENT POTENTIAL OF CRASHES: More jets equal an increased chance of an accident. This, and the impacts of such an accident, are not adequately addressed in the EIS. This should also address the fact that OLF Coupeville does not meet regulations (2,600 feet to short) and address impacts of bringing it up to Navy regulation length.

5. APZ NOT IDENTIFIED: An APZ that adequately addresses the actual flight pattern of the EA-18G Growlers needs to be identified. What impact will this have on property value and subsequent loss of tax dollars to Island County and Coupeville? How will property owners be mitigated and who pays for this? Island County is a small county so the cost of potential downzones, as well as loss of business taxes, could be enormous.

6. ECONOMIC IMPACT TO CENTRAL WHIDBEY ISLAND: The economic impact on the Central Whidbey community is not addressed adequately. Loss of tourism, property value loss, decline of population, and loss of business all need to be evaluated more thoroughly in the EIS. The benefits of short-term economic gain from base improvements is not balanced against the certain economic losses of a reduced tax base due devaluation, population migration away from noise in the region, loss of sustainable, local business. The proposed actions will have a significant effect on Ebey's Landing National Historical Reserve, a unit of the National Park Service, as well as on five State Parks, County Parks, Camp Casey and an extensive trail network. These areas, as well as others, represent a tremendous investment of economic resources which is not acknowledged in the EIS. These recreational areas, along with agricultural activities, are the lifeblood of economic activity on Central Whidbey Island and Coupeville, drawing visitors from all over the Country and foreign nations. The level of noise associated with the scenarios proposed in the DEIS will destroy these recreational activities. Migration from the aircraft noise will have a significant negative impact on property values and aircraft noise at the proposed levels will deter future immigration into the area, further depressing property values. Loss of tourism has the potential to severely impact the businesses of Coupeville. The EIS needs to evaluate the economic losses associated with the proposal.

7. NUMBER OF OPERATIONS: The proposed increase of 29,000 operations under Alternative A would be a total of approximately 34,500 operations per year. At no time in the history of OLF Coupeville has the number of operations been at the proposed level under this Alternative. This action would be, in fact, an increase of approximately 530% over the average operations since 1997. The proposed increase of 2,700 operations under Alternative C would be a total of 8,200 operations per year. This would represent a 49% increase over the historical average of FCLP operation at OLF Coupeville since 1997. At these levels, what was once tolerable, becomes intolerable. Even Oak Harbor, with its well-known affinity for jets, may grow weary of this level of noise. The EIS should state that, under any scenario, the proposed action represents a significant change in the number of operations at OLF Coupeville.

Thanks for the opportunity to comment on the Draft EIS. I urge the Navy to allow further



public comment on the Final EIS when it is released. Sincerely, [REDACTED] Cc:  
Senator Patty Murray Senator Maria Cantwell Congressman Rick Larsen Governor Jay  
Inslee

Camano Island, WA 982872

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 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. 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 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 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. 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. 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. 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. 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. 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 analyzed. 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 provoking significantly higher risk for smaller newborns, gestational hypertension, cognitive abnormalities, and permanent hearing loss.



# 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](http://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 Citizen Couperville

3. Address  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 have owned my property since 2010 (about 2 mile off West Bay Rd) and never had planes flying directly overhead. The planes were all north as they crossed E-W route. I would say 1/2 mile north of Van Dam Rd. Now they fly directly overhead and sometimes further south - has the flight path changed? Or do the pilots need to be reminded to stay further north? Thank you. The noise at times can be deafening.*

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
- 3.d. Arrivals and Departures
- 4.q. Potential Hearing Loss

1.a. Thank You  
4.r. Nonauditory Health Effects



## 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.*

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1. Name [REDACTED]
2. Organization/Affiliation [REDACTED]
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

As there are no studies of long term physiological and psychological effects of the noise and other perceived effects of low-low flying aircraft upon which to base decision making in this process, I recommend that this program be approved contingent on said study being developed and required to be implemented by an independent agency. Aside from this I personally do not want additional Growler missions over the Olympic Peninsula - if does affect my wellbeing when they fly frequently. Thank You

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**

Redmond, WA 98052

As a frequent visitor to the Olympic Peninsula, I am deeply concerned about and strongly oppose the Growler Operations on Whidbey and the Olympic National Park. In these times of growing climate crisis, endangered forests and wildlife, it is essential that we protect what we love. Each jet burns 1304 gallons PER HOUR and produces 12.5 metric tons of CO2 per hour, 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). The extreme noise and intrusion onto the native tribal lands is also unacceptable. Please do not approve this operation. Thank you for protecting our precious land and tribal rights.

1.a. Thank You

18.b. Average Carbon Dioxide per Aircraft

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

7.d. Recreation and Wilderness Analysis and Study Area

9.a. Consideration of Tribes

Langley, WA 98260

As a citizen of Whidbey Island and having attended the Dec. 9 Open House Public Meeting and studied the EIS to the best of my ability, I would like to make the following comments concerning the draft EIS report on Growler Airfield Operations at NAS Whidbey Island Complex. 1. The Navy is mindful of "unavoidable adverse effect" of noise on the community and acknowledges that jet noise may have some negative effect beyond community annoyance, for example affecting children's learning and cognitive abilities, not only from >65-decibel range, but also disruptive noise events increasing up to an additional 4 events per hour. Please consider the following action steps. A. Commission a national expert to execute a new noise data gathering study with the intent of measuring current Growler operations to confirm that the modeling studies and actual measurements are consistent and to address other outstanding noise issues from concerned citizens before moving forward. B. Implement technological solutions to mechanically and/or electronically reduce Growler noise and inform the public that you will be doing this. C. Assist Oak Harbor and Coupeville school systems with additional sound proofing in existing buildings to minimize the adverse noise effect on learning. 2. The proposed increase in aircraft/aircrews would result in an increase from approximately 88,600 operations/year to 130,000 operations/year, similar to the 1970s, 1980s, and 1990s. A. Commission an additional study that compares previous land use with current land use and addresses new Accident Potential Zones 1. OLF was built and established during the era of WWII prior to jet engine technology 2. OLF Coupeville used to have APZs but these were removed when operations decreased. More property rights and land use will be affected by the new APZ's after years of having none. 3. Conduct an exhaustive evaluation of alternatives to basing all Growlers at NASWI. A. The Navy's East Coast Master Jet Base currently conducts more of these operations. If there are no complaints there, why hasn't that been suggested as the place of Growler relocation? After studying these reports, I emphatically think that Whidbey Island citizen's issues currently being raised should be addressed before moving forward. Clearly work still needs to be done. However, if the implementation is to move forward regardless of citizen concerns, I would reluctantly select Alternative 3, Scenario B. This seems to have the least impact and shares the stress between Oak Harbor and Coupeville.

1.a. Thank You  
 2.n. Alternatives Considered But Eliminated  
 4.f. Noise Measurements/Modeling/On-Site Validation  
 4.t. Noise Mitigation  
 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

Langley, WA 98260

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- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.o. Classroom Learning Interference
- 4.t. Noise Mitigation
- 5.a. Accident Potential Zones



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January 4, 2017

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1. The Navy is mindful of "unavoidable adverse effect" of noise on the community and acknowledges that jet noise may have some negative effect beyond community annoyance, for example affecting children's learning and cognitive abilities, not only from >65-decibel range, but also disruptive noise events increasing up to an additional 4 events per hour. Please consider the following action steps.

A. Commission a national expert to execute a new noise data gathering study with the intent of measuring current Growler operations to confirm that the modeling studies and actual measurements are consistent and to address other outstanding noise issues from concerned citizens before moving forward.

B. Implement technological solutions to mechanically and/or electronically reduce Growler noise and inform the public that you will be doing this.

C. Assist Oak Harbor and Coupeville school systems with additional sound proofing in existing buildings to minimize the adverse noise effect on learning.

2. The proposed increase in aircraft/aircrews would result in an increase from approximately 88,600 operations/year to 130,000 operations/year, similar to the 1970s, 1980s, and 1990s.

A. Commission an additional study that compares previous land use with current land use and addresses new Accident Potential Zones

1. OLF was built and established during the era of WWII prior to jet engine technology

2. OLF Coupeville used to have APZs but these were removed when operations decreased. More property rights and land use will be affected by the new APZ's after years of having none.

3. Conduct an exhaustive evaluation of alternatives to basing all Growlers at NASWI.

A. The Navy's East Coast Master Jet Base currently conducts more of these operations. If there are no complaints there, why hasn't that been suggested as the place of Growler relocation?

**After studying these reports, I emphatically think that Whidbey Island citizen's issues currently being raised should be addressed before moving forward.** Clearly work still needs to be done. However, if the implementation is to move forward regardless of citizen concerns, I would reluctantly select Alternative 3, Scenario B. This seems to have the least impact and shares the stress between Oak Harbor/Coupeville

Sincerely

 Langley WA 98260

1.a. Thank You

12.k. Compensation to Citizens for Private Property

2.k. Range of Alternatives

4.b. NOISEMAP Model, Modeling Methodology, and Noise Sources

4.c. Advanced Acoustic Model

4.f. Noise Measurements/Modeling/On-Site Validation

5.a. Accident Potential Zones

Oak Harbor, WA 98277

I live in a rural neighborhood in Oak Harbor where we bought our house in 2010. I am and many of my neighbors benefit from the Navy in our community and in general have no problem with the jets. We live in the APZ-II zone corresponding with the 25 runway. Since 2010, the flight patterns have shifted such that the approximate 75 dB noise contour in which we live according to the 2005 AICUZ study, at times exceeds that sound level and typically it is repeated over a session of flights. If the flying was, for example, to stay at or north of Clover Valley Road when making the turn in FCLPs as shown on many diagrams, the noise would likely never be an issue. But it has begun happening increasingly over the past few years and at times is unbearable. Knowing that the majority of flights already use this runway and looking at the potential significant increase would be devastating. A few simple changes would make all the difference in the world. I have spoken to several seasoned LSOs who say they don't understand why FCLPs would come over our house to begin with. So I think the answer there may be training and bad habits. But also it would be helpful if some of the following could take place: (1) fly north of or at Clover Valley Road, (2) alternate runways for day vs. night flights wherever possible to alleviate the burden on the residents, (3) fly certain of the noisier operations in a stricter pattern and/or at certain altitudes to minimize noise impact, (4) give residents the same "crew rest" opportunity that is required for flight crews, and (5) provide a remediation process when the establish boundaries and guidelines are not followed. The comment about crew rest comes from times in the summer. When jets fly directly over your house at 2 AM and then jets take off at 8 AM, those are completely different crews. Human factors should be considered for the people underneath and the load, timing, and burden be considered for them as well. People in this community and our neighborhood are proud of the Navy and appreciative of the contribution to this area. But though the people of Oak Harbor don't threaten to sue all the time, it doesn't mean we should bear the brunt of flying either. A number of times I have called after midnight to ask what time flying will be done. Specifically when it has been several nights in a row, the officer on duty will make the comment "You can thank Coupeville" as the reason they are flying in my area. This is not acceptable. I would be happy to have someone come to my home and ascertain the impact of the different scenarios we experience on a regular basis. I think the addition of aircraft could be a good thing - for the Navy and for our community - but only if some process tweaking occurs to minimize the impact on the area residents. Thank you.

1.a. Thank You

3.a. Aircraft Operations

3.b. Flight Tracks and Federal Aviation Administration Regulations

3.c. Military Training Routes

3.d. Arrivals and Departures

Coupeville, WA 98239

1.a. Thank You  
11.d. Per- and Polyfluoroalkyl Substances  
12.j. Property Values

I accept that where I have chosen to live is near a practice airfield, and noise is a part of this. I do not advocate shutting the OLF down – only that the Navy practice consideration for those of us affected and not escalate this practice, which, if followed as proposed, would make our lives here all but unlivable, while also destroying our property values, perhaps also rendering our drinking water toxic. Please do not increase operations at Whidbey OLF.

Port Townsend, WA 98368

No amount of modification to the EA-18G will significantly reduce the excessive db level presently generated. I have watched the buildup in jet noise since 1970, both on Whidbey Island where I occasionally work outdoors, and in Port Townsend for 37 years, where I reside. The Navy is NOT entitled to continually ramp up the db level as well as the number planes and practice flights. There is a sense of entitlement that is an abuse of not only the four counties nearest Ault Field, but Greater Victoria, in terms of noise, jet fuel particulates, and hours of operation. It goes without saying that the impacts on the area's wildlife, particularly marine mammals and birdlife, have no voice in these decisions to increase Growler activity. I'm particularly outraged at the recently revealed groundwater contamination around Coupeville. This is a National Historic treasure--but what treasure is underlain by contaminated water? I appeal to the decision-makers to freeze the flight activity, and start now to transfer the practice to areas over Idaho where impacts will be comparatively minimal due to smaller population and no marine mammals. The Navy does not demonstrate good will and good neighborliness by craftily ramping up the activity by dividing it into multiple fragmented proposals intended to avoid real scrutiny such as EIS and other Federal requirements for large projects. This IS a large project, not a collection of small ones. I have personally been active around this issue for nearly 50 years. That long predates the arrival of Growlers. I have enough memory and experience to affirm that the noise levels are painfully higher than in earlier years. It's particularly damaging to work in the Keystone area where I formerly brought my grandchildren; I would not expose them to hearing damage any more, a real personal loss for all of us. OLF Coupeville is not longer needed! The Navy should relinquish the site and allow it to be restored to ancestral prairie, and join it to the National Historic reserve.

- 1.a. Thank You
- 10.c. Wildlife Sensory Disturbance and Habituation
- 15.c. Groundwater
- 2.k. Range of Alternatives
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.t. Noise Mitigation

coupeville, WA 98239

The EIS claims that fewer people will be impacted by scenario A while statistically correct do not reflect the impact on our community. Increasing the number of operations will proportionally have a much larger impact in the Coupeville area real estate values, Quality of life, and safety The EIS improperly evaluates the current rental market. The Navy gives no recognition of people who will be selling their homes if air operations merely double let alone quadruple. These people will be selling their property at a devalued price due to the impact of plane noise as stated by the EIS, and the increased danger of plane crashes. Section 4-303 says residential land use may become incompatible." For some their land absolutely will become incompatible. 4-301 of the EIS claims there will be no significant impact on our health and safety and that a accident potential zone "may" have to be defined!! The navy suggests that counties declare an APZ when operations exceed 5000. Currently operations are at 6000. The Navy is proposing levels of 35000 operations. . APZ zones are not compatible with Landfills, transit centers, or homeless youth centers. The EIS does not address how an APZ can be declared in this situation. Residential development is incompatible in a APZ. The EIS does not address the economic impact that declaring an area a potential crash zone has on property values. In 2002 Avignation Hazard easement nuisance payments were paid to several home owners who sued the Navy over the noise from EA6b planes. The final Environmental Assessment of 2013 states that the growler is louder during arrival than the EA6b The EIS doesn't address the possibility or cost of lawsuits due to increasing operations to 35000. The EIS does not address the pollution of the water table at OLF. It has said there is no record of the amount of poison that has been used in the area. It has not defined the extent of contamination at OLF. It has not described a means of mitigating contamination. It has not described how it will prevent further contamination. NEPA regulations, 40c.f.r., 1502.13 states "a key aspect of a draft EIS is the statement of purpose and need." This EIS started with 14 planes, then it was 22, then it was pushed to 32 planes. Now I'm hearing there are 42 planes which are not covered in the EIS. How can you; have an understanding of environmental impacts when a full disclosure is not happening? These changes imply that any increase is necessary for national defense. The EIS does not address the safety question of placing all growler assets in one location. It does not examine the economics of placing some growlers on the east coast. NEPA regulations sec.101[42usc 4331] states that an EIS is to assure "for all Americans safe, healthy, productive, and aesthetically and culturally pleasing surroundings." Section 1508.8[40c.f.r.] defines EIS effects and impacts to include elements "ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect or cumulative." These requirements describe quality of life. Oak Harbor is a Navy town with established Accident Potential Zones, many current aircraft flights and a large portion of people professing to love jet noise. Coupeville is a small rural quiet retirement community of which the main industry is tourism. Increasing plane activity by at least 400% (not counting any unusual military activity the current administration might require) would have an adverse impact on this community. [REDACTED] Coupeville, 98239

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 17.a. Hazardous Materials and Waste Impacts
- 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
- 3.a. Aircraft Operations
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones

coupeville, WA 98239

NEPA National Environmental Policy Act, 40 C.F.R. 1502.13 states that the "key aspect of a draft EIS is the statement of purpose and need." Section 1-3 of the EIS states that the need for the proposal is to maintain and expand growler operational readiness. The original EIS was for 13 aircraft. The Whidbey eis.com website states that since congress has approved 35 or 36 new aircraft it would not be rational to consider only 13 planes. That rationality requires the assumption that any expiation of military readiness is in itself necessary. The EIS has not demonstrated a need for 35 planes. The summary of the draft EIS for EA-18g airfield operations in section 6.1 states that the EIS complies with National Environmental Policy Act, NEPA. 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" 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 EIS does not address the damaged quality of life, what is termed aesthetics by NEPA. The EIS sets a threshold contour of 65 db averaged over 24 hours where people are angry at the noise, described as long term annoyance. There are plenty of conversation interruptions over the entire Coupeville area that don't average out to 65db over 24 hours. When you increase these interruptions 547% you have impacted the quality of life. An area of economics not addressed by the EIS is real-estate values. If OLF operations increase by only 50% there are people in Admirals cove who will be compelled to sell their homes at a reduced value. Increasing noise by 547% will impact the value of properties in all the area surrounding OLF. I can and have worked around power saws all day without hearing protection (not recommended.) These saws are noise rated at 80 to 100 db. The Environmental Assessment to the transition to ea-16g growlers states on page 39 that the take off level of growler noise is 115db. On page b-3 it states that noises "above 120 db begin to be felt inside the human ear as discomfort." Also, "sounds between 130 and 140 db are felt as pain." I have worked outside in Admirals cove and have needed to plug my ears because the noise hurts. I have bought vegetables at Rosehip Farm on Ft. Casey road and needed to plug my ears because of painful noise. Why is increasing this 547% not a significant impact? Page 4-296 states Scenario A will increase the entire Whidbey Navel Station Co2 out put by 57% which is .7% of all plane emissions in Washington state. Why is this not significant?

- 1.a. Thank You
- 12.j. Property Values
- 12.n. Quality of Life
- 18.d. Washington State Greenhouse Gas Goals
- 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
- 4.m. Supplemental Metrics
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects

coupeville, WA 98239

NEPA National Environmental Policy Act, 40 C.F.R. 1502.13 states that the "key aspect of a draft EIS is the statement of purpose and need." Section 1-3 of the EIS states that the need for the proposal is to maintain and expand growler operational readiness. The original EIS was for 13 aircraft. The Whidbey eis.com website states that since congress has approved 35 or 36 new aircraft it would not be rational to consider only 13 planes. That rationality requires the assumption that any expiation of military readiness is in itself necessary. The EIS has not demonstrated a need for 35 planes. The summary of the draft EIS for EA-18g airfield operations in section 6.1 states that the EIS complies with National Environmental Policy Act, NEPA. 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" 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 EIS does not address the damaged quality of life, what is termed aesthetics by NEPA. The EIS sets a threshold contour of 65 db averaged over 24 hours where people are angry at the noise, described as long term annoyance. There are plenty of conversation interruptions over the entire Coupeville area that don't average out to 65db over 24 hours. When you increase these interruptions 547% you have impacted the quality of life. An area of economics not addressed by the EIS is real-estate values. If OLF operations increase by only 50% there are people in Admirals cove who will be compelled to sell their homes at a reduced value. Increasing noise by 547% will impact the value of properties in all the area surrounding OLF. I can and have worked around power saws all day without hearing protection (not recommended.) These saws are noise rated at 80 to 100 db. The Environmental Assessment to the transition to ea-16g growlers states on page 39 that the take off level of growler noise is 115db. On page b-3 it states that noises "above 120 db begin to be felt inside the human ear as discomfort." Also, "sounds between 130 and 140 db are felt as pain." I have worked outside in Admirals cove and have needed to plug my ears because the noise hurts. I have bought vegetables at Rosehip Farm on Ft. Casey road and needed to plug my ears because of painful noise. Why is increasing this 547% not a significant 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. Why is this not significant?

- 1.a. Thank You
- 12.j. Property Values
- 12.n. Quality of Life
- 18.d. Washington State Greenhouse Gas Goals
- 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
- 4.m. Supplemental Metrics
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects



1.a. Thank You

Oak harbor wa , WA 98277

Practice all you want! My life depends on it!



# 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](http://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] Couperville

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

- If 20% of EA-18G Flights are placed in Couperville the EIS says an APZ is likely. The EIS should state that An APZ is required & describe the impact possible impact of the county or town creating an APZ.

- A study of property values connected to increasing flights 547<sup>th</sup> around Couperville should be in the EIS

- Rental availability is much different than indicated in the EIS

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.i. Housing Access and Affordability
- 12.j. Property Values
- 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 \_\_\_\_\_

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)  
 \_\_\_\_\_

3. Address \_\_\_\_\_ *Coupeville WA*

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.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:**

Difficult to understand why Navy has not eliminated the current Fire fighting team for on land Fire fighting & Fire practice

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](http://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.

Coupe in the WA  
48239

NEPA National Environmental Policy Act, 40 C.F.R. 1502.13 states that the "key aspect of a draft EIS is the statement of purpose and need." Section 1-3 of the EIS states that the need for the proposal is to maintain and expand growler operational readiness. The original EIS was for 13 aircraft. The Whidbey eis.com website states that since congress has approved 35 or 36 new aircraft it would not be rational to consider only 13 planes. That rationality requires the assumption that any expiation of military readiness is in itself necessary. The EIS has not demonstrated a need for 35 planes.

The summary of the draft EIS for EA-18g airfield operations in section 6.1 states that the EIS complies with National Environmental Policy Act, NEPA.

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"

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

- 1.a. Thank You
- 12.j. Property Values
- 12.n. Quality of Life
- 18.d. Washington State Greenhouse Gas Goals
- 2.a. Purpose and Need
- 2.c. Compliance with the National Environmental Policy Act
- 4.m. Supplemental Metrics
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.q. Potential Hearing Loss

of its quiet rural atmosphere. The EIS does not address the damaged quality of life, what is termed aesthetics by NEPA.

The EIS sets a threshold contour of 65 db averaged over 24 hours where people are angry at the noise, described as long term annoyance. There are plenty of conversation interruptions over the entire Coupeville area that don't average out to 65db over 24 hours. When you increase these interruptions 547% you have impacted the quality of life.

An area of economics not addressed by the EIS is real-estate values. If OLF operations increase by only 50% there are people in Admirals cove who will be compelled to sell their homes at a reduced value. Increasing noise by 547% will impact the value of properties in all the area surrounding OLF.

I can and have worked around power saws all day without hearing protection (not recommended.) These saws are noise rated at 80 to 100 db. The Environmental Assessment to the transition to ea-16g growlers states on page 39 that the take off level of growler noise is 115db. On page b-3 it states that noises "above 120 db begin to be felt inside the human ear as discomfort." Also, "sounds between 130 and 140 db are felt as pain." I have worked outside in Admirals cove and have needed to plug my ears because the noise hurts. I have bought vegetables at Rosehip Farm on Ft. Casey road and needed to plug my ears because of painful noise. Why is increasing this 547% not a significant impact?

Page 4-296 states Scenario A will increase the entire Whidbey Navel Station Co2 out put by 57% which is .7% of all plane emissions in Washington state. Why is this not significant?

Nordland, WA 98358

- 1.a. Thank You
- 2.e. Public Involvement Process
- 2.h. Next Steps

Please allow AT LEAST A 45 DAY COMMENT PERIOD following the release of the Final Environmental Impact Statement. Thank you.



Nordland, WA 98358

The NAS Whidbey Island Complex Growler DEIS is inadequate because: Marrowstone Island was not considered. The DEIS does not show any sound impacts over the island. However, we know that this is incorrect because we have heard the jets from our property at the south end of Marrowstone Island when they were previously flying in 2013 – 2014. It has also been reported that at public meetings that the Navy was unaware of the existence of Marrowstone Island, which confirms that it was not considered. The modeling results are not consistent with actual observations, per the preceding paragraph. The noise model was not calibrated to any actual levels. The model is therefore clearly deficient and does not realistically predict actual peak noise impacts. Modeling is not the appropriate approach for determining environmental impacts, because in this case, it is clearly a poor approximation of reality. Noise impacts could more realistically be determined with direct measurements at a variety of locations during a limited number of test flights. This would provide direct evidence without the simplifications, assumption, and other limiting factors of a model. Use of DNL levels suppresses actual noise impacts. Section 3.2.2.1 of the DEIS states that “DNL does not represent a sound level heard at any given time but instead represents long-term exposure” and “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. The DNL metric quantifies the total sound energy received and is therefore a cumulative measure, but it does not provide specific information on the number of noise events or the individual sound levels that occur during the 24-hour day.” Although the DEIS refers to DNL as a standard measure for aircraft noise assessment, the extreme difference between military jet noise and the normally quiet background in most of the area will in this case artificially and inappropriately discount the effects of jet noise due to the method of calculating DNL. Decreased property values were not realistically addressed. While the EIS acknowledges in Section 4.10.2.1 that property values decrease with increasing aircraft noise, it uses estimates that are very general in nature and does not address any specific mitigation for such loss of value. In addition, and specifically with respect to Marrowstone Island, the EIS does not address the particular demographic of East Jefferson County, which has a very high percentage of retired persons. One of the main benefits of the properties on Marrowstone Island is the relative quiet afforded by this environment, which compensates for remoteness and similar factors. Hence, noise impacts from increased Navy aircraft would have a disproportionate effect on our residences, reducing property values much more substantially than estimated in the EIS and potentially causing severe financial hardship for residents that must sell because of age or infirmity. I have been a licensed Professional Engineer (Civil) in Washington for over 25 years and have been involved in a number of environmental projects. The experience provides me with a context for acceptable standards for environmental reviews, and the DEIS clearly does not meet these standards. The Navy must provide the same level of accountability as any other developer or member of the public. The DEIS should therefore be fundamentally revised to address the deficiencies noted above.

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 12.j. Property Values
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.l. Points of Interest
- 4.m. Supplemental Metrics

[REDACTED]  
Silver Spring, MD 20910  
[REDACTED]

- 1.a. Thank You
- 12.b. Invisible Costs
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 2.n. Alternatives Considered But Eliminated

22 February 2017

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

To Whom It May Concern:

I am writing to express my grave concerns about the integrity of the economic analysis in the "Draft Environmental Impact Statement" (DEIS), which the Navy prepared for the proposed expansion of its EA-18G "Growler" program.

I am a Stanford-educated attorney and economist with a specialty in community economies. I have written ten published books, the last four of which have focused on what works and doesn't work in local economic development.

In May 2016 I was hired by a diverse group of residents of Island County, Washington, with both civilian and military backgrounds, to investigate the opportunities and obstacles to building a thriving, just, and sustainable local economy on Whidbey Island. The group was concerned that many studies had been published documenting the benefits of the Naval Air Station Whidbey Island but none had even attempted to calculate the costs. My charge was to correct this gap and calculate the largest costs, in the hope of improving the quality of programmatic decision-making by the Navy and by public officials.

Attached is my just-published study, entitled "Invisible Costs: The \$122 Million Price Tag for the Naval Air Station Whidbey Island."

This study examines the myriad costs that thus far have been invisible for public scrutiny and action. Among the biggest:

- *Public Costs* – Navy personnel and their families use the same services as other businesses on Island County, but if they live or shop on the base they are exempt from local taxation. That means that other residents wind up underwriting a

significant part of the Navy's presence. For example, the County is losing an estimated \$5.7 million per year in sales and property taxes that it would otherwise collect from employees of an equivalently sized private industry.

- *Opportunity Costs* – Compared to private sector jobs, Navy jobs yield relatively small economic impact. The conversion of existing Navy jobs to civilian jobs would create 3,909 additional jobs (beyond the converted jobs), expand the economy by \$503 million, and generate \$153 million more in taxes (mostly to state and local government). The loss of military pay and benefits would bring down net labor income by \$78 million, but this is more than compensated for through expanded proprietor income, rents, and tax revenues.
- *External Costs* – The Naval Air Station's largest program—training pilots to fly “Growler” aircraft—has exposed more than 11,000 residents to harmful levels of noise. An economic assessment model used to assess every high-noise project in the United Kingdom suggests that the health costs to Island County residents are currently \$2.8 million per year, and will grow to \$3.3 million if the Growler program expands as planned. Additionally, the program has depressed property values by \$9.8 million thus far, and this damage will almost certainly grow as that program expands as planned.

Altogether, over the period 2010 and 2021, these invisible costs to Island County will be about \$122 million.

*In preparing this study, I carefully reviewed the DEIS, looking especially for any economic cost estimates. I was stunned to find almost none. Specifically:*

- The DEIS makes no effort to calculate lost property and sales taxes lost from exemptions of properties used by the Navy and exemptions of purchases made in Navy stores. Nor does it evaluate the inequities that result when Navy personnel and families use public resources, such as the schools, but only pay a tiny fraction of the costs.
- The DEIS does not discuss the relatively poor economic-development contribution of Navy jobs, and the ways in which a large Navy presence makes it difficult for Whidbey Island to develop diversified network of local businesses on which long-term prosperity depends.
- The DEIS fails entirely to evaluate the considerable human health costs and property losses that the Growler program has inflicted on residents—costs which will rise as this program expands.

The purpose of an Environmental Impact Statement is to encourage those undertaking major projects, including U.S. agencies, to consider alternative actions. The alternatives the Navy discusses, however, are far too limited. My study recommends that the Navy consider the following five actions to minimize the huge costs being imposed on Whidbey Island residents:

- To help make Island County more resilient, begin serious conversion planning.

- To address the inequities in the Navy’s use of public services, pay Island County at least \$5.7 million per year through “payments in lieu of taxes.” (PILOT)
- To increase the benefits of Navy programs to local business, increase the Navy’s level of local contracting.
- To minimize the health and property damages from the Growler program, move the training exercises to a less populated area.
- And to address some of the damage already inflicted, monetarily compensate victims of adverse Growler noise.

While all these actions will require the Navy to incur additional costs, I submit that these are likely to be less than the \$122 million in invisible costs the Navy is expected to impose by 2021 if the proposed Growler expansion proceeds without any modification.

I submit that the final EIS is fundamentally defective and incomplete unless and until the Navy performs the kinds of cost calculations outlined and undertaken in my study.

I welcome any further discussion of my findings by phone ([REDACTED]), e-mail [REDACTED] or meeting in person.

Sincerely,

[REDACTED]  
[REDACTED]

# Invisible Costs

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## The \$122 Million Price Tag for The Naval Air Station Whidbey Island

By [REDACTED]

February 2017

**For Further Information, Contact:**


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### Author's Note

In 2016 a diverse group of residents of Island County, Washington, with both civilian and military backgrounds, came together to investigate the opportunities and obstacles to building a thriving, just, and sustainable local economy. They understood that economies like Island County's that depend on a single large employer—in their case, the US Navy—appear to be strong but actually are quite vulnerable to forces beyond their control. Previous published works had focused on gross wages paid by the Navy, but many other questions were not being asked: How much of the Navy's activity was flowing back into the local economy through sales and property taxes, and through purchasing from local suppliers? What kinds of burdens was the Navy placing on taxpayer-supported services and infrastructure, including schools? How were existing Navy programs and proposed expansions affecting local health and property values?

I was hired in May 2016 to answer these questions, and discovered many invisible and uncompensated costs that have been thrust upon Island County taxpayers and businesses. For a thriving, just, sustainable future, these costs need to be understood, managed, and brought down. That's the purpose of this report.

This report is not anti-Navy but pro-common sense. It ultimately lays out simple steps that the Navy and local public officials can take to build a robust, sustainable and diverse economy.

-   
February 2017

## Executive Summary

A 2013 report by the Island County Economic Development Council lauds the Naval Air Station Whidbey Island in Washington State as “four times the size of the next nearest employer” in the region. It argues that the Navy’s contributions to the local economy include \$726 million in annual payroll, \$44 million in retirement and disability payments, and \$18 million in health care payments. Another study for the Washington Economic Development Commission found that in FY 2009 the Navy gave Island County companies \$130 million in contracts. All these studies, however, are outdated and incomplete. They highlight the benefits of Naval operations but say nothing about the costs. This study examines the myriad costs that thus far have been invisible for public scrutiny and action. Among the biggest:

- *Public Costs* – Navy personnel and their families use the same services as other businesses on Island County, but if they live or shop on the base they are exempt from local taxation. That means that other residents wind up underwriting a significant part of the Navy’s presence. For example, the County is losing an estimated \$5.7 million per year in sales and property taxes that it would otherwise collect from employees of an equivalently sized private industry.
- *Opportunity Costs* – Compared to private sector jobs, Navy jobs yield relatively small economic impact. The conversion of existing Navy jobs to civilian jobs would create 3,909 additional jobs (beyond the converted jobs), expand the economy by \$503 million, and generate \$153 million more in taxes (mostly to state and local government). The loss of military pay and benefits would bring down net labor income by \$78 million, but this is more than compensated for through expanded proprietor income, rents, and tax revenues.
- *External Costs* – The Naval Air Station’s largest program—training pilots to fly “Growler” aircraft—has exposed more than 11,000 residents to harmful levels of noise. An economic assessment model used to assess every high-noise project in the United Kingdom suggests that the health costs to Island County residents are currently \$2.8 million per year, and will grow to \$3.3 million if the Growler program expands as planned. Additionally, the program has depressed property values by \$9.8 million thus far, and this damage will almost certainly grow as that program expands as planned.

Altogether, over the period 2010 and 2021, these invisible costs to Island County will be about \$122 million. While the Navy understandably wants to discount or dismiss these costs, state and local decision-makers would be remiss not to give them serious consideration. Public officials should seek to minimize them by pressing the Navy: to begin serious conversion planning; to pay the County at least \$5.7 million per year in “payments in lieu of taxes” (PILOT); to increase the Navy’s level of local contracting; to modify the Growler program (perhaps by moving its training to a less populated area); and to compensate victims of adverse Growler noise or toxic chemicals impacts. Whatever the Navy does in the future, Island County also needs to refocus its economic development efforts on diversifying its economy and reducing its dependence on ultimately unreliable streams of federal spending.

## Prologue

What makes an economy sustainable? The American Sustainable Business Council says it includes “economic approaches, investments, regulations, and research that accurately assess the total costs of projects, including social, economic, and environmental externalities.” It points to evidence that nurturing a diversity of small and mid-sized local businesses is better than attracting a large, outside employer for making communities more resilient and generating more jobs for the investment made. Depending on a single large employer “leaves the community vulnerable to ... externalities (pollution, etc.), and to sudden, widespread unemployment if the corporation decides to pull up stakes.”

Forty sustainability minded Whidbey citizens with civilian, military, non-profit, small business, and professional backgrounds came together in the Spring of 2016 to better understand how to assure a thriving, diverse, resilient local economy in Island County into the future. The economic foot print of the Naval Air Station Whidbey Island (NASWI) became a focus because economies dominated by a single employer may look prosperous but are actually brittle, because they use non-local suppliers and often have a transient workforce. They also leave the community subject to decisions over which it has little control.

Dubbing themselves the Sustainable Economy Collaborative, these citizens pooled personal resources and hired a well-known national expert in sustainable local economies, [REDACTED], to do an analysis of the invisible costs of our major employer, and to help plan for the possibility that NASWI could shrink as defense priorities change – or close entirely. The purpose of the SEC is to encourage a healthy economy by promoting long term planning for a sustainable economy with an ecosystem of thriving small and mid-sized businesses that take advantage of our natural assets - beauty, tourism, agriculture, history, high speed internet, strong arts and culture, and strong spirit of community service. The SEC seeks to find ways to assure ourselves and workers in our community that we’ll have equal or better jobs should the Navy as a major employer leave. The SEC does not seek the closure of NASWI; we only seek alternatives to a brittle, Navy dependent economy, including to insulate our current and future businesses from loss of revenue due to the expanding Growler training program; we seek to retain and grow a diversity of local businesses and mitigate any losses in the best way possible.

The SEC tasked [REDACTED] with researching the following questions about how the Navy currently operates in Island County:

- What are the hidden costs of NASWI to Island County and its residents?
- How much does the Navy contribute to property and sales tax, on which the county depends?
- What taxpayer-funded infrastructure and services do the Navy use that is not fully compensated through taxes?



- How might our revenues from our parks and tourist attractions be impacted from NASWI planned programs?
- How do the Navy's economic impacts, such as its purchasing from local merchants, compare with those of other private businesses?
- What are the external costs of the currently proposed expansion of the Navy's Growler training program?
- How might Island County begin to think more seriously about the possibility of the NASWI closing in the future and "military conversion"?

The SEC proudly presents [REDACTED] findings

The Sustainable Economy Collaborative  
Island County, Washington  
February 2017

## Introduction

Island County encompasses two large islands, Whidbey and Camano, and seven smaller islands. It currently is home to an estimated 80,600 residents. About half the population is concentrated in three communities: Oak Harbor (roughly 22,000 population), Langley (1,045 population), and Coupeville (1,849 population). The rest of the population is lightly dispersed over 208 square miles. Compared to Washington State, the residents of Island County are whiter and older, with many retirees who once worked for the largest employer on Whidbey Island – the U.S. Navy.

A 2013 report by the Island County Economic Development Council (EDC) touts the Naval Air Station Whidbey Island as having about 10,000 employees and being “four times the size of the next nearest employer” in Island and three other neighboring counties.<sup>1</sup> It argues that the Navy’s contributions to the Island County include \$726 million in annual payroll, \$44 million in retirement and disability payments (because of the high density of Navy retirees), and \$18 million in health care payments. Additionally, the report notes that the Navy benefits the economy through local contracts, charitable contributions, natural habitat improvements, and employee expenditures. Another study led by Bonnie Berk and Michael Hodgins for the Washington Economic Development Commission found that in FY 2009 the Navy gave Island County companies \$130 million in contracts.<sup>2</sup>

All these studies of the Navy’s economic impacts, however, are incomplete. Alongside the benefits of the Naval Air Station must be a careful evaluation of its costs. To count the benefits of any activity while ignoring the costs leads to poor decision-making. To improve state and local decision-making, this study attempts to highlight the missing piece—the invisible costs of the Navy’s presence in Island County. We call these costs “invisible” because policymakers have largely proceeded from the assumption that they do not exist. In fact, these costs are enormous.

Three invisible costs in particular are tallied:

- The special costs that the Navy imposes on the public sector, compared to a more typical, private-sector industry, because its personnel and veterans do not pay many state and local taxes;
- The opportunity costs of the Navy’s presence, including all the possible futures for the Island County that might be foreclosed or limited by focusing economic development on just one outsider-controlled industry; and,

<sup>1</sup> Island County Economic Development Council, “Naval Air Station Whidbey Island: Economic Impact to Island and Skagit Counties,” monograph, 4 December 2013, p. 3.

<sup>2</sup> Bonnie Berk and Michael Hodgins, “Washington State’s Defense Economy: Measuring and Growing Its Impact,” Prepared for the Washington Economic Development Commission, September 2010, p. ii.

- The external costs of the Navy's activities, particularly the costs of the Growler program on human health and property values.

This study aims to bring common sense back into public policy concerning the Naval Air Station Whidbey Island. It urges state and local decision-makers to balance their enthusiasm for the Navy's economic benefits with a sober assessment of its costs. The purpose is not to encourage the Navy to depart, but rather to suggest reasonable changes in Navy and state-and-local policies and activities that could minimize these costs and make the Navy a better neighbor. These recommendations, elaborated at the end of this paper, include beginning serious economic development planning around diversifying the Island County economy away from its current dependence on one federally funded industry. Additionally, the Navy should be pressed to do the following:

- Pay at least \$5.7 million per year to county and local government as "payments in lieu of taxes" (PILOT);
- Increase levels of local contracting;
- Modify the Growler program, perhaps by moving its FCLP flights to a less populated area; and
- Compensate victims of adverse Growler noise and related impacts.

## About the Methodology

Putting a dollar value on all the impacts associated with a given activity is inherently controversial. Economists and policymakers have spent generations debating “cost-benefit analysis.” What costs and benefits should be counted? How should they be counted? How, for example, can one count the loss of habitats for important or endangered species? What’s the cost of a human life? How should future damage be discounted for the present? There are no simple answers to these questions. Human judgment is required.

But human judgment also underscores that, whatever the challenges posed by cost-benefit analysis, it needs to be done. The prevailing practice by state and local decision-makers in Island County, such as in the EDC study cited above, is to count and glorify the benefits of the Naval Air Station Whidbey Island while ignoring the costs altogether. Even if methodologies to estimate costs are imperfect, assigning costs a value of zero is indefensible.

It’s worth noting, moreover, that the exact same kinds of methodological problems beset the estimation of benefits that are now widely used and accepted. The recitation of the number of jobs that the Navy provides, for example, often comes with an implicit assumption that without the Navy, these jobs would never materialize and these workers would be unemployed. In fact, as this study shows, the same federal dollars could be spent on myriad other nonmilitary activities and create even more employment. Similar benefits might accrue if local land, labor, and capital were freed up for private business development. As has been the case in many communities that once were highly dependent on military jobs, the withdrawal of the military creates short-term challenges but long-term opportunities.

This study focuses on the cost side of the equation but proceeds with two conservatisms, which means that our ultimate estimate of the cost of the Naval Air Station Whidbey Island is probably too low.

- First we rely on the best methodologies available for counting costs. For example, we use the methodology currently required by government decision-makers in the United Kingdom to evaluate the health impacts of noise.
- Second, we only evaluate those costs that are clearly quantifiable and not speculative. At the end of the report, we note several potential costs from the Navy that could be enormously costly, such as the contamination of drinking water supplies in parts of the Island County. But because the evidence on these problems is still unclear, we do not count them.

A final note: We keep all counts in current dollars but note the years of our sources. No discounting of costs or benefits is done, because it is a controversial practice and it would make no difference in the conclusions offered.

## I. Public Sector Costs

The first type of economic cost the Navy imposes on Island County is its burden on public services. Because of federal supremacy under the Constitution, many federal activities are exempt from state and local taxation. Consequently, Navy personnel enjoy the same public services of Island County as other residents do— schools, police, social services, roads, trash collection, and so forth – but pay only a fraction of the cost. The rest of the bill is covered by other residents.

As a state without an income tax, Washington State and its sub-jurisdictions rely especially heavily on sales and property taxes. Island County loses out on both because of the significant presence of the Navy.

Regarding sales tax, Navy personnel do much of their shopping at the NEX and Commissary stores where all purchases are exempt from state and local taxation. The resulting loss of local revenue is significant. Of 39 counties in the state, according to the most recent state data available (for 2015), Island County ranks 34<sup>th</sup> in the yield of just *county and local* sales taxes per capita.<sup>3</sup> Three of the five counties with lower yields have tiny populations (<12,000) where the population readily can shop nonlocally. In Island County, in contrast, nonlocal shopping requires significant effort—a ferry ride—which means that its low tax collections largely reflect extensive on-island, tax-exempt purchasing. Overall, county and local governments in the state generated \$687 million in sales tax collections—or \$97.22 per capita. Island County receives \$53.27 per capita. Were the County to receive just the *average* state yield per capita, the County would receive \$3.5 million more in revenue per year.

Regarding property taxes, Navy-owned land is exempt. As shown in Chart 1, the federal government owns 59 parcels of property across Whidbey Island that are exempt from property taxation.<sup>4</sup> Their assessed valuation is approximately \$216 million. Were the Navy paying the average property tax rate of 0.68% per dollar of valuation, the County would receive another \$1.5 million per year.

Additionally, there are property taxes that might be paid by base personnel. Most personnel live off base and do pay property taxes directly through mortgages or indirectly through rents. However, the most recent statistics available from the Navy show that 1,518 family units are living on the base and paying no property taxes.<sup>5</sup> According to the US Census Bureau in 2010, Island County had 40,234 housing units, so roughly 3.8% of these units were on base and paying no property taxes. The total property tax collections for 2016 was \$17,282,259. If on-base families were occupying households on the tax

<sup>3</sup> Washington State Department of Revenue, *Tax Statistics 2015*, Table 17, p. 28.

<sup>4</sup> See the web site of the Island County Assessor and Treasurer: <http://assessor.islandcountywa.gov>

<sup>5</sup> U.S. Department of the Navy, “Draft Environmental Impact Statement for EA-18G ‘Growler’ Airfield Operations at Naval Air Station Whidbey Island Complex,” (hereinafter, *DEIS*), November 2016, p. 3-155.

rolls and paying an average level of tax per household, they would be paying the County another \$678,000 per year.

Adding these three items together yields about \$5.7 million per year.

Another big tax loss is impossible to calculate. Were federal land made available for private industry or housing, substantially new tax dollars could be generated. The next section of this study, however, explores some of these “opportunity costs.”

**Chart 1**  
**Properties in Island County Owned by the U.S. Government**

Property ID	Geographic ID	Appraised Value	Property ID	Geographic ID	Appraised Value
1205	R03225-200-0650	\$10	36071	R13324-237-1370	\$123,034
1447	R13101-046-0360	\$90,000	36650	R13325-330-0880	\$706,750
2044	R13102-038-4960	\$90,000	37524	R13326-329-4620	\$550,000
2197	R13102-246-4470	\$1,450,000	38444	R13327-428-3630	\$240,667
2295	R13102-336-3100	\$200,000	39005	R13328-264-1320	\$13,159,920
6736	R13109-317-0470	\$100,000	43303	R13336-080-1500	\$2,792,700
8299	R13111-515-5140	\$135,000	43358	R13336-120-2770	\$2,790,000
8315	R13112-015-2810	\$75,000	48086	R22906-345-2070	\$350,000
8324	R13112-036-1990	\$600,000	59395	R23005-198-1070	\$1,000,000
8360	R13112-167-1320	\$1,610,000	59527	R23006-288-4590	\$4,890,790
8529	R13112-421-1660	\$1,180,000	59876	R23007-489-1660	\$1,587,372
8887	R13113-343-3420	\$685,000	60490	R23008-467-0800	\$700,000
10197	R13122-202-2000	\$11,050,906	82010	R23118-181-0080	\$75,000
10240	R13122-310-2600	\$600,000	89647	R23204-040-3570	\$3,641,280
10311	R13122-420-3300	\$10	89790	R23204-330-3530	\$500,000
10721	R13201-093-2050	\$4,393,500	89816	R23204-350-1800	\$4,248,078
10776	R13201-418-1950	\$13,443,500	89969	R23206-024-5240	\$1,484,802
19045	R13212-140-1330	\$30,783,542	107672	R23331-240-4370	\$12,231,845
30344	R13235-479-2040	\$5,000	107681	R23331-345-0240	\$6,624,250
33056	R13310-264-3960	\$15,728,123	107930	R23332-240-2810	\$8,183,225
33252	R13311-107-0480	\$400,000	108369	R23333-166-2260	\$2,546,715
34000	R13312-020-2610	\$230,000	286915	S7270-00-0000A-2	\$1,050
35358	R13313-407-2500	\$1,059,760	286942	S7270-00-00003-0	\$25,000
35376	R13314-264-2640	\$7,438,750	286960	S7270-00-00008-0	\$25,000
35394	R13316-056-4830	\$2,657,008	550834	R03226-005-4810	\$400,348
35401	R13321-198-3300	\$16,222,236	550852	R13329-205-4880	\$9,388,453
35429	R13322-264-2640	\$5,742,935	572589	R13122-104-0740	\$80,000
35571	R13323-270-2730	\$20,444,760	623169	R23112-495-2300	\$200,000
35740	R13324-108-1000	\$700,000	803834	R13108-364-4680	\$273,617
35786	R13324-131-1520	\$450			
<b>Subtotal</b>		<b>\$137,115,490</b>	<b>Subtotal</b>		<b>\$78,819,896</b>
			<b>Total Assessed Value</b>		<b>\$215,935,386</b>

To put this in perspective, the total 2016 budget for the Island County government is about \$83 million.<sup>6</sup> Collecting appropriate sales and property taxes from military personnel would allow the budget to be expanded by almost 7%. Put another way, *nonmilitary residents of the County are significantly underwriting the public expenses imposed by military residents.*

The mismatch between taxes and services is especially apparent in public education. According to the Navy, half of the 5,500 students in the Oak Harbor school district are “federally connected” and school overcrowding, already a problem, is likely to get worse.<sup>7</sup> In 2012-13, total costs of the school district were just over \$46 million and expenditures per student were \$8,973. Mindful of this problem with military bases across the United States, the federal government has historically given aid to school districts in militarily dependent communities. Oak Harbor received \$4.6 million in 2012-13, which covered approximately 20% of the costs of educating “federally connected” students. The other 80% came from the county and local taxes, which are paid largely by nonmilitary families. This unequal allocation of burdens is likely to get worse. Federal aid to schools in 2016, according to the Navy, will be 60% the level in 2008, and may well decline further in the future.

Numerous other instances reveal a mismatch between the Navy’s demands on public services and its contributions of dollars.

- Food insecurity runs high among low-ranking military enlistees, so much so that they spent \$103 million in food stamps at military commissary stores in 2013.<sup>8</sup> While SNAP is a federal program, food insecurity also places burdens on local resources through school lunch programs and food pantries.
- The expansion of the Navy’s personnel in recent years has meant that more people on Whidbey Island are looking for housing. As the Navy concedes, Island County vacancy rates are already running low—in 2013 they were 2.4% for home owners and 5.6% for rentals.<sup>9</sup> In the short term, more residents chasing a fixed supply of housing means higher housing costs for everyone in Island County. It also means more homelessness.<sup>10</sup> A recent editorial in the *South Whidbey Record* concluded, “The affordable housing

<sup>6</sup> See “Island County 2016 Budget Summary,” available at <https://www.islandcountywa.gov/Commissioners/Budget/2016ADOPTEDBUDGETSUMMARY12-07-2015.pdf>.

<sup>7</sup> *DEIS*, pp. 3-158-60.

<sup>8</sup> Becket Adams, “See the Eye-Popping Chart about Food Stamps and the Military,” *The Blaze*, 17 February 2014.

<sup>9</sup> *DEIS*, pp. 3-156.

<sup>10</sup> The rate of homelessness in Island County has recently doubled. See Patricia Guthrie, “More Islanders on Edge of Homelessness Than Previously Thought,” *Whidbey News-Times*, 20 December 2016.

problem on Whidbey Island, particularly the north end of the island, is reaching a crisis point...”<sup>11</sup>

- To the extent that the affordable housing shortage pushes military families to live outside Island County, their commutes are exacerbating local traffic problems, which means more long waits for the ferries and more traffic accidents, all of which impose additional costs on residents.

The analysis above focuses on current budget expenses by Island County and local governments. What’s not included, however, are additional *capital budget* expenses. For example, the expanding number of students in the Oak Harbor school district may require additional schools, buses, and other capital expenditures—all of which will be the responsibility of residential taxpayers.

Another example is the Oak Harbor water treatment system. For several years, Oak Harbor struggled to get the Navy to contribute to the \$122 million upgrade and expansion of its sewage system.<sup>12</sup> The Navy ultimately declined to participate and, instead, chose to continue to dispose of its sewage in an outdated system of lagoons. That system is inadequate now – raw sewage has spilled occasionally into the Oak Harbor Bay – and sooner or later either the Navy or the city must undertake a multimillion-dollar capital project to remedy the problem.

The anticipated expansion of the Growler program means that all these inequities will likely get worse in the years ahead. In its *Draft Environmental Impact Statement (DEIS)* published in November 2016, the Navy suggests that various alternatives will grow military personnel over the next five years by between 371 and 664, and military dependents between 509 and 910.<sup>13</sup> But it’s unclear what exactly the Navy’s baseline is for these estimates, because there was substantial growth in personnel in 2015 and 2016. A clearer picture of what’s happening is available from the Island County’s Economic Development Council, as shown in Chart 2. Between 2015 and 2019, the total population of dependents and active duty officers will grow by 5,184—an increase of 22%.<sup>14</sup>

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<sup>11</sup> “Whidbey Leaders Have Big Job Ahead in Addressing Affordable Housing,” *South Whidbey Record*, 17 September 2016.

<sup>12</sup> See Agenda Bill (at [http://www.oakharborcleanwater.org/content/documents/agendas/2014-01-21\\_Resolution14-05-USNavyParticipation.pdf](http://www.oakharborcleanwater.org/content/documents/agendas/2014-01-21_Resolution14-05-USNavyParticipation.pdf)) and related video (<http://www.oakharbor.org/video-view.cfm?keyword=wwtp&id=746>).

<sup>13</sup> *DEIS*, p. 4-228.

<sup>14</sup> Personal Correspondence between Ron Nelson (Director of the Island County EDC) and Larry Morrell, 14 November 2016. See also Jessie Stensland, “Island County, Oak Harbor Team Up To Tackle Low-Income Housing,” *South Whidbey Record*, 14 September 2016.



**Chart 2**  
**Estimates of Military-Related Population Changes on Island County**  
**As Estimated by the Island County EDC**

Year	Active Duty	Dependents & Active Duty
2007	8,150	26,406
2008	7,700	24,948
2009	7,650	24,786
2010	7,550	24,462
2011	7,250	23,490
2012	7,000	22,680
2013	6,950	22,518
2014	6,975	22,599
2015	7,200	23,328
2016	8,000	25,920
2017	8,600	27,864
2018	8,800	28,512
2019	8,800	28,512
2020	8,150	26,406

## II. Opportunity Costs

Another important cost economists often weigh is the “opportunity cost.” What options are being foreclosed by today’s choices? If the growth of the Whidbey Naval Air Station’s activities crowds out economic activities that could generate still more wealth for Island County, then there are important opportunity costs.

While it’s possible for the region to enjoy economic growth in both military and nonmilitary sectors, the two universes necessarily compete for scarce resources. For example, land used by the military cannot be used simultaneously by the private sector. Investment dollars focused on businesses linked to the military are unavailable for civilian businesses. If housing expansion is limited by strict zoning laws, as is the case on Whidbey Island, the growth of military housing precludes the growth of nonmilitary housing (in fact, private companies on Whidbey Island are having difficulty finding affordable housing for new hires<sup>15</sup>).

But even more fundamentally, economic development is about how a community can shape and realize its collective vision of the future. Residents of Island County can fairly ask: Do you prefer an economy over the next generation with a continued high degree of dependence on the Navy? Or do you prefer a diversified civilian economy? What are the relative costs of pursuing one instead of the other? And what economic-development priorities should flow from these choices?

One reason these questions matter is that a growing body of evidence suggests that military base spending, compared to spending by the private sector, has a relatively weak impact on the local economy. This is partially because low tax payments and low levels of local retail purchasing by military personnel, discussed in the previous section. But equally important is that the Naval Air Station purchases most of its food, equipment, fuel, and so forth from its own, nonlocal supply chain, as dictated by Pentagon rules and suppliers. When a dollar is expended like this outside of a local economy, it constitutes an economic “leakage” that adds little economic benefit locally.

As summarized in Appendix I, a growing body of evidence suggests that economic development is most successful when it identifies dollar leakages like these and systematically plugs them through an expanding universe of locally owned businesses. In this section, we will show the potential benefits of Island County shifting its economic development priorities to these businesses.

Diversification is important for any economy, but especially for a small economy dependent on a single industry.<sup>16</sup> Because the Island County economy is dominated by

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<sup>15</sup> Kyle Jenson, “Slim Rental Market Worrying Officials,” *Whidbey News-Times*, 13 September 2016.

<sup>16</sup> To elaborate: Dependence on a single industry leaves an economy vulnerable to changes in global markets over which the community has little or no control. In the case of dependence on military spending,

one non-locally owned industry (namely the Navy), it is missing out on the economic benefits that might come from a diversity of local businesses. Unlike the Navy, local businesses tend to spend more of their money locally, which pumps up the local economic multiplier and increases local income, wealth, and jobs. (The empirical case for these arguments is, again, summarized in Appendix I.)

Our analysis begins by detailing the key characteristics of the Island County economy. It then presents data that show the relatively poor economic-development impact that flows from a military dollar generally. Finally, it analyzes the potential benefits of Island County replacing Navy jobs with leak-plugging private businesses.

**(1) The Existing Economy in Island County**

Chart 3 provides a snapshot of the Island County economy using data of an input-output model called IMPLAN. Across the United States, economic-development agencies use IMPLAN to calculate the benefits and costs of various decisions. One of the virtues of IMPLAN over the use of, say, U.S. Census data, is that it integrates multiple, disparate federal and private data bases. The year of the data -- the most recent one available -- is 2014. The inputs in the model, drawn from federal and state data, assume that 79,275 County residents live in 32,835 households, with an average household income of \$106,949. Note that *household* income represents more than one income earner. Also, the relatively high average reflects a small number of higher income earners averaged against a much larger number of lower income earners.<sup>17</sup>

**Chart 3  
Overview of the Island County Economy (2014)**

Gross Regional Product	\$2,562,300,743
Total Personal Income	\$3,511,647,000
Total Employment	33,495
Population	79,275
Total Households	32,835
Average Household Income	\$106,949

Chart 4 shows the supply and demand of the Island County economy. IMPLAN is constructed like an accountant's balance sheet, so the two sides, production and

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a change in defense spending by the President, Congress, or the Joint Chiefs could lead to huge and sudden disruptions in the local economy.

<sup>17</sup> IMPLAN's household income number is higher than that reported in the Census (which reported a median household income in 2015 of \$58,815) for two reasons. IMPLAN looks at average income, while Census looks at the 50<sup>th</sup> percentile. IMPLAN also includes non-wage sources of personal income, including self-employment income, rents, dividends, interest, income supplements, retirement, and transfer payments. For further explanation, see: [http://support.implan.com/index.php?option=com\\_content&view=article&id=383#qualitative-differences](http://support.implan.com/index.php?option=com_content&view=article&id=383#qualitative-differences).

consumption, always equal one another. The size of each side—and the size of the Island County economy—is roughly \$2.6 billion per year.

There are two important points in Chart 4 to highlight: Because of the Navy's huge role in the Island County economy, federal demand is about two-thirds the size of all household demand. This is an unusually high level of dependence of a local economy on a single industry. Also, imports are more than \$3.6 billion greater than exports. *This means that the County is running a serious annual trade deficit which, if not remedied over time, will steadily impoverish the economy.*<sup>18</sup>

**Chart 4**  
**Supply and Demand in the Island County Economy (2014)**

Supply (Value Added)		Final Demand	
Employee Compensation	\$1,348,595,843	Households	\$3,299,544,862
Proprietor Income	\$164,624,227	Local/State Government	\$331,468,311
Other Property Type Income	\$859,557,080	Federal Government	\$2,161,193,223
Tax on Production and Imports	\$189,523,592	Capital	\$464,058,305
Total Value Added	\$2,562,300,742	Exports	\$642,105,277
		Imports	-\$4,229,570,932
		Institutional Sales	-\$106,498,252
		Total Final Demand	\$2,562,300,795

Chart 5 shows the breakdown of jobs in the *private* sector in the County, compared with that of the United States. The relatively high percentage of jobs in retail, arts, and accommodation is not surprising for a tourism-dependent economy like Island County, but these are also sectors with relatively low wages. The relatively smaller presence of manufacturing, wholesale, professional services, and administrative services, which typically have higher wages, further depresses incomes. The relatively high levels of construction and health care underscore the relatively high number of retirees.

The data in Chart 5 above are drawn from the U.S. Census Bureau. It presents jobs organized into what's called North American Industrial Classification Scheme (NAICS), an inventory of about 1,100 sectors which currently excludes public employees, self-employees, and farmers.<sup>19</sup> In other words, the Navy is not included.

Chart 6, drawn from IMPLAN, presents a more comprehensive breakdown of the jobs, wages, and output in Island County economy. It fixes the deficiencies of NAICS, and includes public employees, self-employees, and farmers. It shows that the single largest

<sup>18</sup> Unlike a national economy, which can lower the value of its currency to "adjust" to a trade deficit (by making exports cheaper and imports more expensive), a local economy cannot influence the value of its currency.

<sup>19</sup> Even though farmers and ranchers are excluded from NAICS, agricultural services are not. Additionally, companies in NAICS Code "11--" include logging, hunting, and horticulture.

employment category is government services, which provides almost a third of all the jobs. The Navy, according to IMPLAN, was employing 6,170 people in 2014.

**Chart 5**  
**NAICS Composition of Private Sector Jobs on Island County (2014)<sup>20</sup>**

NAICS Code	Sector Description	U.S.	Island County
11----	Agriculture, Forestry, Fishing and Hunting	0%	na
21----	Mining, Quarrying, and Oil and Gas Extraction	1%	na
22----	Utilities	1%	1%
23----	Construction	5%	7%
31----	Manufacturing	9%	6%
42----	Wholesale Trade	5%	1%
44----	Retail Trade	13%	19%
48----	Transportation and Warehousing	4%	1%
51----	Information	3%	na
52----	Finance and Insurance	5%	4%
53----	Real Estate and Rental and Leasing	2%	2%
54----	Professional, Scientific, and Technical Services	7%	5%
55----	Management of Companies and Enterprises	3%	na
56----	Administrative, Support and Waste Management	9%	4%
61----	Educational Services	3%	2%
62----	Health Care and Social Assistance	16%	22%
71----	Arts, Entertainment, and Recreation	2%	3%
72----	Accommodation and Food Services	11%	14%
81----	Other Services (except Public Administration)	4%	7%

<sup>20</sup> The initials "na" mean that the data are not available from the Census Bureau, because there are a small number of firms and revealing data would compromise confidentiality.

**Chart 6**  
**IMPLANS Picture of Jobs, Output, and Wages on Island County Sectors (2014)**

IMPLAN Sector	Employment	Output	Employee		Other Property		Indirect Business Tax
			Compensation	Proprietor Income	Type Income		
Farming, Ranching, & Forestry	716	\$42,920,394	\$7,126,931	\$9,336,480	\$8,899,309	\$1,992,611	
Mining, Oil, and Gas	94	\$17,301,764	\$881,483	\$350,024	\$2,748,966	\$148,302	
Energy & Utilities	63	\$28,118,374	\$3,204,886	\$28,967	\$4,398,505	\$5,420,626	
Construction	1,645	\$259,945,096	\$28,829,000	\$31,672,855	\$12,955,828	\$4,196,633	
<b>Manufacturing</b>							
* Food, Beverages, & Tobacco	149	\$51,670,084	\$3,513,173	\$420,860	\$1,659,236	\$1,826,412	
* Fibers, Textiles, & Clothing	44	\$8,774,428	\$1,119,587	\$395	\$60,769	\$109,576	
* Wood and Wood Products	6	\$923,525	\$105,907	\$2,968	\$79,525	\$3,474	
* Paper, Paper Products, & Printing	68	\$21,611,547	\$3,462,367	\$64,710	\$1,369,688	\$109,326	
* Petroleum-Based Products	2	\$1,767,752	\$142,862	\$0	\$215,617	\$42,599	
* Rubber, Glass, Stone, & Concrete Products	11	\$2,794,076	\$364,600	\$0	\$88,853	\$30,579	
* Metals	21	\$10,162,570	\$1,142,677	\$0	\$1,853,289	\$56,782	
* Metal Products	27	\$5,415,414	\$1,085,234	\$0	\$525,710	\$52,273	
* Machinery & Equipment	47	\$7,466,635	\$1,265,547	\$2,457	\$212,735	\$38,459	
* Computers, Electronics, & Appliances	144	\$38,517,732	\$5,009,786	\$70	\$312,979	\$304,154	
* Vehicles, Boats, & Planes	335	\$216,400,179	\$28,365,091	\$1,486,969	\$29,326,503	\$1,227,194	
* Furniture	10	\$1,250,924	\$304,667	\$0	\$60,665	\$6,349	
* Health Equipment	11	\$2,758,378	\$124,724	\$452	\$82,516	\$27,554	
* All Other Manufacturing	40	\$6,856,070	\$302,227	\$1,675	\$109,181	\$216,026	
Wholesale Trade	302	\$81,565,277	\$14,170,474	\$2,101,381	\$7,074,438	\$12,250,274	
Retail	3,406	\$249,239,517	\$67,524,534	\$22,587,807	\$10,153,188	\$52,776,497	
Transportation	420	\$51,487,398	\$12,182,897	\$2,766,983	\$4,027,376	\$1,407,569	
Warehousing & Storage	9	\$1,103,471	\$459,799	\$118,160	\$122,459	\$8,785	
<b>Services</b>							
* Information Businesses	273	\$80,471,340	\$15,315,702	\$920,812	\$6,147,513	\$3,048,063	
* Banking & Finance	893	\$116,786,126	\$16,497,292	\$2,784,276	\$15,393,410	\$3,428,606	
* Real Estate & Leasing	1,778	\$611,839,532	\$8,671,047	\$10,250,969	\$279,177,891	\$65,745,955	
* Professional Services	4,321	\$355,931,964	\$92,714,656	\$31,953,232	\$29,010,439	\$14,524,178	
* Private Education	462	\$24,764,838	\$8,938,017	\$3,469,199	\$153,486	\$968,407	
* Health & Human Services	2,662	\$152,455,674	\$59,342,491	\$14,331,885	\$6,338,829	\$2,646,596	
* Entertainment, Tourism, & Food Services	3,340	\$177,991,556	\$48,839,752	\$7,062,224	\$19,301,723	\$19,444,394	
* Personal Services	854	\$57,251,354	\$13,359,872	\$22,605,680	\$645,676	\$6,714,043	
* Churches, Nonprofits, & Unions	220	\$19,378,548	\$4,647,283	\$303,307	\$7,017,851	\$1,504,273	
* Household Operations	208	\$1,822,832	\$1,822,832	\$0	\$0	\$0	
* Government Services	10,913	\$1,432,134,823	\$899,958,646	\$0	\$410,032,926	-\$10,752,979	
	33,495	\$4,126,879,089	\$1,348,595,843	\$164,624,227	\$859,557,080	\$189,523,592	

## (2) The Relative Impact of Military Jobs

As noted at the beginning of this study, state and local economic-development agencies tend to see the large presence of the Navy in Island County strictly in terms of its benefits. And unquestionably every military dollar spent in Island County does generate some jobs, wages, local contracts, and tax revenues. What is not discussed, however, is that a military dollar tends to generate all these economic benefits at a substantially lower rate than a nonmilitary dollar, because the military dollar tends not to be re-spent locally.

University of Massachusetts economists Robert Pollin and Heidi Garrett-Peltier recently compared the job impacts of \$1 billion invested in the military versus \$1 billion invested in clean energy, health care, and education.<sup>21</sup> They also compared the impacts of a \$1 billion tax cut. The military investment wound up generating the smallest employment impact—11,200 jobs. Clean energy yielded 16,800 jobs, health care 17,200 jobs, and education 26,700 jobs. Even tax cuts generated more jobs than did military spending.

Using IMPLAN (which is also the tool Pollin and Garrett-Peltier use), we perform a similar exercise for Island County. Chart 7 shows the impact of creating 1,000 new jobs in the military versus 1,000 new jobs in ten other exemplary sectors: farming, construction, manufacturing, information services, financial services, professional services, health services, and tourism. Note that the total new wages include both direct pay and benefits.

**Chart 7**  
**Impact of 1,000 New Jobs in Military vs. Other Sectors**

IMPLAN Sector	IMPLAN Sector Description	Total New Jobs	Total New Wages	Total New Taxes
4	Fruit Farming	1,179	\$24,914,876	\$1,448,400
61	Residential Construction	2,541	\$71,999,276	\$20,767,246
94	Bread & Baker Products	1,258	\$38,256,560	\$10,954,872
357	Aircraft Manufacturing	1,812	\$117,314,855	\$9,938,568
398	Electronics and Appliance Stores	1,335	\$69,407,217	\$15,202,382
423	Motion Picture & Video Industries	1,955	\$32,306,931	\$10,627,114
439	Funds & Trusts	2,173	\$84,546,664	\$7,964,736
449	Architectural, Engineering Services	1,624	\$44,838,599	\$4,761,540
482	Hospitals	1,600	\$108,606,962	\$6,147,386
499	Hotels and Motels	1,295	\$32,731,723	\$29,020,043
536	Military	1,327	\$108,805,055	\$3,299,928

<sup>21</sup> Robert Pollin & Heidi Garrett-Peltier, "The U.S. Employment Effects of Military and Domestic Spending Priorities: 2011 Update," monograph, Political Economy Research Institute, University of Massachusetts-Amherst, December 2011.

Interpreting the results in Chart 7 requires an appreciation that each total (for jobs, wages, and taxes) includes direct effects, indirect effects, and induced effects.<sup>22</sup> The direct effects are the 1,000 jobs hypothetically created, which then generate increased wages and taxes. Indirect effects are what happens when expanded local industries buy more local inputs. And induced effects are what happens when the employees of the expanded local industries purchase more local goods and services. Subtracting the 1,000 direct jobs, we can see that in the eleven exemplary sectors, the military is the fourth poorest generator of indirect and induced jobs.

Because the benefits of Navy personnel are relatively high, military jobs have the second highest impact on total wages. But because so much of this income is spent in tax-exempt ways, military jobs are the second poorest generator of tax revenue. Only fruit farming generates less tax revenue, because farmer incomes are low.

Thus, while military jobs come with good benefits, they ultimately have relatively small impact on local economic development. This underscores why it's imperative for Island County to focus its small economic-development team and budget on diversifying the local economy and growing other, nonmilitary industries.

### (3) Leakage in Island County

Just how leaky is the Island County economy? That is, to what extent are residents buying goods and services from outside the County? IMPLAN can be used to answer these questions. Chart 8 summarizes the bottom line. *Overall, for every dollar spent by Island County residents, 59 cents leak out. Compared to similar counties, this is an unusually high level of leakage.*<sup>23</sup> This suggests a huge opportunity for diversifying the Island County economy through greater local production for local needs—what economists call import replacement. Every cost-effective local substitution means fewer purchasing dollars leaking out, a higher local economic multiplier, and more income, wealth, and jobs.

<sup>22</sup> One caveat on these calculations is that IMPLAN assumes that all government sectors only generate payroll expenditures. Unlike private business sectors, no indirect expenditures—that is, base expenditures on local food, electricity, and so forth—are assumed. According to the Berk and Hodgins study, *supra* note 2, base expenditures are about 2.5% the level of Navy payroll expenditures. Were indirect impacts of the Navy included, the total results would slightly (2-3%) higher.

<sup>23</sup> The author has performed leakage analyses over the past decade for about two dozen counties and regions.



**Chart 8**  
**Leakage in the Island County Economy**

<b>Current Spending on Local Production</b>	\$2,992,662,152
<b>Additional Production for Self-Reliance</b>	\$4,370,768,905
<b>Total Demand for Local Production</b>	\$7,363,431,057
<b>Rough Level of Leakage</b>	59%

Chart 9 reinforces this point by showing how many IMPLAN sectors lack self-reliance. IMPLAN combines the 1,100 NAICS sectors in 539 sectors. Island County is self-reliant in only 4% of these sectors. About 78% of the sectors are less than 20% self-reliant, and two thirds of the sectors have almost zero activity in them. Appendix II presents a comprehensive list of the degree of the County's self-reliance in every one of the 539 IMPLAN sectors.

**Chart 9**  
**Leakiness of IMPLAN's 539 Sectors in Island County**

	<b>Number of Sectors</b>	<b>Percent of Sectors</b>
<b>Total IMPLAN Sectors</b>	539	100%
<b>&gt;99% Self-Reliant Sectors</b>	22	4%
<b>&lt;50% Self-Reliant Sectors</b>	453	84%
<b>&lt;20% Self-Reliant Sectors</b>	418	78%
<b>&lt;1% Self-Reliant Sectors</b>	361	67%

As Appendix I details, economic development works is most effective when new jobs are created in businesses that are locally owned and meet (initially at least) local demand. What would happen if, with a magic wand, the 6,170 Navy jobs could be converted into civilian economy jobs? And better still, what if those jobs could be redistributed to other sectors of the economy in a way that would have the greatest impact on reducing leakage and increasing local self-reliance? IMPLAN enables us to model the impacts of this hypothetical shift.

Before sharing our results, we should explain that we only redistributed the 6,170 Navy jobs into sectors that were plausible and preferable.

- Among the sectors we deemed implausible were those where natural resources or policies were already precluding any economic activity, such as certain kinds of farming (e.g., cotton and sugar cane), commercial logging, and mining.

- Among the sectors we deemed not preferable were tobacco and fossil fuel burning for energy.
- Additionally, we did not assume any changes in government employment except in the military.

Chart 10 shows the results. As would be expected, the conversion of 6,170 jobs from the Navy to private industry has very little effect on direct employment. But the induced effects, as local industries start purchasing from other industries, are huge. Overall, conversion of 6,170 Navy jobs to 6,170 nonmilitary jobs creates 3,909 *additional* jobs (beyond those converted), expands the economy by \$503 million, and generates \$153 million more in taxes.<sup>24</sup> Of these taxes, about \$142 million come into the coffers of state and local government.

**Chart 10**  
**Impact from Converting All Navy Jobs to Private Sector Jobs**

Impact Type	Jobs	Labor Income	Value Added	Business Taxes
Direct Effect	62	(\$185,102,853)	\$332,308,420	\$127,221,866
Indirect Effect	4,074	\$113,174,104	\$185,183,318	\$28,133,139
Induced Effect	(227)	(\$6,172,330)	(\$14,154,501)	(\$2,335,805)
<b>Total Effect</b>	<b>3,909</b>	<b>(\$78,101,079)</b>	<b>\$503,337,238</b>	<b>\$153,019,200</b>

The one negative effect is a reduction of labor income by \$78 million, largely reflecting the disappearance of generous benefits paid to Navy personnel. How, then, can wages go down but the economy still expand? Because counterbalancing the loss of wages are a significant growth in proprietor income, rents, and tax revenues, all of which generate multiplier effects within the local economy.

Again, the point of this exercise is not to argue for elimination of Navy jobs, but rather to highlight their relatively weak impact on the local economy. It underscores why economic development ultimately needs to diversify the economy by plugging leaks through expansion of private industries. Given that the Navy's presence could disappear overnight with an act of Congress, it would be prudent for Island County plan seriously to reduce its dependence on military spending.

<sup>24</sup> As discussed in note 22, *supra*, IMPLAN does not include indirect local expenditures by the Navy associated with the based. Were these included, the net impacts of the shift would probably be slight (2-3%) smaller.

### III. External Costs

The third type of cost the Navy imposes on Island County is the “external” cost—that is, the cost borne by the general public and not compensated by the Navy. Economists have long recognized that “internalizing” external costs can lead to more efficient and fair outcomes. If for example a factory emits air pollution, forcing the factory to pay for the damage it causes downwind motivates it to install scrubbers that reduce its pollution. Failing to internalize the externality removes any incentive for the factory to manage its own pollution.

The Naval Air Station Whidbey Island Complex currently generates myriad external costs and has little incentive to internalize them. Those imposed by just one of its many programs—the deployment and training of pilots for its EA-18G “Growler” aircraft—are extensively reviewed in the 1,000+ page *Draft Environmental Impact Statement (DEIS)* published in November 2016. The report presents dozens of potential problems with the program and then largely discounts or dismisses all them. *In no instance does it actually attempt to assess the dollar cost of any of these externalities.*

While it is beyond the scope of this study to place a dollar value on all these costs—many are speculative and require probabilistic analysis—two of the costs discussed in the *DEIS* are especially high, clearly visible right now, and susceptible to empirical measurement: the human health impacts of Growler noise, and the reduced value of private property resulting from Growler noise. We analyze both below, and then discuss briefly other more speculative—but potentially costly—impacts from the Naval Air Station.

#### (1) The Costs of Noise

The most significant public concerns about the operations from the Naval Air Station surround the noise emanating from its Growler aircraft. The nickname “Growler” comes from the plane’s unusual loudness, and consequently the *DEIS* devotes more space and analysis to this one issue than any other. As shown in Chart 11, the *DEIS* estimates that the current level of the program (called “No Action”) is adversely effecting more than 11,000 residents. The metric the Navy uses is a weighted average of loud and quiet periods called the Day Night Average Sound Level (DNL). The Navy focuses on three concentric areas of DNL impact: those exposed to average noise levels between 65 and 70 decibels (dB), those exposed to between 70 and 75 dB, and those exposed to above 75 dB.

The use of the DNL metric is controversial, because it averages very high levels of sound on a few days with a large number of quiet days.<sup>25</sup> Careful measurement on the ground of Growler noises by the National Park Service in 2015 found “acoustic events” from

<sup>25</sup> “DNL is...a ‘noise averaging method’ that has been criticized because it does not address annoyance. Annoyance can therefore be understated by averaging.” Randall Bell, “The Impact of Airport Noise on Residential Real Estate,” *The Appraisal Journal*, July 2001, p. 320.

Growler overflights as high as 113 dBA.<sup>26</sup> This study also points out that human blood pressure and heart rates increase at 35 dB, that the World Health Organization recommends that the maximum noise level inside a bedroom be 45 dB, and that normal conversations are interrupted by sound above 60 dB.<sup>27</sup> (Note that decibels are measured on a logarithmic scale, which means that a 60 dB noise exerts ten times the sound pressure as a 50 dB noise.) The sidewalks of a busy street are about 80 dB, a jackhammer is 100 dB, and a train horn close up is 120 dB.<sup>28</sup> In plain language, metrics that present periodic bursts of jackhammer noise as being just like the average humming of traffic are very misleading. In submitted commentary on the DEIS, Dr. Sanford Fidell, a noted sound engineer, argues that this kind of analysis is obsolete and is likely to cause an underestimation of the ultimate impact and the population effected.<sup>29</sup>

**Chart 10**  
**Island County Residents Impacted at Different Noise Levels**

	65-<70 dB	70-<75 dB	>75 dB	Total
<b>No Action</b>	3,875	3,165	3,993	11,033
<b>Alternative 1</b>				
- Scenario A	4,355	2,958	5,734	13,047
- Scenario B	4,359	3,505	5,646	13,510
- Scenario C	5,183	3,400	5,223	13,806
<b>Alternative 2</b>				
- Scenario A	4,264	2,985	5,554	12,803
- Scenario B	4,355	3,547	5,545	13,447
- Scenario C	5,055	3,454	5,056	13,565
<b>Alternative 3</b>				
- Scenario A	4,348	2,970	5,675	12,993
- Scenario B	4,363	3,505	5,633	13,501
- Scenario	5,024	3,443	5,010	13,477

The *DEIS* reviews nine different alternatives that would raise the exposed population to almost 14,000. It makes no effort to quantify the health costs of a DNL above 65 dB, because it claims that at these DNL levels “no studies have shown a definite causal and significant relationship between aircraft noise and health.”<sup>30</sup>

<sup>26</sup> National Park Service, *Ebey's Landing National Historical Reserve Acoustical Monitoring Report*, Natural Resource Report NPS/ELBA/NRR-2016/1299, p. vi.

<sup>27</sup> *Ibid.*, p. viii.

<sup>28</sup> *Ibid.*, p. 10.

<sup>29</sup> Personal Communication, 4 January 2017.

<sup>30</sup> *DEIS*, p. 3-22.

In fact, the Department for Environment, Food, and Rural Affairs for the United Kingdom (UK), examining the same evidence, has come to the opposite conclusion: “Noise can have an effect on health, wellbeing, productivity, and the natural environment.”<sup>31</sup> While the Department concedes that measurement of ill effects on productivity and environmental damage from noise is difficult, it argues that there is convincing evidence connecting loud noise exposure to measurable impacts like heart attacks, hypertension, strokes, and dementia. To help guide decision-makers evaluating projects with significant noise impacts, they have produced two tables that summarize their best estimates of the associated economic costs. One table estimates the health costs of noise, and the other estimates the amenity costs of sleep disturbance. We use these tables to estimate the total health costs of the Growler program.

Chart 12 applies the midpoints of the two sound-impact areas identified in the *DEIS*—67.5 dB and 72.5 dB—to the two UK charts.<sup>32</sup> For the highest sound-impact area—75 dB plus—we use 80 dB as a reasonable single point. The Chart shows that at the three sound levels, the annual costs per affected person are between \$229 and \$275.

**Chart 12**  
**UK Estimates of Damages Per Affected Person**  
(1 Pound = \$1.25)

	67.5 dB	72.5 dB	80 dB
Health Cost	\$110.41	\$132.30	\$155.89
Sleep Disturbance Cost	\$118.99	\$118.99	\$118.99
<b>Total Cost</b>	<b>\$229.40</b>	<b>\$251.29</b>	<b>\$274.88</b>

Chart 13 applies these data to the population areas identified in the *DEIS*. If the Growler program remained at its current level, its cost would continue to be \$2.8 million per year. If it is expanded, as the *DEIS* advocates, annual costs could grow to as high as \$3.5 million.

The Growlers fully replaced the predecessor planes, called the Prowlers, in 2010. Thus, in the seven years between 2010 and 2017, the cost of just the Growler program to public health on Island County thus far has been \$18.9 million.

<sup>31</sup> Department for Environment, Food and Rural Affairs, “Noise Pollution: Economic Analysis,” 9 April 2013 (updated 19 December 2014), “Overview,” at [www.gov.uk/guidance/noise-pollution-economic-analysis](http://www.gov.uk/guidance/noise-pollution-economic-analysis).

<sup>32</sup> The UK charts are calibrated in “change in noise metric.” The “change” is effectively the level of the Growler DNL, however, because the scale is logarithmic. A 60 dB DNL generates a thousand times more sound pressure than 30 dB DNL, the level of the quiet enjoyed by a Whidbey Island resident without the Growlers. Because the change from 1 to 1,000 is 999, the Growler DNLs give the proper indication of which points to choose on the UK charts. Hilary Notley, Senior Acoustic Analyst for the UK Department of Environment, Food, and Rural Affairs, Personal Communication, 25 January 2017.

Chart 13  
UK Estimates of Damages Applied to DEIS Population Envelopes

	65-<70 dB	70-<75 dB	>75 dB	Total
<b>No Action</b>	\$888,925	\$795,325	\$1,097,576	\$2,781,826
<b>Alternative 1</b>				
- Scenario A	\$999,037	\$743,308	\$1,576,133	\$3,318,479
- Scenario B	\$999,955	\$880,763	\$1,551,944	\$3,432,662
- Scenario C	\$1,188,980	\$854,378	\$1,435,672	\$3,479,030
<b>Alternative 2</b>				
- Scenario A	\$978,162	\$750,093	\$1,526,656	\$3,254,911
- Scenario B	\$999,037	\$891,317	\$1,524,182	\$3,414,536
- Scenario C	\$1,159,617	\$867,947	\$1,389,768	\$3,417,332
<b>Alternative 3</b>				
- Scenario A	\$997,431	\$746,324	\$1,559,916	\$3,303,671
- Scenario B	\$1,000,872	\$880,763	\$1,548,371	\$3,430,006
- Scenario C	\$1,152,506	\$865,183	\$1,377,124	\$3,394,812

These estimates of health costs are arguably too conservative for five reasons:

- First, as noted, the Navy's use of DNL averages understates the health problems imposed on residents, because it masks the bursts of high and extremely damaging sounds. Compared to the previous generation of Navy planes being flown in Island County, the Prowlers, the Growlers emit very high intensities of low frequencies that have an intense effect on humans.<sup>33</sup> Were appropriate adjustments made, many more residents would be listed in the concentric areas marking the Navy's exposure categories, and higher exposure categories (not just ">75 dB") would be identified—all of which would increase the consequent costs.
- The value of the British pound collapsed after the June 2016 "Brexit" vote, and now is at its lowest point against the U.S. dollar in thirty years. At the time the UK study was written, the conversion rate was over \$1.6 dollars per pound, which would increase the damage numbers here by a third.
- Underlying the British calculations are assumptions about medical care for noise-induced problems and about the value of human life. In fact, medical expenses per capita in the United States are significantly greater than they are in the United Kingdom (UK medical costs are tightly controlled by its single-payer system). And the value of human life assumed in the UK model—

<sup>33</sup> Larry Morrell, Comments on the DEIS, "Calculating Sound Averages That More Accurately Describe Environmental Impact," Forthcoming.

a\$36,600 to \$97,600, depending on demographics—is significantly lower than what U.S. lawsuits routinely award.

- Adjusting for the demographics of Whidbey Island would further increase the total level of damage. Older people, for example, are more vulnerable to heart attacks from all causes, including noise, and Island County’s population is significantly older than that of the United States or the United Kingdom.<sup>34</sup>
- Finally, the UK cost estimates do not include lost productivity. But consider one glaring example of this uncounted cost in Whidbey Island: According to the *DEIS*, classrooms at the Oak Harbor High School and Crescent Harbor Elementary School are already being interrupted 4-5 times per hour for multiple school-time hours every week, and the rate and intensity of these interruptions will grow as the Growler program expands.<sup>35</sup> Teaching with significant interruptions every 10-12 minutes is exceedingly difficult. What are the costs of lost school time? Lost education? Student well being?

In sum, the \$18.9 million estimate of costs imposed on the health of Island County residents between 2010 and the present are almost certainly too low.

## (2) The Costs of Reduced Property Values

A second important external cost is reduced property values. The *DEIS* cites general studies on the topic, most of them 20 to 40 years out of date, and concedes that “[e]nough data are available to conclude that aircraft noise has a real effect on property values.”<sup>36</sup> But it then chooses not to count the actual property damages on Island County. “Real property values,” the *DEIS* explains, “are dynamic and influenced by a combination of factors, including market conditions, neighborhood characteristics, and individual real property characteristics (e.g., the age of the property, its size, and amenities).”<sup>37</sup> In fact, enough data are available to make such an analysis for Island County.

Chart 14 compares the total assessed valuation of property in Island County with that of neighboring counties and Washington State generally.<sup>38</sup> Contrasting property values in 2007 (pre-financial crisis) with those of 2015 (the most recent data), we can see that

<sup>34</sup> See, e.g., Bel Marra, “Noise Pollution Health Risks in Seniors: Heart Disease, Stroke, and Hearing Loss,” *Hearing Health*, 9 October 2015. According to the U.S. Census Bureau, 23.2% of Island County residents are above 65, while only 14.5% of all Americans are in that age bracket. The comparable number for the United Kingdom is 17.8%. See <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates> .

<sup>35</sup> *DEIS*, p. 4-38.

<sup>36</sup> *Ibid.*, p. 4-232.

<sup>37</sup> *Ibid.*, pp. 4-232-33.

<sup>38</sup> Washington State Department of Revenue, Property Tax Statistics 2015, monograph, available at [http://dor.wa.gov/content/aboutus/statisticsandreports/stats\\_proptaxstats\\_report.aspx](http://dor.wa.gov/content/aboutus/statisticsandreports/stats_proptaxstats_report.aspx) .

Island County's property values have shrunk more than all the surrounding counties except Kitsap (another Navy-dependent economy). While property values in Washington State generally rose by about 10% during this period, those on Island County fell by almost 13%. Why?

A second comparison of interest is between 2010 (when the Growler flight tests became fully engaged) and 2015. Here, Island County performed better than surrounding counties, losing only about 3% of its assessed property value. In Washington State generally during this period, property values rose by 1.5%, but surrounding counties lost 7-24% of their assessed valuation. This has led to a general impression that the Island County economy is booming and that the Growlers have had no negative impact on property values.

A more complex picture emerges, however, if the focus shifts to the 27 subdivisions that are currently most directly under the flight path of the Growlers.<sup>39</sup> In many of these subdivisions, large numbers of "For Sale" signs are now visible as residents now seek to flee the loss of peace and quiet in their homes. Over 2010 to 2015, the collective assessed property valuation in these subdivisions, as shown in Chart 15, has plummeted 6.64%, or 3.35% more than the Island overall. That amounts to a total property value loss in these subdivisions of about \$9.8 million.

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<sup>39</sup> These data were made available by special request from the Island County Assessor's Office. There are 28 subdivisions under the flight path, but one, On Frosted Pond, saw considerable housing construction during this period, so changes in its property valuation are not comparable.



**Chart 14**  
**Changes in Assessed Property Values between 2007 and 2015**  
**Island County, Surrounding Counties, and Washington State**

Year	Island	Jefferson	Kitsap	Snohomish	Skagit	San Juan	State
2007	\$13,966,045,784	\$4,618,248,685	\$31,903,513,049	\$95,519,249,655	\$15,038,859,402	\$6,974,272,646	\$800,949,389,329
2008	\$14,729,387,220	\$5,056,667,107	\$31,901,494,279	\$97,810,393,346	\$15,706,785,645	\$7,904,618,853	\$875,941,275,493
2009	\$14,452,006,504	\$5,311,207,280	\$29,021,620,917	\$90,197,192,681	\$14,964,746,348	\$8,064,934,225	\$818,067,274,838
2010	\$12,546,359,697	\$5,327,550,880	\$27,716,265,936	\$81,763,046,539	\$14,227,276,096	\$8,024,385,667	\$780,116,556,730
2011	\$12,552,367,094	\$4,830,828,030	\$26,461,497,915	\$72,601,537,469	\$13,577,446,902	\$7,919,989,258	\$747,277,392,378
2012	\$12,052,722,301	\$4,549,745,475	\$25,444,024,968	\$68,642,718,641	\$13,244,632,127	\$6,209,389,933	\$720,274,017,942
2013	\$11,864,504,769	\$4,316,339,253	\$25,208,432,971	\$75,289,712,921	\$13,387,944,549	\$6,147,487,805	\$760,198,391,066
2014	\$11,959,902,648	\$4,508,093,057	\$25,140,607,793	\$84,038,078,352	\$13,616,166,938	\$6,124,904,836	\$830,215,285,152
2015	\$12,170,669,944	\$4,587,247,864	\$27,160,214,037	\$88,260,207,637	\$14,670,422,177	\$6,217,488,278	\$883,968,552,219
From 07 to 15	-12.86%	-0.67%	-14.87%	-7.60%	-2.45%	-10.85%	10.37%
From 10 to 15	-2.99%	-15.12%	-13.37%	-6.83%	-9.01%	-24.06%	1.48%

**Chart 15**  
**Changes in Assessed Property Values**  
**In Island County Subdivisions Directly Under the Growler Flight Path**

Assessor Code	Subdivision	Number of Properties	Value 2010	Value 2015	% Change
6010-02	Admirals Cove - 2	19	\$4,200,009	\$4,072,276	-3.04%
6010-03	Admirals Cove - 3	75	\$19,891,641	\$19,640,732	-1.26%
6010-04	Admirals Cove - 4	29	\$6,825,994	\$7,051,534	3.30%
6010-05	Admirals Cove - 5	67	\$12,838,433	\$13,014,412	1.37%
6010-06	Admirals Cove - 6	88	\$19,419,377	\$19,004,624	-2.14%
6010-07	Admirals Cove - 7	42	\$8,667,935	\$8,508,149	-1.84%
6430	Crescent Acres	27	\$6,344,281	\$5,588,221	-11.92%
6515	Dugualia Bay Heights - 1	35	\$11,927,025	\$9,971,598	-16.39%
6515-02	Dugualia Bay Heights - 2	20	\$5,684,650	\$5,741,310	1.00%
6515-03	Dugualia Bay Heights - 3	36	\$10,685,110	\$10,947,040	2.45%
6515-04	Dugualia Bay Heights - 4	21	\$8,229,754	\$7,595,405	-7.71%
6515-05	Dugualia Bay Heights - 5	11	\$4,096,452	\$4,052,168	-1.08%
6515-06	Dugualia Bay Heights - 6	5	\$1,616,735	\$1,534,694	-5.07%
6515-07	Dugualia Bay Heights - 7	11	\$5,309,863	\$4,830,290	-9.03%
6515-08	Dugualia Bay Heights - 8	19	\$7,192,801	\$6,727,185	-6.47%
6515-09	Dugualia Bay Heights - 9	47	\$14,019,000	\$13,812,591	-1.47%
7020	Goldie Road Acres	2	\$250,916	\$193,454	-22.90%
7355-02	Ledgewood Beach - 2	4	\$1,490,031	\$384,139	-74.22%
7355-03	Ledgewood Beach - 3	45	\$14,978,744	\$14,807,483	-1.14%
7575	Northgate Terrace	243	\$33,824,464	\$27,214,053	-19.54%
7585	Oak Harbor	26	\$6,451,397	\$6,089,457	-5.61%
7755	Polnell Shores	95	\$27,840,559	\$26,404,337	-5.16%
8250	Sunrise Beach	5	\$3,180,582	\$2,538,763	-20.18%
8255	Sunrise Hills - 1	30	\$9,898,490	\$8,616,936	-12.95%
8255-02	Sunrise Hills - 2	24	\$7,985,274	\$7,044,873	-11.78%
8255-03	Sunrise Hills - 3	30	\$12,535,972	\$12,118,785	-3.33%
8542	Frostad Road - Assessor's P	11	\$1,862,646	\$1,985,336	6.59%
Total			\$267,248,135	\$249,489,845	-6.64%

A reasonable estimate of lost property value almost certainly will rise in the coming years, for four reasons:

- First, many home buyers are still unaware of the severity of the problem of jet noise when they move in. Real estate brokers have a strong incentive to understate the problem, and the legal requirements for disclosure are loose. In other words, the market has yet to fully absorb information about the problem. As it does, better information will likely depress prices further.
- Second, assessed valuation is almost always a lagging indicator of the real property value by several years. The financial crisis that hit housing prices across America especially hard technically struck in 2008. But as Chart 13 shows, the impacts on assessed valuation across the state did not register until 2010-12 (depending on the county).
- Third, as the *DEIS* explains, the number of Growler tests and their flight footprint will expand over the next five years. This will increase the number of properties adversely affected.
- Fourth, the Navy will issue an Air Installations Compatible Use Zones Report (AICUZ) after the final *Environmental Impact Statement* is issued to define an “Accident Potential Zone” (APZ) that would prohibit further development. This could further reduce property values by diminishing landowners’ ability to build houses and by increasing insurance rates.

### (3) Other Major External Costs

As noted at the outset, this study is limited to those costs that are visible and measurable. There are, however, several costs that could dwarf the costs mentioned so far, but are, for the moment at least, speculative. Three in particular are worth mentioning.

First is the potential cost of a catastrophic accident. The Navy’s policy is generally not to conduct training flights in populated areas like Whidbey Island, because the area underneath is an “Accident Potential Zone” (APZ). As noted, the Navy may recommend a prohibition on *additional* development on these properties after the EIS is finalized. But even with the existing level of development, the dangers of a major accident are potentially huge. A plane accidentally crashing into a public school, a hospital, or a fuel storage facility, for example, could conceivably lead to hundreds of deaths and hundreds of millions of dollars of liability. The Growlers, moreover, have a significant rate of accidents and mishaps that make these worries not just abstract.<sup>40</sup>

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<sup>40</sup> Robert Wilbur, Maryon Attwood, Neal Sims, and Mark Harmon, “Outlying Field Coupeville: Its Time Has Passed,” monograph, October 2016, pp. 40-44, 79-84. The authors make the points that military jets are 67 times more likely to crash than passenger jets, and that the F-18 frame (which the Growler uses) has had an accident rate 5.5 times greater than the predecessor Prowler. The report contains appendices with comprehensive lists of worrisome Prowler and Growler mishaps.

Second is the potential cost of toxic releases. The Navy has recently found a number of wells mid-island with water that may be contaminated by a very toxic class of chemicals called PFASs that are used in its fire-retardant foams.<sup>41</sup> A scientific paper on the subject in 2016 concludes that “PFAS contamination is poorly reversible and...*the societal costs of cleanup will be high.*”<sup>42</sup> In July 2015, after modest levels of PFAS were found in public drinking water just north of Philadelphia, the Navy agreed to pay \$8.8 million for cleanup of wells in the Horsham Water and Sewer Authority and \$4 million for cleanup of the neighboring Warmminster Municipal Authority.<sup>43</sup> In October 2015, a jury awarded a woman suing DuPont for kidney cancer caused by PFAS contamination \$1.6 million, and now the law firm of Weitz & Luxenberg is seeking a multi-million dollar settlement for PFAS damages caused by the Willow Grove Naval Air Station.<sup>44</sup> The New York State Department of Environmental Conservation and Department of Health recently sent a letter to the federal Environmental Protection Agency seeking reimbursement for the roughly \$25 million the state has already spend cleaning up PFAS contamination in drinking water—and for another \$50 million of anticipated future costs.<sup>45</sup>

Third is the potential cost to the local tourism economy. Tourists are directly spending \$180 million per year in Island County—a significant part of the overall economy.<sup>46</sup> There is already anecdotal evidence that campers are demanding refunds when they experience a night of jet noise.<sup>47</sup> Should word of the noise problems spread, not to mention more reports of PFAS contamination of local water supplies, this could ultimately shave tens of millions of dollars of activity from the Whidbey Island economy. Unfortunately for Island County, campers, hikers, and nature lovers can find many quiet and clean-water alternatives elsewhere in the Pacific Northwest.

Risk has long been understood to equal the probability of an adverse event multiplied by the probability of its occurrence. All three of the costs mentioned here are potentially enormous, but the probabilities are unclear. The Navy and public officials alike must

<sup>41</sup> Jessie Stensland, *Whidbey News-Times*, 29 October 2016. See also, Mitch Pittman, “Navy Testing Wells on Whidbey Island for Possible Contamination,” 11 November 2016. <http://komonews.com/news/local/navy-testing-wells-on-whidbey-island-for-possible-contamination>

<sup>42</sup> Emphasis added. IT Cousins et al., “The Precautionary Principle and Chemicals Management: The Example of Perfluoroalkyl Acids in the Groundwater,” *Environ. Int.*, September 2016, pp. 331-40.

<sup>43</sup> Sharon Lerner, “Poisoning the Well: Toxic Firefighting Foam has Contaminated U.S. Drinking Water,” *The Intercept*, 16 December 2015. (*The Intercept* is an online, investigative-journalism site.)

<sup>44</sup> Associated Press, “Residents Near Former Willow Grove Base Sue Over Contaminated Drinking Water,” *The Morning Call*, 16 September 2016.

<sup>45</sup> Michael Goot, “State Asks Feds for PFOA Cleanup Reimbursement,” *The Post Star*, 30 August 2016.

<sup>46</sup> Dean Runyan Associates, Washington State County Travel Impacts & Visitor Volume, 1991-2014, Prepared for the Washington Tourism Alliance, April 2015, p. 57.

<sup>47</sup> Hal Bernton, “Jets, Helicopters, Rockets: Military Plans More Uses of Northwest Public Lands,” *Seattle Times*, 4 April 2016.

assess the risks of these scenarios carefully, and monitor for early warning signs that they might be coming to fruition.

#### IV. Conclusions and Recommendations

Whatever the benefits of the Naval Air Station Whidbey Island, its activities are clearly imposing significant costs on Island County. This study underscores that these costs include:

- The non-collection of \$5.7 million in sales and property taxes each year, which at a minimum makes it more difficult for public agencies to provide needed infrastructure and services to everyone living in Island County;
- The opportunity costs of embracing a military-dependent economy, which, if the military jobs were converted to civilian jobs, could mean 3,909 new jobs and \$142 million more in state and local taxes;
- At least \$2.8 million in costs per year in the form of adverse health effects and sleep disturbances; and
- The loss (between 2010 and 2015) of \$9.8 million in private property value.

Chart 16 combines the public sector costs and external costs over twelve years, beginning in 2010 (when the Growler program was first introduced) and continuing until 2021 (which the *DEIS* chose as a reasonable cutoff date for estimating the impacts of the Growler program). Because some of these numbers are annual while others are one-time costs, and because all of them will change if the Growler program grows as planned, the following adjustments have been made:

- Earlier we noted that Island County EDC foresees the total population of active duty personnel and their dependents growing by 22% between 2015 and 2019. We therefore increase the anticipated tax losses by 22% evenly between 2015 and 2019, and then hold them constant. We also assume that the baseline calculation of \$5.7 million of tax loss remains constant before the spike of personnel growth.
- The health effects are annual and will grow if the Growler program expands. As a conservatism, the *DEIS* alternative with the lowest projected additional health costs (\$3.3 million per year) is assumed.
- The property value losses between 2010 and 2016 are spread out evenly at \$1.4 million per year. A reasonable assumption is that if the Growler sound footprint of >65 dB expands from about 11,000 to 13,000 residents (an 18% increase), properties overall will experience 18% more damage—from \$9.8 million to \$11.6 million. Spread over 2017 to 2021, the additional annual damage (\$1.8 million divided over five years) is \$360,000 per year.

*As shown in Chart 16, the total adverse economic impact over this period is nearly \$122 million.*

Chart 16  
Total Public Costs of Naval Operations 2010-2021

	Health Effects	Property Losses	Tax Losses	Annual Losses
2010	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2011	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2012	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2013	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2014	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2015	\$2,800,000	\$1,400,000	\$5,700,000	\$9,900,000
2016	\$2,800,000	\$1,400,000	\$6,025,000	\$10,225,000
2017	\$3,300,000	\$360,000	\$6,350,000	\$10,010,000
2018	\$3,300,000	\$360,000	\$6,675,000	\$10,335,000
2019	\$3,300,000	\$360,000	\$7,000,000	\$10,660,000
2020	\$3,300,000	\$360,000	\$7,000,000	\$10,660,000
2021	\$3,300,000	\$360,000	\$7,000,000	\$10,660,000
	\$36,100,000	\$11,600,000	\$74,250,000	\$121,950,000

To reiterate a point made at the outset of this study, the identification of costs should not be interpreted to mean that the appropriate recourse is to shut down naval operations. Rather, *the goal for decision makers should be to shift total costs of operations from the community to the Navy, and help the Navy maximize benefits and minimize costs over the long term.* Hence the following five recommendations:

#### (1) Begin Conversion Planning

Ever since the Cold War ended in the 1990s, hundreds of military-dependent communities have learned that assuming a local military base will remain open forever is unwise. In a rapidly changing world like today's, foreign policies and military commitments are in constant flux. While most observers believe that the Whidbey Naval Air Station will likely remain relevant in the short-term, Island County officials should start framing a plan for what happens if or when the military downscales or leaves.

The rapid advancement of technology may already be making the principal program of the Naval Air Station obsolete. The Growler's mission of jamming communications soon may be performed by unmanned aerial vehicles (UAVs) at a small fraction of the cost. In July 2016, the Navy launched a "swarm of drones" to demonstrate autonomous drone-to-drone communication and cooperation. Compared to the \$8 million per year<sup>48</sup> just to operate an \$81 million Growler, the Office of Naval Research recently demonstrated the comparable efficacy of 30 Raytheon-built Coyote UAVs for \$15,000 per unit. Vice Admiral Rick Breckenridge, Deputy Commander of U.S. Fleet Forces Command, said,

<sup>48</sup> Selected Acquisition Report, RCS: DD-A&T (Q&A)823-378, 18 March 2015, gives Average Annual Operating Cost Per Aircraft (EA-18G) of \$8.123 million.

"This is going to change some of the calculus of how we operate." The swarm can conduct such tasks as intelligence-gathering or jamming communications that might otherwise be accomplished with manned aircraft.<sup>49</sup> If UAV costs drop, as expected, to \$10,000 in large-scale production, 800 UAVs could be purchased for less than the cost of just operating a single Growler for a year. These economic realities place the future of the Growler program and the current mission of the Naval Air Station in serious question.<sup>50</sup>

Whatever the Navy decides to do, Island County urgently needs to focus its economic development on diversification. The current economy is remarkably brittle and leaky. And as the analysis here underscores, every new civilian job will generate significantly greater economic-development benefits than retention of an existing military job. Economic development priorities needs to be reset accordingly.

### **(2) Demand a PILOT Agreement with the Navy**

To address current tax inequities, state and local decision-makers should negotiate an agreement for "payment in lieu of taxes." PILOT programs are common where federal agencies impose burdens on state and local authorities, and this study suggests that an appropriate PILOT right now just with Island County should be at least \$5.7 million per year. If compensation for victims of Growler noise is included, this amount should be closer to \$9 million per year. Inclusion of lost property value would raise the further. One priority for this compensation should be the Oak Harbor school district, which now must expand to accommodate federally connected students. Currently, federal agencies give Island County a PILOT of about \$2,000 per year, of which the Navy currently contributes \$155.

### **(3) Increase Local Contracting by the Navy**

One way the Navy has sought to be a good neighbor with other jurisdictions is by increasing the level of local contracting. There is already some local contracting, as outlined in the 2013 report by the Island County EDC, but it can and should be expanded substantially. Every dollar that the Navy puts back into the Island County economy creates more income, wealth, and jobs. Moreover, it has the further benefit of diversifying the local economy, which supports the needed strategy of locally-owned import substitution (LOIS). By developing businesses that can thrive locally by supplying goods and services both to the Navy and the local civilian customers, economic planners can create a more robust local economy.

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<sup>49</sup> Hope Hodge Seck, "Navy to Demo Swarming Drones at Sea in July," *Military.com Daily News*, 24 June 2016.

<sup>50</sup> Another "game changer" could be the "MAGIC CARPET" software, which will greatly reduce the burdens on and training requirements for Growler pilots. See, e.g., Meghann Myers, "Navy Fighters Are One Upgrade Away from Changing Carrier Aviation Forever," *Navy Times*, 3 July 2016.



#### (4) Reduce the Economic Cost of the Growler Program

This study suggests that the biggest external costs from the Naval Whidbey Air Station come not from Naval operations generally but from one program. The problem is obvious: *The Navy is training pilots to fly an exceptionally loud plane over a populated area and instead should do so over a less populated area.*

In the *DEIS* and elsewhere, the Navy has dismissed a variety of alternatives for its current training program. These include:

- Making technical modifications to the Growler engines to lower their noise (the Navy assessment is that this is technologically infeasible);
- Changing flight paths to reduce exposure to the population (the Navy claims this will lessen the value of the landing practices); or
- Moving the FCLP training program to a more appropriate nearby, less densely populated location (construction of an FCLP runway on one of several nearby training ranges is an alternative the Navy has not fully considered).

Ultimately, a key factor governing some of the Navy's positions is cost. By assuming public costs near zero, the Navy easily can dismiss *any* alternatives. With this study, state and local decision-makers now know this is untrue. It's their role to prevail upon the Navy to revisit and reweigh the very real costs to the community of the status quo against costs of the alternatives.

#### (5) Compensate Victims of the Growler Noise

Short of changing or moving the Growler program, public decision-makers also might seek to internalize some of these costs by asking the Navy to compensate financially residents who have experienced adverse health effects and diminished property values. Settlements between federal agencies creating noise and property owners adversely effected by the noise are common.<sup>51</sup>

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While the analogy is imperfect, it's worth concluding by noting the disturbing similarity to the recent contamination of water systems in Flint, Michigan. There, public officials steadily dismissed complaints from thousands of residents about discolored and foul tasting water, until the facts became undeniable. Now, many of these same officials are being carted off to jail for dereliction of their duties. Here, thousands of residents under the flight paths of Navy Growler jets—in Island, San Juan, Skagit and Jefferson Counties—are complaining about toxic levels of noise that making healthy living, sleeping, and learning all but impossible. Public officials who ignore these complaints do so not only at the public's peril but at their own.

<sup>51</sup> See, e.g., <http://www.nonoise.org/news/law.htm> .

## Appendix I

### The Case for LOIS Economic Development

A growing body of evidence suggests that the promising approach to economic development is to focus, laser-like, on locally owned, import-substituting (LOIS) businesses. Local ownership means that working control of a company is held within a small geographic area. Import-substituting means that the company is focused first and foremost (though not exclusively) on cost-effective production for local markets. While the vast majority of LOIS businesses are small, some actually grow to be quite large and powerful.

Numerous studies in recent years suggest that local ownership –the LO in LOIS—enables businesses to contribute more to economic development than do most global businesses attracted through expensive incentive schemes. Local ownership matters in at least five ways:<sup>52</sup>

- *Higher Multipliers* – Locally owned businesses generally contribute more to the “economic multiplier.” More than two dozen studies over the past decade have compared the economic impacts of locally owned businesses with their nonlocal equivalents, and they consistently show that local businesses generate two to four times the multiplier benefits.<sup>53</sup> That means that every dollar that moves from a nonlocal to a local business in a community generates two to four times the income boost, two to four times the jobs, two to four times the local taxes, and two to four times the charitable contributions.
- *More Reliable* – While absentee-owned businesses increasingly consider moving to Mexico, China, or low-wage U.S. states, with only secondary concern for throwing the community into an economic tailspin, businesses anchored locally produce wealth more reliably for many years, often for many generations. This means that economic-development investments in local business have greater payoffs.
- *Higher Standards* – Because local businesses tend to stay put, a community with primarily local businesses can raise labor and environmental standards with confidence that its businesses will adapt rather than flee.

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<sup>52</sup> Extensive documentation of these points can be found in Michael H. Shuman, *The Small-Mart Revolution: How Local Businesses Are Beating the Global Competition* (San Francisco: Berrett-Koehler, 2006), Chapter 2.

<sup>53</sup> See, for example, Michael H. Shuman, *Local Dollars, Local Sense: How to Shift Your Money from Wall Street to Main Street and Achieve Real Prosperity* (White River Junction, VT: Chelsea Green, 2012), 17–25. Also see Stacy Mitchell, *The Big Box Swindle: The True Cost of Mega-Retailers and the Fight for America's Independent Businesses* (Boston: Beacon Press, 2006).

- *More Dynamic* – A community made up of smaller, locally owned businesses is better equipped to promote smart growth and walkable communities, draw tourists through unique stores and attractions, retain talented young people who seek entrepreneurial opportunities and a distinct sense of place, and reduce the noise, fumes, and risks of traffic.
- *Better Social Impacts* – Compared to economies dependent on absentee-owned enterprises, local-business economies tend to have more social stability, lower levels of welfare, and greater political participation.

The case for promoting local ownership has been deepened by empirical evidence that regions with higher densities of local business have superior economic performance. For example:

- A 2010 study appeared in the *Harvard Business Review* under the headline “More Small Firms Means More Jobs.”<sup>54</sup> The authors wrote, “Our research shows that regional economic growth is highly correlated with the presence of many small, entrepreneurial employers—not a few big ones.” The authors further argued that the major preoccupation of economic developers – how to attract global companies – is fundamentally wrong-headed. “Politicians enjoy announcing a big company’s arrival because people tend to think that will mean lots of job openings. But in a rapidly evolving economy, politicians are all too likely to guess wrong about which industries are worth attracting. What’s more, large corporations often generate little employment growth even if they are doing well.”
- Another study published shortly thereafter in the *Economic Development Quarterly*, a journal long supportive of business attraction practices, similarly finds: “Economic growth models that control for other relevant factors reveal a positive relationship between density of locally owned firms and per capita income growth, but only for small (10-99 employees) firms, whereas the density of large (more than 500 workers) firms not owned locally has a negative effect.”<sup>55</sup>
- A paper published in 2013 by the Federal Reserve in Atlanta, which performed a regression analysis of counties across the United States, found statistically significant “evidence that local entrepreneurship matters for local economic performance . . . [T]he percent of employment provided by resident, or locally-owned, business establishments has a significant positive effect on

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<sup>54</sup> Edward L. Glaeser and William R. Kerr, “The Secret to Job Growth: Think Small,” *Harvard Business Review*, July-August 2010.

<sup>55</sup> David A. Fleming and Stephan J. Goetz, “Does Local Firm Ownership Matter?,” *Economic Development Quarterly*, 2011.

county income and employment growth and a significant and negative effect on poverty....<sup>56</sup>

The second part of LOIS, the IS, stands for import substitution—the consumption of goods and services produced in close proximity to the producer. Every time a community imports a good or service that it might have cost-effectively produced for itself, it “leaks” dollars and loses the critically important multipliers associated with them. Moreover, import dependencies – on petroleum, for example –subject a community to risks of price hikes and disruptions far beyond local control. They also deny a community a diversified base of businesses and skills needed to take advantage of unknown (and unknowable) future opportunities in the global economy.

Three examples help to illustrate the potential benefits of import substitution:

- Twenty years ago, Güssing was a dying rural community of 4,000 in Austria.<sup>57</sup> Its old industries of logging and farming had been demolished by global competition. Many of today's economic developers would have given up and encouraged the residents to move elsewhere. But the mayor of Güssing decided that the key to prosperity was to plug energy "leaks." He built a small district heating system, fueled with local wood. The local money saved by importing less energy was then reinvested in expanding the district heating system and in new energy businesses. Since then, 50 new firms have opened, creating 1,000 new jobs. And most remarkably, the town estimates that this economic expansion actually will result in a *reduction* of its carbon footprint by 90 percent.
- In autumn of 2008 Marian Burros of the *New York Times* wrote a piece about how the 3000-person community of Hardwick, Vermont, prospered by creating a new "economic cluster" around local food.<sup>58</sup> Cutting-edge restaurants, artisan cheese makers, and organic orchardists were just some of the new businesses that had added an estimated 75-100 jobs to the area at a time when most rural communities were losing jobs. A new Vermont Food Venture Center also was put in place to continue the creation of local food enterprises.
- Even a single, visionary business can lead a community-wide effort at import substitution. Take Zingerman's in Ann Arbor, Michigan. On its first day of business in a college town known globally more for its radicalism than for its food, Zingerman's Deli sold about \$100 worth of sandwiches. That was 1982.

<sup>56</sup> Anil Rupesingha, "Locally Owned: Do Local Business Ownership and Size Matter for Local Economic Well-Being?," monograph, August 2013.

<sup>57</sup> Jonathan Tirone, "'Dead-End' Austrian Town Blossoms with Green Energy," *International Herald-Tribune*, 28 August 2007.

<sup>58</sup> Marian Burros, "Uniting Around Food to Save an Ailing Town," *New York Times*, 7 October 2008.

It has since grown into a community of ten businesses, each independent but linked through overlapping partnerships that collectively employ 650 people and achieve annual sales of over \$50 million. Over that period the proprietors conscientiously built a food cluster from scratch. They carefully assessed the items going into the deli – bread, coffee, cheeses – and captured profitable opportunities for creating a bakery, a coffee roaster, and a creamery. They looked at the products being sold at the deli – fabulous coffee cakes and high-quality meats – and built new, value-adding businesses with these products, including a mail-order company and a restaurant called the Roadhouse.

These three case examples suggest the importance of a region looking past *existing* clusters of export-oriented business. A smarter approach is to create new clusters based, initially at least, on local demand.

Many economic developers believe that the only way an economy can grow is by exporting, because, the argument goes, this is the only way to bring new money into the economy. This in turn leads to a focus on larger, nonlocal, “trading sector” businesses. The argument is incorrect, however, because what matters is not exports per se but the local trade balance. Greater exports can improve the trade balance, but so can fewer imports.

As the great regional economist Jane Jacobs argued, import substitution is arguably more important than export-led development, because it facilitates long-term growth through diversification and long-term stability through self-reliance. Moreover, it tends to be easier to grow local businesses around local markets (which are well understood) than global markets (which are more unpredictable). Most importantly, Jacobs argued, it turns out that the best way of growing exporting businesses is to nurture them first through local markets, and then they naturally expand into regional, national, and global markets.

Implementation of LOIS requires creating a strong entrepreneurship ecosystem. Doing so requires answering key questions around six key concepts, each beginning with the letter P:

- *Planning* – How can significant dollar “leaks” caused by imports be identified, and which leaks can best be plugged with competitive LOIS enterprises?
- *People* – How can a new generation of LOIS entrepreneurs be nurtured and trained?
- *Partners* – How can existing LOIS businesses work together (through, for example, joint purchasing or marketing cooperatives) to improve their competitiveness?
- *Purse* – How can local savings, whether in banks or pension funds, be tapped to support new or expanded LOIS businesses?

- *Purchasing* – How can LOIS businesses achieve greater success through “Local First” purchasing by consumers, businesses, and government agencies?
- *Public Policymaking* – How can biases that currently exist against LOIS be eliminated so that local businesses can compete?

**Appendix II**  
**The Degree of Self-Reliance on Island County**  
**(In IMPLAN's Private Enterprise Sectors)**

IMPLAN Sector	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
<b>Farming, Ranching, and Forestry</b>					
Oilseed farming	\$0	\$2,844,960	\$2,844,960		0%
Grain farming	\$1,889	\$3,865,571	\$3,867,461		0%
Vegetable and melon farming	\$905,192	\$4,781,724	\$5,686,916		16%
Fruit farming	\$132,560	\$16,148,628	\$16,281,188		1%
Tree nut farming	\$3,300	\$1,470,505	\$1,473,806		0%
Greenhouse, nursery, and floriculture production	\$143,923	\$3,501,023	\$3,644,946		4%
Tobacco farming	\$0	\$296	\$296		0%
Cotton farming	\$0	\$481,695	\$481,695		0%
Sugarcane and sugar beet farming	\$0	\$389,594	\$389,594		0%
All other crop farming	\$24,381	\$598,352	\$622,733		4%
Beef cattle ranching and farming, including feedlots	\$103,513	\$575,303	\$678,815		15%
Dairy cattle and milk production	\$35,590	\$1,453,691	\$1,489,280		2%
Poultry and egg production	\$12,977	\$2,429,840	\$2,442,817		1%
Animal production, except cattle and poultry and eggs	\$1,239,512	\$1,110,677	\$2,350,189		53%
Forestry, forest products, and timber tract production	\$4	\$123,128	\$123,132		0%
Commercial logging	\$0	\$488,373	\$488,373		0%
Commercial fishing	\$20,507	\$2,211,403	\$2,231,910		1%
Commercial hunting and trapping	\$0	\$382,430	\$382,430		0%
Support activities for agriculture and forestry	\$214,905	\$485,077	\$699,982		31%

IMPLAN Sector	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
<b>Mining, Oil, and Gas</b>					
Extraction of natural gas and crude petroleum	\$19,883	\$14,220,255	\$14,240,138		0%
Extraction of natural gas liquids	\$0	\$0	\$0		0%
Coal mining	\$0	\$999,005	\$999,005		0%
Iron ore mining	\$0	\$72,884	\$72,884		0%
Gold ore mining	\$0	\$509,837	\$509,837		0%
Silver ore mining	\$0	\$29,364	\$29,364		0%
Lead and zinc ore mining	\$0	\$160,547	\$160,547		0%
Copper ore mining	\$0	\$617,202	\$617,202		0%
Uranium-radium-vanadium ore mining	\$0	\$100,622	\$100,622		0%
Other metal ore mining	\$0	\$350,674	\$350,674		0%
Stone mining and quarrying	\$10,237	\$166,930	\$177,167		6%
Sand and gravel mining	\$137,684	\$206,610	\$344,294		40%
Other clay, ceramic, refractory minerals mining	\$0	\$50,718	\$50,718		0%
Potash, soda, and borate mineral mining	\$0	\$213,023	\$213,023		0%
Phosphate rock mining	\$0	\$195,443	\$195,443		0%
Other chemical and fertilizer mineral mining	\$0	\$76,872	\$76,872		0%
Other nonmetallic minerals	\$0	\$174,919	\$174,919		0%
Drilling oil and gas wells	\$1,064,087	\$14,267,825	\$15,331,912		7%
Support activities for oil and gas operations	\$15,757	\$4,224,235	\$4,239,991		0%
Metal mining services	\$15,050	\$241	\$15,291		98%
Other nonmetallic minerals services	\$0	\$201,215	\$201,215		0%

IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
Energy and Utilities	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Electric power generation - Hydroelectric	\$0	\$4,281,489	\$4,281,489	0%
Electric power generation - Fossil fuel	\$0	\$0	\$0	0%
Electric power generation - Nuclear	\$0	\$0	\$0	0%
Electric power generation - Solar	\$0	\$0	\$0	0%
Electric power generation - Wind	\$0	\$0	\$0	0%
Electric power generation - Geothermal	\$0	\$0	\$0	0%
Electric power generation - Biomass	\$0	\$0	\$0	0%
Electric power generation - All other	\$0	\$0	\$0	0%
Electric power transmission and distribution	\$6,861,505	\$71,119,092	\$77,980,597	9%
Natural gas distribution	\$0	\$12,167,153	\$12,167,153	0%
Water, sewage and other systems	\$6,859,501	\$484,111	\$7,343,612	93%

IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
Construction	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Construction of new health care structures	\$8,035,455	\$617,813	\$8,653,267	93%
Construction of new manufacturing structures	\$6,188,086	\$48,377	\$6,236,462	99%
Construction of new power and communication structures	\$14,908,030	\$92,823	\$15,000,853	99%
Construction of new educational and vocational structures	\$13,399,953	\$173,981	\$13,573,934	99%
Construction of new highways and streets	\$14,673,882	\$72,150	\$14,746,032	100%
Construction of new commercial structures, including farms	\$10,158,979	\$462,315	\$10,621,294	96%
Construction of other new nonresidential structures	\$33,776,241	\$1,395,208	\$35,171,450	96%
Construction of new single-family residential structures	25,387,175	4,557	\$25,391,732	100%
Construction of new multifamily residential structures	6,196,633	2,605	\$6,199,238	100%
Construction of other new residential structures	71,259,102	45,972	\$71,305,074	100%
Maintenance and repair construction of nonres. structures	7,116,305	15,302,826	\$22,419,130	32%
Maintenance and repair construction of res. structures	790,979	14,765,275	\$15,556,254	5%
Maintenance and repair construction of infrastructure	9,294,402	15,677,637	\$24,972,039	37%



IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
Manufacturing (Food, Beverages, and Tobacco)	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Dog and cat food manufacturing	0	8,601,316	\$8,601,316	0%
Other animal food manufacturing	0	4,571,757	\$4,571,757	0%
Flour milling	283	1,959,230	\$1,959,513	0%
Rice milling	449	501,584	\$502,033	0%
Malt manufacturing	0	248,936	\$248,936	0%
Wet corn milling	0	1,727,689	\$1,727,689	0%
Soybean and other oilseed processing	0	3,673,733	\$3,673,733	0%
Fats and oils refining and blending	7	1,922,291	\$1,922,297	0%
Breakfast cereal manufacturing	602	3,176,922	\$3,177,525	0%
Beet sugar manufacturing	0	1,001,165	\$1,001,165	0%
Sugar cane mills and refining	0	1,247,940	\$1,247,940	0%
Nonchocolate confectionery manufacturing	1	2,517,522	\$2,517,522	0%
Chocolate and confectionery manufacturing from cacao bean	1,625	807,809	\$809,433	0%
Confectionery manufacturing from purchased chocolate	13	3,636,929	\$3,636,942	0%
Frozen fruits, juices and vegetables manufacturing	25	3,159,576	\$3,159,601	0%
Frozen specialties manufacturing	2,585	5,385,135	\$5,387,720	0%
Canned fruits and vegetables manufacturing	74	5,040,393	\$5,040,467	0%
Canned specialties	1,809	6,261,092	\$6,262,901	0%
Dehydrated food products manufacturing	145	890,551	\$890,697	0%
Fluid milk manufacturing	130,724	8,769,581	\$8,900,305	1%
Creamery butter manufacturing	36,631	615,919	\$652,549	6%
Cheese manufacturing	6,310	7,339,967	\$7,346,277	0%
Dry, condensed, and evaporated dairy product manufacturing	31,065	3,993,089	\$4,024,154	1%
Ice cream and frozen dessert manufacturing	36,657	1,765,736	\$1,802,392	2%
Animal, except poultry, slaughtering	1,355	13,043,548	\$13,044,904	0%
Meat processed from carcasses	1,794	15,230,699	\$15,232,493	0%
Rendering and meat byproduct processing	7	899,427	\$899,434	0%
Poultry processing	9	13,432,893	\$13,432,902	0%
Seafood product preparation and packaging	19	3,149,973	\$3,149,992	0%
Bread and bakery product, except frozen, manufacturing	133,105	13,311,262	\$13,444,367	1%
Frozen cakes and other pastries manufacturing	2,681	1,199,723	\$1,202,404	0%
Cookie and cracker manufacturing	3,225	3,270,984	\$3,274,209	0%
Dry pasta, mixes, and dough manufacturing	1,433	3,343,659	\$3,345,091	0%
Tortilla manufacturing	111	950,688	\$950,799	0%
Roasted nuts and peanut butter manufacturing	195	2,286,601	\$2,286,796	0%
Other snack food manufacturing	1,436	7,727,701	\$7,729,137	0%
Coffee and tea manufacturing	108,432	3,326,634	\$3,435,065	3%
Flavoring syrup and concentrate manufacturing	215	1,539,051	\$1,539,266	0%
Mayonnaise, dressing, and sauce manufacturing	279	2,068,032	\$2,068,310	0%
Spice and extract manufacturing	285	2,973,300	\$2,973,587	0%
All other food manufacturing	14,449	6,719,673	\$6,734,122	0%
Bottled and canned soft drinks & water	47,648	17,969,794	\$18,017,442	0%
Manufactured ice	0	338,485	\$338,485	0%
Breweries	0	10,335,949	\$10,335,949	0%
Wineries	62,704	5,142,380	\$5,205,084	1%
Distilleries	953	4,473,320	\$4,474,273	0%
Tobacco product manufacturing	0	12,237,155	\$12,237,155	0%

IMPLAN Sector Manufacturing (Fibers, Textiles, and Clothing)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Fiber, yarn, and thread mills	7,586	676,036	\$683,622		1%
Broadwoven fabric mills	5,035	838,620	\$843,655		1%
Narrow fabric mills and schiffli machine embroidery	0	202,314	\$202,314		0%
Nonwoven fabric mills	1,757	511,754	\$513,511		0%
Knit fabric mills	46	124,696	\$124,742		0%
Textile and fabric finishing mills	70	1,333,446	\$1,333,516		0%
Fabric coating mills	167	254,314	\$254,481		0%
Carpet and rug mills	2,058	3,437,346	\$3,439,404		0%
Curtain and linen mills	1,628	4,489,059	\$4,490,687		0%
Textile bag and canvas mills	1,052	1,475,025	\$1,476,077		0%
Rops, cordage, twine, tire cord and lire fabric mills	269	1,224,592	\$1,224,861		0%
Other textile product mills	3,152	1,784,675	\$1,787,826		0%
Hosiery and sock mills	0	1,121,200	\$1,121,200		0%
Other apparel knitting mills	6	0	\$6		100%
Cut and sew apparel contractors	0	821,397	\$821,397		0%
Mens and boys cut and sew apparel manufacturing	102	6,567,969	\$6,968,071		0%
Womens and girls cut and sew apparel manufacturing	16	12,843,561	\$12,843,577		0%
Other cut and sew apparel manufacturing	0	1,255,611	\$1,255,611		0%
Apparel accessories and other apparel manufacturing	56	2,246,205	\$2,246,261		0%
Leather and hide tanning and finishing	3	176,111	\$176,113		0%
Footwear manufacturing	972	5,140,387	\$5,141,359		0%
Other leather and allied product manufacturing	71	3,578,316	\$3,578,387		0%

IMPLAN Sector Manufacturing (Wood and Wood Products)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Sawmills	0	3,544,511	\$3,544,511		0%
Wood preservation	0	675,248	\$675,248		0%
Veneer and plywood manufacturing	0	1,578,562	\$1,578,562		0%
Engineered wood member and truss manufacturing	227	1,071,322	\$1,071,549		0%
Reconstituted wood product manufacturing	83	1,203,203	\$1,203,286		0%
Wood windows and door manufacturing	2	2,235,190	\$2,235,191		0%
Cut stock, resawing lumber, and planing	0	302,637	\$302,637		0%
Other millwork, including flooring	0	1,867,941	\$1,867,941		0%
Wood container and pallet manufacturing	0	1,527,662	\$1,527,662		0%
Manufactured home (mobile home) manufacturing	7,233	675,115	\$682,347		1%
Prefabricated wood building manufacturing	43,375	38,342	\$81,717		53%
All other miscellaneous wood product manufacturing	12	1,274,779	\$1,274,791		0%

IMPLAN Sector Manufacturing (Paper, Paper Products, and Printing)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Pulp mills	0	437,498	\$437,498		0%
Paper mills	6	9,890,651	\$9,890,657		0%
Paperboard mills	0	4,301,183	\$4,301,183		0%
Paperboard container manufacturing	5	6,561,021	\$6,561,026		0%
Paper bag and coated and treated paper manufacturing	471	3,121,350	\$3,121,821		0%
Stationery product manufacturing	360,134	729,427	\$1,089,561		33%
Sanitary paper product manufacturing	0	3,308,152	\$3,308,152		0%
All other converted paper product manufacturing	47	729,585	\$729,632		0%
Printing	72,562	8,310,729	\$8,383,291		1%
Support activities for printing	657	296,240	\$296,897		0%

IMPLAN Sector Manufacturing (Petroleum-based Products)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Petroleum refineries	316,234	157,056,312	\$157,372,547		0%
Asphalt paving mixture and block manufacturing	8,936	2,533,578	\$2,542,515		0%
Asphalt shingles and coating materials manufacturing	92	2,277,115	\$2,277,207		0%
Petroleum lubricating oil and grease manufacturing	5,219	3,121,366	\$3,126,585		0%
All other petroleum and coal products manufacturing	666	886,606	\$887,272		0%
Petrochemical manufacturing	2,005	8,680,355	\$8,682,360		0%
Industrial gas manufacturing	11	1,442,716	\$1,442,726		0%
Synthetic dye and pigment manufacturing	32	730,880	\$730,912		0%
Other basic inorganic chemical manufacturing	998	3,965,794	\$3,966,792		0%
Other basic organic chemical manufacturing	43	7,208,679	\$7,208,722		0%
Plastics material and resin manufacturing	44	2,855,433	\$2,855,477		0%
Synthetic rubber manufacturing	98	614,304	\$614,401		0%
Artificial and synthetic fibers and filaments manufacturing	0	3,863,583	\$3,863,583		0%
Nitrogenous fertilizer manufacturing	0	2,366,662	\$2,366,662		0%
Phosphatic fertilizer manufacturing	74	2,302,902	\$2,302,976		0%
Fertilizer mixing	5	0	\$5		100%
Pesticide and other agricultural chemical manufacturing	0	2,847,492	\$2,847,492		0%
Medicinal and botanical manufacturing	18	206,787	\$206,805		0%
Pharmaceutical preparation manufacturing	1,051	80,892,152	\$80,893,204		0%
In-vitro diagnostic substance manufacturing	0	102,599	\$102,599		0%
Biological product (except diagnostic) manufacturing	54	1,478,831	\$1,478,885		0%
Paint and coating manufacturing	0	3,206,412	\$3,206,412		0%
Adhesive manufacturing	0	1,610,061	\$1,610,061		0%
Soap and other detergent manufacturing	39,372	5,455,228	\$5,494,600		1%
Polish and other sanitation good manufacturing	4,609	3,750,259	\$3,754,868		0%
Surface active agent manufacturing	191	1,133,024	\$1,133,215		0%
Toilet preparation manufacturing	1,166	11,499,736	\$11,500,902		0%
Printing ink manufacturing	0	583,939	\$583,939		0%
Explosives manufacturing	0	261,709	\$261,709		0%
Custom compounding of purchased resins	22	1,390,086	\$1,390,108		0%
Photographic film and chemical manufacturing	0	1,377,093	\$1,377,093		0%
Other miscellaneous chemical product manufacturing	2,891	3,325,185	\$3,328,076		0%
Plastics packaging materials and unlaminated film and sheet	7	4,265,268	\$4,265,275		0%
Unlaminated plastics profile shape manufacturing	11	972,365	\$972,376		0%
Plastics pipe and pipe fitting manufacturing	5	1,956,104	\$1,956,109		0%
Laminated plastics plate, sheet (except packaging), and shape	5	365,671	\$365,676		0%
Polystyrene foam product manufacturing	435	1,467,351	\$1,467,786		0%
Urethane and other foam product (except polystyrene)	236	1,470,545	\$1,470,780		0%
Plastics bottle manufacturing	2	1,006,953	\$1,006,955		0%
Other plastics product manufacturing	87	15,557,064	\$15,557,151		0%

IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
Manufacturing (Rubber, Glass, Stone, and Concrete)	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Tire manufacturing	0	6,477,172	\$6,477,172	0%
Rubber and plastics hoses and belting manufacturing	2	540,802	\$540,804	0%
Other rubber product manufacturing	121	3,221,105	\$3,221,226	0%
Pottery, ceramics, and plumbing fixture manufacturing	477	889,315	\$889,793	0%
Brick, tile, and other structural clay product manufacturing	0	1,321,764	\$1,321,764	0%
Flat glass manufacturing	0	201,870	\$201,870	0%
Other pressed and blown glass and glassware manufacturing	456	1,193,030	\$1,193,486	0%
Glass container manufacturing	0	1,013,150	\$1,013,150	0%
Glass product manufacturing made of purchased glass	159	730,119	\$730,277	0%
Cement manufacturing	0	957,847	\$957,847	0%
Ready-mix concrete manufacturing	8	3,256,487	\$3,256,495	0%
Concrete block and brick manufacturing	3	906,072	\$906,075	0%
Concrete pipe manufacturing	9	328,613	\$328,622	0%
Other concrete product manufacturing	105	1,832,725	\$1,832,830	0%
Lime manufacturing	118	212,891	\$213,009	0%
Gypsum product manufacturing	0	1,244,003	\$1,244,003	0%
Abrasive product manufacturing	414	547,795	\$548,209	0%
Cut stone and stone product manufacturing	43,207	1,717,256	\$1,760,463	2%
Ground or treated mineral and earth manufacturing	112	400,107	\$400,219	0%
Mineral wool manufacturing	0	1,376,076	\$1,376,076	0%
Miscellaneous nonmetallic mineral products manufacturing	10	591,572	\$591,582	0%

IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
Manufacturing (Metals)	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Iron and steel mills and ferroalloy manufacturing	0	14,596,526	\$14,596,526	0%
Iron, steel pipe and tube manufacturing from purchased steel	4	0	\$4	100%
Rolled steel shape manufacturing	0	0	\$0	#DIV/0!
Steel wire drawing	3	575,869	\$575,872	0%
Alumina refining and primary aluminum production	16	2,963,006	\$2,963,022	0%
Secondary smelting and alloying of aluminum	0	0	\$0	#DIV/0!
Aluminum sheet, plate, and foil manufacturing	31	1,753,127	\$1,753,158	0%
Other aluminum rolling, drawing and extruding	7	250,625	\$250,632	0%
Nonferrous metal (exc aluminum) smelting and refining	0	2,081,086	\$2,081,086	0%
Copper rolling, drawing, extruding and alloying	0	2,031,608	\$2,031,608	0%
Nonferrous metal, except copper and aluminum, shaping	1	2,721,091	\$2,721,091	0%
Secondary processing of other nonferrous metals	3	1,100,652	\$1,100,655	0%
Ferrous metal foundries	0	805,983	\$805,983	0%
Nonferrous metal foundries	3	653,264	\$653,267	0%
Iron and steel forging	26	1,070,321	\$1,070,347	0%
Nonferrous forging	245	229,113	\$229,359	0%
Custom roll forming	1	153,732	\$153,733	0%

JIMPLAN Sector	Current Spending	Additional Production	Total Demand	%
	On Local Production	for Self-Reliance	For Local Production	
<b>Manufacturing (Metal Products)</b>				
Crown and closure manufacturing and metal stamping	8	1,342,751	\$1,342,760	0%
Cutlery, utensil, pot, and pan manufacturing	4	2,080,857	\$2,080,861	0%
Handtool manufacturing	0	2,615,288	\$2,615,288	0%
Prefabricated metal buildings and components manufacturing	2,743	1,139,872	\$1,142,615	0%
Fabricated structural metal manufacturing	10	3,765,549	\$3,765,559	0%
Plate work manufacturing	7	1,036,060	\$1,036,067	0%
Metal window and door manufacturing	28	2,333,427	\$2,333,455	0%
Sheet metal work manufacturing	28	2,992,376	\$2,992,404	0%
Ornamental and architectural metal work manufacturing	186	1,381,848	\$1,382,034	0%
Power boiler and heat exchanger manufacturing	3	1,061,215	\$1,061,218	0%
Metal tank (heavy gauge) manufacturing	1	1,576,922	\$1,576,923	0%
Metal cans manufacturing	75	1,430,733	\$1,430,809	0%
Metal barrels, drums and pails manufacturing	1	309,662	\$309,663	0%
Hardware manufacturing	1,470	2,694,026	\$2,695,497	0%
Spring and wire product manufacturing	18	2,660,254	\$2,660,271	0%
Machine shops	1,333	4,242,391	\$4,243,724	0%
Turned product and screw, nut, and bolt manufacturing	12	1,906,782	\$1,906,794	0%
Metal heat treating	3	562,717	\$562,721	0%
Metal coating and nonprecious engraving	17	1,193,857	\$1,193,873	0%
Electroplating, anodizing, and coloring metal	0	826,324	\$826,324	0%
Valve and fittings, other than plumbing, manufacturing	111	6,768,672	\$6,768,784	0%
Plumbing fixture fitting and trim manufacturing	2	1,288,971	\$1,288,973	0%
Ball and roller bearing manufacturing	0	1,464,055	\$1,464,055	0%
Small arms ammunition manufacturing	0	3,048,246	\$3,048,247	0%
Ammunition, except for small arms, manufacturing	21	3,441,631	\$3,441,652	0%
Small arms, ordnance, and accessories manufacturing	102	5,158,425	\$5,158,527	0%
Fabricated pipe and pipe fitting manufacturing	0	1,774,297	\$1,774,297	0%
Other fabricated metal manufacturing	2	3,414,527	\$3,414,529	0%

IMPLAN Sector	Current Spending	Additional Production	Total Demand	%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant
Manufacturing (Machinery and Equipment)				
Farm machinery and equipment manufacturing	23,820	5,402,775	\$5,426,595	0%
Lawn and garden equipment manufacturing	14,873	1,436,288	\$1,451,161	1%
Construction machinery manufacturing	6,386	6,714,371	\$6,720,757	0%
Mining machinery and equipment manufacturing	130	319,735	\$319,865	0%
Oil and gas field machinery and equipment manufacturing	4	3,649,619	\$3,649,623	0%
Food product machinery manufacturing	0	624,228	\$624,228	0%
Semiconductor machinery manufacturing	0	1,383,961	\$1,383,961	0%
Sawmill, woodworking, and paper machinery	0	206,310	\$206,310	0%
Printing machinery and equipment manufacturing	5	338,184	\$338,189	0%
All other industrial machinery manufacturing	2	2,430,982	\$2,430,984	0%
Optical instrument and lens manufacturing	69	1,947,806	\$1,947,875	0%
Photographic and photocopying equipment manufacturing	30	475,966	\$475,996	0%
Other commercial service industry machinery manufacturing	5	2,971,182	\$2,971,187	0%
Air purification and ventilation equipment manufacturing	0	1,307,252	\$1,307,252	0%
Heating equipment (except warm air furnaces) manufacturing	0	990,577	\$990,577	0%
Air conditioning, refrigeration, and warm air heating equipment	1	5,977,414	\$5,977,415	0%
Industrial mold manufacturing	11,548	1,135,764	\$1,147,312	1%
Special tool, die, jig, and fixture manufacturing	131	1,772,658	\$1,772,789	0%
Cutting tool and machine tool accessory manufacturing	1	546,228	\$546,229	0%
Machine tool manufacturing	4	1,638,727	\$1,638,732	0%
Rolling mill and other metalworking machinery manufacturing	4	273,868	\$273,872	0%
Turbine and turbine generator set units manufacturing	0	1,339,288	\$1,339,288	0%
Speed changer, industrial high-speed drive, and gears	0	389,471	\$389,471	0%
Mechanical power transmission equipment manufacturing	0	783,721	\$783,721	0%
Other engine equipment manufacturing	34	3,521,462	\$3,521,496	0%
Pump and pumping equipment manufacturing	0	2,729,931	\$2,729,931	0%
Air and gas compressor manufacturing	0	1,402,597	\$1,402,597	0%
Measuring and dispensing pump manufacturing	2	133,276	\$133,278	0%
Elevator and moving stairway manufacturing	0	496,733	\$496,733	0%
Conveyor and conveying equipment manufacturing	47	1,182,860	\$1,182,907	0%
Overhead cranes, hoists, and monorail systems manufacturing	159	943,340	\$943,499	0%
Industrial truck, trailer, and stacker manufacturing	16	1,395,446	\$1,395,463	0%
Power-driven handtool manufacturing	111	1,064,864	\$1,064,974	0%
Welding and soldering equipment manufacturing	37	649,520	\$649,557	0%
Packaging machinery manufacturing	2	1,330,382	\$1,330,384	0%
Industrial process furnace and oven manufacturing	0	326,825	\$326,825	0%
Fluid power cylinder and actuator manufacturing	124	1,251,156	\$1,251,281	0%
Fluid power pump and motor manufacturing	8	1,630,113	\$1,630,122	0%
Scales, balances, and misc. general purpose machinery	4	2,234,669	\$2,234,672	0%

IMPIAN Sector	Current Spending		Additional Production		Total Demand		%
	On Local Production	For Self-Reliance	For Local Production	For Self-Reliance	For Local Production	For Self-Reliance	
Electronic computer manufacturing	0	25,734,868		\$25,734,868		0%	
Computer storage device manufacturing	0	2,970,006		\$2,970,006		0%	
Computer terminals and other computer peripheral equipment	0	4,935,454		\$4,935,454		0%	
Telephone apparatus manufacturing	0	3,420,393		\$3,420,393		0%	
Broadcast and wireless communications equipment	2,648	34,962,785		\$34,965,433		0%	
Other communications equipment manufacturing	6	962,822		\$962,828		0%	
Audio and video equipment manufacturing	0	9,564,302		\$9,564,302		0%	
Bare printed circuit board manufacturing	0	1,016,812		\$1,016,812		0%	
Semiconductor and related device manufacturing	157	33,642,570		\$33,642,728		0%	
Capacitor, resistor, coil, transformer, and other inductors	57	1,133,284		\$1,133,341		0%	
Electronic connector manufacturing	3	1,065,483		\$1,065,486		0%	
Printed circuit assembly (electronic assembly) manufacturing	927	6,104,433		\$6,105,360		0%	
Other electronic component manufacturing	58	5,662,819		\$5,662,877		0%	
Electromedical and electrotherapeutic apparatus	3	5,285,020		\$5,285,023		0%	
Search, detection, and navigation instruments manufacturing	6,402	65,484,893		\$65,491,295		0%	
Automatic environmental control manufacturing	1	917,964		\$917,965		0%	
Industrial process variable instruments manufacturing	15	1,632,483		\$1,632,498		0%	
Totalizing fluid meter and counting device manufacturing	1,218	740,506		\$741,724		0%	
Electricity and signal testing instruments manufacturing	0	4,144,844		\$4,144,844		0%	
Analytical laboratory instrument manufacturing	0	1,775,716		\$1,775,716		0%	
Irradiation apparatus manufacturing	0	1,469,367		\$1,469,367		0%	
Watch, clock, and other measuring and controlling devices	116	4,080,912		\$4,081,028		0%	
Blank magnetic and optical recording media manufacturing	0	598,848		\$598,848		0%	
Software and other prerecorded and record reproducing	0	420,613		\$420,613		0%	
Electric lamp bulb and part manufacturing	0	682,279		\$682,279		0%	
Lighting fixture manufacturing	0	3,846,299		\$3,846,299		0%	
Small electrical appliance manufacturing	4	3,199,851		\$3,199,855		0%	
Household cooking appliance manufacturing	0	2,445,413		\$2,445,413		0%	
Household refrigerator and home freezer manufacturing	0	2,534,310		\$2,534,310		0%	
Household laundry equipment manufacturing	0	2,191,235		\$2,191,235		0%	
Other major household appliance manufacturing	0	1,386,782		\$1,386,782		0%	
Power, distribution, and specialty transformer manufacturing	11	1,629,284		\$1,629,295		0%	
Motor and generator manufacturing	22	2,343,892		\$2,343,914		0%	
Switchgear and switchboard apparatus manufacturing	10	3,778,753		\$3,778,764		0%	
Relay and industrial control manufacturing	888	2,113,882		\$2,114,770		0%	
Storage battery manufacturing	0	1,193,958		\$1,193,958		0%	
Primary battery manufacturing	0	1,259,455		\$1,259,455		0%	
Fiber optic cable manufacturing	15	598,186		\$598,201		0%	
Other communication and energy wire manufacturing	1	2,516,328		\$2,516,329		0%	
Wiring device manufacturing	48	4,127,569		\$4,127,617		0%	
Carbon and graphite product manufacturing	0	569,568		\$569,568		0%	
All other miscellaneous electrical equipment and components	52,546	2,597,081		\$2,649,626		2%	

IMPLAN Sector Manufacturing (Vehicles, Boats, and Planes)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Automobile manufacturing	0	47,372,192	\$47,372,192		0%
Light truck and utility vehicle manufacturing	0	46,053,099	\$46,053,099		0%
Heavy duty truck manufacturing	0	5,847,205	\$5,847,205		0%
Motor vehicle body manufacturing	0	437,232	\$437,232		0%
Truck trailer manufacturing	0	1,697,154	\$1,697,154		0%
Motor home manufacturing	0	1,669,767	\$1,669,767		0%
Travel trailer and camper manufacturing	0	2,214,475	\$2,214,475		0%
Motor vehicle gasoline engine and engine parts	0	3,169,434	\$3,169,434		0%
Motor vehicle electrical and electronic equipment	11	7,754,639	\$7,754,650		0%
Motor vehicle steering, suspension, and brake systems	0	3,451,146	\$3,451,146		0%
Motor vehicle transmission and power train parts	8	5,743,750	\$5,743,758		0%
Motor vehicle seating and interior trim manufacturing	0	1,266,208	\$1,266,208		0%
Motor vehicle metal stamping	19	389,364	\$389,383		0%
Other motor vehicle parts manufacturing	0	10,470,951	\$10,470,951		0%
Aircraft manufacturing	10,694,821	77,768,002	\$88,462,824		12%
Aircraft engine and engine parts manufacturing	3,374	35,012,354	\$35,015,728		0%
Other aircraft parts and auxiliary equipment manufacturing	20,976	35,021,289	\$35,042,265		0%
Guided missile and space vehicle manufacturing	98,374	14,318,073	\$14,416,447		1%
Propulsion units and parts for space vehicles and missiles	43,589	3,115,258	\$3,158,848		1%
Railroad rolling stock manufacturing	0	2,173,258	\$2,173,258		0%
Ship building and repairing	16,264,131	12,669,277	\$28,933,408		56%
Boat building	106,665	2,733,031	\$2,839,696		4%
Motorcycle, bicycle, and parts manufacturing	4	2,449,190	\$2,449,194		0%
Military armored vehicle, tank, and tank component	1,045	3,843,404	\$3,844,449		0%
All other transportation equipment manufacturing	883	2,889,034	\$2,889,917		0%

IMPLAN Sector Manufacturing (Furniture)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Wood kitchen cabinet and countertop manufacturing	98	3,527,809	\$3,527,907		0%
Upholstered household furniture manufacturing	540	3,595,124	\$3,595,663		0%
Nonupholstered wood household furniture manufacturing	4,582	4,423,197	\$4,427,780		0%
Other household nonupholstered furniture manufacturing	1,531	1,666,610	\$1,668,141		0%
Institutional furniture manufacturing	1,164	983,546	\$984,710		0%
Wood office furniture manufacturing	116	651,203	\$651,320		0%
Custom architectural woodwork and millwork	242	583,724	\$583,966		0%
Office furniture, except wood, manufacturing	2,539	1,525,636	\$1,528,176		0%
Showcase, partition, shelving, and locker manufacturing	2,984	2,092,618	\$2,095,602		0%
Mattress manufacturing	58	2,424,010	\$2,424,068		0%
Blind and shade manufacturing	2,851	688,771	\$691,622		0%

IMPLAN Sector Manufacturing (Health Equipment)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Surgical and medical instrument manufacturing	89	4,964,976	\$4,965,065		0%
Surgical appliance and supplies manufacturing	3,886	7,793,187	\$7,797,073		0%
Dental equipment and supplies manufacturing	5	1,092,354	\$1,092,358		0%
Ophthalmic goods manufacturing	6	2,254,934	\$2,254,939		0%
Dental laboratories	0	943,416	\$943,416		0%

IMPLAN Sector Manufacturing (All Other Manufacturing)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Jewelry and silverware manufacturing	0	5,093,974	\$5,093,974		0%
Sporting and athletic goods manufacturing	31,950	5,830,281	\$5,862,231		1%
Doll, toy, and game manufacturing	1	6,494,375	\$6,494,376		0%
Office supplies (except paper) manufacturing	24	1,068,922	\$1,068,946		0%
Sign manufacturing	6,857	1,173,056	\$1,179,913		1%
Gasket, packing, and sealing device manufacturing	14	1,160,539	\$1,160,553		0%
Musical instrument manufacturing	0	426,446	\$426,446		0%
Fasteners, buttons, needles, and pins manufacturing	27	392,409	\$392,436		0%
Broom, brush, and mop manufacturing	22	787,457	\$787,479		0%
Burial casket manufacturing	0	148,069	\$148,069		0%
All other miscellaneous manufacturing	3,449	3,693,746	\$3,697,195		0%



IMPLAN Sector Manufacturing (Wholesale Trade)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Wholesale trade	36,854,338	199,436,012	\$236,290,350		16%

IMPLAN Sector Manufacturing (Retail Trade)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Retail - Motor vehicle and parts dealers	13,058,948	27,452,293	\$40,511,240		32%
Retail - Furniture and home furnishings stores	6,940,418	5,082,965	\$12,023,383		58%
Retail - Electronics and appliance stores	3,714,136	3,432,538	\$7,146,674		52%
Retail - Building material and garden equipment and supplies	26,908,293	52,883	\$26,961,177		100%
Retail - Food and beverage stores	43,077,787	6,810,270	\$49,888,057		86%
Retail - Health and personal care stores	15,051,250	2,378,494	\$17,429,744		86%
Retail - Gasoline stores	5,720,922	7,978,727	\$13,699,649		42%
Retail - Clothing and clothing accessories stores	4,977,392	16,033,172	\$21,010,564		24%
Retail - Sporting goods, hobby, musical instrument and books	4,753,388	3,064,838	\$7,818,226		61%
Retail - General merchandise stores	21,539,969	30,473,339	\$52,013,308		41%
Retail - Miscellaneous store retailers	9,850,878	64,024	\$9,914,902		99%
Retail - Nonstore retailers	25,428,067	156,294	\$25,584,362		99%

IMPLAN Sector Manufacturing (Transportation)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Air transportation	983,157	53,672,633	\$54,655,790		2%
Rail transportation	719,049	5,413,279	\$6,132,327		12%
Water transportation	401,952	6,462,560	\$6,864,511		6%
Truck transportation	10,564,149	42,566,493	\$53,130,643		20%
Transit and ground passenger transportation	2,763,549	87,692	\$2,851,241		97%
Pipeline transportation	0	1,934,396	\$1,934,396		0%
Scenic and sightseeing transportation and support activities	2,378,876	245,824	\$2,624,700		91%
Couriers and messengers	99,611	6,390,564	\$6,490,175		2%

IMPLAN Sector Manufacturing (Warehousing and Storage)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Warehousing and storage	89,760	10,583,778	\$10,673,537		1%

IMPLAN Sector Services (Information Businesses)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Newspaper publishers	17,341	1,889,159	\$1,906,500		1%
Periodical publishers	336,715	3,911,512	\$4,248,227		8%
Book publishers	27,632	8,342,082	\$8,369,714		0%
Directory, mailing list, and other publishers	54,249	5,414,554	\$5,468,804		1%
Greeting card publishing	915	430,877	\$431,791		0%
Software publishers	320,088	32,808,974	\$33,129,062		1%
Motion picture and video industries	1,677,596	25,812,744	\$27,490,340		6%
Sound recording industries	1,001,006	2,209,317	\$3,210,323		31%
Radio and television broadcasting	117,962	2,000,741	\$2,118,703		6%
Cable and other subscription programming	2,859,856	2,720,354	\$5,580,210		51%
Wired telecommunications carriers	41,051,896	24,724,258	\$65,776,155		62%
Wireless telecommunications carriers (except satellite)	287,426	73,372,153	\$73,659,579		0%
Satellite, telecommunications resellers, and other telecomm.	389,917	2,185,351	\$2,575,268		15%
Data processing, hosting, and related services	4,606,817	48,679,290	\$53,286,107		9%
News syndicates, libraries, archives and other information	148,048	11,424,997	\$11,573,045		1%
Internet publishing and broadcasting and web search portals	716,188	6,516,919	\$7,233,107		10%

IMPLAN Sector Services (Banking and Finance)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Monetary authorities and depository credit intermediation	19,373,862	64,647,694	\$84,021,556		23%
Nondepository credit intermediation and related activities	1,335,367	24,599,278	\$25,934,644		5%
Securities and commodity contracts intermediation and brokers	5,029,373	10,360,525	\$15,389,899		33%
Other financial investment activities	19,462,115	41,685,607	\$61,147,722		32%
Insurance carriers	5,641,742	106,788,467	\$112,430,208		5%
Insurance agencies, brokerages, and related activities	1,208	23,050,559	\$23,051,767		0%
Funds, trusts, and other financial vehicles	7,295,986	32,003,627	\$39,299,613		19%

IMPLAN Sector Services (Real Estate and Leasing)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Real estate	92,533,385	75,412,008	\$167,945,393		55%
Owner-occupied dwellings	376,712,061	0	\$376,712,061		100%
Automotive equipment rental and leasing	1,434,393	17,398,241	\$18,832,634		8%
General and consumer goods rental except video tapes	1,087,922	3,734,747	\$4,822,669		23%
Video tape and disc rental	906,793	98,357	\$1,004,650		90%
Commercial and industrial machinery and equipment rental	683,314	146,689	\$830,003		82%
Lossors of nonfinancial intangible assets	0	930,523	\$930,523		0%

IMPLAN Sector Services (Professional Services)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Legal services	11,249,042	34,962,892	\$46,211,934		24%
Accounting, tax preparation, bookkeeping, and payroll services	8,063,322	11,247,310	\$19,310,632		42%
Architectural, engineering, and related services	18,639,788	93,446,411	\$112,086,199		17%
Specialized design services	1,746,765	269,888	\$2,016,652		87%
Custom computer programming services	20,510,892	57,460,402	\$77,971,295		28%
Computer systems design services	7,080,665	50,192,381	\$57,273,045		12%
Other computer related services, including facilities man.	1,976,049	7,206,089	\$9,182,138		22%
Management consulting services	10,547,810	15,485,738	\$26,033,548		41%
Environmental and other technical consulting services	705,323	226,684	\$932,007		76%
Scientific research and development services	70,654,479	221,481,943	\$292,136,422		24%
Advertising, public relations, and related services	729,309	39,064,805	\$39,794,113		2%
Photographic services	0	2,955,812	\$2,955,812		0%
Veterinary services	7,955,285	925,092	\$8,880,378		90%
Marketing research and other miscellaneous professional servs	3,807,839	3,607,541	\$7,415,380		51%
Management of companies and enterprises	0	39,949,617	\$39,949,617		0%
Office administrative services	882,627	16,104,036	\$16,986,663		5%
Facilities support services	7,560,656	93,677	\$7,654,332		99%
Employment services	513,501	30,504,517	\$31,018,018		2%
Business support services	4,084,955	2,617,888	\$6,702,843		61%
Travel arrangement and reservation services	1,486,139	11,241,956	\$12,728,095		12%
Investigation and security services	1,136,977	6,651,659	\$7,788,636		15%
Services to buildings	2,116,260	5,008,244	\$7,124,504		30%
Landscape and horticultural services	4,149,998	239,819	\$4,389,817		95%
Other support services	824,357	6,241,027	\$7,065,384		12%
Waste management and remediation services	5,164,789	5,311,845	\$10,476,633		49%

IMPLAN Sector Services (Private Education)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Elementary and secondary schools	4,839,900	10,768,039	\$15,607,939		31%
Junior colleges, colleges, universities, and prof. schools	9,975,217	37,629,509	\$47,604,727		21%
Other educational services	9,033,936	5,943,622	\$14,977,558		60%

IMPLAN Sector Services (Health and Human Services)	Current Spending	Additional Production	Total Demand		%
	On Local Production	for Self-Reliance	For Local Production	Self-Reliant	
Offices of physicians	\$27,353,138	\$85,587,722	\$112,940,860		24%
Offices of dentists	\$21,375,723	\$13,818,551	\$35,194,274		61%
Offices of other health practitioners	\$22,762,316	\$7,710,070	\$30,472,385		75%
Outpatient care centers	\$12,178,065	\$26,097,883	\$38,275,949		32%
Medical and diagnostic laboratories	\$0	\$8,011,294	\$8,011,294		0%
Home health care services	\$3,983,873	\$19,147,913	\$23,131,786		17%
Other ambulatory health care services	\$2,559,224	\$4,340,463	\$6,899,687		37%
Hospitals	\$942,338	\$230,037,883	\$230,980,222		0%
Nursing and community care facilities	\$23,958,322	\$23,019,404	\$46,977,725		51%
Residential mental retardation, mental health, substance abuse	\$0	\$9,787,896	\$9,787,896		0%
Individual and family services	\$17,922,228	\$4,917,740	\$22,839,968		78%
Community food, housing, and other relief services	\$12,186,245	\$246,304	\$12,432,549		98%
Child day care services	\$3,265,639	\$1,031,384	\$4,297,023		76%

IMPLAN Sector	Current Spending		Additional Production		Total Demand		%
	On Local Production		for Self-Reliance		For Local Production		
<b>Services (Entertainment, Tourism, and Food Service)</b>							
Performing arts companies	\$4,605,549		\$4,153,775		\$8,759,324		53%
Commercial Sports Except Racing	\$44,827		\$5,367,397		\$5,412,223		1%
Racing and Track Operation	\$0		\$475,429		\$475,429		0%
Promoters of performing arts and sports and agents	\$1,371,544		\$4,080,668		\$5,452,213		25%
Independent artists, writers, and performers	\$3,768,840		\$37,846		\$3,806,686		99%
Museums, historical sites, zoos, and parks	\$1,361,691		\$2,349,871		\$3,711,562		37%
Amusement parks and arcades	\$0		\$2,568,961		\$2,568,961		0%
Gambling industries (except casino hotels)	\$6,001,535		\$13,957,777		\$19,959,312		30%
Other amusement and recreation industries	\$10,249,153		\$75,054		\$10,324,208		99%
Fitness and recreational sports centers	\$5,208,308		\$1,707,042		\$6,915,350		75%
Bowling centers	\$786,407		\$168,625		\$955,032		82%
Hotels and motels, including casino hotels	\$503,446		\$34,077,746		\$34,581,191		1%
Other accommodations	\$8,510		\$1,571,293		\$1,579,802		1%
Full-service restaurants	\$31,215,208		\$5,438,459		\$36,653,667		85%
Limited-service restaurants	\$58,703,428		\$40,246,795		\$98,950,223		59%
All other food and drinking places	\$17,969,041		\$5,657,942		\$23,626,983		76%

IMPLAN Sector	Current Spending		Additional Production		Total Demand		%
	On Local Production		for Self-Reliance		For Local Production		
<b>Services (Personal Services)</b>							
Automotive repair and maintenance, except car washes	\$19,737,448		\$18,012,452		\$37,749,900		52%
Car washes	\$1,899,496		\$2,202,743		\$4,102,239		46%
Electronic and precision equipment repair and maintenance	\$769,172		\$5,396,840		\$6,166,012		12%
Commercial and industrial machinery and equipment repair	\$557,416		\$2,794,084		\$3,351,500		17%
Personal and household goods repair and maintenance	\$5,445,571		\$884,848		\$6,330,420		86%
Personal care services	\$6,699,485		\$10,842,918		\$17,542,404		38%
Death care services	\$698,146		\$3,454,181		\$4,152,326		17%
Dry-cleaning and laundry services	\$667,974		\$3,330,964		\$3,998,938		17%
Other personal services	\$9,523,906		\$1,150,124		\$10,674,029		89%

IMPLAN Sector	Current Spending		Additional Production		Total Demand		%
	On Local Production		for Self-Reliance		For Local Production		
<b>Services (Churches, Nonprofits, and Unions)</b>							
Religious organizations	\$1,965,901		\$13,431,197		\$15,397,099		13%
Grantmaking, giving, and social advocacy organizations	\$8,296,821		\$9,486,826		\$17,783,647		47%
Business and professional associations	\$1,674,494		\$7,000,328		\$8,674,822		19%
Labor and civic organizations	\$5,934,595		\$8,072,440		\$14,007,035		42%

IMPLAN Sector	Current Spending		Additional Production		Total Demand		%
	On Local Production		for Self-Reliance		For Local Production		
<b>Services (Household Operations)</b>							
Private households	\$1,822,118		\$3,555,511		\$5,377,629		34%



1.a. Thank You

Victoria, (Oak Bay), British Columbia V8S 4X2

Unlike some in this municipality, I have no concern about the noise of the Growler aircraft. When I hear the flights I think of the bravery of the flyers who are training in a high risk activity that promotes our safety. A bit of noise is a small price to pay for something that contributes to our protection.

1.a. Thank You

victoria, British Columbia v8v2p6

Comments from Victoria BC residents. I support this project, and the security provided by the US military. Victoria residents in general are professional complainers, ignore them.

Victoria, British Columbia V8R2Z5

I am a concerned resident of Victoria, British Columbia. At my workplace, I hear and feel the rumble, grumble and disruption of the Growler Airfield on a regular basis. It makes me feel uneasy and disturbed in my physical health, and also to know that there are weapons of war (i.e. the Growlers) being trained in and tested so near by. Please reconsider the operation, and any expansion of, the Growler Airfield. I'd like to be able to concentrate at work. I can only imagine what the situation is for folks who live on Whitby. I also believe that you have a duty to consult Canadians. The air, water and land knows no borders. Your actions in Washington deeply impact Canadians living in British Columbia. Please consider holding a community consultation meeting in Victoria, British Columbia. Thank you, [REDACTED]

1.a. Thank You  
2.e. Public Involvement Process  
4.r. Nonauditory Health Effects

Sequim, WA 98382

- 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).



sequim, WA 98382

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.

sequim, WA 98382

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

sequim, WA 98382

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 misconception has to be credibly revised to properly characterize the real impacts.

sequim, WA 98382

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.

Port Townsend, WA 98368

1.a. Thank You  
2.I. No Action Alternative

I recommend the No Action Alternative.

## QUIET SKIES

Over San Juan County

### Navy DRAFT Environmental Impact Statement (EIS)

To add 36 Growlers to the 82 already based at  
Naval Air Station Whidbey Island (NASWI)

#### Meeting with the NAVY

Lopez Center for Community and the Arts  
Wednesday, December 7, 2016  
Drop in: 3 - 6 pm

#### To view the Draft EIS:

Hard Copy at the Lopez Library  
Online: [http://www.whidbeyeis.com/  
CurrentEISDocuments.aspx](http://www.whidbeyeis.com/CurrentEISDocuments.aspx)

#### What is this meeting about?

At the Scoping Meeting in 2014, the Navy asked for comments on what we wanted them to consider – before adding 36 Growlers to NASWI. They have supposedly done that and the Draft EIS (1,500 pages) presents the results of what they considered and their reasons for not incorporating certain public suggestions.

The Draft EIS presents 3 Action Alternatives – all of which include adding an additional 35 or 36 Growlers to NASWI.

**The meeting will be an opportunity to ask questions of the Navy personnel which may help clarify your concerns and help us create useful comments to submit.**

#### Our job NOW is to read the Draft EIS and find:

- \* Errors or new information that would change the analysis and conclusions.
- \* Things that are incorrect, incomplete or need to be clarified.
- \* A substantially different Alternative that meets the Navy purpose and need.

#### We need to comment by January 25, 2017:

This is a time to say more than "I'm opposed to adding 36 more Growlers." We have to say specifically where the Navy analysis is incorrect or incomplete. Comments need to be supported by Draft EIS page number, explanations, facts and references. **In Federal procedures only individuals who have commented can object when the Decision is made.**

Suggested comments begin on the next page. Feel free to edit or use your own words.

**Page 5 is a summary of the comments. You can fill in your name and address and drop the sheet into the comment box at the December 7th meeting.**

- 1.a. Thank You
- 2.e. Public Involvement Process
- 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.s. Health Impact Assessment and Long-term Health Study Requests
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

## Suggested Comments on the Navy Draft EIS

### 1. Not evaluating the low-frequency noise characteristics of the Growler

Section 3.2 - Noise Associated with Aircraft Operations - makes no mention of the signature low-frequency noise of the Growler. All of the noise analysis is solely based on A-weighted sound (dBA) which ignores the lower frequencies, and is therefore deficient.

Nevertheless, the Draft EIS at 4-194 states "... the 2012 study included a brief examination of low-frequency noise associated with Growler overflights at 1,000 feet AGL in takeoff, cruise, and approach configuration/power conditions ... The study found that takeoff condition ... overall C-weighted sound level of 115 dBC. The Growler would exhibit C-weighted sound levels up to 101 dBC when cruising and 109 dBC (gear down) at approach." Page 4-193 states "According to Hubbard (1982), a person inside a structure can sense noise through vibration of the primary components of a building, such as the floors, walls, and windows; by the rattling of objects; ..."

The World Health Organization "Guidelines on Community Noise" (Berglund, 1999) <http://apps.who.int/iris/bitstream/10665/66217/1/a68672.pdf> states:

"When prominent low frequency components are present, noise measures based on A-weighting are inappropriate;"  
 "Since A-weighting underestimates the sound pressure level of noise with low frequency components, a better assessment of health effects would be to use C-weighting"

Closing windows and doors provides limited reduction for low frequency noise entering a building as measured by sound Transmission Loss tests (see graph on <http://windowanddoor.com/article/04-april-2007/understanding-basics-sound-control>). Therefore assumptions throughout the study assuming an average noise level reduction with windows closed is optimistic.

**RECOMMENDATION: Evaluate impacts of the Growler at low frequencies (C-weighted, dBC).**

### 2. Discounting Health Effects of Noise

The Draft EIS at 3-22 states "No studies have shown a definitive causal and significant relationship between aircraft noise and health. Inconsistent results from studies examining noise exposure and cardiovascular health have led the World Health Organization (2000) to conclude that there was only a weak association between long- term noise exposure and hypertension and cardiovascular effects."

The statement above disagrees with multiple findings in the WHO "Guidelines on Community Noise" (Berglund, 1999):

"For a good night's sleep, the equivalent sound level should not exceed 30 dB(A) for continuous background noise, and individual noise events exceeding 45 dB(A) should be avoided."

"For noise with a large proportion of low frequency sounds a still lower guideline is recommended"

"It should be noted that a large proportion of low frequency components in a noise may increase considerably the adverse effects on health"

"The evidence on low frequency noise is sufficiently strong to warrant immediate concern"

Waye (2004) finds "As low frequencies propagate with little attenuation through walls and windows, many people may be exposed to low frequency noise in their dwellings. Sleep disturbance, especially with regard to time to fall asleep and tiredness in the morning, are commonly reported in case studies on low frequency noise. However, the number of studies where sleep disturbance is investigated in relation to the low frequencies in the noise is limited. Based on findings from available epidemiological and experimental studies, the review gives indications that sleep disturbance due to low frequency noise warrants further concern." <http://www.noiseandhealth.org/text.asp?2004/6/23/87/31661>

Specific guidelines are found in the "WHO Night Noise Guidelines for Europe" (2005), Table 5.1, "Summary of effects and threshold levels for effects where sufficient evidence is available." [http://www.euro.who.int/\\_data/assets/pdf\\_file/0017/43316/E92845.pdf](http://www.euro.who.int/_data/assets/pdf_file/0017/43316/E92845.pdf)

During Scoping 1785 comments were submitted on Noise and Vibration and 914 on Health Effects (Table 1.9-5).

**The Navy has not demonstrated there are no health impacts from Growler noise.**

**RECOMMENDATION: Recognize the impacts of low frequency Growler noise on health.**

### **3. Exclusion of San Juan County Noise Reports**

Section 1.9.5 states "The Navy continues to evaluate noise reports that have been developed by independent sources and review their findings in conjunction with this EIS analysis." Not included in the Draft EIS is data collected by San Juan County (SJC) <http://sjcgis.org/aircraft-noise-reporting/> Data collected since May 14, 2014 has been regularly sent to NASWI.

More than 6000 citizen reports include date, time, location and noise characteristics. The Navy should correlate that data with the information they collect on flight tracks to understand what activity causes disruptive noise in SJC. Actual noise reports and measurements should be used to benchmark the computer modeled noise impacts used for evaluation and decision-making. Reports can also help to develop mitigation measures.

**RECOMMENDATION: Incorporate San Juan County noise reports in the EIS analysis.**

### **4. Exclusion of the SJI National Monument**

The Draft EIS suggests that the lands and waters of the San Juan Islands National Monument are exempt from National Environmental Policy Act protection because the 2013 proclamation establishing the Monument states: "Nothing in this proclamation shall be deemed to restrict safe and efficient aircraft operations, including activities and exercises of the Armed Forces in the vicinity of the monument."

Legally, this only has the effect of preserving the status quo: it clarifies that the creation of the National Monument does not place any additional burden on the Navy to justify its operations in the vicinity. The President did not--indeed, he did not have the power to exempt the Monument area from federal laws that already applied to wildlife there. Hence creation of the Monument did not exempt the Navy from NEPA or Endangered Species Act with respect to wildlife in the Monument, such as Marbled Murrelets or marine mammals.



At 3.5.2.4 the Draft EIS acknowledges "However, the Bureau of Land Management (BLM) has determined that BLM-owned and controlled lands in the San Juan Islands National Monument possess wilderness characteristics." It also concedes that the Monument is subjected to a maximum noise level of 95 dB (SEL) an estimated 372 times per year (at 3-34)

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

##### **5. Exclusion of New Technology Alternatives**

In 2014 the Department of Defense successfully demonstrated carrier takeoff, landing, and formation flying capabilities of the unmanned X-47B prototype that is part of the Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) program. <http://breakingdefense.com/2014/08/x-47b-drone-manned-f-18-take-off-land-together-in-historic-test> The UCLASS jets can meet the Purpose and Need, delivering the same capability for electronic surveillance and attack against enemy radar and communications systems as the Growlers.

This Alternative has many benefits. Because of its inherent automation UCLASS would significantly reduce the amount of land-based training that impacts our community. It eliminates the high risk to the Growler's two-person crew from advanced anti-aircraft threats. The smaller UCLASS vehicle is lighter and uses less fuel. Eliminating the \$3 billion purchase of 36 Growlers will save taxpayer money. Some experts believe we are already flying the last generation of manned military aircraft. With a focused effort the Navy could deploy the UCLASS while the existing 82 Growlers carry out the mission.

**RECOMMENDATION: Evaluate a new Alternative that deploys UCLASS jets instead of more Growlers.**

##### **6. Lack of Commitment to Noise Mitigation**

At 1-20 the Draft EIS discusses Noise Mitigation. The only cited measure in place is "to share flight schedules and other information and to solicit public feedback." Potential measures include construction and operation of a noise suppression facility for engine maintenance (Hush House), Engine Chevrons (noise reduction) and MAGIC CARPET (automating parts of carrier landing which will reduce FCLP training activity).

Further discussion on Existing Mitigation at 3-30 states "NAS Whidbey Island has noise-abatement procedures ... to minimize aircraft noise. Airfield procedures used to minimize/abate noise ... include optimizing of flight tracks, restricting maintenance run-up hours, runway optimization, and other procedures .... Additionally, aircrews are directed, to the maximum extent practicable, to employ prudent airmanship techniques to reduce aircraft noise impacts and to avoid sensitive areas except when operational safety dictates otherwise."

Each Alternative is an irrevocable decision to add 35 or 36 Growlers at NASWI. Therefore the Navy should commit to Mitigation measures as part of the Final EIS and Record of Decision. Since experts have identified the need for additional research on health effects of low frequency noise the Navy should sponsor this research.

**RECOMMENDATION: Commit to Mitigation Measures with timelines in the Record of Decision.**

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] 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 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](http://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:

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(Continue on the back)

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

**Detailed Comments**

1. First Name: [REDACTED]
2. Last Name: [REDACTED]
3. Organization/Affiliation Quiet Skies Over San Juan County
4. City, State, ZIP Lopez Island, WA 98261
5. E-mail QuietSkiesSanJuan@gmail.com
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.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.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

### Detailed Comments

1. According to the Navy, “The Growler is recognizable by the low frequency “rumble” of its jet engines.”<sup>1</sup> Despite this acknowledgement, low frequency noise impacts are ignored in the Draft EIS except for the brief section on Noise and Vibration. Section 3.2 – Noise Associated with Aircraft Operations – makes no mention of the signature low frequency noise of the Growler. All of the noise analysis is based on A-weighted sound (dBA), which ignores the lower frequencies, and is therefore deficient.

Nevertheless, the Draft EIS in the section on Noise and Vibration (page 4-194) states “... the 2012 study included a brief examination of low-frequency noise associated with Growler overflights at 1,000 feet AGL in takeoff, cruise, and approach configuration/power conditions ... The study found that takeoff condition ... overall C-weighted sound level of 115 dBC. The Growler would exhibit C-weighted sound levels up to 101 dBC when cruising and 109 dBC (gear down) at approach.” Page 4-193 states “According to Hubbard (1982), a person inside a structure can sense noise through vibration of the primary components of a building, such as the floors, walls, and windows; by the rattling of objects; ...”

The World Health Organization “Guidelines on Community Noise” (Berglund, 1999)<sup>2</sup> states:

“When prominent low frequency components are present, noise measures based on A-weighting are inappropriate;”

“Since A-weighting underestimates the sound pressure level of noise with low frequency components, a better assessment of health effects would be to use C-weighting”

Closing windows and doors provides limited reduction for low frequency noise entering a building as measured by sound Transmission Loss tests.<sup>3</sup> Therefore analysis throughout the Draft assuming an average noise level reduction across the frequency spectrum with windows closed is not based on scientifically observed behavior of low frequency sounds.

**RECOMMENDATION: Evaluate impacts of the Growlers at low frequencies using C-weighting (dBC) In addition to A-weighting (dBA).**

2. The Draft EIS states (page 3-16) that aircraft noise levels represented in this draft EIS are “generated by a computer model and not actual noise measurements at Ault Field or OLF Coupeville.” It further states that the computer model draws from “a library of actual noise measurements” (page 4- 20). There is no documentation on whether Growler measurements were used or if the model is based on another jet. We also do not know the conditions for the measurements, e.g. engine power, afterburners, distance, orientation, etc. For more information see Sections 2 and 3 of the comment letter (Greacen, 2016).<sup>4</sup>

<sup>1</sup> [http://www.cnrc.navy.mil/regions/cnmw/installations/nas\\_whidbey\\_island/om/environmental\\_support/growler-fact.html](http://www.cnrc.navy.mil/regions/cnmw/installations/nas_whidbey_island/om/environmental_support/growler-fact.html)

<sup>2</sup> <http://apps.who.int/iris/bitstream/10665/66217/1/a68672.pdf>

<sup>3</sup> See graph on <http://windowanddoor.com/article/04-april-2007/understanding-basics-sound-control>

<sup>4</sup> [http://media.wix.com/ugd/92226a\\_af2c68d06704466591fbcd71062bab13.pdf](http://media.wix.com/ugd/92226a_af2c68d06704466591fbcd71062bab13.pdf)

**RECOMMENDATION: Provide the noise measurement data used for simulation and an explanation of how the data was captured and processed. Provide Growler noise measurements with afterburners in one-third octave bands from 6 Hz to 20 kHz at various distances and orientations. Calibrate the computer model with actual noise measurements in locations throughout the region.**

3. The Draft EIS states (page 3-16) "The computer modeling program used for this EIS is NOISEMAP Version 7.2 (October 29, 2015), developed by Wyle Laboratories. ... The U.S. Department of Defense (DOD) uses NOISEMAP as the accepted standard noise modeling program for assessing potential noise exposure from fixed-wing aircraft." A 2004 study performed by Wyle for DOD states "The latest NOISEMAP package of computer programs consists of ... NOISEMAP Version 7.2 ..."<sup>5</sup> The version used in the Growler EIS is at least 12 years old, not a year old.

The DOD Strategic Environmental Research and Development Program (SERDP) found that NOISEMAP was outdated and might not be able to "provide legally defensible noise assessments of current and future aircraft operations." SERDP project WP-1304, led by Principal Investigator Dr. Kenneth Plotkin of Wyle issued a final report titled "Advanced Acoustic Models for Military Aircraft Noise Propagation and Impact Assessment" in 2010.

The project summary states "Classic Department of Defense (DOD) noise models are based on NOISEMAP technology, using linear acoustics and an integrated formulation. ... The acoustic environments in the vicinity of newer aircraft such as ... the F/A-18E/F [which uses the same GE F414 jet engine as the Growler] differs from those of most prior aircraft, with high noise levels associated with higher thrust engines. ..."

"Moreover, the ... modeling approach typical of integrated noise models do not properly account for the complex operational and noise characteristics of the new aircraft. ... A new aircraft noise model, the Advanced Acoustic Model (AAM), has been developed for the assessment of noise from military aircraft operations. It is a ... model that produces more physical realism and detail than traditional ... model."<sup>6</sup>

For more information on this issue see Section 1 of the comment letter (Greacen, 2016).<sup>7</sup>

**RECOMMENDATION: Redo the noise level simulation using the more recent Advanced Acoustic Model.**

4. Day-Night Noise Level (DNL), the fundamental noise metric in the Draft, represents "the energy-averaged sound level measured over a 24-hour period" (Section 3.2.2.1). An FAA study, "Technical Support For Day/Night Average Sound Level (Dnl) Replacement Metric Research," finds "... DNL has another major practical limitation. It doesn't work particularly well as a predictor of aircraft noise impacts. FICON's 1992 relationship accounts for less

<sup>5</sup> <http://www.nctcog.org/trans/aviation/usnoisestudy04.pdf>

<sup>6</sup> <https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/NoiseWP-1304>

<sup>7</sup> [http://media.wix.com/ugd/f9226a\\_at2c6840670d486591fbdd71062bab13.pdf](http://media.wix.com/ugd/f9226a_at2c6840670d486591fbdd71062bab13.pdf)

than a fifth of the variance in the association between aircraft noise exposure and the prevalence of high annoyance in communities (Fidell, 2003; Fidell and Silvati, 2004).<sup>8</sup>

The Day-Night Noise Level (DNL) was developed for the FAA to established a threshold for annoyance at commercial airports where typical operations are 16 hours a day, 7 days a week. The noise events experienced during Growler training flights are intermittent in a region with very low background noise. The noise assessment in the Draft instead spreads the annual training operations over 365 days to calculate Annual Average Daily (AAD) day and night events (at 4.2 on page A-35). In actual experience these events are concentrated into some number of days in a year, which is not specified in the analysis. We use actual data below to demonstrate this.

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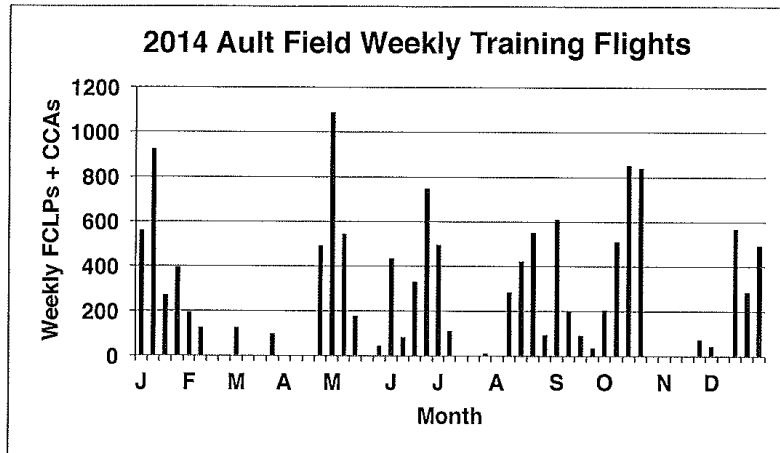


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8 [https://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/research/science\\_integrated\\_modeling/noise\\_impacts/media/6-14-2011\\_FinalReport\\_MetricsMestre\\_et\\_al\\_061411\\_part1.pdf](https://www.faa.gov/about/office_org/headquarters_offices/apl/research/science_integrated_modeling/noise_impacts/media/6-14-2011_FinalReport_MetricsMestre_et_al_061411_part1.pdf)

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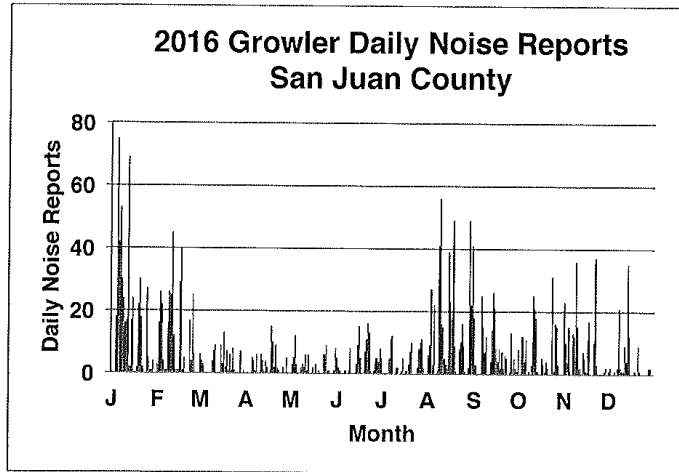


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**RECOMMENDATION: Recognize the impacts of Growler noise on health as documented in the World Health Organization "Guidelines on Community Noise", "Night Noise Guidelines for Europe" and other published studies.**

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Not included in the Draft EIS is data collected by San Juan County (SJC).<sup>11</sup> Data gathered since May 14, 2014 has been regularly sent to NASWI. More than 6000 citizen reports

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<sup>10</sup> [http://www.euro.who.int/\\_data/assets/pdf\\_file/0017/43316/E92845.pdf](http://www.euro.who.int/_data/assets/pdf_file/0017/43316/E92845.pdf)

<sup>11</sup> <http://sjogis.org/aircraft-noise-reporting/>



creation of the Monument did not exempt the Navy from NEPA or Endangered Species Act with respect to wildlife in the Monument, such as Marbled Murrelets or marine mammals.

At 3.5.2.4 the Draft EIS acknowledges "However, the Bureau of Land Management (BLM) has determined that BLM-owned and controlled lands in the San Juan Islands National Monument possess wilderness characteristics." It also concedes that the Monument is subjected to a maximum noise level of 95 dB (SEL) an estimated 372 times per year (at 3-34).

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**RECOMMENDATION: 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. In 2014 the Department of Defense successfully demonstrated carrier takeoff, landing, and formation flying capabilities of the X-47B prototype ("drone") that is part of the Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) program.<sup>14</sup>

The UCLASS jets can meet the Purpose and Need, delivering the same capability for electronic surveillance and attack against enemy radar and communications systems as the Growlers.

This Alternative has many benefits. Because of its inherent automation UCLASS platforms would significantly reduce the amount of land-based training that impacts our region. It eliminates the high risk to the Growler's two-person crew from advanced anti-aircraft threats. The smaller UCLASS vehicle is lighter and uses less fuel, reducing costs and CO<sub>2</sub> emissions. Eliminating the \$3 billion purchase of 36 Growlers will save taxpayer money. Navy Secretary Ray Mabus said "[the F-35] should be, and almost certainly will be, the last manned strike fighter aircraft the Department of the Navy will ever buy or fly."<sup>15</sup> With a focused effort the Navy can deploy the UCLASS while the existing 82 Growlers plus spares carry out the mission.

**RECOMMENDATION: 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 (see Section 3.10.2). San Juan and Jefferson Counties are excluded from the socioeconomic impacts analysis but sites in those Counties appear in the Points of Interest (Figure 3.2-6) and experience significant Single Event Noise (Tables 3.2-4 through 3.2-8). Clallam County may also be impacted by Growler noise but no noise analysis was done for this area.

The San Juan County Comprehensive Plan states "...the islands are places of peace ... We support a pattern of economic growth...which recognizes the rural, residential, quiet, agricultural, marine, and isolated nature of the islands." Anecdotal evidence from San Juan

<sup>13</sup> [http://media.wix.com/ugd/9228a\\_c2a40618270749a4b74a6d43bb2a19c3.pdf](http://media.wix.com/ugd/9228a_c2a40618270749a4b74a6d43bb2a19c3.pdf)

<sup>14</sup> <http://breakingdefense.com/2014/08/x-47b-drone-manned-f-18-take-off-land-together-in-historic-test>

<sup>15</sup> <https://news.usni.org/2015/04/15/mabus-f-35c-will-be-last-manned-strike-fighter-the-navy-marines-will-ever-buy-or-fly>

County realtors is that property sales have been lost due to Growler activity. The three counties excluded from the socioeconomic analysis are very dependent on outdoor recreation that is being harmed by Growler flight activity. These Counties receive little, if any, economic benefit from employment and other activity associated with NASWI.

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

10. At 1-20 the Draft EIS discusses Noise Mitigation. The only cited measure in place is "to share flight schedules and other information and to solicit public feedback." Potential measures include construction and operation of a noise suppression facility for engine maintenance (Hush House), Engine Chevrons (noise reduction) and MAGIC CARPET (automating parts of carrier landing which will reduce FCLP training activity).

Further discussion on Existing Mitigation at 3-30 states "NAS Whidbey Island has noise-abatement procedures ... to minimize aircraft noise. Airfield procedures used to minimize/abate noise ... include optimizing of flight tracks, restricting maintenance run-up hours, runway optimization, and other procedures ... Additionally, aircrews are directed, to the maximum extent practicable, to employ prudent airmanship techniques to reduce aircraft noise impacts and to avoid sensitive areas except when operational safety dictates otherwise."

Council on Environmental Quality (CEQ) regulation 1502.14 - Alternatives including the proposed action - states " ... agencies shall ... (f) Include appropriate mitigation measures not already included in the proposed action or alternatives."

All three Alternatives are an irrevocable decision to add 35 or 36 Growlers at NASWI. Therefore the Navy should commit to Mitigation Measures as part of the Final EIS and Record of Decision. Since experts have identified the need for additional research on health effects of low frequency noise the Navy should sponsor this research.

**RECOMMENDATION: 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 as described in the comments above and by others, and is inadequate to support a decision. Council on Environmental Quality (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."

**RECOMMENDATION: Supplement the EIS to address deficiencies identified in comments and allow 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**

**Detailed Comments**

1. First Name: ██████
2. Last Name: ██████████
3. Organization/Affiliation Quiet Skies Over San Juan County
4. City, State, ZIP Lopez Island, WA 98261
5. E-mail QuietSkiesSanJuan@gmail.com
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.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.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

### Detailed Comments

1. According to the Navy, “The Growler is recognizable by the low frequency “rumble” of its jet engines.”<sup>1</sup> Despite this acknowledgement, low frequency noise impacts are ignored in the Draft EIS except for the brief section on Noise and Vibration. Section 3.2 – Noise Associated with Aircraft Operations – makes no mention of the signature low frequency noise of the Growler. All of the noise analysis is based on A-weighted sound (dBA), which ignores the lower frequencies, and is therefore deficient.

Nevertheless, the Draft EIS in the section on Noise and Vibration (page 4-194) states "... the 2012 study included a brief examination of low-frequency noise associated with Growler overflights at 1,000 feet AGL in takeoff, cruise, and approach configuration/power conditions ... The study found that takeoff condition ... overall C-weighted sound level of 115 dBC. The Growler would exhibit C-weighted sound levels up to 101 dBC when cruising and 109 dBC (gear down) at approach." Page 4-193 states "According to Hubbard (1982), a person inside a structure can sense noise through vibration of the primary components of a building, such as the floors, walls, and windows; by the rattling of objects; ..."

The World Health Organization "Guidelines on Community Noise" (Berglund, 1999)<sup>2</sup> states:

"When prominent low frequency components are present, noise measures based on A-weighting are inappropriate;"

"Since A-weighting underestimates the sound pressure level of noise with low frequency components, a better assessment of health effects would be to use C-weighting"

Closing windows and doors provides limited reduction for low frequency noise entering a building as measured by sound Transmission Loss tests.<sup>3</sup> Therefore analysis throughout the Draft assuming an average noise level reduction across the frequency spectrum with windows closed is not based on scientifically observed behavior of low frequency sounds.

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

2. The Draft EIS states (page 3-16) that aircraft noise levels represented in this draft EIS are “generated by a computer model and not actual noise measurements at Ault Field or OLF Coupeville.” It further states that the computer model draws from “a library of actual noise measurements” (page 4- 20). There is no documentation on whether Growler measurements were used or if the model is based on another jet. We also do not know the conditions for the measurements, e.g. engine power, afterburners, distance, orientation, etc. For more information see Sections 2 and 3 of the comment letter (Greacen, 2016).<sup>4</sup>

<sup>1</sup> [http://www.cnrc.navy.mil/regions/cnrmw/installations/nas\\_whidbey\\_island/om/environmental\\_support/growler-fact.html](http://www.cnrc.navy.mil/regions/cnrmw/installations/nas_whidbey_island/om/environmental_support/growler-fact.html)

<sup>2</sup> <http://apps.who.int/iris/bitstream/10665/66217/1/a68672.pdf>

<sup>3</sup> See graph on <http://windowanddoor.com/article/04-april-2007/understanding-basics-sound-control>

<sup>4</sup> [http://media.wix.com/ugd/f9226a\\_af2c68d0670d466591fbd7f062bab13.pdf](http://media.wix.com/ugd/f9226a_af2c68d0670d466591fbd7f062bab13.pdf)

**RECOMMENDATION: Provide the noise measurement data used for simulation and an explanation of how the data was captured and processed. Provide Growler noise measurements with afterburners in one-third octave bands from 6 Hz to 20 kHz at various distances and orientations. Calibrate the computer model with actual noise measurements in locations throughout the region.**

3. The Draft EIS states (page 3-16) “The computer modeling program used for this EIS is NOISEMAP Version 7.2 (October 29, 2015), developed by Wyle Laboratories. ...The U.S. Department of Defense (DOD) uses NOISEMAP as the accepted standard noise modeling program for assessing potential noise exposure from fixed-wing aircraft.” A 2004 study performed by Wyle for DOD states “The latest NOISEMAP package of computer programs consists of ... NOISEMAP Version 7.2 ...”<sup>5</sup> The version used in the Growler EIS is at least 12 years old, not a year old.

The DOD Strategic Environmental Research and Development Program (SERDP) found that NOISEMAP was outdated and might not be able to “provide legally defensible noise assessments of current and future aircraft operations.” SERDP project WP-1304, led by Principal Investigator Dr. Kenneth Plotkin of Wyle issued a final report titled “Advanced Acoustic Models for Military Aircraft Noise Propagation and Impact Assessment” in 2010.

The project summary states “Classic Department of Defense (DOD) noise models are based on NOISEMAP technology, using linear acoustics and an integrated formulation. ... The acoustic environments in the vicinity of newer aircraft such as ... the F/A-18E/F [which uses the same GE F414 jet engine as the Growler] differs from those of most prior aircraft, with high noise levels associated with higher thrust engines. ...”

“Moreover, the ... modeling approach typical of integrated noise models do not properly account for the complex operational and noise characteristics of the new aircraft. ... A new aircraft noise model, the Advanced Acoustic Model (AAM), has been developed for the assessment of noise from military aircraft operations. It is a ... model that produces more physical realism and detail than traditional ... model.”<sup>6</sup>

For more information on this issue see Section 1 of the comment letter (Greacen, 2016).<sup>7</sup>

**RECOMMENDATION: Redo the noise level simulation using the more recent Advanced Acoustic Model.**

4. Day-Night Noise Level (DNL), the fundamental noise metric in the Draft, represents “the energy-averaged sound level measured over a 24-hour period” (Section 3.2.2.1). An FAA study, “Technical Support For Day/Night Average Sound Level (Dnl) Replacement Metric Research,” finds “... DNL has another major practical limitation. It doesn’t work particularly well as a predictor of aircraft noise impacts. FICON’s 1992 relationship accounts for less

<sup>5</sup> <http://www.nctcog.org/trans/aviation/jlus/noisestudy04.pdf>

<sup>6</sup> <https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>

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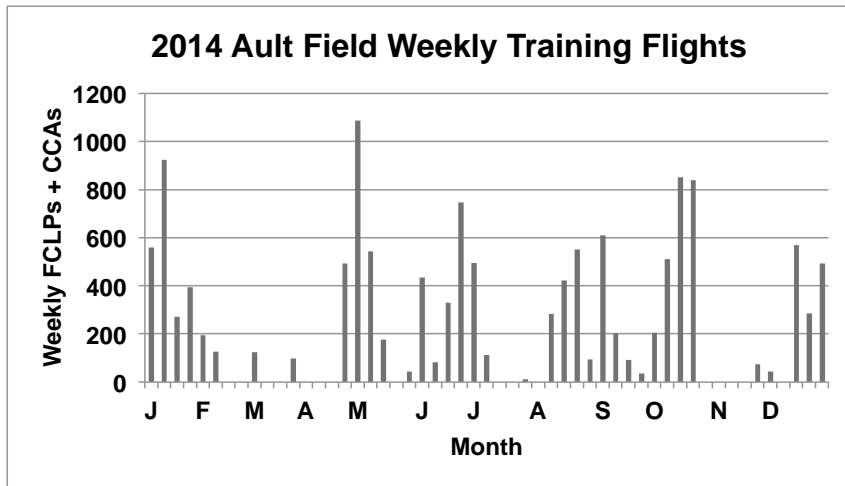


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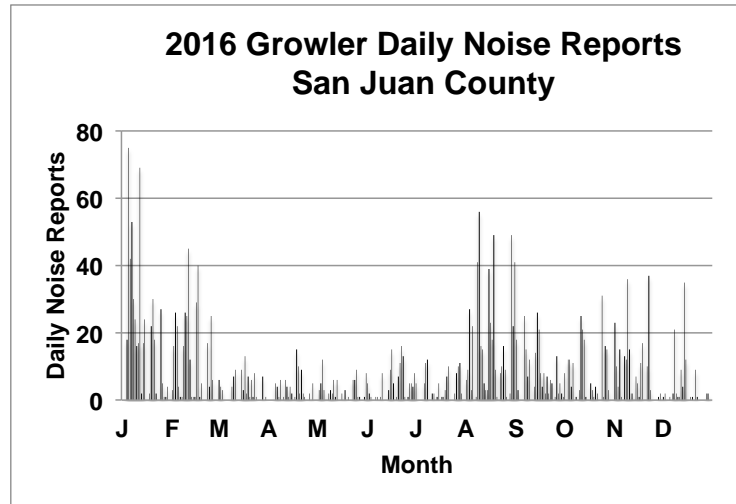


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include date, time, location and noise characteristics. See a sample chart in Figure 6.1. The Navy should correlate the data with the information they collect on flight tracks to understand what events cause disruptive noise in SJC including location, elevation, direction, engine thrust, etc. In addition, noise reports and measurements should be used to benchmark the computer-modeled noise impacts relied on for decision-making. Noise reports can also help to understand the benefits of potential mitigation measures.

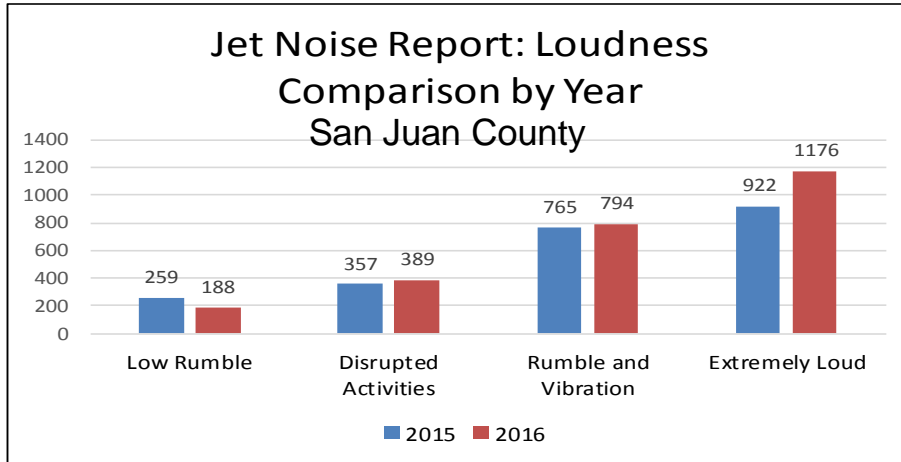


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Also not included is the study sponsored by Citizens of Ebey Reserve. They engaged an independent noise study by JGL Acoustics in 2013 to obtain actual on-site Growler noise data at Outlying Field Coupeville because "rather than simply accept the computer-modeled data used by Wyle Labs because we believed on-site validation was critical."<sup>12</sup>

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

- 7. At 3.5.2.4 the Draft EIS suggests that the lands and waters of the San Juan Islands National Monument are exempt from National Environmental Policy Act protection because the 2013 proclamation establishing the Monument states: "Nothing in this proclamation shall be deemed to restrict safe and efficient aircraft operations, including activities and exercises of the Armed Forces in the vicinity of the monument."

Legally, this only has the effect of preserving the status quo: it clarifies that the creation of the National Monument does not place any additional burden on the Navy to justify its operations in the vicinity. The President did not--indeed, he did not have the power to exempt the Monument area from federal laws that already applied to wildlife there. Hence

<sup>12</sup> <http://citizensofebeyreserve.com/References/Files/JGL.Noise.Report.pdf>

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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. In 2014 the Department of Defense successfully demonstrated carrier takeoff, landing, and formation flying capabilities of the X-47B prototype ("drone") that is part of the Unmanned Carrier-Launched Airborne Surveillance and Strike (UCLASS) program.<sup>14</sup>

The UCLASS jets can meet the Purpose and Need, delivering the same capability for electronic surveillance and attack against enemy radar and communications systems as the Growlers.

This Alternative has many benefits. Because of its inherent automation UCLASS platforms would significantly reduce the amount of land-based training that impacts our region. It eliminates the high risk to the Growler's two-person crew from advanced anti-aircraft threats. The smaller UCLASS vehicle is lighter and uses less fuel, reducing costs and CO<sub>2</sub> emissions. Eliminating the \$3 billion purchase of 36 Growlers will save taxpayer money. Navy Secretary Ray Mabus said "[the F-35] should be, and almost certainly will be, the last manned strike fighter aircraft the Department of the Navy will ever buy or fly."<sup>15</sup> With a focused effort the Navy can deploy the UCLASS while the existing 82 Growlers plus spares carry out the mission.

**RECOMMENDATION: 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 (see Section 3.10.2). San Juan and Jefferson Counties are excluded from the socioeconomic impacts analysis but sites in those Counties appear in the Points of Interest (Figure 3.2-6) and experience significant Single Event Noise (Tables 3.2-4 through 3.2-8). Clallam County may also be impacted by Growler noise but no noise analysis was done for this area.

The San Juan County Comprehensive Plan states "...the islands are places of peace ... We support a pattern of economic growth...which recognizes the rural, residential, quiet, agricultural, marine, and isolated nature of the islands." Anecdotal evidence from San Juan

<sup>13</sup> [http://media.wix.com/ugd/f9226a\\_c2a40618270749a4b74a6d43bb2a19c3.pdf](http://media.wix.com/ugd/f9226a_c2a40618270749a4b74a6d43bb2a19c3.pdf)

<sup>14</sup> <http://breakingdefense.com/2014/08/x-47b-drone-manned-f-18-take-off-land-together-in-historic-test>

<sup>15</sup> <https://news.usni.org/2015/04/15/mabus-f-35c-will-be-last-manned-strike-fighter-the-navy-marines-will-ever-buy-or-fly>

County realtors is that property sales have been lost due to Growler activity. The three counties excluded from the socioeconomic analysis are very dependent on outdoor recreation that is being harmed by Growler flight activity. These Counties receive little, if any, economic benefit from employment and other activity associated with NASWI.

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

10. At 1-20 the Draft EIS discusses Noise Mitigation. The only cited measure in place is “to share flight schedules and other information and to solicit public feedback.” Potential measures include construction and operation of a noise suppression facility for engine maintenance (Hush House), Engine Chevrons (noise reduction) and MAGIC CARPET (automating parts of carrier landing which will reduce FCLP training activity).

Further discussion on Existing Mitigation at 3-30 states “NAS Whidbey Island has noise-abatement procedures ... to minimize aircraft noise. Airfield procedures used to minimize/abate noise ... include optimizing of flight tracks, restricting maintenance run-up hours, runway optimization, and other procedures ... Additionally, aircrews are directed, to the maximum extent practicable, to employ prudent airmanship techniques to reduce aircraft noise impacts and to avoid sensitive areas except when operational safety dictates otherwise.”

Council on Environmental Quality (CEQ) regulation 1502.14 - Alternatives including the proposed action - states “ ... agencies shall ... (f) Include appropriate mitigation measures not already included in the proposed action or alternatives.”

All three Alternatives are an irrevocable decision to add 35 or 36 Growlers at NASWI. Therefore the Navy should commit to Mitigation Measures as part of the Final EIS and Record of Decision. Since experts have identified the need for additional research on health effects of low frequency noise the Navy should sponsor this research.

**RECOMMENDATION: 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 as described in the comments above and by others, and is inadequate to support a decision. Council on Environmental Quality (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.”

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

Lopez Island, WA 98261

- 1.a. Thank You
- 2.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
- 2.e. Public Involvement Process

The Draft Environmental Impact Statement (EIS) is deficient in not addressing 40 Growlers now being delivered beyond the 35 or 36 identified in the Proposed Action. The Draft EIS states that - "The Proposed Action would: • continue and expand existing Growler operations at the Naval Air Station Whidbey Island complex, which includes field carrier landing practice by Growler aircraft that occurs at Ault Field and Outlying Landing Field Coupeville • increase electronic attack capabilities by adding 35 or 36 aircraft to support an expanded U.S. Department of Defense mission for identifying, tracking, and targeting in a complex electronic warfare environment "The Environmental Impact Statement evaluates the potential environmental impacts associated with the following resource areas: airspace, noise, safety, ... , as well as the cumulative impacts of the Proposed Action and other local projects." (Volume 1, pg. Abstract-1) The Draft also states that the total number of Growler Aircraft at Ault Field will be 117 or 118. (Table 2.3-1) A Department of Defense (DoD) report from 2016 states - "The procurement profile of the FY 2017 PB adds 7 EA-18G aircraft in FY 2016. The result of this addition will be a FY 2016 FRP contract for Lot 40 EA-18G aircraft, which increases the total Program of Record (PoR) from 150 to 157. ... These aircraft are in the process of delivery ... . (Selected Acquisition Report (SAR), RCS: DD-A&T(Q&A) 823-378, EA-18G Growler Aircraft (EA 18G), As of FY 2017 President's Budget, March 17, 2016, pg. 7. <https://goo.gl/IQrY4K>) "Initial aircrew training will be conducted at NAS Whidbey Island, WA. ... Limited I Level for some EA-18G and F/A-18E/F common maintenance tasks has been established at Whidbey Island, WA. Airborne Electronic Attack (AEA) I-Level maintenance will be stood up at Whidbey Island and aboard the CVWs commencing FY18. (pg.37)" It is clear from the DoD report that 157 Growlers will be based at NASWI at times, not 117 or 118 as described in the Draft EIS. The additional 40 Growlers are part of the same mission and are "in the process of delivery." The Draft does not acknowledge the additional 40 Growlers, describe what activity they will undertake or analyze how that activity will impact the affected environment. We have been verbally told that they are "only spares." For example, will maintenance engine run-ups be conducted on the additional Growlers? The Draft EIS has not fulfilled its obligation to "evaluate[s] the potential environmental impacts ... as well as the cumulative impacts of the Proposed Action and other local projects." Council on Environmental Quality (CEQ) Regulation 1502.9 states (c) Agencies: (1) Shall prepare supplements to either draft or final environmental impact statements 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. RECOMMENDATION: Supplement the EIS to address the 40 additional Growlers to be stationed at NASWI and allow further opportunity for public comment before the Final EIS is prepared.

Forks, WA 98331

I live and work in the rural forested watersheds of the north and west Olympic Peninsula, and am negatively impacted on a daily or weekly basis by high decibel noise that sometimes shakes my office in Forks or drowns out discussion in meetings at the Olympic Natural Resource Center. I conduct restoration and river assessments on coastal rivers, and often have to shout to be heard by my crew. The EIS analysis' use of a 24 hour average as a threshold for 'unacceptable' noise doesn't accurately represent the impact of this intense and intermittent ascending and descending noise. Anecdotally, I've heard coyotes in river-adjacent forest stands and dogs from the Hoh Reservation howling at the Growlers. In short, my quiet rural life and enjoyment of the sounds of nature - birdsong, flowing water, pattering rain, wind in branches, surf, elk whistles and coyote yips, is significantly impaired by the loud growling sounds that are often after my bedtime, and regardless of the time of day, interrupt my hearing and bring the sense of being bombed with military sound. Please find another way to train - away from wilderness, or turn these jets into other uses.

- 1.a. Thank You
- 4.d. Day-Night Average Sound Level Metric
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference

Port Townsend, WA 98368

1.a. Thank You  
2.k. Range of Alternatives

I feel that the noise and flight paths of the Growler flights are not conducive to the residents of this region, including myself. I feel that the flights could take different pathways and be reduced in number and still be able to achieve the navy training goals.

## 1.a. Thank You

, WA 98363

I apologize for not commenting sooner. All the things we hold so dear freedom, safety and prosperity are ours because we have shown the rest of the world that we have and will fight to protect them. The men and women who fly those jets weren't born with that skill. They learned how to do what they do so well with a lot of practice and training. The "noise" you guys make sounds a lot like "God Bless America" to me. Please keep doing what you are doing to protect our freedom.

coupeville, WA 98239

Hello Hello EA-18G Growler EIS Project Manager I am a underserved adult in the state of Washington I live on Whidbey island a small town and I have some underserved health care needs in the state of Washington I am trying too get met too the best of my ability . When the jets fly over my dads house in the evening it is very hard for me and it disturbs me and others in the Whidbey island community it also hurts peoples health in the Whidbey island community and it does not make my health issues any better I feel I am not a doctor but I feel this I feel the noise does not help me it disturbs me and others in are community . Can you change the flight pattern and have the growlers move to another place that is not on Whidbey island I would appreciate this . People health is suffering and so is mine . Maybe you can help with this. [REDACTED]

1.a. Thank You

2.n. Alternatives Considered But Eliminated

4.r. Nonauditory Health Effects



## 1.a. Thank You

Coupeville, WA 98239

A situation where many members of the community represent "Moral Ecology" and the Navy with its "Just War" position with the specious belief that the death and destruction of an enemy, who is very much like you and me, superimposes a version of authoritarianism inflicting wounding here to all life forms with their war exercises, fire foams, water contamination, health risks over the Salish Sea, Olympic National Forest and Park region with no end of suffering here or elsewhere and where the next war will be fought. Other locals here suffer from the delusion that one can build a local economy by expanding a Navy Growler presence at the expense of a viable social order based on the true needs of peoples. May our hearts be warmed that our deeds may serve the healing of people here and people elsewhere in the World. For the peoples of the World, All of those of us who care. "Love is the will to work for the highest good and wellbeing of others and yourself."

Seattle, WA 98115

I am opposed to the proposed "games" the navy wants to conduct on the Olympic Peninsula. Whatever could be gained by the "games" cannot possibly justify the noise, the carbon emissions, the trauma to wildlife, and the impact on native peoples. Please do not allow this proposal to go forward. Thank youj.

1.a. Thank You

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

19.d. Electronic Warfare

9.a. Consideration of Tribes

BURTON, WA 98013

The Olympic National Park & Forest are special spaces where the public can enjoy the peace and quiet that only a wilderness like this can provide. It is not an appropriate place to allow jet noise for up to 12 hours per day. Please respect the Park and deny the Navy's permit.

- 1.a. Thank You
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare

Lopez Island, WA 98261

Dear Commander, As others have noted (see post-comment concerns) noise levels from the Growlers continues to increase. It doesn't take much imagination to consider that the military is increasing the number of Growlers, and military presence due to the planning, anticipation, and intelligence of, some sort of military defense or offense off the Washington Coast. I would suggest that the military set up a new base on the Washington or Oregon Coast where Growlers can be tested in a much less populated area. The Oregon and Washington coasts are highly undefended. A base that is on the coast would be a more strategic location, and training activities would fly out over the Pacific rather than in heavily populated Puget Sound. I can appreciate that the military wants to protect U.S. citizens, but the harmful noise levels does just the opposite, and begins to look like an attack on U.S. citizens, which is unconstitutional. It also increases an anti-military sentiment, which cannot be helpful to any party. As you have already heard, the comments below accurately reflect my concerns as well. Thank you for listening.

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

- 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


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.

Anacortes, 98221

I support a reduction of military training runs over populated/residential areas of Anacortes. I grew up near Miramar Naval Air Station in San Diego. Similar concerns were raised, and compromise was achieved with rerouting of training runs more out over water and south. This was both for noise abatement and also safety. Thank you for your consideration.

- 1.a. Thank You
- 3.a. Aircraft Operations
- 4.t. Noise Mitigation

1.a. Thank You  
2.h. Next Steps

  
Oak Harbor, WA 98277  
12 November 2016

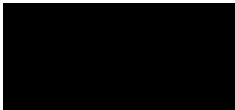
EA-18G EIS Project Manager  
Naval Facilities Engineering Command  
(NAVFAC) Atlantic - Attn: Code EV21/SS  
6505 Hampton Blvd.  
Norfolk, VA 23508

Comments concerning "Draft EIS, EA-18G "Growler" Airfield Operations at  
Naval Air Station Whidbey Island Complex"

Shipmates:

Would it be too much to ask to reserve a copy of the final (and approved) EIS for dealing with COER, the group of whining, self serving twits which represent less than .0001% of the population of Whidbey Island? A copy of the EIS rolled into a tight cylinder and shoved repeatedly up their collective ass would go far towards causing a sigh of relief by those of us who have had to listen to their dreck.

Sincerely,



CDR, USN (Ret.)

Oak Harbor, WA 98277

1.a. Thank You  
12.n. Quality of Life  
4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations  
4.r. Nonauditory Health Effects

We purchased our farm at the north end of Whidbey Island in 1987 because we thought it was our best choice for raising a family. We did this with the knowledge we were in a noise zone for the EA-6 and EA-6B aircraft. For 20 years they flew over our home and never once did we call the base or complain to anyone. We knew what the EA-6 and EA-6B sounded like. I still remember our boys when they were 3 and 5 years old, sitting in the sandbox covering their ears with their hands and crying every time a plane flew over. We lived with it because the farm was worth it and we felt our future was worth it and the island life was worth it for our children. And so the years ticked by, one by one, but way too fast. Then we started reading in the newspaper over several years or more about this new aircraft they wanted to build and bring to Whidbey. They always talked about how it would be quieter than the EA-6 and we looked forward to it's arrival. Well it arrived and what a shock it was. We felt so cheated, so lied to, so gut punched. This new airplane was so much worse, so much noisier. We were just plain in shock for at least the first year. We love our farm, so we try to adjust. When you see a plane coming you run for cover, anything to get away from the noise. If your grandchildren are outside you run to bring them in. Even indoors though it's a terrible thing. The windows rattle, the pictures and items on the wall bang and rattle, the walls vibrate. You wonder if someday the nails will work their way out and the walls will fall in. When I'm outside doing farm chores and a plane takes off from Ault Field....I never see the plane....but I feel the sound waves in my stomach and chest area the most. A strange and scary feeling. You just can't always run fast enough to get inside, especially now that we're older. I just keep saying that with the pounding our bodies take from those sound waves, maybe we will never have kidney or gall stones. But we love our country and our military and we want to be supportive, so we try to do the right thing and just stay quiet and take it. Then in November the number of planes flying over us ramped up considerably, many passes day after day, and even up to and after 11pm. It was like nothing we had ever experienced before. I actually thought the 35 new planes had arrived and the barrage of noise day in and day out got to me. Like never before. It felt like we were being punished, like noise was being used to make us go crazy. For the first time since 1987 I complained to my friends and family. I walked up to my husband in the kitchen with tears in my eyes and said "I don't know if I can take this". I was crying because moving means giving up the farm we raised our children on, the farm we are now raising our grandchildren on. The house we built, with much of our own labor and because of it, two of our sons are now electricians. All of our memories are here and nowhere else. Then I found out that all that noise was not even caused by the additional planes you want to bring. I'll never know what that was about, it stopped as suddenly as it started and went back to the "normal" noise. But it sure made me think of what it must be going to be like when you bring those 35 planes. People in the military are used to moving and think nothing of it. Those of us who grow up on farms and go on to get farms of our own don't move much. We grow deep roots, take care of the land and animals and try to be good citizens and raise good kids. We don't want to move, we don't want you to force us to tear out our roots and leave all the memories behind. In 1987 we signed up for noise from EA-6 and EA-6B aircraft and we never complained. We never signed up for the terrible aircraft that flies overhead now and destroys our life in our old age. If we had known we would not have bought this property. But how could we possibly



have foreseen the airplane that would be invented and brought in such great numbers to ruin everything we have worked so hard for. We know you will drive us out with your expanded fleet of noise and sound waves pounding on our home and bodies. We know we can't stop it, and that even this comment period and all the town meetings are just for show. I have started taking more pictures. Pictures of our grown children and their children. Pictures of them here on the farm, teaching our grandchildren about animals and growing things and being good people. Soon the pictures will be all we have left of this place because it's only a matter of time before your additional 35 planes flying over our home drive us away once and for all. We know you don't care, but somehow it felt better to get it off our chest. All we can do is pray for peace. If there were peace in the world you wouldn't need so many planes and you wouldn't be destroying our lives and the lives of our children and grandchildren. But thank you for your service, God Bless You and may this never happen to your family.

Coupeville, WA 98239

As a retiree of this beautiful area ( Ebeys Reserve)my wife and I are dumb founded by the decision by the Navy to increase the size and amount of flyovers in their EIS. We appreciate a safe place to train our pilots but to the levels the Navy are talking about make no sense. If the Navy goes ahead with these numbers (Increases) they will gut this community as well as destroy the local economy. At present we are not in the flyover pattern but know numerous people that are and they have problems sleeping and concentrating due to the high level of noise. I hope that if the Navy make any decisions to increase their flyovers that they keep it at present or a slight increase. Please take my plead into consideration and for those voices that will not speak up.

- 1.a. Thank You
- 2.a. Purpose and Need
- 2.m. Record of Decision/Preferred Alternative
- 4.p. Sleep Disturbance

Coupeville , WA 98239

First of all I want you to know that I subscribe to the proper training of our pilots but not here on Ebeys Landing, a historical reserve that is one of the most scenic and pristine areas in our country. If the Navy follows through with the increase of activity at OLF that they would like to, it would not only devastate the economy of Coupeville but cause havoc to the tourism and home values of this area. I for one who is not in the fly zone but close enough would sell my home. As a native of Washington, I moved to Whidbey to retire in a quiet, not threatening location only to find that the Navy not only doesn't care about this area but is out to cause my wife and I potential health issues due to anxiety caused by a unprecedented noise levels. I think the Navy should reconsider locating their base in Eastern Washington or somewhere less vulnerable. Please consider my comments with your decision. [REDACTED]

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.j. Property Values
- 2.n. Alternatives Considered But Eliminated
- 4.r. Nonauditory Health Effects
- 7.a. Regional Land Use and Community Character

Coupeville , WA 98239

First of all I want you to know that I subscribe to the proper training of our pilots but not here on Ebey's Landing, a historical reserve that is one of the most scenic and pristine areas in our country. If the Navy follows through with the increase of activity at OLF that they would like to, it would not only devastate the economy of Coupeville but cause havoc to the tourism and home values of this area. I for one who is not in the fly zone but close enough would sell my home. As a native of Washington, I moved to Whidbey to retire in a quiet, not threatening location only to find that the Navy not only doesn't care about this area but is out to cause my wife and I potential health issues due to anxiety caused by unprecedented noise levels. I think the Navy should reconsider locating their base in Eastern Washington or somewhere less vulnerable. Please consider my comments with your decision. [REDACTED]

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.j. Property Values
- 2.n. Alternatives Considered But Eliminated
- 4.r. Nonauditory Health Effects
- 7.a. Regional Land Use and Community Character

Coupeville, WA 98239

1.a. Thank You  
12.j. Property Values  
2.e. Public Involvement Process

I am concerned that the increase of flights at OLF will impact everything I love about living in Coupeville. Particularly the level of noise that adversely effects the health of all the people & wildlife who live here. Then our property loses its value & no one wants to live or visit here & the economy of the area dies. We live in a national reserve between 2 state parks. Has this no value to the navy? I appreciate the navy & all that is done for the sake of our country but what about us citizens acutely effected by you. There must be a solution agreeable to all. Certainly your proposed flight increases is not taking our concerns into consideration.

February 21, 2017

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

Comment on the Draft EIS NAS Whidbey Island

I have read the Draft EIS for NAS Whidbey Island and note this is the third such EIS concerning expansion and growth promised since 1987, and the second attempt to have reached the Draft EIS stage.

Of the two previously promised NAS Whidbey Island EIS it is instructive to understand why neither resulted in a completed Final EIS for flight operations at NAS Whidbey Island.

A front-page article in the Whidbey News Times, January 28, 1987 begins (see attachment1), "Dramatic growth looms on the horizon at Whidbey Island Naval Air Station." In the article then Wing Commander RAdm. Fred Metz and Base Commander speculate that Whidbey is the odds on favorite, but not guaranteed the extra squadrons. In anticipation, the process and timeline for completion of an EIS was outlined with a "record of decision regarding the sighting in early 1990."

Less than one year later, another front-page article (December 16, 1987 see attachment 2) quoted the same RAdm. Fred Metz, "We have determined that there is a saturation level (at NAS Whidbey). We can accommodate some growth, but not the level mentioned last year."

The term "growth saturation level at NAS Whidbey" is very important. The Naval air station has not grown in its basic size and runway configuration since it was originally built to accommodate propeller aircraft in World War II. These built limitations refer not only to what level of operations are physically theoretically possible, but also what level of environmental impact is tolerated within the existing community.

The physical limitations are well documented in NAS Whidbey Island MASTERPLAN UPDATE Existing Conditions Report dated 30 September 1986 (see attachment 3). The document sites operational limitations at Ault Field due to two runways crossing each other, and recommends (as does a 1968 engineering report) that runways should be rebuilt in parallel configuration. Most troubling is the MASTERPLAN's pronouncement on the unsuitability of OLF Coupeville:

*Although the field is operationally important as a carrier qualification field, facilities at OLF Coupeville do not now meet criteria established for current FCLP operations levels. The following improvements are required:*

- a. Extend runways—Runway 14/32 from 5,400' to 8,800', Taxiway from 4,366' to 8,800'
- b. Strengthen existing pavement
- c. Improve roads and drainage
- d. Acquire land in fee (APZ A lands outside the base) 71 acres.

*The cost of bringing OLF Coupeville up to standard is approximately \$8.75 million.*

NONE of the required improvements to OLF Coupeville outlined above were ever done.

- 1.a. Thank You
- 12.d. Population Impacts
- 2.k. Range of Alternatives
- 5.c. Condition of Outlying Landing Field Coupeville

February 21, 2017

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

Comment on the Draft EIS NAS Whidbey Island

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A front-page article in the Whidbey News Times, January 28, 1987 begins (see attachment1), "Dramatic growth looms on the horizon at Whidbey Island Naval Air Station." In the article then Wing Commander RAdm. Fred Metz and Base Commander speculate that Whidbey is the odds on favorite, but not guaranteed the extra squadrons. In anticipation, the process and timeline for completion of an EIS was outlined with a "record of decision regarding the sighting in early 1990."

Less than one year later, another front-page article (December 16, 1987 see attachment 2) quoted the same RAdm. Fred Metz, "We have determined that there is a saturation level (at NAS Whidbey). We can accommodate some growth, but not the level mentioned last year."

The term "growth saturation level at NAS Whidbey" is very important. The Naval air station has not grown in its basic size and runway configuration since it was originally built to accommodate propeller aircraft in World War II. These built limitations refer not only to what level of operations are physically theoretically possible, but also what level of environmental impact is tolerated within the existing community.

The physical limitations are well documented in NAS Whidbey Island MASTERPLAN UPDATE Existing Conditions Report dated 30 September 1986 (see attachment 3). The document sites operational limitations at Ault Field due to two runways crossing each other, and recommends (as does a 1968 engineering report) that runways should be rebuilt in parallel configuration. Most troubling is the MASTERPLAN's pronouncement on the unsuitability of OLF Coupeville:

*Although the field is operationally important as a carrier qualification field, facilities at OLF Coupeville do not now meet criteria established for current FCLP operations levels. The following improvements are required:*

- a. *Extend runways—Runway 14/32 from 5,400' to 8,800', Taxiway from 4,366' to 8,800'*
- b. *Strengthen existing pavement*
- c. *Improve roads and drainage*
- d. *Acquire land in fee (APZ A lands outside the base) 71 acres.*

*The cost of bringing OLF Coupeville up to standard is approximately \$8.75 million.*

NONE of the required improvements to OLF Coupeville outlined above were ever done.

All of these improvements are proposed to improve the margins of safety and environmental protection of both flight crews and neighboring civilian populations. After 30 years of growth in the Coupeville community, practically the only thing the Navy can do to minimize the added risks and impacts from the use of OLF Coupeville is limit the number of operations to the minimum indicated in the Draft EIS Document. That would be somewhere between current 6100 and 9200 flight operations at OLF Coupeville per year according to the Draft EIS.

Finally, it is time to look at the second time an EIS of Impacts of Flight Operations was promised the people of Whidbey Island. When NAS Whidbey Island shelved plans for its first EIS at the end of 1987 a Central Whidbey citizens group, reeling from 20,010 operations at Coupeville in 1986 and over 30,000 in 1987, petitioned the Navy in the spring of 1988 to follow through with a full EIS through its Attorneys (Attachment 4). That effort resulted in the release of a Draft EIS for NAS Whidbey Island in 1993.

However, because in the intervening 6 years the Navy had made plans to retire all A-6 medium attack bombers, numbers of flight operations at OLF Coupeville were reduced, and no Final EIS was ever issued and work on the EIS was again shelved.

The environmental impacts of Flight Operations at OLF Coupeville over 12,000 are undeniable. That represented a saturation level for the central Whidbey community in 1987. Since then there have been no successful zoning alternatives, or prevention of home building that should have triggered Navy action to purchase lands in fee to establish a credible APZ. These things did not happen but a doubling or more of the impacted populations has taken place.

Unless an alternative carrier training field to relieve or replace OLF Coupeville can actually be activated, then it is past time for Navy planners to finally "define NAS Whidbey's saturation level" as RAdm Metz urged 30 years ago.

It is better for the Navy to determine that level of operations that can be managed with minimum noise and accident potential now, in this EIS process, than to repeat a very sad chapter of Navy-Community relations.

Thank you for the opportunity to comment out of my experience, and the experience of so many of my neighbors,

[REDACTED]  
[REDACTED]  
[REDACTED]

Coupeville, WA 98239

CC: Senator Patty Murry  
Senator Maria Cantwell  
Representative Jim Larsen

Attachments:

Impact of Navy growth will be far-reaching, Whidbey News Times January 28, 1987

Whidbey can't handle full notional airwing, Metz says, Whidbey News Times December 16, 1987

NAS Whidbey Island MASTERPLAN UPDATE Existing Conditions Report dated 30 September 1986

Anti-noise group demands EIS for Coupeville field, Whidbey News Times April 13, 1988



# Impact of Navy growth will be far-reaching

By Steve Berentson  
Staff reporter

**D**ramatic growth looms on the horizon at Whidbey Island Naval Air Station.

A pending change in the mix of aircraft deployed on American aircraft carriers may well result in an influx of aircraft and manpower at NAS Whidbey — Island County's largest "industry" and the undisputed backbone of the local economy.

In his fiscal year 1988 annual report to Congress, U.S. Defense Secretary

Caspar Weinberger told federal legislators the Navy will begin next year to reduce the numbers of Grumman F-14 and McDonnell Douglas FA-18 aircraft in its carrier air wings.

Weinberger continued with news of the decision that has for several months had local Navy officials scrambling to prepare contingency plans — news that the Navy will double the number of Grumman A-6s in a typical airwing and eliminate tanker aircraft.

This realignment in the makeup of carrier airwings could very well mean a leap in the number of aircraft and personnel at NAS Whidbey — increasing by approximately 50 percent the number of aircraft; almost 40 percent the number of military personnel; and 35 percent the number of military dependents.

Weinberger's testimony elevated to official status recent reports that the Navy is moving ahead on the "notional" airwing, which essentially replaces four F-14s and four FA-18s with A-6s, the type of aircraft home-based at Oak Harbor.

The question is no longer whether the number of A-6 aircraft will increase, but where they will be based. Tentative preparations are for five additional squadrons here.

"Nobody has said Whidbey Island is going to get the extra A-6 squadrons," said Rear Admiral Fred Metz last week. "But the notional airwing is go-



RAdm. Fred Metz  
Air wing commander

ing to be implemented in the Navy, and we are making plans based on the assumption that Whidbey Island will absorb one-half of the additional squadrons."

Metz, who is Commander, Medium Attack Tactical Electronic Warfare Wing, U.S. Pacific Fleet, came to Whidbey Island this fall quietly bearing news of local ramifications of the notional airwing concept within Navy

ranks. The news was made public in November shortly after air wing and NAS Whidbey staffs started planning based on the assumption the extra squadrons will end up here.

Before the end of the year, Metz and NAS Whidbey Commanding Officer Capt. Dave Williams had hosted a private meeting to "brief" a handful of community leaders including county commissioners and mayors. Earlier this month, NAS Whidbey was represented in Washington, D.C. as Pentagon officials prepared a notional air wing briefing for Secretary of the Navy John Lehman.

Although local Navy officials privately speculate NAS Whidbey is the odds-on favorite to host the new squadrons, Williams cautions: "There is a possibility the growth would be absorbed elsewhere." The commanding officer also notes that in keeping with the National Environmental Policy Act (NEPA), there are planning and impact mandates that must be followed.

"Implementation of this growth," he said, "will depend on a positive economic assessment," for which preparatory work is already under way at NAS Whidbey.

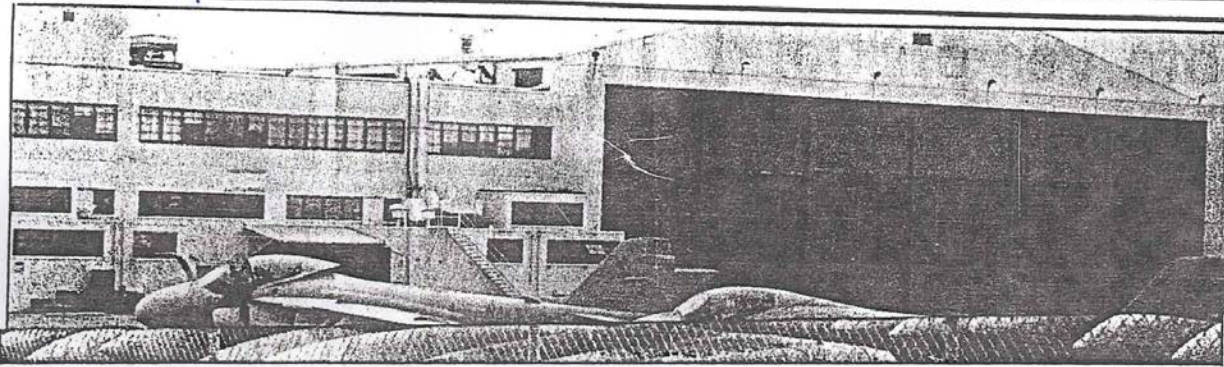
Assuming the notional airwing concept brings additional squadrons to Whidbey Island, the impact on this community would be far-reaching.

(Please turn to page 3)

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If tentative Navy plans become reality, there will be more aircraft and hangars like these at Whidbey Island Naval Air Station. Local Navy officials are involved in contingency planning

focused on the possibility of a 50 percent increase in the number of Whidbey-based aircraft by 1995.

## Impact of Navy growth to be far-reaching

(Continued from page 1)

According to admittedly conservative Navy estimates, the number of aircraft based at NAS Whidbey would increase from 160 today to 243 by 1995. In the same time period, the number of military personnel would rise from 7,400 to 10,000; the number of military dependents, from 12,400 to 16,800.

Although the Navy has not prepared estimates regarding related growth in civilian personnel ranks, the number of civilian support employees would obviously grow with the arrival of new squadrons.

An environmental planning schedule prepared at NAS Whidbey indicates a draft environmental impact statement (EIS) related to the notional airwing concept will be completed in mid-year 1988. Public hearings would follow, with a final EIS expected late that year and a final government "record of

decision" regarding the siting in early 1990.

Because federal dollars are committed years ahead of time, however, planning is already under way at NAS Whidbey to line up the funding and manpower that would be necessary to absorb new squadrons in this community.

Military construction allocations, for example, are being made now in Congress. If the new squadrons are ultimately assigned to Whidbey, some new construction will be necessary to accommodate both aircraft and personnel. Navy officials point out that more than 40 percent of the air base's physical plant was constructed before 1945.

Metz and Williams emphasize that the Navy is eager to involve the civilian community in all

developments regarding the potential influx of squadrons.

Even before the notional airwing concept was announced, NAS Whidbey was making preparations for "a significant period of growth," as former commanding officer Capt. Richard Powell described it. Already-approved expansion plans call for 20 new aircraft by 1991; an estimated addition of 1,000 military personnel by 1991; an estimated increase of 1,600 military dependents (total, 14,000) by 1991.

Meetings held with local elected officials already have raised issues related to such obvious subjects as roads, sewers and water to accommodate growth in the North Whidbey area. All of these concerns, Navy officials assure the civilian leaders, will

be addressed in the environmental assessment process.

"We are dedicated to working in a manner compatible to the mutual benefit of the Navy and the community," said Williams last week. Both he and Metz report they have solicited the continued input of community leaders.

For his part, Metz is convinced NAS Whidbey is the best place for the Navy to base its new squadrons.

"The only airspace in the country where we can support this mission is here," he said. "We are making our plans based on the assumption it is going to be here."

The admiral also emphatically cautions, however, that there is a lot of planning, paperwork and politics between today and an ultimate decision to expand NAS Whidbey.

# WHIDBEY NEWS

Serving North and Central Whidbey

WEDNESDAY, DECEMBER 16, 1987

VOLUME 96, NUMBER 17

## Whidbey can't handle full notional air

By Steve Berentson  
Staff reporter

U.S. Navy RAdm. Frederick Metz last week reported that following an "in-depth review," he has recommended against NAS Whidbey taking on as many new "Roosevelt air wing" squadrons as anticipated a year ago.

He suggested it is unlikely NAS Whidbey will ever grow to the size of Navy air bases at Oceana, Virginia and Miramar, Calif.

"We have determined," said the air wing commander, "that there is a growth saturation level (at NAS Whidbey). We can accommodate some growth, but not to the level mentioned last year."

It was Metz who brought news to the Whidbey Island community that Navy adoption of the "notional air wing" concept would mean dramatic growth at NAS Whidbey between now and the mid-'90s. Initial estimates projected about 240 aircraft based here, as opposed to current levels of about 160 aircraft.

Those projections were based on a new Navy plan to place more A6s and EA6Bs on aircraft carriers, in part because of their critical role in dealing with terrorists. A6 and EA6B squadrons, for example, were a primary part of the U.S. strike team that bombed Libya in 1986.

Metz noted Friday that Navy plans regarding the notional or "Roosevelt" air wing are still in a state of flux. Still, he said, evidence he has gathered indicates NAS Whidbey cannot absorb the level of growth initially projected here as the Roosevelt air wing plan goes forward.

"The original notional air wing numbers were going to make NAS Whidbey the largest air station on the coast," noted Metz. "I don't think that's going to happen."

The admiral said the Navy is still trying to define NAS Whidbey's "saturation level."

"What number of aircraft determines that saturation level has not been determined," he said, "but I don't

think we can take that growth (as many as 243 aircraft based on North Whidbey). My recommendation is that we are unable to do that."

Metz said that while he believes NAS Whidbey is "very viable" for absorption of some growth associated with the Roosevelt air wing concept, "somebody else should share part of that growth." NAS Oceana is a likely candidate to absorb growth beyond NAS Whidbey's "saturation point."

On another subject, that of much-publicized Navy deliberations over siting of a "follow-on" aircraft to replace the A6 attack bomber, Metz said he is not sure the Navy will announce its "in-house" recommendations before a final decision is reached at top Washington, D.C. levels.

Three months ago Metz and Williams reported Navy plans to assess NAS Whidbey versus NAS Lemoore in California as the site to base follow-on aircraft squadrons in the mid to late '90s. Information regarding that program is classified top secret by the Navy.

Metz, whose recommendation was the first in a series of recommendations that will be made along the Navy chain of command, said he advocated to his superiors that "all-weather training remains here."

"My position all along," said Metz, "has been that this is the best place to do all-weather medium attack training."

An urgent appeal to the community for a show of support of Navy growth was helpful in making the case for NAS Whidbey as the continued center of A6 training on the West Coast, said Metz. Before that, he contended, local consideration of the Navy's impact on land-use planning was drawing "one-sided" response from the community. That response was harshly critical of growth in air training activities at NAS Whidbey and Outlying Field Coupeville.

Metz, who in September cited a new Central Whidbey

(Please turn to page 5)

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# WHIDBEY NEWS-TIMES

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Serving North and Central Whidbey Island

VOLUME 96, NUMBER 17

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## Can't handle full notional airwing, Metz says

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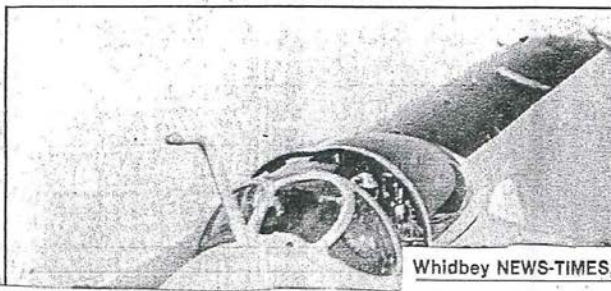
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Metz, who in September cited a new Central Whidbey



Whidbey NEWS-TIMES, Wed., December 16, 1987

## NAS Whidbey can't handle full airwing

(Continued from page 1)

organization known as Whidbey Islanders for a Sound Environment (WISE) as a threat to NAS Whidbey's future, has since met several times with Central Whidbey residents including leaders from this group.

Metz said Friday he told a group of Central Whidbey residents including several WISE members that he would recommend against NAS Whidbey absorbing the number of aircraft originally anticipated with Roosevelt air wing.

"I told them I recommend that we accept growth, but only to a point," he said. "I have told the Navy League

the same thing. We are looking into what that saturation point is."

In addition to their meetings with Metz and NAS Whidbey commanding officer Capt. Dave Williams, WISE leaders and elected officials including local mayors and county commissioners will be given a chance to meet this week with two representatives from regional Navy headquarters in San Diego.

Meetings with local officials and select citizens, said Metz, will be part of the San Diego team's agenda during a two-day visit that includes an NAS Whidbey "orientation."

NAS Whidbey cannot accommodate the growth a new notional airwing would bring, RAdm. Fredrick Metz said this week. Metz has recommended Whidbey split the new squadrons with another air base.

Maybelle Hutchinson, attended yesterday's hearing and raised her hand when Patrick asked if anyone else wanted to speak for the record.

Patrick quickly said he would not accept comments from anyone not involved in the defense or prosecution and denied Gladys Hutchinson permission to speak.

Contacted by phone after the hearing, Gladys Hutchinson said she merely wanted to ask Patrick if she could be allowed to put anti-freeze in her son's car, which is currently being held as evidence.

Darrin told her he was concerned (Please turn to page 5)

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NAS WHIDBEY ISLAND

MASTERPLAN UPDATE

\* \* \* \* \*

Existing Conditions Report

30 September 1986

Western Division Naval Engineering Facilities Command

. Contract Number N 62474-85-C-5608

surrounding community; it is likely that noise complaints may increase somewhat from areas under the night FCLP patterns on Runways 24, 13 and 31. The fact that 15,000 operations can be added to Ault Field without changing the AICUZ makes it clear that CNR contour corrections are step-functions which allow for considerable leeway in operational level. FCLP operations at Ault Field would have to triple before the difference would be reflected in the CNR contours.

Costs incurred in implementation of this strategy are centered on administrative expenditures. This strategy implies careful scheduling of FCLP operations. Planning of deployment activity by the Wing Commander will ease FCLP loading at Ault Field.

In the event overloading does occur at Ault Field, it would be possible to construct a parallel runway (designated 13R-31L) such that at all times one of the parallel runways would serve FCLP operations and the other could accommodate arrivals and departures. A runway 8,800' in length with associated taxiway and lighting systems may cost \$40-70 million.

On the other hand, the Wing Commander could assign FCLP deployment to other Pacific Fleet support facilities. However, there are considerable costs associated with this course of action which are difficult to accurately estimate. There would be transfer of maintenance facilities and maintenance personnel as well as aircraft squadrons and dependents.

Although the field is operationally important as a carrier qualification field, facilities at OLF Coupeville do not now meet criteria established for current FCLP operations levels. The following improvements are required:

- a. Extend runways--
  - Runway 14/32 from 5,400' to 8,800'
  - Taxiway from 4,866' to 8,800'
- b. Strengthen existing pavement
- c. Improve roads and drainage
- d. Acquire land in fee (APZ A lands outside the base) 71 acres.

The cost of bringing OLF Coupeville up to standard is approximately \$8.75 million. Should operations at OLF Coupeville continue, it is likely that if planning and zoning alternatives were unsuccessful, extensive restrictive use easements would also have to be acquired since OLF Coupeville is in an area more prone to second home subdivision development than Ault Field.

## Anti-noise group demands EIS for Coupeville field

By Mary Kay Doody  
Staff reporter

An attorney hired by Whidbey Islanders for a Sound Environment (WISE) has asked the U.S. Navy to prepare an environmental impact statement on flight operations at Coupeville Outlying Field, and to reduce flight levels to 11,000 operations a year from the current 30,000-plus, until the study is completed.

"Operations at OLF Coupeville have exceeded the point of tolerability and are threatening the livability of the community," said Jeffrey M. Eustis, an attorney in J. Richard Aramburu's Seattle law office. "Yet never during the 20 years since the reactivation of this landing field has the Navy prepared any environmental or health analysis of its activities."

In a letter to Rear Admiral Frederick Metz at Whidbey Island Naval Air Station, Eustis said WISE requests the impact statement under

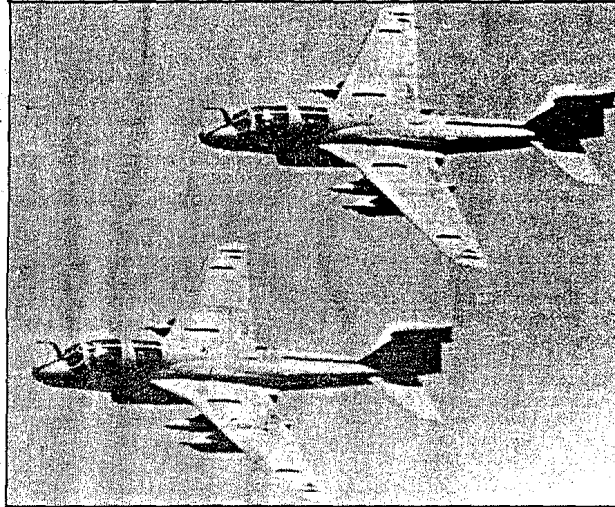
the provisions of the National Environmental Policy Act (NEPA) — and expects a reply within 45 days.

"To assure the Navy's compliance with NEPA," Eustis said in his letter dated April 8, "WISE is prepared to resort to all legal remedies available.

NAS Whidbey public affairs officer Mariana Graham said yesterday, "We have received Mr. Eustis' letter and are reviewing it. We will determine our course of action at a later date."

Island County Health Officer Dr. Wylie Vracin has reported an increase in noise-related stress cases in the past year, and real estate agents have found it harder to sell houses in high-noise areas, said Eustis.

Last year there were 30,350 Navy flight operations at Coupeville OLF, a 50-percent increase over 1986 levels and nearly 100-percent over levels the preceding 10 years, he said, adding that 1988 levels are higher than last year's, and surpass those forecast in



Two EA6Bs fly in formation. Whidbey Islanders for a Sound Environment this week demanded an environmental impact statement for increased use of OLF Coupeville.

the Navy's 1986 Air Installation Compatible Use Study.

Not only would preparation of an EIS fulfill the Navy's legal obligations under NEPA, Eustis suggested, but it

would be "a decision-making tool" that could help resolve conflicts on Whidbey Island between the Navy's operations and the people who live in Navy aircraft noise and accident-potential zones.

EA-18G Growler  
EIS Project Manager Naval Facilities  
Engineering Command Atlantic

Attn: Code ~~EV2~~/SS

Comment on the DraftEIS

I am a long time resident on Whidbey Island. My family has owned land in Central and North Whidbey long before the Navy became a presence on Whidbey Island.

Increased flights at OLF will put farmers out of business because they and their workers will not be able to tolerate the unbearable noise as they attempt to work under the flight path. Bed and Breakfast businesses and tourism, the life-blood of Central Whidbey, will be dramatically, negatively impacted (as we have already heard from our friends who own such a business). Increased flights at OLF means a greater risk of crash and with it the certainty of more frequent use of the foam containing PFOA's which is poisoning our local wells. This issue has been discovered AFTER the EIS was written. A fact which should require the whole process to be re-evaluated and re-written (at the least). The water pollution is a big concern for we who are drinking it.

Finally, two months ago, the United States, once again recognized the agonizing moment of the attack on Pearl Harbor, where so many valuable U.S. Assets were lying in the harbor, an easy target. WHY on earth would we want to make the same mistake yet again and position ALL of our expensive and valuable Growler assets in ONE place. This makes ABSOLUTELY NO SENSE STRATEGICALLY! If you care nothing for the destructive impact you will have by increasing flights at OLF, at least consider the unwise strategy you are embarking on. You will be putting a big target on the backs of every single man, woman and child living here. If you can't be concerned about them at least consider the great loss in the very expensive assets you tell me the Navy depends on to protect our country.

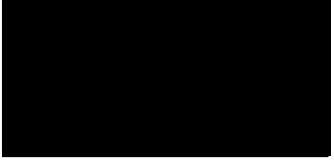
Please don't 'blow this off' as a disgruntled anti-Navy liberal. I am an independent voter

1.a. Thank You  
1.e. Risk of Terrorist Attack  
11.d. Per- and Polyfluoroalkyl Substances  
12.e. Agriculture Analysis  
12.h. Tourism  
2.a. Purpose and Need  
2.d. Program of Record for Buying Growler Aircraft  
3.a. Aircraft Operations



and thinker. The things I have written to you are true and worthy of consideration.

Sincerely,



Coupeville, WA. 98239

CC Senator Patty Murray, Senator Maria Cantwell, and Congressman Rick Larson



# 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](http://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

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

INCREASED OPERATIONS BY "GROWLER" AIRCRAFT, AT OLF WILL CAUSE ECONOMIC HARDSHIP, I.E. LOSS OF TOURISM AS GUESTS CAN NOT ENJOY THE QUIET VACATION THEY CAME SEEKING, FARM FIELD WORKERS, WORKING IN THE RELATIVELY NEW ORGANIC FARMS, WILL NOT BE ABLE TO WITHSTAND THE NOISE PRODUCED IF THE NAVY CHOOSES THE MOST INTRUSIVE PLAN, AT OLF. CHILDREN AT SCHOOL WILL BE EXPOSED TO NOISE LEVELS DETRIMENTAL TO THEIR HEALTH, EBES NATL HISTORIC RESERVE WILL SEE LESS VISITORS, WHICH WILL MEAN LESS BUSINESS FOR LOGAL-ESTABLISHMENTS. COUPEVILLE STANDS TO LOSE A GREAT DEAL FROM INCREASED OPERATIONS AT OLF. KEEP THE

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

PRACTICES IN CARROLL COUNTY, WHERE THAT COMMUNITY IS CLEARLY THE BENEFICIARY. YOUR INPUT MATTERS

- 1.a. Thank You
- 12.c. Socioeconomic Impacts
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 2.I. No Action Alternative
- 4.o. Classroom Learning Interference



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1. Name [REDACTED]

2. Organization/Affiliation *Citizen of Whidbey*

3. Address [REDACTED] *Carpentier 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 don't have time to list all the reasons  
Growlers should not use the OLF but here are  
just a few*

- the noise pollution will only get worse w/ more of these awful jets. I have fibromyos and have lain awake many a night waiting for the OLF flights to cease. And I don't have a 40-hr job - think of all the working people who have to go to work after sleepless nights.*
- the chemical pollution from fire retardants*

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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
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.j. Property Values
- 2.n. Alternatives Considered But Eliminated
- 3.j. Flight Simulators
- 4.d. Day-Night Average Sound Level Metric
- 4.m. Supplemental Metrics
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 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.

is being looked at but no one is testing for the aircraft fuel pollution to ground water that jet bases are known for. This could be worse than the fine retardant pollution yet no one is testing for it

- The Navy's method of averaging sound measurements over time is BS. If I hold a firecracker next to my ear and set it off I will lose my hearing in that ear. But if you average it over a day it's minor and completely tolerable. Pure BS
- The OLF field was designed for prop planes, not jets!
- Our property values will plummet. Can you imagine showing your home to a potential buyer when a Growler blows by overhead? What kind of steep discount will it take to unload a home under or near such obnoxious racket?
- Fly the jets over the Cascades and test train your pilots in a less densely populated terrain. Our island belongs to EVERYONE, not just the Navy. Bigger and stronger doesn't make the Navy right - it makes the Navy a bully and a bad neighbor.
- What will you do when a Growler takes out Coupeville or an entire neighborhood? No one will care about your apologies after all those civilian deaths.
- The Navy is harming the very people they pledged to protect. NO MORE GROWLERS AT THE OLF.

For more information, please visit the project website at [whidbeyis.com](http://whidbeyis.com)

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**YOUR INPUT MATTERS**

coupeville, WA 98239

The EIS is inadequate. Here are my issues with it: NOISE - It was bearable the first few years we lived here but steadily ramped up with noisier jets and more frequent flights. NO consideration was given to children or old people within ear shot of the jets, nor any consideration given to working people who have to get up and go to work after a night of jets preventing sleep past 11:00pm. The town of Coupeville, its businesses and a great hospital must put up with oppressive noise that drives away customers and reduces the inpatient enrollment a great hospital like ours needs to make ends meet. I won't live here forever. Try to imagine how my house will sell in the future when prospective buyers are pushed away by the threatening racket of loud jets constantly buzzing the neighborhood. Who wants to pay to live beneath such noise? What price can I ask for a great home under these circumstances? Unless something changes, we'll be underwater when we sell. Contamination of groundwater is about as serious a problem as we can have short of a nuclear winter. And correct me if I'm wrong, but the Navy isn't even testing for contamination from jet fuel. If the OLF is like any other Navy airstrip, there are or have been underground fuel tanks at the field, tanks that are notorious for leaking as they age. We will not put up with the Navy contamination the very resource required by all people on the planet - clean water. No one has properly addressed the potential for mass casualties if one of these Growlers crashes in Admirals Cove neighborhood, an area the jets fly over repeatedly. The devastation would be catastrophic. What tourist in his right mind will subject himself to this racket? Tourism is a major source of income for our island and the jets do nothing but damage any enjoyment tourists look to experience on our otherwise beautiful island.

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.h. Tourism
- 12.j. Property Values
- 17.a. Hazardous Materials and Waste Impacts
- 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
- 5.a. Accident Potential Zones

Coupeville, WA 98239

I am very concerned about these issues and I do NOT see them being addressed: Health affects from noise and low frequency sounds Impact on schools, hospital and many residents(me included). Tourism impact-hikers, campers, etc. We are a tourist island. loss of revenue from flying. Documented campers leaving in the night from loud flying over Deception Pass campgrounds. Property value issues due to noise- I am in the fly zone, signed papers when bought home, and now you are saying this HUGE INCREASE in flights. No WAY. Noise impacts on agriculture and commercial property. Impact on marine and terrestrial wildlife. A Security risk by having ALL the Growlers here. Crash and mishap risks due to problems such as on board oxygen systems. Did the Navy consider and look at siting new Growler aircraft elsewhere since that was a TOP issue from the community during the Navy's prior scoping formats. Water contamination issues. Release of the ACTUAL NOISE MEASUREMENTS, were any really made? Why not? Way too loud. Impact on Children at school and sports activities. Economic impact-Navy costs us loss of money from property taxes Navy does not pay for property owned. Addressing of the fuel dumping and frequency of it. Shouldn't we know?

- 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.h. Tourism
- 12.j. Property Values
- 17.a. Hazardous Materials and Waste Impacts
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 6.f. Fuel Dumping
- 7.i. Deception Pass State Park and Other State Parks
- 7.j. Impacts on Outdoor Sports



# 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](http://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 \_\_\_\_\_
2. Organization/Affiliation Resident of WI/Ledgewood
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

many concerns:

- Number of possible flights — increase by as little as 2,200 to as much as 29,000!
- wow — kill the quiet life, tourism and pollution.
- Fuel dumping in Salish Sea?
- Housing for Navy
- Jet noise linked to health issues
- How noise level measured & averaged?
- Real estate value affected by noise?

Please print • Additional room is provided on back

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**YOUR INPUT MATTERS**

- 1.a. Thank You
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- 11.d. Per- and Polyfluoroalkyl Substances
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- 12.i. Housing Access and Affordability
- 12.j. Property Values
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- 4.d. Day-Night Average Sound Level Metric
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Deception Pass noise so bad  
campers leave

EIS acknowledges

High background noise causes problems  
for students at Coupeville schools +  
outdoor sports events.

Pollutants found in water.

I know the jets need to fly - but  
why not where there is less population.

This plan will make central  
CWI unlivable.

For more information, please visit the project website at [whidbeyeis.com](http://whidbeyeis.com)

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**YOUR INPUT MATTERS**



Port Townsend, WA 98368

The DEIS does not adequately address the environmental and public health consequences of planned Growler increases, especially regarding noise. Computer modeling averaging periods of noise with long periods of silence, with no measurements of noise levels in the community itself, is absolutely unacceptable for evaluating noise impact in the entire area of growler operations. The DEIS ignores overwhelming scientific and medical evidence of harms caused by hazardous Growler noise. School children will be horribly disturbed in the Coupevill area and may experience some cognitive damage due to increased noise. Property have already fallen and the economic impact on the area is significant. 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 aboard Growlers, to civilians, wildlife and habitat. OLF has a stationary electromagnetic emitter currently in use. Why is any mention or discussion of risks from exposure to electromagnetic radiation from Navy jets completely missing from all discussions of potential impacts? The draft EIS does not comply with mandatory NEPA requirements to fully analyze off-Whidbey training options, which is where they belong - away from the (formerly) peaceful northern Puget Sound area and precious jewel of the Olympic peninsula.

- 1.a. Thank You
- 12.j. Property Values
- 19.d. Electronic Warfare
- 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.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects



# 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](http://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

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 support the NAVY Mission on Whidbey Island. I support the addition of GROWLERS to be added to the FLEET.

I support the TRAINING AT OLF Courville.

I BELIEVE ALL OF THESE ARE NECESSARY for OUR NATIONAL SECURITY.

Please print • Additional room is provided on back  
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**YOUR INPUT MATTERS**

Coupeville, WA 98239

1.a. Thank You

4.q. Potential Hearing Loss

7.d. Recreation and Wilderness Analysis and Study Area

I live beneath the flight path of the jets. The noise has been very distressing to me in various ways. When fighting cancer and needing to rest, it is deeply disturbing to live in the sound of a war zone that ear plugs could not muffle and even the bed vibrates. When I try to bike, the jets overhead cause me to have to block my ear with one hand and turn my other ear to the ground. It is damaging to one's hearing and distressing to the spirit. Please respect the value of our lives and health to be able to live in peace on this beautiful island. Thankyou.

Langley, WA 98260

RE: Public Comment on Draft Environmental Impact Statement for EA-18 Growler Airfield Operations at Naval Air Station Whidbey Island Complex. I am writing to express my concern about the planned expansion of EA-18 G Growler airfield operations at NAS Whidbey Island Complex. Although I think that the expansion will greatly diminish the quality of life on Whidbey Island due to the impacts of noise on private citizens and visitors to our state parks, I am most concerned about the findings of toxic levels of perfluorinated compounds in the drinking water on our island. Since we have a sole source aquifer, the use of outdated aqueous film forming foams represents a threat to the public health of the entire Whidbey Island population. Providing bottled water is not an acceptable remediation. At a MINIMUM, the Navy should safely dispose of all stored reserves of the now banned fire suppressant and replace it with a safe alternative. Ideally, the expansion of the Growler airfield operation should be postponed indefinitely until a plan can be developed to decontaminate the drinking water and ensure that further contamination is prevented. Sincerely, [REDACTED] Langley, WA 98260 [REDACTED]

1.a. Thank You  
11.d. Per- and Polyfluoroalkyl Substances  
12.h. Tourism  
12.n. Quality of Life  
4.m. Supplemental Metrics

1.a. Thank You

Oak Harbor, WA 98277

i fully support what you doing and always have since i have been here thank yiu

Oak harbor , WA 98277

1.a. Thank You  
11.d. Per- and Polyfluoroalkyl Substances

I'd like my water tested for the possible contamination please.

## 1.a. Thank You

Mount Vernon, WA 98273

My wife and I live on Fir island in Skagit County WA. which is located 11-12 miles east of NAS Whidbey. Our house lines up with NAS Whidbey east/west runway. Growlers are over our house when returning to base or during night ops circling overhead. The jets (noise) are a small inconvenience to us for living in a free country. Please continue with your needed up grades to NAS Whidbey. We support the DOD and Navy 100%. Thank you [REDACTED]

Oak Harbor, WA 98277

I worry the growlers will be too loud for me and anyone else who might want to purchase my residence should I be forced to sell. Can't they stay out of the restricted zone of residential home owners, fly over the water or permitted zones. I also worry about the water contamination not dealt with in the DEIS.

1.a. Thank You  
11.d. Per- and Polyfluoroalkyl Substances  
12.j. Property Values  
3.a. Aircraft Operations



Oak Harbor, WA 98277

Since I live on Penn Cove, I am impacted by the Jet noise. I like the option C on the DEIS, and want my property values protected as this is a low fly zone and never on weekends, hoping it stays that way. I appreciate the Navy's service and understand you need to train.

- 1.a. Thank You
- 12.j. Property Values
- 2.m. Record of Decision/Preferred Alternative
- 4.t. Noise Mitigation

nordland, WA 98358

i am against the operations of the ea-18g growler jets. the noise level is very significant where i live on marrowstone island. the jet noise is too loud and creates a great deal of stress on me and my animals. please stop this program.

1.a. Thank You

4.r. Nonauditory Health Effects

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

nordland, WA 98358

i am against the operations of the ea-18g growler jets. the noise level is very significant where i live on marrowstone island. the jet noise is too loud and creates a great deal of stress on me and my animals. please stop this program.

1.a. Thank You

4.r. Nonauditory Health Effects

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You

SEATTLE, WA 98122

Please stop the testing and practice of fighter jets over National Park land. Unnecessary.  
They can cut back practice and go to Eastern Wash.

Friday Harbor, WA 98250

Growler jets are flying over our peaceful area frequently. Their noise and window rattling rumbles disturb us, lower our property values and destroy the peace of this rural area. Why not practice over the desert, or in a less populated area? Growler jet training flights over San Juan County and over the Olympic Peninsula must cease!

- 1.a. Thank You
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 2.n. Alternatives Considered But Eliminated
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations

## 1.a. Thank You

Saanich, British Columbia V8N 2Y8

I live on the East shore of Saanich peninsula and frequently hear the rumbles created by the 'Growler' jets. On occasion, particularly when the nights are dark, windy and wet, I think of the young people, ground crews and flight crews, who are involved in the operation of the A/C and appreciate immensely, their dedication to their duty to their Country. Also, I believe that others, eg., Australians, take part in these training exercises. We in Canada have very few combat A/C with which to defend our territory and I appreciate the fact that it is the United States Armed Forces that are, de facto, our main line of defence. For my part, the U.S. Navy can go right on making rumbles if thats what it takes to help keep me secure. Most sinceretely, [REDACTED].

Dec 1, 2016

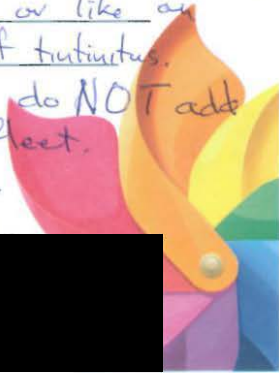
Dear Project Manager

I live in Oak Bay  
Victoria BC. We  
overlook the ocean  
and enjoy the constant  
beauty of our environment.  
Unfortunately, the dull  
roar of the howler  
jet engines destroys  
this pleasant aspect.

The noise is constant  
and threatening. It invades  
my ears like a throbbing  
ear ache or like an  
attack of tinnitus.

Please do NOT add  
to the fleet.

Thanks



Victoria BC V8S 2N8



1612020134

3717 V7B

EA-18G EIS Project Manager  
Naval Facilities Engineering Command  
(NAVFAC) Atlantic

Attn: Code EV21/55  
6506 Hampton Blvd.  
NORFOLK VA  
23504



Sequim, WA 98382

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 2.m. Record of Decision/Preferred Alternative

I am writing to ask you to at least hold the line on the number and frequency of Navy Growler jets based at Whidbey Island. Last week I was working voluntarily on trail maintenance in Olympic National Park, and the day was repeatedly interrupted by the annoying sound of these jets flying overhead. I can't imagine how deafening they are to the people who live near their home base on Whidbey Island. Please deny the Navy the additional Growlers, and ask them to stay away from World Heritage Sites. Thank You for your consideration.



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 misconception 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 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 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.

Coupeville, 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 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.

- 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

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

Coupeville, WA 98239

1.a. Thank You  
4.q. Potential Hearing Loss

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...” 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 reanalyzed.

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

It has been very difficult to even wrap my mind around how and what to comment on this EIS. The whole situation since the Growler's first arrived in Oak Harbor has been tumultuous and depressing. To have been told that we are looking at possibility of such greatly increased flights after several years of community meetings and concerns about the affect of the Growlers as they HAVE been seems almost pointless. Regardless, I will go forward with my concerns in the manner in which the Navy has asked them to be made and trust you will take them to heart. PFA Contamination This first point of concerns is unresolved in the current EIS. It is my understanding that the current EIS does not address that issue at all. Information also seems to be developing on this issue. My concern on this issue is; how far will the contamination eventually extend? My residence and commercial produce farm, is currently far enough away from contaminated wells that have been identified around OLF in Coupeville SO FAR. But our aquifer system certainly is interconnected. Is my well at potential to eventually be affected? What is the Navy's plan to continue to test wells to monitor this? If contamination continues to spread, what is the Navy's plan to recompense those home and business owners that are now affected? It is also my understanding that the Navy has not indicated any current plans to discontinue use of the fire suppressing materials from which the PFA contaminants seems to be most likely coming from. Based on that, how can we be assured that contamination above and beyond what has already occurred will not continue in the future? If a Growler crashes in a field near my home and farm business, and this PFA containing product is used to suppress fire, contaminating my well, my soil and ruining my farming business, what is the Navy's plan to compensate for that. Providing bottled water is certainly not sufficient for farm irrigation, nor will I be able to safely grow vegetables in contaminated soils. I believe the Navy MUST address this issue as part of their EIS as it certainly is a major potential environmental affect of not only current use of the OLF field, but certain a major factor in proposed INCREASED use. As far as potential other affects of proposed increased flights... First a little background on me. I am a life-long resident of central Whidbey, four generation actually, as my family originally settled on our farmland on Ebey's Prairie in the late 1800s. I would like to make it clear that my family has owned this land long before the OLF was present, and even before the Navy was on the island itself. So the argument of "we should have known buying next to airstrip" is irrelevant to my situation. I was born in 1971 and grew up on Ebey's Prairie. I at one point lived on Quail Trail Lane near the county dump, which was right under the jet path, and still is. I never had a problem with the Prowlers, I remember falling asleep to them flying right over the house I lived in on Quail Trail Lane. The Growlers however, are a completely different beast as far as sound and I am at a loss to understand how anybody can argue that the Growlers are not substantially more loud, in not only a decibel, but whole visceral body reaction, than the Prowlers were. My father, who also was born in Coupeville in 1940, and wears hearing aids from years of working around loud tractors and vehicles, was shocked by the noise of the Growlers when they are running. He actually said to me, the first day the Growlers started flying; "So what does this new plane do? Just drive back and forth over our enemies till they give up from the noise?" When you have a 78 year old, hearing impaired man who has spent his life driving tractors and big trucks complaining about noise, that's well, that's saying

- 1.a. Thank You
- 1.d. General Project Concerns
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
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has the potential to greatly DECREASE the value of our land. Why would people want to buy that beautiful, peaceful 10-acre home surrounded by preserved farmland when they will be blasted by intolerable noise? That isn't why people move to our community (including those retired Navy folks many of whom are also very concerned about this noise issue!). Or, for that matter, why would they buy this land that may be at the risk of losing their well water to contamination with no assurances that the Navy will "make it right" if that does occur? They won't buy it. Or they will, at greatly reduced price. In addition, many of us who do own land without the development rights, such as my family who has again OWNED OUR LAND BEFORE THE NAVY WAS EVEN ON WHIDBEY, will now be faced with the prospect of now our land is truly only valued as farm land which, ironically has become MUCH MORE DIFFICULT TO FARM because of the noise issue affecting our ability to work in the fields. The 20 acres my family owns can never be developed on, so its only value to us is as a home to us and the potential to sell it, and, as a place to make a living on by farming (which is where my heart and soul is). So where does this put us...well, it puts us between a really solid rock and a really pointy hard place! So, with all these points.... I hope you can understand my great concern about the proposed Growlers flights at OLF. I feel for the people of North Whidbey and Ault Field too, for sure. I would hope the Navy would seriously consider the huge impact this will have on our communities and our lives, and at look to mitigate this situation in any and all ways possible. Spreading the Growlers between many Naval communities would be one answer (so we don't take the brunt of it all). Or finding a place the Growler's can practice that are NOT in a populated area (why not fly over the Cascades to Eastern Washington?). Or for God's sake, find SOME WAY to reduce the noise volume on the Growler's. I would think you would want to do that for the sake of your Naval personnel alone! Thank you for your time! Please accept these comments. Please take them to heart. [REDACTED]

Comments Submitted for Draft NAVY EIS for Whidbey Naval Air Station  
2/24/17

To Whom It May Concern

It has been very difficult to even wrap my mind around how and what to comment on this EIS. The whole situation since the Growler's first arrived in Oak Harbor has been tumultuous and depressing. To have been told that we are looking at possibility of such greatly increased flights after several years of community meetings and concerns about the affect of the Growlers as they HAVE been seems almost pointless. Regardless, I will go forward with my concerns in the manner in which the Navy has asked them to be made and trust you will take them to heart.

**PFA Contamination**

This first point of concerns is unresolved in the current EIS. It is my understanding that the current EIS does not address that issue at all. Information also seems to be developing on this issue. My concern on this issue is; how far will the contamination eventually extend? My residence and commercial produce farm, is currently far enough away from contaminated wells that have been identified around OLF in Coupeville SO FAR. But our aquifer system certainly is interconnected. Is my well at potential to eventually be affected? What is the Navy's plan to continue to test wells to monitor this? If contamination continues to spread, what is the Navy's plan to recompense those home and business owners that are now affected? It is also my understanding that the Navy has not indicated any current plans to discontinue use of the fire suppressing materials from which the PFA contaminants seems to be most likely coming from. Based on that, how can we be assured that contamination above and beyond what has already occurred will not continue in the future? If a Growler crashes in a field near my home and farm business, and this PFA containing product is used to suppress fire, contaminating my well, my soil and ruining my farming business, what is the Navy's plan to compensate for that. Providing bottled water is certainly not sufficient for farm irrigation, nor will I be able to safely grow vegetables in contaminated soils.

I believe the Navy MUST address this issue as part of their EIS as it certainly is a major potential environmental affect of not only current

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use' of the OLF field, but certain a major factor in proposed INCREASED use.

As far as potential other affects of proposed increased flights... First a little background on me. I am a life-long resident of central Whidbey, four generation actually, as my family originally settled on our farmland on Ebey's Prairie in the late 1800s. I would like to make it clear that my family has owned this land long before the OLF was present, and even before the Navy was on the island itself. So the argument of "we should have known buying next to airstrip" is irrelevant to my situation. I was born in 1971 and grew up on Ebey's Prairie. I at one point lived on [REDACTED] near the county dump, which was right under the jet path, and still is. I never had a problem with the Prowlers, I remember falling asleep to them flying right over the house I lived in on [REDACTED]. The Growlers however, are a completely different beast as far as sound and I am at a loss to understand how anybody can argue that the Growlers are not substantially more loud, in not only a decibel, but whole visceral body reaction, than the Prowlers were. My father, who also was born in Coupeville in 1940, and wears hearing aids from years of working around loud tractors and vehicles, was shocked by the noise of the Growlers when they are running. He actually said to me, the first day the Growlers started flying; "So what does this new plane do? Just drive back and forth over our enemies till they give up from the noise?" When you have a 78 year old, hearing impaired man who has spent his life driving tractors and big trucks complaining about noise, that's well, that's saying something!

#### **EFFECT OF NOISE ON CENTRAL WHIDBEY FARMERS**

So, now, lets talk about how the Growlers affect farming in the central Whidbey area. Farming in central Whidbey has certainly evolved and developed over the years since my family first started farming here in the late 1890s.

The current farming situation however, is that we are a very fertile farming region (class 1 and 2 soils, which means GOOD!) with current farming enterprises consisting of some small scale 'commodity crop' farming (such as grain crops) but mostly lots of smaller scale specialty crop production. Much of that specialty crop production, including my own 12-acre vegetable farm, is highly diversified and functions mostly with lots of hand labor. On my farm, we typically plant about 12 total

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[REDACTED]

[REDACTED]

Comperville WA 98239

[REDACTED]

Coupeville, WA 98239

Alternatives 1. No alternatives to Whidbey Island were considered. The reasons given for not reviewing off-island alternatives - a 40-year history, travel distance, expense - are merely mentioned, not given a serious, hard look. The 1,500-page draft fails to show that there are not more suitable locations than Whidbey. There are no comments regarding the suitability of locations such as NAS Fallon, Nevada. 2. The DEIS also does not address a potential national security threat. It says nothing about why our country should have all its electronic attack equipment in one location. Especially on an island that is: 1) susceptible to terrorist attack because it is only accessible by bridge or ferry; and 2) in an area of the country susceptible to earthquake and tsunami. Noise 1. Actual noise measurements were not made by the Navy, only modeled by computer. The model used 365 days/year to arrive at the average daily decibel level instead of the actual non-weekend number of flying days flown per year - making the decibel level appear lower than it actually is. 2. Actual measurements by residents have recorded levels as high as 130 decibels during flyovers - far above the 80 dB that the DEIS indicates potentially cause hearing loss. 3. The effects of flyover noise on Coupeville Elementary students are not adequately addressed and the effects on students at the Middle and High schools are not addressed at all. Economic Impact 1. Coupeville's economy is highly dependent on tourism and small-farm agriculture - a potential increase to 35,100 operations from 6,100 will likely cripple Coupeville's tourism trade as well as residents' property values. 2. The DEIS does not refer to the effect on Coupeville's biggest draw - Ebey's Landing National Historical Reserve. There is no reference to the National Park Service's 2015 noise study, which measured two different points in Ebey's Reserve over a 30-day period. One representative 24-hour period cited in the NPS study recorded 281 "military aircraft events" that exceeded 70 dBA - 10 dBA over the limit deemed to interrupt speech by visitors. Public Safety 1. The DEIS does not adequately address the potential for increased accidents in the potential six-fold increase in flights at the OLF. Pilots are trainees learning new, dangerous maneuvers, increasing accident risk above routine flights done by seasoned pilots. Accidents result in the use of fire-fighting foams with chemicals that have contaminated private and public drinking water wells near OLF. 2. The EPA's Health Advisory Levels for two of these chemicals - PFOA and PFOS - is 70 parts per trillion (PPT). The Navy is currently testing wells for three chemicals, PFOA, PFOS and PFBS - all of which the EPA lists as likely human carcinogens. So far, 10% of wells tested are above EPA limits - one as high as 440 PPT. These banned toxins are still being stored on Whidbey for emergency use and increased flight operations will increase the risk of accidents, fires and the need to use the foams. Summary We are not anti-Navy. And we definitely support the need to train our pilots. But we don't think it's reasonable to put our nation's entire electronic warfare in one location (Whidbey). Nor do we think it's fair to increase one small town's burden from 6,100 operations each year to a potential 35,100. We encourage the Navy to find other expansion alternatives to Coupeville.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.h. Tourism
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 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.q. Potential Hearing Loss
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

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

EA-18G EIS Project Manager:

Please include the following comments for the official record for this draft EIS prepared by the Navy regarding the increase of and impacts by EA-18G Growler aircraft to NAS Whidbey Island.

1. In general, cumulative and direct impacts resulting in the increase of growlers to NAS Whidbey were considered but the INDIRECT impacts, which also must be considered, was weak. Indirect impacts to resources must be considered as is required by NEPA and NHPA. The APE is not large enough when considering indirect effects of increased personnel to Whidbey Island.
2. The first and most obvious question is this: why is there not a RELOCATE WHIDBEY NAS Alternative? Wouldn't this solve the citizen conflicts and allow the Navy to do whatever it wants, in an unpopulated area? Was this considered but rejected? This should at least be a long-term goal for the Navy, as we head into a future of drone warfare and no need for the OLF.
2. Why did the Navy announce that an additional 4000 people were moving to Whidbey Island to support the increase in Growler jets and larger consolidation of Navy operations in the region without going through the required NEPA process this growth will have both direct and indirect impacts on resources. In addition, it was a predecisional action that is illegal under NEPA and NHPA. This kind of action requires a public process that appears to have been circumvented. Purchasing more planes prior to completion of an EIS, or the intent to purchase more planes prior to the completion of an EIS, is, again, predecisional. This DEIS seems to be a means of justifying what has already being done. This is called putting the cart before the horse.

Whidbey Island is physically limited by its size, configuration and natural resources including water availability and suitable perkable land for domestic construction. The indirect effects of rapidly and significantly increasing the population on Whidbey Island are profound and need additional realistic evaluation beyond what is provided here. Unintended consequences of new development to accommodate this population growth need further assessment and evaluation. Again, the APE is not large enough.

- 1.a. Thank You
- 12.d. Population Impacts
- 12.n. Quality of Life
- 14.a. Transportation Impacts
- 14.c. Pedestrians, Bicycles, and Bus Stops
- 14.d. Bridges and Ferries
- 15.a. Infrastructure
- 15.b. Potable Water and Wastewater Capacity
- 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
- 4.d. Day-Night Average Sound Level Metric
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 5.a. Accident Potential Zones
- 7.g. Ebey's Landing National Historical Reserve
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.e. Outlying Landing Field Coupeville and Coupeville History
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Average sound decibel is not a meaningful or realistic measure for Whidbey Island residents who experience the ear-shattering 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. It is also mind-numbing to have an office in or near the FCLP flight tracks, and to regularly experience the roar of a 4-plane daisy chain as they touch and go in what sometimes seems to be an endless loop. My office was in a National Park Service owned historic barn on Ft Casey Road and during the flights, the windows rattled, conversation came to a halt, and thinking/concentrating/reading became impossible.

When you talk about sleep/learning/conversation interference as sources of annoyance, that is an understatement.

And Accident Protection Zones? What's next, residents build bunkers? "Head for the root cellar, Ma, the jets are comin!"

3. Executive Summary, Cultural Resources: this section does not mention OLF being adjacent to Ebey's Landing National Historical Reserve (EBLA) which is significant as a cultural landscape. The open, undeveloped nature of Smith Prairie, in which the OLF is situated, is a character-defining feature of EBLA's historic prairies. The Navy must take cultural landscape resources and attributes into consideration when evaluating impacts to cultural resources in the Alternatives. This is different from considering impacts to archeological or architectural resources as it considers impacts to settlement patterns, land use patterns, small-scale features (among others) as well as built resources. Property boundaries are not evident to the visitor to Whidbey Island. One sees long views across prairies, woodlands, and agricultural fields, historic and other buildings, roads, etc. but no differentiation is made between where Navy property stops and starts. This is the importance of evaluating the cultural landscape of the Reserve at the landscape (not property boundary) level.

Generally, the significance of Ebey's Landing National Historical Reserve is minimized throughout this document. It was established in 1978 by an Act of Congress to celebrate early exploration and patterns of settlement from 19<sup>th</sup> century onward. Federal funds have purchased development easements on large areas of farmland. Whidbey Camano Land Trust has purchased easements on numerous significant lands within the Reserve. This is a rural and pastoral landscape. Residents and visitors do not expect to be confronted by sleeping, learning, and speaking interference as they enjoy the beauties of the unit of the National Park System.

4. Page 9 of the executive summary: Traffic backing onto Highway 20 headed south to Whidbey island is already causing dangerous situations on the

highway. Cars are waiting to turn southbound while on a severely slanted roadside ditch with an inadequate shoulder, frequently for ½ mile or more in the afternoons of weekdays. Transit would be adversely impacted by anticipated increased traffic further delaying residents who rely on public transit to get to/from work and home: another example of indirect effects of bringing in more planes and personnel. Everyone who drives this route is already angry and frustrated. Increasing traffic will be like pouring gas on the fire. And the Deception Pass Bridge is already a bottleneck of serious proportions. Road-delivered supplies to the base are at the mercy of traffic jams, visitor conflicts, and very narrow lanes. Summer travel on this route will be increasingly impractical and frustrating. Is this not a security issue for the Quartermaster Corps?

5. Additionally, why is there little obvious mention of additional civilian employees and their families? Where will they live? What county and municipal infrastructure and resources will they use? Will the cities of Oak Harbor and Coupeville need to expand their water availability and sewage treatment facilities?
6. Island County already has limitations on its infrastructure. More housing is needed, requiring roads improvements, water, power and sewer lines. Significant impacts ARE expected with the increase of growlers and the lack of planning for this anticipated growth. To make a statement to the contrary reflects a profound ignorance of what is happening on the island at the present with regard to traffic, road congestion, lack of affordable and safe housing for navy personnel, inconclusively studied health issues for children due to noise, negative impacts for tourism, among other issues: more indirect effects of bringing in more planes and personnel.
7. Figure 3.2-5: this and all figures for OLF should identify its location adjacent to EBLA and flight patterns that take loud places over a unit of the National Park System (see Figure 3.3-3 for example).
8. Page 3-63, last paragraph: this is the first time EBLA is mentioned. It should be noted early on in document that the OLF is adjacent to a unit of our National Park system. EBLA and NPS should be included in the list of acronyms.
9. Figure 3.5-3: EBLA referred to as a Reservation on map. It is a Reserve, not a Reservation. Ebey's Landing State Park and Fort Ebey State Park should be added to map in Figure 3.5-3. National park Service and other park boundaries are confusing on this map. Make NPS/EBLA boundary a different color for border?
10. Page 3-74: EBLA actually wraps around Penn Cove and is on the north, west, and south of the cove. It is significant as a cultural landscape that reflects a

flights with louder jets will further degrade a sense of history in this landscape.

16. Page 4-195: I disagree with the closing statement that no significant impacts, direct or indirect, would result to cultural resources. The incessant flying of loud jets over a historic cultural landscape is a direct impact to the Reserve and people's enjoyment of it.
17. Page 6-13: Navy is downplaying that visitor enjoyment won't be diminished by aircraft noise by making EBLA seem like any old park. It is different. It is the first National Historical Reserve in the nation. History rules here and there are expectations of seeing a historic place and landscape which speaks to the 19<sup>th</sup> century and is only minimally marked by modern day intrusions. The marked increase in these loud jets at OLF will have significant effects on a visitor's enjoyment and understanding of the landscape, since so much depends upon the visitor viewing the Reserve from key vantage points overlooking the prairies (and this is where the planes fly).

[REDACTED]  
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Freeland, WA 98249  
(Former Coupeville resident)

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](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

- 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



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 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.

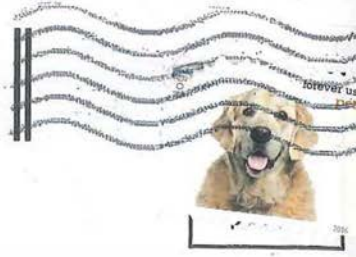
(<https://dec.alaska.gov/spar/ppr/hazmat/Chemical-&-Material-Emerging-Risk-Alert-for-AFFF.pdf>) 24. No mention of contaminated soil is found in the DEIS: It confines its discussion to soil compression and compaction effects from new construction, and concludes there will be no impacts to groundwater. 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, [REDACTED] Port Townsend

TACOMA WA 98333  
 OLYMPIA WA  
 23 FEB 2017 PM 2:11



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Port Townsend, WA 98368-7624

EA-186 EIS PROJECT MANAGER  
 NAVAC ATLANTIC Attn: Code EV 21/SS 6-506  
 HAMPTON Blvd.  
 NORFOLK VA 23508

- 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

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/NWTDocuments/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*



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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](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

**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.

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**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.

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**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.

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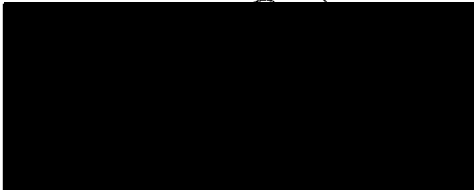
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**26. Pages of boilerplate language do not constitute analysis of impacts to wildlife:**

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,



1.a. Thank You

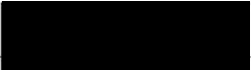


VICTORIA, British Columbia V9A7M9

As a retired Navy CPO, it does not bother me if you rattle a few tea cups in Oak Bay.  
Keep it coming, this is the sound of Freedom.

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
- 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](http://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:

thank you for your consideration

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## 1.a. Thank You

Oak Harbor and Aancortes, WA 98277

I lived in the largest community right next to Ault Field for 11 years - Dugualla Bay Heights with about 230 families. At our annual meetings, there was never an issue raised with noise impacts - we all knew about the base, signed disclosure statements and know that homes are "discounted" near the runway (why people buy there). There was not a SINGLE claim for 'permanent' damage - that is a false claim being promoted by historic anti-Navy groups.

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 [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

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12.h. Tourism
12.j. Property Values
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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:

SAN JUAN COUNTY IS GROSSLY  
 AFFECTED BY GROWLER NOISE. ↘  
 ESPECIALLY SOUTHERN LOPEZ ISLAND.  
 PLEASE REVISE THIS DRAFT &  
 BRING IT UP TO DATE.

1.a. Thank You

Clinton, WA 98236

I fully support expanded flight operations and aircraft inventory at NAS Whidbey. Some noise disturbance is a small price to pay for freedom. I am on Whidbey Island and appreciate all that NAS Whidbey does for the Island and the USA.

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.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
- 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 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

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.

nordland, WA 98358

I am very upset about the Draft EIS analysis of the noise from the expanded Growler program. The analysis uses a 24 hour average as a threshold for 'unacceptable' noise. Because the noise from the planes is of an intermittent nature, averaging that very loud but brief noise does not accurately reflect the actual impact. I am worried, not only about how the noise affects my neighborhood and the communities that are even closer to the flight paths but for the impact of the noise on the wildlife that is so important to me. Our endangered Orca have very sensitive hearing and they and the wildlife in the National Park are critically dependent on a quiet environment. Furthermore, the document does not provide an accurate 'no action alternative' by which we can compare potential future impacts (from noise, exhaust, etc) with current conditions. For these reasons, and many more, I strongly demand that the draft document be re-written in a way that meets the requirements of NEPA and brought back to the public for review. Sincerely, [REDACTED]  
[REDACTED]

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.m. Impacts to Marine Species and Habitat
- 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
- 4.d. Day-Night Average Sound Level Metric
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Victoria, British Columbia V8N 6L2

My home in Victoria, BC faces Whidby Island which is 50 km away. Depending on the atmospheric conditions the growler noise is so intense the house vibrates and objects move on shelves. This happens many times per month. If the noise cannot be reduced significantly (to be not audible) the growlers should be relocated to a more remote location. Please be more considerate to your neighbours. [REDACTED]

[REDACTED] Victoria, BC, Canada V8N 6L2 [REDACTED]

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.t. Noise Mitigation

Langley, WA 98260

1.a. Thank You

4.r. Nonauditory Health Effects

My home is on the east bank of Whidbey Island about 2 miles south of the city of Langley. About a week ago I was getting ready for bed and a Growler aircraft flew over my home. The noise was so intense that I felt shaken and shocked by the intensity of the sound. I know now what the people of Coupeville experience lots of the time. I don't feel like it is good for a person's health.

Freeland, WA 98249

1.a. Thank You

2.n. Alternatives Considered But Eliminated

Please consider that Whidbey is a residential island and that the proposed increase in noise will negatively impact much of our population. I value the Navy's dedication to providing the best possible training for its personnel and thank every member of the armed services for their service to America; HOWEVER, finding a location to train pilots where there is a much smaller resident population seems like a reasonable solution. I hope that unpopulated sites can be considered.



Coupeville, WA 98239

Please, please do not increase the number of flights at OLF. I want the Navy here but don't increase the flights as it would ruin our very special historic town and tranquil community. I have a B&B in town and am asked by folks how noisy the planes are. It would be horrible if you increase the flights to 15,000 or worse yet 35,000! Our property values would go down and our tourist town would die. I haven't even touched on the water pollution, noise damage, children's learning issues etc etc etc. please consider our pleas and really think this through and keep it at the lowest option of 8,000 ( more than our present amount)

- 1.a. Thank You
- 12.h. Tourism
- 12.j. Property Values
- 12.n. Quality of Life
- 2.m. Record of Decision/Preferred Alternative

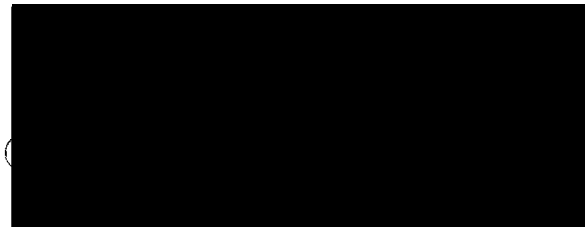
- 1.a. Thank You
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- 12.o. Cost-Benefit Analysis

Dear Secretary of the Navy,

As a Coupeville resident, I would like to say that I want the Navy to stay on Whidbey! I appreciate what they do to keep us safe and what they bring to our local economy. What I don't want is the number of flights at OLF to increase according to your options. Coupeville is a very unique and special historic town and it needs to be protected. It is a very popular tourist town and a large increase in flights at OLF would ruin the tranquil feeling here. I have a B&B here in town and people often ask how often the planes fly. It would be a disaster to have them increase to 15,000 or 35,000 flights---that would be flights all day and night everyday but the weekend and that is just not acceptable. Our property values would drop and the town would eventually die with no tourists coming.

Whidbey Island is such a special place for people to come and enjoy the beauty of beaches, farmlands, wooded trails and parks and the peaceful quiet! So please don't ruin all these special things!! Other problems are water contamination, noise damage, pollution to farmlands, children learning issues, etc! etc! etc! So please do not ignore our pleas to you and really think this through to realize what impact this would have on our town. Thank you- [REDACTED] from the [REDACTED] in Coupeville.

P.S. hopefully someone reads these letters!

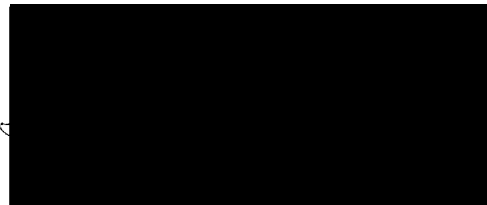


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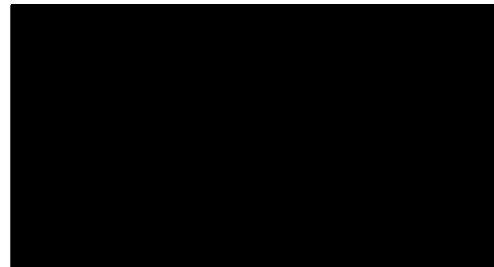


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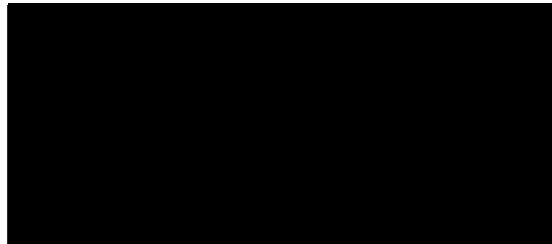


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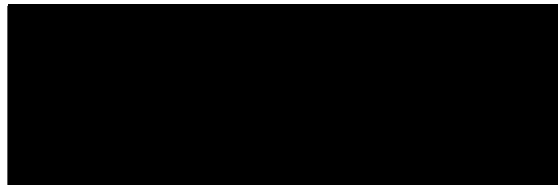


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# Public Meeting Comment Form

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](http://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 vacation rental owner

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

1. I have no problem with the present plan, but do not want increased noise at OLF

2. Coupeville is supposed to be a quiet, peaceful, historic town folks retire here, because of that and it would be so sad to see that change.

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
- 2.a. Purpose and Need
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 4.p. Sleep Disturbance

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3. I own a vacation rental right in town and folks ask before they come - how much noise there is from the jets.

4. Also it is hard in the summer when they fly at midnight, which is hard if you trying to relax & sleep.

5. So please go with the lesser increase in flights at OLF to preserve our quaint, historic town & area!

For more information, please visit the project website at [whidbeyis.com](http://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**



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](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

- 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

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. Thank you for considering these comments. Sincerely,



# 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](http://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

AS A PROPERTY OWNER LIVING SOUTH OF THE COUPEVILLE  
 OLF, I AM CONCERNED ABOUT INCREASED EFFECTS FROM NOISE,  
 ENVIRONMENTAL POLLUTION, AND REDUCTION OF PROPERTY VALUES  
 RESULTING FROM INCREASED AIRCRAFT OPERATIONS AT THE OLF.  
 CONSIDERATION OF THE NEGATIVE EFFECTS ON PRIMARILY RESIDENTIAL  
 AREAS SHOULD BE SERIOUSLY EVALUATED. IF THESE INCREASES IN  
 FLIGHT OPERATIONS CANNOT BE ACCOMMODATED IN AREAS WHERE  
 THERE WOULD BE LESS IMPACT, THEN I WOULD HOPE THAT  
 SCENARIO "C" WOULD BE SELECTED TO MINIMIZE NEGATIVE IMPACT TO  
 OUR PRIMARILY RESIDENTIAL NEIGHBORHOODS. I WOULD ALSO

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.d. Arrivals and Departures



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.

HOPE THAT FLIGHT PATTERNS FOR ANY OPERATIONS AT OLF COUPEVILLE WOULD OCCUR OVER WATER AS MUCH AS IS POSSIBLE, ALSO RECOMMEND THE USE OF THE TWO LOOP PATTERNS AT THE OLF TO MINIMIZE IMPACTS ON RESIDENTS UNDER THE FLIGHT PATHS.

THANK YOU FOR THE OPPORTUNITY TO OFFER COMMENTS ON THE EIS. I HOPE THAT THE CONCERNS OF RESIDENTS LIVING IN THE COUPEVILLE AREA WILL BE CAREFULLY CONSIDERED.



For more information, please visit the project website at [whidbeyeis.com](http://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**

Port Townsend, WA 98368

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

The noise from the Growlers is very disturbing. If it's disturbing us humans, it is definitely disturbing animals in the wild and if you don't believe it, try to sneak up on any wild animal and see just how much sound it takes to disturb them.

Saanich , British Columbia V8N 5Y6

I live at least a mile inland, maybe 2 miles, and when the Growlers are active it sounds and feels like having a huge dump truck roll through our little back yard. Being indoors provides little buffer. I can't stand the noise and the feeling of the rumbling on the body. I can't imagine how it must affect the marine life and other wildlife. And our whole yard is well treed but that doesn't seem to make any difference. The prospect of increased Growler activity is totally depressing. Why is it necessary to even fly "Growlers"? Surely there are other aircraft that function as well but without the hideous noise of these machines. Please cease and desist.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 2.a. Purpose and Need
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Coupeville, WA 98103

I am submitting the following comments in addition to having signed on as a co-signatory to the comments submitted by Citizens of the Ebey's Reserve for a Healthy, Safe and Peaceful Environment ("COER") which comments and supporting documents are included herein in their entirety by reference. The current DEIS is deficient and should be completely reworked for the following additional reasons: The Navy has never performed an actual EIS for the basing of either the EA - 6 Prowlers or the EA 18G Growlers on Whidbey Island. During scoping meetings, for the current DEIS, Project manager [REDACTED] repeatedly represented to the public that the current DEIS would not use present operational levels as a baseline but would rather be an environmental assessment of all Growlers based at NASWI. Given that the current DEIS employs present operations as a baseline and does not provide as an alternative the relocation of all Growler from Whidbey Island, [REDACTED] representations were false. This DEIS is deficient because it is based upon a failure of prior environmental assessments (which were required by federal law), based upon a 2005 EA that misrepresented facts to the public and assumed false information, and because it fails to examine and present as an option the relocation of all Growlers from Whidbey Island and NASWI. Other issues that render this DEIS invalid are: -- failure to include an examination of the pollution of the water table by PFOAs and other toxic chemicals used by the Navy; -- failure to examine the propriety of a single site basing decision for all Growler aircraft (see paper by [REDACTED]); -- failure to examine alternative basing sites that present less environmental and human damage from Growler operations; -- failure to examine the medical harms to the residents of Whidbey Island from exposure to the vibrations and noise of Growler Operations. This noise constitutes a continuing assault and battery upon those citizens; -- failure to properly examine the economic costs of Growler Operations on Whidbey Island (see the economic study entitled "Hidden Costs" by Michael H. Shuman February 2017). We also join in the comments submitted by the Coupeville Community Allies. We live on the Historic [REDACTED] and own and operate the [REDACTED] Center and the [REDACTED]. Operations of the Prowlers during the tenure of our ownership was a nuisance but Growler operations have been a severe hindrance on our business as well as our health and sanity. Expansion of Growlers operations beyond current levels will almost certainly put us out of business. Should the Growlers begin using the Coupeville OLF more frequently on Fridays or on Saturdays and/or Sundays they will effectively kill our wedding and tourist trade. As it is we cannot stay in our home when Growlers are operating out of the OLF. The Navy is supposed to protect American citizens not harm them. It is not the American way to come in and destroy American lives and property values claiming it is necessary for National Security. Alternative basing sites should have been examined and relocation away from such a heavily populated area as the Salish Sea regions should have been included as an alternative. The Navy has other, better (see COER White Paper) basing alternatives, for Growler operations. Finally, Growler basing on Whidbey Island has torn the Whidbey community apart. Growler supporters in Oak Harbor have threatened and demonized American citizens for speaking up for their civil rights. Recently two county commissioners, Jill Johnson and Rick Hannold, took punitive action against the Town Of Coupeville and denied park funding because the Town's DEIS comment was less that supportive of the Navy plan to

- 1.a. Thank You
- 1.c. Segmentation and Connected Actions
- 1.e. Risk of Terrorist Attack
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.b. Invisible Costs
- 12.c. Socioeconomic Impacts
- 12.f. Economic Hardship and Impacts
- 12.j. Property Values
- 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.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 4.r. Nonauditory Health Effects

increase Growler operations at the OLF. In actuality the Town was only asking for more information, yet the controversy the Navy has created has so poisoned the community on Whidbey Island that these two commissioners were punishing the Town of Coupeville. My last point is that this DEIS is deficient and must be completely restarted because actions such as this one by the two county commissioners, and the threats coming from Growler supporters -- without the Navy taking any action to reign in or disavow such improper behavior -- throws the entire commenting process into question. How many Whidbey residents have been too afraid to submit a comment because of the repercussions sure to follow. In conclusion, this DEIS is invalid and the entire process must begin again. Thank you. [REDACTED]  
Coupeville, Washington

1.a. Thank You

Keno, OR 97627

I am basically curious about what all branches of our military is doing. The IES will be interesting, and what people say that live in Coupsville. I live in Klamath Falls, OR where the ANG trains pilots and we can get a lot of flights, but I don't think as many as you are proposing. Just trying to stay informed.

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,

[Redacted signature]

Name: [Redacted]

Address: [Redacted] Port Angeles, Wa 98362

cc: Hon. Derek Kilmer, U.S. Congressman, 6<sup>th</sup> 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



# 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](http://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 U.S. CITIZEN, VET., DOD. RET.

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

(Times change) WHEN I moved here  
I was the only one on my road, I  
knew how loud, how low, the right  
slight patterns, and how often the EA6B's,  
and A6's would fly. I knew because I  
worked for the Navy (27 years) and  
did the training for them. I could live  
with it. Now there are more than 40  
people on my road. OLF is NOT OUTLYING  
anymore. Step on a flower in the forest and no one

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



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will notice. Step on a flower garden  
and the shit will hit the fan. It is  
just plain wrong to treat those who  
support you with such utter contempt.  
MOVE THE "OLF" TO ANOTHER  
OUTLYING AREA.

I support the Navy but NOT OLF!

For more information, please visit the project website at [whidbeyis.com](http://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**

Anacortes, WA 98221

- 1.a. Thank You
- 12.n. Quality of Life
- 4.n. Speech Interference (Indoor and Outdoor)

As I fill this out, one of your jets has flown over twice. Completely drowns out everything, including conversation. Sets off car alarms. As a Navy Viet Nam war veteran, I heard plenty of noise and would like to enjoy my retirement in a very nice community such as Anacortes is. What if the Navy decided National security called for bombing runs on one of the uninhabited San Juan Islands? Just as unreasonable.

Clinton, WA 98236

My workplace was Oak Harbor and Coupeville for the past 6 years. ( I have retired.) Working as a home visitor, I was often in the home of a parent and young child while a loud plane flew overhead, causing us to pause our conversation and try to maintain our composites. The loudest planes rattled the windows of trailers and vibrated our bodies. Several mothers I visited suffered from anxiety disorders, which research shows may have been exacerbated by the frequent load roaring. I worried about the effect of the noise on their children's development. Oak Harbor and Coupeville have a large population of Navy families. They sacrifice so much for their loved ones to serve. Is there any way to alter the flight path, maybe have the planes take off from ships so that their flight plans would not be flying over residences?

- 1.a. Thank You
- 3.a. Aircraft Operations
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects



# 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.*

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1. Name [REDACTED]

2. Organization/Affiliation home owner

3. Address [REDACTED] Goupsville, WA 98739

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 am highly concerned with the effect the increased ECLD's at OLF will have primarily on the agricultural community because they cannot avoid being outside when the growlers fly. I don't want them to be driven away and our amazing rural character changed forever. Secondly I am concerned for our children who play outside & whom we want playing outside. Thirdly I'm concerned for our tourism industry on which so many small businesses rely. I ask the following...

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**

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 16.a. Geological Hazards (Seismic, Liquefaction, Bluff Erosion, and Landslides)
- 2.a. Purpose and Need
- 2.m. Record of Decision/Preferred Alternative
- 2.n. Alternatives Considered But Eliminated
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.a. Regional Land Use and Community Character

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- Please consider the option that has the least impact on the most farms & agricultural community
  - Please do all you can to reduce the noise in the engine of the growlers like some commercial aircraft have done
  - Please consider not putting all the eggs (growlers) in one basket on NAS Whidbey spreading our military resources may not be a efficient but it may be smarter.
- Thank you for the time & information given

For more information, please visit the project website at [whidbeyis.com](http://whidbeyis.com)

Please print

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**YOUR INPUT MATTERS**

Clinton, WA 98236

1.a. Thank You

4.r. Nonauditory Health Effects

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Please consider the impact that the noise is on Humans and animals and the repetitive actions can be a cause for depression especially in the elderly citizens . thank you

Greenbank, WA 98253

We are residents of Greenbank, Washington on Central Whidbey Island. From the Growler EIS, we understand that the Navy proposes to station an additional 36 Growler aircraft at NASWI on Whidbey Island (on a base of 82 Growlers already stationed there). This means that all Growler operations in the U.S. would be based and concentrated on Whidbey Island. The EIS also covers substantially increased flight operations; for the OLF on Central Whidbey, this could mean an increase in flight frequency of fivefold to sixfold from current operations. We recognize that the Navy is an important part of the Whidbey Island community and has been for some time. We also understand the Navy's presence on the Island and understand its role in national security. We support these. It is nonetheless undeniable that Growler operations are disruptive to the surrounding community, with the primary impact the intrusive noise from Growlers, which has the secondary impacts of potential public health and safety harm and economic damage to agriculture and tourism. These kinds of disruptions have been present to varying degrees throughout the Navy's tenure and the community has adapted to them. The change from Prowler to Growler increased the intensity of the interference in the community and, consequently, community concerns. In this context and against this history, we believe that the proposals outlined in the EIS (basing all Growler at NASWI and dramatically increasing flight operations) are unfair to, and place highly disproportionate burdens on, the Whidbey Island community, particularly Central Whidbey. In this connection, we believe that the EIS inadequately deals with alternatives that could mitigate these effects. The EIS discusses the decision to base all Growlers on Whidbey, increasing the number of Growlers by 36 and substantially increasing flight operations. There is a long section reviewing the alternative of basing Growlers at more than one facility. The conclusions of the section is that other than this alternative is impractical due to duplicate costs and the efficiency and effectiveness of having the entire Growler community in one location. We note, however, that the section primarily presents the results of the Navy analysis as conclusions; there is relatively little in the way of raw data or information in order to make an informed judgment on the validity of these conclusions. For example, the cost of multiple basing is identified and discussed, but there are no cost figures, either as amounts or as percentages of single basing costs. This makes it difficult to comment on these conclusions or to compare such costs with the cost to the Navy of community dissatisfaction or potential future liability for Growler harm to health and safety of the community. Another example is the discussion of the benefits of a single base, such as developing a culture around the Growler mission. Again, there is little to go on other than the qualitative statements. There is also no discussion of the strategic benefits or other benefits that could come from multiple basing and no discussion of how often the single base approach is used with other weapons systems. The military often builds redundancy in systems and basing and finds advantages relating to strategy, dispersion of assets and variations in training. Why not here? As far as we can tell (though there may be a treatment we overlooked in the voluminous EIS), there is no discussion of possible technical changes or additions to the Growler aircraft that would reduce and mitigate the noise of the cost to do so. While this might not be a complete solution, it might go some way to reducing the problem and convincing the community of the Navy commitment to working this problem. Others have pointed out the limitations in the EIS on the technical

1.a. Thank You  
 12.e. Agriculture Analysis  
 12.f. Economic Hardship and Impacts  
 12.h. Tourism  
 12.n. Quality of Life  
 2.b. Scope of the Environmental Impact Statement and Analysis Conducted  
 2.k. Range of Alternatives  
 4.t. Noise Mitigation

information regarding noise, health risks and similar effects, and have cited private studies that suggest harm. The latest is the Washington state health department review. Our objective is not to recapitulate these but to note that, at a minimum, the results of studies identify a real risk of future harm and damage. In light of these uncertainties and the gaps in the discussion of the single basing decision, we urge the Navy to reconsider its decision to base all Growlers at Whidbey. The second decision discussed in the EIS is the dramatic increase in flight operations that accompanies the addition of Growlers. Training flight operations on Central Whidbey would increase from approximately 6,000 FCLP flights currently to approximately 35,000 such flights under the most extreme allocation on flights between Ault Field and OLF. The total of all FCLP flights could be allocated between OLF and Ault under three separate alternatives: (A) 80% at OLF, 20% at Ault; (B) split evenly between the two; (C) 80% at Ault and 20% at OLF. The EIS essentially rules out the alternative of 80% at Ault because of interference with other flight operations. But it leaves open the alternative of 80% of flights at OLF, which would increase flight operations impacting Central Whidbey by fivefold to sixfold from present operations. This, as you can imagine, would dramatically increase the disruption to Central Whidbey and raise to a different level of concern the impacts on health and safety, education and children, agriculture and tourism. Whatever the decision on basing additional Growlers, we urge the Navy not to disproportionately allocate the flights (and the relative burdens and risks) to OLF. While the Navy prefers OLF as the "ideal" field for FCLP operations, we have no assessment of how an even split would actually affect pilot training and readiness (the real goal of flight activity). Otherwise, we can find no compelling reason for doing so when weighed against the community harm. To do otherwise than an even split lends itself to the interpretation that the Navy is offloading the community disruptions and hazards from NASWI and surrounding communities to Central Whidbey because the base personnel do not want them any more than the residents of Central Whidbey do. That shifting would be manifestly unfair. Based on the foregoing, we respectfully request that the Navy reconsider its proposal to base all Growlers at Whidbey and not disproportionately allocate flight operations, whatever the basing outcome is, to OLF. [REDACTED]



Milwaukie, OR 97222

I write to oppose the Navy's plan to use the Olympic National Forest as a war games area. Not only would 5,000 events per year include unannounced closures of the National Forest but it would impact five tribal areas in the region. I have visited the Olympic NP several times backpacking and hiking. The unique rain forest provides a refuge for humans, fish, birds, and animals. The loud noise from Growler Jets would startle wildlife and humans, increase stress levels, cause heart problems, and create behavior and psychological problems. Birds especially would be impacted by the onslaught of jets. Unfortunately I was in the Mt. Hood NF when three fighter jets flew over the area in war games (probably not authorized). The ground shook, birds scrambled into the air, the noise was almost unbearable to our ears. How much more terrifying would be the high level of war games being proposed for the Olympics. In addition thousands of gallons of fuel would be burned throwing enormous amounts of pollution into our already climate-challenged environment. Public Lands, National Parks especially, were intended as places of solitude and havens for our native animals and plants. Too few of these places remain, and letting the Navy invade this area with Growler Jets is unethical.

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 18.a. Climate Change and Greenhouse Gases
- 18.b. Average Carbon Dioxide per Aircraft
- 18.d. Washington State Greenhouse Gas Goals
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.d. Recreation and Wilderness Analysis and Study Area
- 9.a. Consideration of Tribes

Seattle, WA 98133

1.a. Thank You  
12.h. Tourism  
4.o. Classroom Learning Interference

I am concerned regarding noise and low frequency sound of the Growlers. I frequent Deception Pass Campground, Mr. Erie and retreats at Whidbey Island for peaceful connection with nature. Tourism will be significant reduced if invasive noise from the Growlers increases. I grew up in the sound path of SeaTac and high school classes were inaudible for 20 minutes of every session.

Port Townsend, WA 98368

The Navy's plans to ramp up Growler operations on Whidbey Island horrifies my family. We moved to the southern outskirts of Port Townsend (Cape George) for the peace and quiet it offers. That serenity is totally destroyed by noisy military jet activity. Please confine your training tightly to Whidbey Island and if you must pass over quiet non-military areas do so slowly and at a high altitude. Don't overlook or underestimate the impact your operations have on the residents of small towns or rural areas. We strongly disapprove of any increase in operations that will direct jets over or around Port Townsend. The increase described in your EIS is so severe it will affect property values and tourism as well as quality of life for residents.

1.a. Thank You

12.h. Tourism

12.j. Property Values

12.n. Quality of Life

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

Freeland, WA 98249

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

I appreciate the opportunity to comment. I know this is becoming a contentious issue. I support the Navy's mission here and want to encourage an open dialogue and a sincere exploration of all possible alternatives. In my experience, a Win-Win solution is available; but it takes effort and often REAL compromise on all sides of the matter. The Navy is asking for (although it often can be interpreted as insisting) for a very significant increase in volume of jets and quantity of fly-overs. The Coupeville community reacts with equal and opposite enthusiasm strongly suggesting that flights be eliminated altogether. First, the Navy must admit (in my opinion) that the jets are in fact noise disruptions. As an example of the significant impact, my out of state relatives visited our lovely island and I suggested they camp at Deception Pass State Park with their kids. They were awed by the Park but stayed there only one night (despite having reservations for a week) because the jet noise - to them - was unbearable. What alternatives are -theoretically- available? I hear that using NWSTF Boardman as an alternative to OLF would minimize new environmental impacts for Ebey's Landing Historical Reserve and the Central Whidbey Island community, now, and if additional aircraft are added to the NASWI fleet in the future. This alternative could also decrease FCLPs at Ault Field while retaining the economic benefits of the Growler community in Oak Harbor. It would be in best interest of all if Navy could respond honestly - not defensively - as to the cost/benefit of this possible alternative. Bottom line, the jets are noisy to the point of approaching nuisance and discomfort. What can the Navy offer the local folks (and the very many State Park visitors) that would clearly minimize the negative impact (e.g., limiting flights to certain time of day and/or day of week and/or month of year; sharing the training load between OLF and other locations; uncovering a noise reduction retrofit to jets themselves; or some other TRUE compromise that smarter folks can brainstorm)? I wish you success with this challenge. Best regards.

Langley, WA 98260

1.a. Thank You  
12.e. Agriculture Analysis  
7.a. Regional Land Use and Community Character

Please do not increase the Growler activity. We must protect Whidbey Island and preserve it as it is. Do you realize the negative benefits for the farms all over the island? My children live in Coupville and I pray you'll make the right decision to protect our environment NOT decay it.

Coupeville, WA 98239

I am a resident of Coupeville and live very near the flight path of OLF. I am not against the Navy in any way shape or form. I have the utmost respect for the men and women who are employed by the Navy on this island. My wife and I recently relocated to the organic pumpkin farm where we live now and love it. More importantly, we have the opportunity to have a career working and managing the farm. We have housing we can afford and this allows us to look towards the future of one day raising a family here. In addition we are small business owners who support other local businesses. We are ALL in this together and must look out for ourselves and neighbors. My main concern for the proposal to move the majority of flight operation to Coupeville OLF is the issue of noise pollution. Ebey's Landing National Historic Reserve is federally protected land. This was done for the intent of preserving this community as a direct link to our state's history. The land here in many cases is still owned by the families that settled here in the 1850's. This land has been farmed and cared for while many other such places have been paved over and developed upon. The increase of noise from the Growlers will disturb the way of life that has been deemed worthy of protection by the US Government. The increase in noise will cause damage and increase stress amongst the delicate ecosystem of animals that call Ebey's Landing home. Whether year round or just migrating through. The increase in noise will make being outside unpleasant. Some of us make our living being outside and this increase noise will not only be potentially damaging to our hearing, but also make communication among workers nearly impossible. The increase in noise will cause loss of sleep and anxiety which can lead to safety issues when operating heavy equipment or driving on the highway. The increase in noise will potentially deter tourists from visiting Coupeville, causing great harm to our local economy which relies on a very busy summer season to help us survive slow winters. The issue of air pollution as well as the exponentially increased potential for devastating accidents is of grave concern as well. With recent discoveries that drinking water wells may be contaminated as a result of Navy firefighting chemicals I am even more concerned. Our farm was recently certified organic. This took a lot of work and significant financial investment on behalf of the farm owners. Other farmers practice organic techniques while not being certified. If a plane crashed in one of our fields it could potentially end the livelihood of our business causing irreparable harm to our family and the food security of our community. I hope that as the Navy begins to finalize their decision about where to station the Growler fleet that they will consider moving it somewhere that does not put a federally protected reserve and state park directly under the flight path as well as Oak Harbor which is the most populated area on the Island. I am clearly not a military official but it seems that splitting up the fleet rather than moving it all to Whidbey Island would make more sense from a security standpoint as well. I hope that you make this decision carefully and listen to what the comments on the DEIS are saying. Sincerely, [REDACTED]

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.n. Quality of Life
- 17.a. Hazardous Materials and Waste Impacts
- 2.n. Alternatives Considered But Eliminated
- 3.h. Runway Usage, Flight Tracks, and Altitudes
- 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
- 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

I am a resident of Coupeville. I am a farmer who relies on this land for my living. I believe that the potential increase in flight operations at OLF Coupeville will result in an unsatisfactory environment in which to live. The current level of jet noise is tolerable and can even be ignored. But the proposed change to the amount of flight operations is outrageous and will be impossible to ignore. Quiet early mornings on the prairie will be shattered by non-stop jet noise. Activities such as hiking and camping which make this Island so special will be marred by the high decibel levels caused by the increase in flight operations. I am also concerned about the Navy's want to make an additional 1,134 acres into Accident Protection Zones will not only decrease our already meager property values, but also prevent future development of sustainable energy sources in the area such as wind turbines, if it is deemed that they would cause a threat to aircraft safety. I am not anti-Navy. I am against unreasonable changes which endanger the livelihood of residents and the pristine Ebey's Landing National Historic Reserve. This piece of land was set aside by the US Government in the 1970's because it is such a special place with such deep ties to pre-colonial America. If this land is allowed to become a playground for the military it is in direct violation of the laws set forth when the reserve was created. I am a Coupeville resident, and I am opposed to Alternative A, B, and C. I call for 'No Action' to be taken. [REDACTED] Coupeville, WA US Taxpayer and Citizen

1.a. Thank You  
12.n. Quality of Life  
4.p. Sleep Disturbance  
7.b. Land Use Compatibility and Air Installations Compatible Use Zones  
7.d. Recreation and Wilderness Analysis and Study Area  
8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve

Freeland, WA 98260

this EIS draft does not address the actual impact on the health and safety of those that are going to be affected by the use of the proposed operation on Whidbey Island and surrounding vicinity. Page 3-12: the Navy is using "average year" as a metric for noise analysis rather than ABD, which more truly measures the noise as it occurs. the community asks for the ABD metric to be used. Pages 3-26 and 3-33: Both of these illustrations show Points Of Interest; however they leave off the critical points of Coupeville Middle and High Schools, which appear to be obviously more impacted by flight pattern noise. Page 3-34, Table 3.2-4 Coupeville Middle and High Schools have been left off of this table which shows measured sound levels; these omitted levels are closer to flight paths. Page 3-43: in the Section "Accident Potential Zones" this draft states: "The main goals of the AICUZ program are to protect the health, safety, and welfare of people living or working near military airfields while preserving the defense flying mission." Land use in Coupeville currently is incompatible with flight operations due to schools and apartments in close proximity to APZ zones I and II. Page 3-44 in section 3.3.1.4, the DEIS refers to the President's executive order to "make it a high priority to identify and assess environmental health risks" that may affect children and shall ensure that its policies address risks to children. Scientific knowledge indicates that children may suffer disproportionately from environmental health risks...and these schools are subject to such risks with the proposed OLF operations.

- 1.a. Thank You
- 4.g. Average Annual Day/Average Busy Day Noise Levels
- 4.l. Points of Interest
- 4.o. Classroom Learning Interference
- 4.r. Nonauditory Health Effects
- 5.d. Environmental Health Risks and Safety Risks to Children
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones



Freeland, WA 98260

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

4.k. Comparison of the Prowler to the Growler

I am concerned about the fact that average noise measurements, which were used in the EIS are not the true impact of the sound here on peoples' lives...having lived here many years, I know the Growler is much worse than the Prowler as far as noise , at unacceptable levels. Too many people are too close to the APC zone!!

Freeland, WA 98249

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](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

- 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

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 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,





# 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](http://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 na

3. Address [REDACTED] Coupeville,

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

Despite the fact that there are nearly 1000 students in the Coupeville Schools, the Coupeville Middle and High schools are not even shown on the noise zone map nor ~~did~~ any noise measurement taken <sup>was</sup> at CHS or CMS!

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

4.l. Points of Interest

1.a. Thank You  
5.a. Accident Potential Zones

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  
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(425) 259-3330

23 (The personal identifiable information disclosure  
24 statement was read to the following commenter.)  
25 MS. [REDACTED]: Hi. My name is [REDACTED],

1 and I was read the comment form caveat about the comments.

2           And I would like to know how does the Navy -- why  
3 is the Navy able -- Navy able to fly so many missions  
4 without having an accident zone identified? It seems to me  
5 that the EIS states that if there are more than 5,000  
6 touchdowns an accident prevention zone needs to be  
7 identified, and we don't have one here on -- at NAS -- at  
8 OLF Coupeville. And the highway is so close to the runway,  
9 with school buses going and public traffic, and yet we don't  
10 even have a zone identified that is an accident zone.  
11 That's what my question is. How can they do -- how can they  
12 do that? I don't understand.

13           Also, the EIS does not state that -- that an  
14 accident zone will be identified. They do not state that  
15 they are going to do that. And it seems to me like they  
16 should have had one identified with the -- the -- with  
17 the -- what's the word -- the building- and person-free zone  
18 already identified so that the public would not be so close  
19 to the runway. And now they're talking about increasing the  
20 number of FCLP -- FCLPs, yet they are not addressing the  
21 need for the accident zone.

22   \* \* \*

Freeland, WA 98249

The noise and jet fuel impact from the addition of 36 more growlers. There is scientific public health data that indicates that the noise from these planes negatively impacts humans and impact on wildlife is clear, they flee from the noise.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Port Townsend, WA 98368

Please extend the deadline for the decision about the EA-18G Growler Airfield Operations at NAS Whidbey Island. I do not feel you have give the EIS adequate time and information about the extend of the impact of the project.

- 1.a. Thank You
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments

1.a. Thank You

COUPEVILLE, WA 98239-4018

I fully support the Navy in the use of the OLF for training. I live on Denneboom Road which is right under the flight path. The noise is a small sacrifice to make to secure a close facility for aircrew training.

Nordland, WA 98358

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

- 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.l. Points of Interest
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument



public comment before the Final EIS is prepared. 12. Marrowstone Island and the town of Nordland has not been included in the EIS. We experience high levels of jet noise due to Navy operations. 13. The EIS does not take into account the loss of income and loss of property value as a result of jet noise. We have already had complaints from tourists and patrons because of last summer's Growler practice.

Nordland, WA 98358

The Olympic Peninsula is located in the northwest corner of Washington State, United States. Its ecological diversity includes temperate rain forest, freshwater rivers and lakes, the Olympic Mountain Range, coastal lands, the Pacific Ocean, and an intricately connected biological network which is home to many species, both threatened and endangered. Contained within the region is The Olympic National Park, the Olympic National Forest, indigenous tribal settlements, farms and orchards, sea ports, and a variety of unique communities. The Olympic Peninsula is recognized internationally as a popular tourist destination for its unprecedented natural beauty. The Olympic National Park is registered as an UNESCO World Heritage site, with over 3 million visitors each year. All of this is inconsistent with the present and proposed training with Growlers from Naval Air Station Whidbey Island. I strongly oppose present and proposed training in this area where there are so many present and potential conflicts. We were excluded from the EIS here on Marrowstone Island, and I can attest to high levels of noise disrupting our lifestyle and economy.

1.a. Thank You

10.a. Biological Resources Study Area

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

4.l. Points of Interest

7.d. Recreation and Wilderness Analysis and Study Area

Nordland, WA 98358

I have deep concerns regarding the negative impacts caused by the Navy conducting Growler training at OLF on Whidbey Island. I am seriously alarmed at the proposed expansion of that program as identified in the DEIS presented by the Navy. I have experienced firsthand, loss of sleep and emotional fatigue from extended periods of invasive high levels of noise over my home on Marrowstone Island. Businesses have been negatively impacted with guests complaining of noise from Navy touch and go flights that continue from 4pm to midnight. I can personally attest to witnessing the outrage often felt toward the military for invading and degrading the quality of life many hold as a significant reason they live, visit and vacation in Jefferson County. I have concerns about the erosion of Jefferson County tax base. A study by Michael H. Shuman, Director of Local Economy Programs, Telesis Corp. concludes that for Whidbey Island, the Navy Growler program has depressed property values by \$9.8 million thus far, and this damage will almost certainly grow as that program expands as planned. The consequences of widespread property devaluation for Jefferson County are also very likely. Noise studies around airports indicate loss of property values to be greatest to higher value properties, but no property, no matter how humble, is immune to loss of value. On Whidbey Island, a significant number of homes now are burdened with disclosure requirements to reveal noise levels when a property is put on the market. Vacation and retreat businesses already are compelled to warn potential guests of Navy jet activity, or stand to lose favorable ratings for inaccurately representing providing a natural quiet environment. Between the health issues and economic impact, we are highly distraught about the changes we see to our quality of life as a result of the Navy Growler program. We look to our elected representatives to respond to our concerns and act on behalf of our best interests. [REDACTED] Nordland, WA 98358

- 1.a. Thank You
- 12.b. Invisible Costs
- 12.h. Tourism
- 12.j. Property Values
- 12.n. Quality of Life
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 2.e. Public Involvement Process
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects

Nordland, WA 98358

Maybe this is over the top, but I am exhausted from having to pit myself against this Goliath. The more I learn about the health effects of prolonged exposure to noise, the more I feel threatened by the Navy Growler program. It is inconsistent with my reason for choosing to call this place my home for the last 26 years, and hopes to spend the rest of my life here. The emotional stress I have experienced from training flights over my home are untenable. I can not accept this is what our national defense is meant to do. Must I give up the liberty of quiet for war readiness. What is the Navy defending me from? Must I forgo my health? I will not. Damn this arrogance the Navy has shown in regard to the well-being of those they claim to protect. Damn them for putting military budget ahead of our local economy. Damn the Navy for lying to us about the environmental impacts by presenting us with a flawed and disingenuous DEIS study.

1.a. Thank You

12.n. Quality of Life

2.b. Scope of the Environmental Impact Statement and Analysis Conducted

2.c. Compliance with the National Environmental Policy Act

4.r. Nonauditory Health Effects



# 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](http://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] *PO BOX 401000, 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

*Currently as well as under the alternatives being considered, the Growlers fly over the bird refuge adjacent & running east from the Capeville ferry dock. Their noise must disrupt the lives of the birds. I'd rather have the birds than the 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
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Redmond, WA 98052

I spend time at the Hoh Rainforest regularly. It's a place of peace! War games and flight of war planes have no business there. Native peoples living nearby have lost so much. They do not deserve to have the peace of their homes disturbed, and that also goes for the wildlife nearby. Please reconsider!!!!

- 1.a. Thank You
- 10.a. Biological Resources Study Area
- 10.b. Biological Resources Impacts
- 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

Victoria , British Columbia V8x3n2

Every time I hear the sound of the growlers I am thankful for the safety we all feel in Canada knowing the protection we may receive in the unlikely event of an attack. So if it means aviators will be safer in risky landing situations, then keep practising.

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 Lopez Community member

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
- 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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- 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](http://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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EA-18G EIS Project Manager

Naval Facilities Engineering Command Atlantic

6506 Hampton Blvd, Norfolk, VA 23508

Attn: Code EV21/SS

To whom it may concern,

First off, let me say that my family has had close ties with Naval Air Station Whidbey Island, even before I was born. My father was one of the first sailors deployed to Whidbey Island, circa 1940, to acquire the land which would become NASWI and OLF Coupeville. In Dec. 1941 he was stationed aboard the USS Curtis, in Pearl Harbor, HI. The Curtis was anchored at Ford Island at the time of the attack when the ship was struck by a Japanese Zero airplane (kamikaze pilot). There were 26 sailors killed in that crash. My father survived Pearl Harbor and went on to become a wartime naval aviator (Catalina seaplanes). He retired in 1957, after 28 years active duty, 2 years Naval Reserve. He loved it here. His last duty station was NASWI. Our family has stayed in the local area ever since. My mother and father have since passed, but my wife was born and raised on Whidbey Island. We have many friends and family who live on Whidbey Island. I have lived in Island and Skagit counties my entire life, except while serving my country.

My wife and I reside in a residential community called Admiral's Cove. I am now 70 years old, and my wife is 66. We are retired on fixed income. I have high blood pressure, my wife has MS. The worst thing for either condition is stress. We live directly in line with the OLF Coupeville airfield. The extreme noise pollution here can be very stressful. We have been able to tolerate the jet noise so far. But, an eightfold increase is going to be far too much for us to endure. We will be forced out. At 70 years of age I don't feel this is at all fair. The DEIS gives a lot of positive economic impact data, but does not mention any negative impacts, such as reduced home sale values, loss of income from vacation rentals, loss of tourist dollars, in and around Coupeville, etc.

We will probably have to sell the place we call home, give up the retirement we have worked so hard to achieve, and start over. If we can sell the house for what it's worth, we could start over, but you and I both know that is **NOT** going to happen. The value of our home is going to crater. And, you know it too and, shame on you. Our retirement is going to take a severe hit. I advise all affected land owners to apply to the Island County Board of Equalization to get their property taxes reduced. That should be several thousand properties.

If, the Navy adopts the plan 1A option, as appears to be the consensus, quality of life here at Admiral's Cove will be altered dramatically. Not just for my wife and I, but all the residents of Admiral's Cove. Already, personnel and equipment is arriving at NASWI, even before the DEIS is completed. I guess it's a foregone conclusion that the Navy is going to go ahead with its' plans whether there are objections, or not.

Years ago the airplanes were propeller driven. And, they were fun to watch. As the years advanced the prop planes were replaced by jet planes. They were still fun to watch. However, over the years, the noise levels from the jets have gone from nuisance levels in the 1960's, 70's, 80's and 90's, to the point of being physically painful now. They may still be fun to watch, but they are nearly unbearable to listen to. You can hear them from miles away. Up close they are very **painful**. No other way to describe it. You cannot be in close proximity without ear protection when the EA-18's are flying low and performing touch and go landings. We live **directly** under the approach flight path of OLF Coupeville and believe me when I

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 12.j. Property Values
- 12.k. Compensation to Citizens for Private Property
- 12.n. Quality of Life
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.m. Record of Decision/Preferred Alternative
- 3.a. Aircraft Operations
- 3.d. Arrivals and Departures
- 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
- 4.a. General Noise Modeling
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.k. Comparison of the Prowler to the Growler
- 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
- 7.a. Regional Land Use and Community Character

say it's damn loud. It is much worse than the December 2016 community meeting in Coupeville contends. The Navy would have us all believe that the noise effects are of low level, and are harmless.

When we purchased our property in in Admiral's Cove in 1995, and eventually built our home here, in 2005, the jet traffic was considerably less frequent. We could tolerate it because it did not last for too long of a time. And, it was seldom repeated on the next day. I estimate that the training time was 1 to 2% of the total time, maybe less. This is what we bargained for. We expected some jet noise. And we got some. But we also got to live in beautiful spot by the waters' edge. We had to take a little down time and go inside during the noisy periods, but it was livable. It was paradise here, with some inconvenience attached. This will no longer be the case. It will be like living in Aleppo, Syria. We will be under constant attack, but without the threat of live ammo.

The Draft EIS is an astounding 1400+ pages long. It includes more data than any one person can digest in at least a year or two. That would be the reason it was written I suppose. When I was in the service we referred to it as "dazzle 'em with brilliance or, buffalo 'em with bullshit." I waded through a lot of the pages and found evidence that I believe was meant to be obscured by the sheer volume of the report.

First of all, the noise levels indicated in the Draft EIS were computer generated, or simulations, of the anticipated noise levels. The data was **not** obtained by actual "in the field readings". In other words, this means that the data is not valid. The data shown is educated guess work. There are various terms used in different professions that are attached to this type of science. In the field of finance it's called "cooking the books". In research it's called "dry lab-ing the results". It appears to myself, and others, that the data has been "massaged" to show noise level numbers that are not in line with reality.

Secondly, I have personally taken noise level readings while the jets were flying overhead last summer using an easily obtainable Noise Level Meter. On my front porch the decibel readings were almost always over +100db with a peak reading of +110db. Farther up the hill where the elevation rises closer to the jets, at the corner of Admirals Drive and Byrd Drive (mentioned in the Draft EIS), the noise level readings were, on several occasions, above the Navy's expected maximum Sound Exposure Limit (SEL) of +121db (that the computer generated data indicated in the Draft EIS on page 4-35) by at least +3db. And, on the same page, the number of annual events is estimated to happen 2,650 times! If the readings I took were accurate, there will be lot more than the expected 2,650 number of events at +121db. This is just simple math.

Third, the World Health Organization states that children should **never** be exposed to levels above +120db, **ever!** And, there are children living in the area. Kids can be seen at this intersection frequently. In fact, there is an Island County bus stop there, and the school bus stops there, too! Not to mention our pets who cannot protect themselves from the noise in any way if they are stuck outside. All they can hope to do is hide under some cover. According to OSHA and NIOSH, adults should have very limited time exposure at these levels (3 **seconds total** per day at +124db). And, the Navy has not even passed out foam ear protectors! I guess that means the Navy would be admitting it's a little loud here.

Four, there are sound level charts which can be easily found on the internet using Google. In the search box, type in: "Jet Engine Noise Levels". They will give you some idea of the kind of noise that is generated right here in Admiral's Cove. Also Google "Jet Noise USFWS", which includes data from the US Fish and Wildlife Service that indicates the Navy mislead them about the noise levels generated by the EA-18 Growler by an astounding -32db. The numbers given out by the Draft EIS just do not make good sense. I don't know whether or not there is a -32db discrepancy, but I do know the estimated noise level numbers shown in the DEIS are too low (at least in Admiral's Cove).

I think it would be a great idea for the base commander, or a real Admiral, to come here to Admiral's Cove and sit down outside with me, without ear protection, and have a beer, or two while the jets fly. How about it? Are there any takers?

To me, it's no coincidence that there are no Naval Officers who live here, none. The local housing shortage be damned. There are few enlisted personnel here, either.

Five, the Navy estimates that the total flying time expected will be 650 hours at OLF, or 8% of the total time per year. It doesn't sound like too much, does it? But, the problem is further compounded by the planes **NOT** using up some of that 8% of allotted flying time during inclement weather. During rainy, foggy or even windy weather we would normally have our windows and doors closed. The heaviest training schedules seem to be during *nice summer, spring and fall days and evenings* when people, and animals, want to be outdoors by choice.

But, considering the Navy does **not** perform training in poor weather, the bulk of flying time will be in the summer months. This is how it has been done in the past and I do not expect that to change. When the weather is good enough to go outside and do some gardening, beachcombing, fishing, relaxing in the sunshine, our over-head guests will be driving us back inside to look out the window at the beautiful serene waters of Puget Sound. I have three choices, all bad. I can leave the house 165 times a year for a few hours. I can hide out inside the house 165 times a year. Or, we can sell our home at a much lower price than we want to. If we stay home, we'll be stuck inside the house during warm sunny weather and, the house will heat up because all the windows and doors will be shut. We can't listen to the radio or watch television because neither can be heard. There is a 30 second interruption every minute and 15 seconds. See the math below.

Let's say for the sake of argument that the jets don't fly on weekends either. That leaves (365-104) 261 days. Let's take out 6 holidays which leaves 255 days. Now let's factor in weather. (Let's subtract 90 days for poor weather, and that's a generous estimate considering where we live), leaving 165 flying days. So, 650 hours divided by 165 days = 3.939 hours per day, for 165 days. For the sake of argument let's just say 4 hours per day.

The Navy's Option 1A plan estimates there will be 35,100 touch and go landings per year at OLF. And, 35,100 FCLP's divided by 165 days = 212.7 FCLP's per day spread over 4 hours = 53.2 FLCPS per hour, or about 1 every 1.2 minutes, for 4 long hours. Since these noise levels are on a par with an explosion, every minute and 15 seconds, you can probably imagine how pleased I am with the Navy's proposal. Not only that, but the bulk of the time used for training will be in the summer. So expect the hours per day in the summer to be above average, spring and fall to be below average, with the winter almost noise free!

In the fall of 2013 and into the spring of 2014 there was a moratorium brought about by a lawsuit to stop the touch and go landings at OLF Coupeville. This was a GOOD time. It was **peaceful**. My blood pressure went down 20 points, and my wife felt better during the moratorium. And, we could sleep at night, or we could watch TV. I could fish, we could garden. Life was good, as it should be.

Prior to the 6 month moratorium in late 2013, during the summertime, touch and go landings at OLF Coupeville increased from approximately 3 hours for 1 or 2 days a month, to 10-12 hours a day, 5 days a week, for several weeks at a time. I don't know why it was so damn busy then, but it was **awful**. It was a harbinger of the future (which is now). The new Navy proposal at that time was to increase the number of planes based at NASWI from 6 to 16 planes. Now the Navy wants to assign its' **ENTIRE** Electronic Warfare Training to NASWI. So, home base for 117 EA-18 Growlers will be Ault Field at NASWI. I do understand that not all the planes will be here at one time, but it is really going to be busy, and unbearably loud, here at Admiral's Cove.

When I served my country I was stationed on an Air Force base in Viet Nam with jets coming and going at all hours of the day and night. It was **never** as bad as it is here when the training sessions are on. Not even close.

The EA-6 Prowlers had a bad reputation for noise. The people of Whidbey Island were told by the Navy that the replacements for the old EA-6's, would be quieter, so everyone happily anticipated the arrival of the new EA-18 Growler airplanes. That propaganda definitely was **NOT** true. The EA-18's are far worse than the EA-6's. The Navy has some data claiming that the EA-6's are louder. Well, I live here, and you can take it from me, and all my neighbors, that this is definitely not true! It just more of the data massaging.

When either type of plane is flying at higher altitudes the plane passes overhead quickly and the noise dissipates within a few seconds and is not so terrible. But, during touch and go practice at OLF Coupeville, the EA18's approach the runway at low altitude. They do not "glide" down to the runway. The approach is to fly level for 1 to 2 miles at approximately 500 feet above sea level, just above stall speed. They do not actually fly level, the nose is up, the tail is down a few degrees. The net of this is the dual exhaust ports are pointed downward. So, the wheels are down, the flaps are down, and the throttles are "on", nearly constantly. The roar of the throttle jockeying is continuous, even during the trip out over Puget Sound and Fort Ebey and the Keystone ferry terminal to Port Townsend. Then, as the planes turn towards shore it gets louder and louder until they are directly overhead. Then, when the peak noise levels go up, it lasts approximately 20-30 seconds at our house for each plane. And, then after the "touch down at OLF" the throttle is pushed fully forward for the takeoff. Then you get another noise blast, still loud, but bearable because of the distance away, for another 10-20 seconds. Then, a 30 to 60 second pause, depending on the number of jets in the rotation, and another plane comes and it starts all over again. This happens just above our rooftops. We live directly in line with the approach to OLF Coupeville. I swear the pilots use our house as the "guide post" to line up on the airfield. I've seen your EIS documents and it clearly shows that this is so.

Anyone who argues with me on this point is welcome to come to my house and stand outside with me, without ear protection. Better still, go farther up the hill in the Admiral's Cove neighborhood and give it a listen. The airplanes are even closer to the ground there as the planes get closer to the ground on the way to the runway. I would estimate the planes are only 300 to 400 feet above the ground there, maybe less. And, they are **extremely, painfully loud!** Actual noise levels should be taken by the Navy, and verified by independent observers!

But in recent years, and specifically in the 2 summers prior to the moratorium, in 2013, and one year after, there were many periods of time where 4, 5, or even 6 EA-18's would fly nearly all day. When they ran out of fuel they would be replaced by more. When it is like this, people cannot go outside. Without quality ear protection you will go deaf. And, no ear protection is provided, **or even advised.** If you do go out, even for a short time, it is very painful to your eardrums. This is no joke. It hurts! And, the flying sometimes went on for 5 – 6 days in a row, week after week. There was no peace here anymore. The flying sometimes started mid-morning and went as late as 1 AM! I know because I looked at my alarm clock. I was still working at this time and, had to get up at 5 AM to commute to work. I drove to work tired before I even got there! I imagine many others were in the same predicament.

One time I was mowing my mother-in-law's lawn (she lives up on the hill in the Admiral's Cove neighborhood), while an EA-18 was doing touch and go landings. When the plane flew directly overhead (at about 300-400 feet) I could not tell if the old lawn mower, with a loud Briggs and Stratton engine, was still running. The jet noise causes everything to shake, the mower, even my body. It was however, still running, though I could not hear it, and I was holding the handle of the damn thing! My mother-in-law lives closer to the runway, but there are a lot of houses up in that area directly under the final approach. It is very bad at my house but, it is absolutely deafening up the hill from us. There are hundreds of homes here. All are affected, some to a lesser degree. But, the ones that the planes fly directly over are **severely** affected.

All a person can do during the touch and go landings is go somewhere else, or go inside your house and close all the windows, even if it is during hot summer weather. Don't bother trying to watch TV, you can't hear it. The windows rattle, the house shakes. Forget gardening, fishing, beachcombing, or doing anything outside. And, we are helpless to stop it. In

the DEIS Documents it is stated that houses and windows won't shake until above 130dB. Well, my windows shake, along with the house. The sound level testing is severely flawed.

Real estate values will be suppressed in the area due to the increased traffic and noise levels. Not to mention the possibility of a fully fueled jet falling onto us. Here at OLF Coupeville there are two air traffic patterns that can be utilized, one on the west side of the island, where Admirals' Cove is located, and the other is on the east side of the island. Please, use both equally. At the present time this happens only occasionally, probably less than 10% of the time. This places nearly all the burden on the people of Admirals' Cove.

Thank you.

[REDACTED]

[REDACTED]

Coupeville, WA 98239

[REDACTED]

**STIRLING CONSULTING**  
**Environmental & Public Health History Services**  
**P.O. Box 280**  
**Coupeville, WA 98239**

February 22, 2017

EA-18G Growler EIS Project Manager  
 Naval Facilities Engineering Command Atlantic  
 6506 Hampton Blvd.  
 Norfolk, VA 23508

**Attn: Code EV21/SS**

**RE: PUBLIC COMMENT—NAS WHIDBEY ISLAND COMPLEX DRAFT EIS**

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. Although the U.S. Navy (Navy) has prepared a DEIS that follows the regulatory mandates of the National Environmental Policy Act (NEPA) it does not fully address consequences of the proposed action and related alternatives and scenarios. Specific areas of concern and related statements and questions follow, all of which relate to the Outlying Field (OLF) located near the town of Coupeville.

**NOISE IMPACTS**

**Computer Modelling**

The Navy's consultant prepared a noise exposure study related to the planned expansion of EA-18G aircraft use at the OLF. The consultant relied upon the a group of computer programs known as NOISEMAP and the commonly used DNL average that's been used for decades. However, other noise models exist. Therefore:

1. Were any of the following models considered, and if not, what are the scientific reasons?
  - AzB
  - Harmonoise Sound Propagation Model
  - IBANA-Calc
  - Hidden Markov Model
  - Integrated Noise Model
  - NORD2000
  - NORTIM
  - PANAM (Parametric Aircraft Noise Analysis Module)
  - SoundPLAN

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 4.a. General Noise Modeling
- 4.d. Day-Night Average Sound Level Metric
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.j. Other Reports
- 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
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 8.f. Cultural Landscape and Impacts to Ebey's Landing National Historical Reserve



### Noise Consultant Selection

The Navy's consultant has prepared noise-related reports for other similar environmental impact statements and has authored numerous noise-related contract reports for federal agencies such as:

- NASA
- U.S. Army Aviation Materiel Laboratory
- U.S. DOD, Strategic Environmental Research & Development Program
- U.S. Department of Energy, Martin Marietta Energy Systems, Inc.
- U.S. Department of the Navy, Washington Navy Yard
- U.S. Department of Transportation, Federal Aviation Administration

Accordingly,

1. Was there a competitive bid process for the preparation of the DEIS, and if so, did other companies submitted Statements of Qualifications and what were the reasons for other consultants not being selected to conduct the noise study?

#### Military Aviation Noise Bibliography Prepared by Stirling Consulting

I'm in the process of compiling a comprehensive literature survey on military aviation noise. A draft copy is attached for the Navy's use and reference. It is in draft form because additional pertinent documents have been identified for inclusion in a final version.

Accordingly,

1. Of the 809 cited documents appearing in this reference work, which ones were consulted by the Navy in preparing the noise study?
2. What research resources (e.g., fee-based databases, library research, archival research, etc.) did the Navy consult in writing the DEIS?

#### Psychological Impact of Aviation Noise on Hearing & Wellbeing

Even if physiological damage to hearing is unlikely, the psychological impact on inhabitants living near the OLF has been dismissed by the Navy. The Navy relies on modelling and the long-standing DNL, but the inhabitants who live near the OLF do not live "average" lives or experience aviation noise in an "average manner." The demographics are not clear, but a large number of Coupeville residents are retired or are employed and work from home. Many of these same individuals are also musicians, writers, and artists who hone their craft in home studios. Therefore, I believe a major failure of the noise study is dismissal of the human element. In addition, the health of Navy personnel are not considered in the DEIS.

Accordingly,

1. Why didn't the Navy interview residents and business owners who live near the OLF and is there a valid scientific reason for this?
2. Why didn't the Navy install noise measurement devices on and within the homes and businesses located near the OLF and is there a valid scientific reasons for this?
3. Why didn't the Navy study the impact of aviation noise on its own personnel who work at the OLF?

#### CULTURAL RESOURCES

Because the OLF is situated adjacent to Ebey's Landing National Historical Reserve the effect of aviation noise on cultural resources is of concern. So much that the National Park Service conducted an acoustical monitoring study of the reserve in 2016 and concluded that:<sup>1</sup>

*This report provides current baseline ambient sound level metrics and data on military overflights at and near the Reserve. The data suggest that EBLA002 has an elevated level of anthropogenic noise from frequent aircraft using a myriad of flight paths, and while this is also partially true at EBLA001, Growler operations cause extremely loud events during training exercises at OLF Coupeville. This data show that the ambient sound level at EBLA001 was elevated during use of the OLF by military aircraft.*

*EBLA002 had a higher occurrence of aircraft events but at lower sound levels than at EBLA001 overall. The presence of military aircraft flying over or near EBLA increases anthropogenic noise at the Reserve. The information in this report should be considered when evaluating impacts to the Reserve and its resources as defined by Federal laws, regulations, and executive orders, and according to policies established by the Director of the National Park Service.*

Throughout Section 4.6—Cultural Resources of DEIS Volume 1 the Navy continually “anticipates” little to no effect on cultural resources. However, the paucity of documents relied upon by the Navy to conclude that there are limited “anticipated” effects is inadequate.

Accordingly,

1. I conducted a basic literature search and of the documents listed below, which ones did the Navy consult and if not, why not?
  - Benham P.P. & Birks A.N. 1973. The response to Concorde's sonic boom of some historic buildings in Northern Ireland. *Building Science* 8(2):137-147.
  - Battis J.C. 1988 Effects of Low Flying Aircraft on Archaeological Structures (AFGL-TR-88-0263). Hanscom AFB, MA. Air Force Geophysics Laboratory.
  - Girard J.J. & Sutherland L.C. 1989. Bibliography of Response of Unconventional Structures to Sonic Boom (Wyle Research Technical Note 89-3). A report prepared for the U.S. Air Force, HQ-ES/RDCS. Tyndall AFB, FL.
  - Hanson C.E., et al. 1991. Aircraft Noise Effects on Cultural Resources: Review of Technical Literature (Report No. HMMH-290940.04-1). A report prepared for the National Park Service. Denver CO.

<sup>1</sup> Pipkin A. 2016. *Ebey's Landing National Historical Reserve, Acoustical Monitoring Report* (NPS/ELBA/NRR—2016/1299). Ft. Collins, CO: U.S. Department of the Interior, National Park Service, Natural Resource Stewardship & Science, Natural Sounds & Nigh Skies Division.

- Klos J. 2008. Vibro-Acoustic Response of Buildings Due to Sonic Boom Exposure: July 2007 Field Test (NASA/TM-2008-215349). Hampton, VA: Langley Research Center.
- Konon W. & Schuring J.R. 1985. Vibration criteria for historic buildings. *Journal of Construction Engineering Management*. 111(3):208-215.
- Lynch E., et al. 2011. An assessment of noise audibility and sound levels in U.S. National Parks. *Landscape Ecology*. 26:1297-1309.
- Miller N.P. 2008. U.S. national parks and management of park soundscapes: A review. *Applied Acoustics*. 69:77-92.
- O'Hare Noise Compatibility Commission. 2014. Sound insulation for historical properties in Norwood Park Historical District. Presentation at the Residential Sound Insulation Committee Meeting, May 21. Available online at [http://www.oharenoise.org/sitemedia/documents/noise\\_mitigation/NP2014\\_052014.pdf](http://www.oharenoise.org/sitemedia/documents/noise_mitigation/NP2014_052014.pdf)
- Rickley E.J., et al. 1975. Noise Emissions and Building Structural Vibration Levels from the Supersonic Concorde and Subsonic Turbojet Aircraft (DOT-TSC-OST-74-35). Washington, D.C.: U.S. Department of Transportation, Office of Noise Abatement.
- Stanley G.R., editor. 2014. Annotated Bibliography—Vibroacoustic Studies for NPS Resource Impact Assessments v1.1. National Park Service, Intermountain Natural Resources Division.
- Sutherland L.C., et al. 1990. Evaluation of Potential Damage to Unconventional Structures by Sonic Booms (HSD-TR-90-021). A contract report prepared by Wyle Laboratories for the Air Force Systems Command, Human Systems Division, Noise & Sonic Boom Impact Technology. Brooks AFB, TX.
- Temple Group Ltd. 2014. Aviation Noise Metric - Research on the Potential Noise Impacts on the Historic Environment by Proposals for Airport Expansion in England. A report prepared for English Heritage. London.
- Transportation Research Board. 2013. Treatment of historic structures. In *Guidelines for Airport Sound Insulation Programs*. Washington, D.C.: National Academy of Sciences. Pages 106-114.
- U.S. Air Force. 2000. Appendix G: Noise. In *Realistic Bomber Training Initiative Final EIS, Volume 1*. Air Combat Command in Cooperation with the Federal Aviation Administration. Page G-21.

## WATER QUALITY

It is not surprising that fire-fighting chemicals of concern have been found in water supply wells adjacent to the OLF. According to the Association of State & Territorial Solid Waste Management Officials<sup>2</sup> a patent for using aqueous film forming foam (AFFF) was issued in 1966 and in 1969 the U.S. Department of Defense issued military specification Mil-F-24385 for AFFF liquid concentrate. The primary manufacturers of AFFF were 3M, Ansul, National Foam, Angus, Chemguard, Buckeye, and Fire Service Plus, Inc., however, AFFF was voluntarily phased out of production by its largest producer, 3M between 2000 and 2002 and is no longer manufactured in the U.S.

<sup>2</sup> ASTSWMO. 2015. *Perfluorinated Chemicals (PFCs): Perfluorooctanoic Acid (PFOA) & Perfluorooctane Sulfonate (PFOS): Information Paper*. Washington, D.C.

The Navy should continue its current investigation of fire-fighting chemicals of concern and provide that information to the public in a manner consistent with its current approach. In that regard, the DEIS notes that the Navy "is conducting a review of potential historic use of legacy AFFF and release of PFCs at ...OLF Coupeville to identify possible groundwater impacts."

Accordingly,

1. Is the Navy currently, or has plans to, research the environmental and human health impacts of fire-fighting chemicals that it used at the OLF between 1944 and the present?

#### CLOSING STATEMENT

The Navy will receive a substantial amount of comments on this DEIS. Although the Navy plans to issue a Final EIS without the opportunity for public comment, it is imperative that the Navy respond to each and every inquiry and question raised concerning the DEIS and then issue an updated DEIS before issuing a final EIS.

The usual "stock" reply method, which is commonly employed by federal agencies, will be insufficient to address the substantial shortcomings in this DEIS.

Sincerely,



Historian/Researcher

Cc:

- Senators Patty Murray and Maria Cantwell
- Representative Rick Larsen
- Governor Jay Inslee
- State Senator Barbara Bailey
- State Representatives Dave Hayes & Norma Smith
- Island County Commissioners Helen Price Johnson, Jill Johnson, & Rick Hannold
- Mayor Molly Hughes, Town of Coupeville

#### Attachment

Stirling Consulting. 2017. *Military Aviation Noise: A Comprehensive Literature Survey, Draft* (Stirling Consulting Reference Publication No. 2). Coupeville, WA.



Photo from: [https://www.cnmc.navy.mil/regions/cnrnw/installations/nas\\_whidbey\\_island.html](https://www.cnmc.navy.mil/regions/cnrnw/installations/nas_whidbey_island.html)

**MILITARY AVIATION NOISE  
A COMPREHENSIVE LITERATURE SURVEY**

***STIRLING CONSULTING REFERENCE PUBLICATION NO. 2 ©***

**DALE A. STIRLING**

**FEBRUARY 2017**

**STIRLING CONSULTING  
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DRAFT

## Preface

This literature survey is intended as a research guide for those interested in military aviation noise and contains more than 800 bibliographic citations organized into key subject areas. However, because aviation noise issues are not unique to the military, this reference work also includes documents pertaining to civil and commercial aviation noise.

The impetus for this reference work is my experience with jet noise resulting from U.S. Navy use of an outlying field (OLF) located on central Whidbey Island near the town of Coupeville. I live four miles south of town and approximately ½ mile from the south end of the OLF. It was also prepared in response to the U.S. Navy's November 2016 *Environmental Impact Statement for EA-18G "Growler" Airfield Operations at Naval Air Station Whidbey Island Complex*.

Individuals, agencies, and organizations, regardless of their support for, or opposition to, naval flight operations on Whidbey Island or who are concerned with any type of aviation use, should find relevant information relating to aviation noise. In the spirit of cooperation and open-source publishing, it is distributed free of charge.

This reference work is one in a series published by Stirling Consulting and similar to those published under a different company name between 1984 and 2000. Some of those reference works were prepared in response to natural resource, environmental, and public health issues.

Although a final version of this reference work will be forthcoming, the issue of aviation noise will likely be long term, both here in Coupeville and at other military and civilian aviation facilities located in the United States and around the world.

## Introduction

Noise is part of life. We're exposed to varying levels of noise in our workplace, in our homes, at school, and during leisure time activities. Aviation noise became an issue after World War I due to the dramatic growth of commercial flight. There was also a gradual increase in the size of the U.S. Army Air Service and its successor the U.S. Army Air Corps in the mid 1920s, which resulted in the construction of airfields across the country. However, it wasn't until the 1930s and 1940s that aviation noise became the focus of serious study. Some of the earliest studies were published in the *Journal of the Acoustical Society of America* and in general authors focused on noise from an engineering perspective although there was growing concern for its effect on pilots, passengers, and the public. One of the earliest health-related articles appeared in *The Journal of Laryngology & Otology* in 1942.<sup>1</sup> In addition, the federal government began publishing its first studies on the impact of aviation noise on humans.<sup>2</sup> During the same period the first articles to examine the legal angle of aviation noise were published.<sup>3</sup>

After World War II, turbine engines were developed and by the early 1950s nearly all military aircraft were jet powered. With these developments came increasing attention to, and complaints about, aviation noise. In the 1950s, journals such as *Noise Control* and *Journal of Aeronautical Science* published hundreds of articles on engineering controls and airframe and airplane design. There was also limited but growing research into the impact of aviation noise on human health, but virtually no study of its impact on the environment. Two Journals that published on the human health angle included the *Annals of Otology Rhinology & Laryngology* and the *Journal of Comparative & Physiological Psychology*. The landmark study of this period and a pivotal moment in considering human health and aviation noise was the Benox Report: An Exploratory Study of the Biological Effects of Noise published by the University of Chicago in 1953.

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<sup>1</sup> Dickson E.D.D. 1942. Aviation noise deafness and its prevention. *The Journal of Laryngology & Otology*. 57(1)8-10.

<sup>2</sup> Stevens S.S. 1941. *The Effects of Noise on Psychomotor Efficiency. II. Noise Reduction in Aircraft as Related to Communication, Annoyance and Aural Injury* (OSRD Report No. 274). Washington, D.C.: National Research Council, Committee on Sound Control.

Lewis D. 1943. *The Effect of Noise and Vibration on Certain Psychomotor Responses* (Report No. 8). A report prepared by the State University of Iowa, Iowa City for the Civil Aeronautics Administration, Division of Research. Washington, D.C.

<sup>3</sup> Noel T. 1946. Airports and their neighbors. *Tennessee Law Review*. 563:565-67.



It wasn't until the 1960s and 1970s that engineers, medical professionals, and scientists began to earnestly investigate aviation noise as a potential threat to human health and the environment. Numerous medical, engineering, technical, and environmental journals focused on the issue. Those were complemented by hundreds of reports published by federal agencies (e.g., Department of Commerce, Department of Defense, Department of Transportation, EPA, and NASA) either directly by agency staff or through consulting contracts. Over the past four decades, research and publication has continued at a rapid pace.

There also have been many efforts to control aviation noise through regulatory action. Chief among these are the following:

- Federal Aviation Act of 1958 (Public Law 85-726)
- Aircraft Noise Abatement Act of 1968 (Public Law 90-411)
- Airport & Airway Development Act of 1970 (Public Law 91-258)
- Noise Control Act of 1972 (Public Law 92-574)
- Aviation Safety & Noise Abatement Act of 1979 (Public Law 96-193)
- Airport and Airway Improvement Act of 1982 (Public Law 97-248)
- Airport Noise and Capacity Act of 1990 (Public Law 101-508)

Finally, there have been many efforts to create standards and guidelines that address aviation noise, including the following standard setting organizations:

- American National Standards Institute
- International Civil Aviation Organization (UN agency)
- International Electrotechnical Commission
- International Organization for Standardization
- National Bureau of Standards (USA)

Yet, despite five decades of research and regulatory action, there is no consensus about the impact of aviation noise on human health and the environment. Nor do there appear to be consistently applied engineering controls for mitigating and abating noise exposure in communities adjacent to civilian or military aviation facilities.

## The Literature Survey: Process & Organization

A comprehensive search of aviation noise literature was conducted utilizing publicly available and fee-based databases and select online search engines. They included, but were not limited to, the following:

- EBSCO
- National Academy of Sciences
- NASA
- ProQuest
- PUBMED
- Thomson Reuters Databases
- U.S. Department of Defense
- U.S. Department of Transportation
- U.S. Environmental Protection Agency

Documents appear in this literature survey only if abstracted by a database provider, available as a download, or acquired from a document delivery service so they could be reviewed. However, I leave it to the reader to decide if documents appearing in this literature survey provide information of value as it applies to his or her involvement or interest in aviation noise.

The literature searches I conducted are based on frequently asked questions about aviation noise as reflected in my local community as well as other communities in the United States. I also posed additional questions that I felt should be asked. The questions include the following:

- What is the impact of aviation noise on human health?
- What is the impact of aviation noise on contemporary and historic structures?
- What is the impact of aviation noise on flora and fauna?
- What can be done to mitigate the effect of aviation noise?
- What is the effect of aviation noise on real estate values?
- What type of aircraft has the Navy used at OLFs?
- How has the Navy designed, operated, and managed OLFs?
- How do other countries deal with aviation noise issues?
- What is the history of aviation noise research and how has the state-of-the-science progressed over time?
- What is the history of aviation noise regulations and establishment of standards and guidelines?

Based on those questions the literature survey is organized as follows:

**Military Aviation Noise & Human Health:** includes documents examining the effects of human exposure to aviation noise. Due to the intense interest of the public in the the health effects of aviation noise, this section is sub-divided into core health-effects areas as follows:

- Cardiovascular
- Central Nervous System
- Circulatory
- Developmental/Reproductive
- Hearing & Noise Exposure
- Hypertension
- Metabolism
- Mortality
- Nocturnal/Sleep
- Psychological
- Teratogenesis
- Geographic Examples

#### **Military Aviation Noise & The Environment**

- **General Reviews:** includes documents that examine aviation noise from a wide perspective
- **Cultural Resources:** includes documents that examine the impact of aviation noise on historic structures
- **Parks & Planning:** includes documents relating to the impact of aviation noise on parks and rural quiet areas
- **Wildlife:** includes documents relating to the impact of aviation noise on many species of animals

#### **Economics, Policy & Law**

This section includes documents that examine aviation noise from the perspective of the economy and attempts to regulate aviation noise. Topics of interest include real estate values, social welfare, noise abatement, and aviation facility siting.

### Technical Aspects of Military Aviation Noise

- **EA-6B Prowler/EA-18G Growler:** Much of the public is unaware of the history of these aircraft, so documents pertaining to their development, maintenance, efficacy and use are included
- **Air Installations Compatible Use Zones:** includes documents specifically pertaining to military aviation facilities, including the OLF located in Coupeville
- **Field Carrier Landing Practice:** includes documents that explain the purpose and methods of conducting air carrier exercises on land
- **Noise Assessment, Engineering Controls & Mitigation:** includes documents dating to the 1930s that focus on the assessment of aviation noise and engineering and design controls. Due to the intense interest by the public in the technical aspects of noise assessment and engineering controls, this section is sub-divided by type of document as follows:
- **Helicopters:** most documents pertaining to aviation noise at OLFs and aviation in general focus on fixed-wing aircraft, however, helicopters frequently conduct exercises at the Coupeville and other OLFs; therefore, a section on helicopters is included in this reference work

DRAFT

## LITERATURE SURVEY RESULTS

### MILITARY AVIATION NOISE & HUMAN HEALTH

#### Cardiovascular

1. Basner M., et al. 2009. Aircraft noise effects on sleep: a systematic comparison of EEG awakenings and automatically detected cardiac activations. *Physiological Measurement*. 29(9):1089-103.
2. Brink M. 2011. Aircraft noise and myocardial infarction mortality. *Epidemiology*. 22(2):283.
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4. Eriksson C., et al. 2014. Long-term aircraft noise exposure and body mass index, waist circumference, and type 2 diabetes: A prospective study. *Environmental Health Perspectives*. 122(7):687-694.
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#### Central Nervous System

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#### Circulatory

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#### Developmental/Reproductive

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24. Klatt M., et al. 2013. Does noise affect learning? A short review on noise effects on cognitive performance in children. *Frontiers in Psychology*. 4:578.
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DRAFT

- 1.a. Thank You
- 4.q. Potential Hearing Loss

Freeland, WA 98249

I grew up on whidbey island. My father served in the navy, and I had the good fortune of living in military housing within close walking distance to the beach. I loved that beach, the stillness, the presence of nature, a place to retreat and feel the language that only wild nature speaks. I have hike and walked all over this island, both growing up and now as an adult living on the south end. I'm here partly because I love to listen to the sounds of nature. These live, dynamic sounds are inimitable. They normalize me and help tune me to what it is to be fully human. I do understand the needs of pilots to train well. My ex husband flew P-3s. That's a plane whose sound output is perfectly compatible with nature. It just hums along sounding like a part of the scene. The growlers, however, scream, roar, startle, deafen, and dominate the soundscape. Sounds like that do not belong around homes, havens, and large animal populations. In a shared world, we all have to give a little. Sometimes a lot. But increasing growler presence in any way on whidbey or over the Olympic peninsula is too much. It is inappropriate and is too much.

Olga, WA 98279

When I first came to Orcas Island in 1956, I was stunned by its beauty and tranquility. I lived then about a mile from McChord Air Force Base south of Tacoma. Each day, I experienced the cacophony of C-124 Globemasters and other aircraft taking off and landing. The noise bothered me, but it just became part of my daily life. When I visited Orcas and the other San Juan Islands, the quiet overwhelmed me. Today, that's changed. I sit on my beautiful deck near Doe Bay that on occasion shakes from the disruptive and unhealthy noise from the EA-18G Growler jets from Naval Air Station Whidbey and OLF Coupeville. My friends on Lopez Island have it even worse. Some are forced to wear noise-cancelling headphones much of the day. Now, there could be an increase in jet noise of more than 47 percent under the Navy's plan to add 36 more Growler jets that will fly over the San Juan Islands. Please find below my comments on the Draft Environmental Impact Statement (EIS):

1. Low frequency noise impacts are ignored in the Draft EIS, despite the Growler jets being known for intense low frequency engine rumble. I urge that the Navy evaluate impacts of the Growler at low frequencies using C-weighting (dBC) in addition to A-weighting (dBA).
2. The Draft EIS is flawed because analysis of noise impacts is based solely on computer simulation. To be valid for decision-making, models must be verified. I urge that data used for simulation be provided. Growler noise measurements should be provided with afterburners at 100 feet behind the jet in one-third octave bands from 6 Hz to 20 kHz. The computer model should be calibrated with actual noise measurements in locations throughout the San Juan Islands and broader regions.
3. The computer model in the Draft is NOISEMAP, which predicts noise impacts. A Defense Department report found that NOISEMAP is outdated and new software is needed to provide "scientifically and legally defensible noise assessments" of the modern, high-thrust jet engines used in the Growlers. I urge that the noise simulation be redone using more up-to-date Advanced Acoustic Models.
4. The Draft is flawed because it used the annual Day-Night Noise Level (DNL) metric developed for commercial airports that operate 365 days a year. The Growler noise issue is intermittent, but intensive. So by averaging noise over the entire year, the Draft assumes—without studies—that the quiet days mitigate the noisy days. I urge that noise levels of the Growlers be averaged only over active flying days.
5. Unfortunately, the Draft dismisses long-term health impacts of jet noise because some studies are not conclusive. I urge that the health impacts of Growler noise be evaluated under criteria 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. I urge that the San Juan County noise reports be incorporated, as well as the Coupeville noise measurements performed by JGL Acoustics into the EIS analysis.
7. The Draft incorrectly suggests that the lands and waters of the San Juan Islands National Monument are exempt from National Environmental Policy Act (NEPA) protection. Protection was granted prior to the establishment of the SJI National Monument. I urge that language stating that the Monument is exempt from NEPA be removed.
8. The Draft contains three Alternatives, but all three are very similar and are based on old technology that assumes a piloted jet that requires constant pilot training for safe carrier landing. I urge that a new Alternative be evaluated that deploys UCLASS jets (drones) instead of more Growlers to reduce significantly the need for land-based carrier

- 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

training. 9. I live on Orcas Island in the San Juan Islands. The Draft totally fails to examine the socioeconomic impacts on San Juan County despite the fact that Growler jet noise affects my County. For example, the Draft fails to evaluate the negative impact on real estate values in San Juan County caused by the excessive Growler noise. I urge that the socioeconomic impacts, including real estate values, be evaluated. Same for Jefferson and Clallam Counties, which also are ignored in the Draft. 10. All of the Alternatives in the Draft involve irrevocable decisions to add 35 or 36 Growlers. There is no commitment to potential noise mitigation measures in the Draft. I urge that a clear commitment be made to noise mitigation measures and to their timelines in the Final EIS and the 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." I urge that the EIS address the deficiencies I've outlined in my comments, and those of others, and that there be a further opportunity for public comment before the Final EIS is prepared. Thank you for considering my comments.

Coupeville, WA 98239

In the recent past, the jet flight noise was getting unbearable. We moved to Coupeville in 2005 and signed the form that we were aware of the jet flight noise. But, that noise has increased. Please don't let the noise exceed that which it is at present. I am aware that our Navy pilots need training and practice to maintain their levels of expertise, but the noise as it got to be was literally unbearable. Consider the school students, hospital staff and patients, homeowners, and business owners. Hearing is unrepairable. Thank you for your consideration.

1.a. Thank You  
12.f. Economic Hardship and Impacts  
4.o. Classroom Learning Interference  
4.q. Potential Hearing Loss  
7.c. Noise Disclosure

Port Angeles, WA 98362

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](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

- 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



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 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.

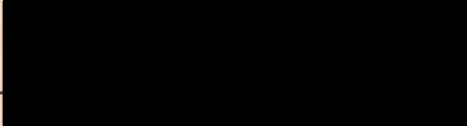
(<http://onlinelibrary.wiley.com/doi/10.1111/brv.12207/abstract>) The DEIS also failed to consider an important 2014 study called "Anthropogenic EM Noise Disrupts Magnetic Compass Orientation in Migratory Birds,"

(<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, [REDACTED]

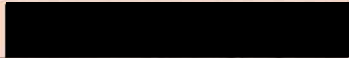
**Environmental Impact Statement Comment Form**  
**EA-18G Growler Airfield Operations at NAS Whidbey Island Complex**


**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 

2. Organization/Affiliation (resident, citizen, business, nonprofit, veteran, retired military)

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 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.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.g. Ebey's Landing National Historical Reserve
- 7.j. Impacts on Outdoor Sports
- 8.c. Noise and Vibration Impacts to Cultural Resources
- 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.
- 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 consider the dire economic consequences to the second oldest town in Washington. The proposed action will destroy the Central Whidbey economy. The proposed action will have significant physical impact to the structures in Ebey's Reserve.

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](http://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.



22 February 2017

EA-18G Growler EIS Project Manager  
Naval Facilities Engineering Command Atlantic  
6506 Hampton Blvd.  
Norfolk, VA 23508

Attn: Code EV21/SS

**RE: PUBLIC COMMENT—NAS WHIDBEY ISLAND COMPLEX DRAFT EIS**

The NAS Whidbey DEIS is deficient in numerous areas, and a new draft should be issued for public comment prior to any final decision-making. The length of the document violates NEPA regulations in that it is 1500 pages long (NEPA requirement is 300 pages) the excessive length and complexity acts as a deterrent to public involvement and comment. The DEIS is artificially constrained by limiting consideration of FCLP for the Growler only to Whidbey Island. The Navy asserts this is for "mission requirements." It's hard to imagine that the Navy built a plane that pilots can only train on Whidbey Island. The "No Action" alternative in the DEIS was dismissed as not meeting the Navy's objectives, without a full and objective evaluation of alternatives. This is in violation of NEPA requirements. By not considering viable alternatives that could meet the Navy's mission without increasing operations at OLF Coupeville the DEIS appears to have a predetermined decision.

There are a number of locations that are physically suitable for an FCLP. These should be reviewed and considered in the document. In addition, Coupeville Outlying Field does not meet the Navy's own requirements for FCLP facilities. NEPA requires that the DEIS be based on **Best Available Science**. This document is deficient in its review and analysis of noise impacts, economic impacts, water quality issues, earthquake potential and impacts, and impacts to cultural resources. It has conflicting information in it regarding the requirement for APZ's, so that it impossible to determine what action is expected, and what the impact might be. The specifics and details of these deficiencies are listed below. Please address these deficiencies with more than the obligatory "Comment Noted."

The combination of myriad deficiencies, omissions and errors, and the lack of a public comment period for the final EIS means another draft should be issued prior to finalizing the project. The citizenry as well as public officials and regulatory agencies need an opportunity to ascertain that these deficiencies have been addressed prior to moving forward with the proposed action.

Copies furnished:  
Senators Murray and Cantwell  
Representative Larsen  
Island County Commissioners

Sinc

Coupeville WA 98239

- 1.a. Thank You
- 1.b. Best Available Science and Data
- 1.e. Risk of Terrorist Attack
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.e. Agriculture Analysis
- 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
- 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.c. Compliance with the National Environmental Policy Act
- 2.d. Program of Record for Buying Growler Aircraft
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- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.j. Other Reports
- 4.o. Classroom Learning Interference
- 4.q. Potential Hearing Loss
- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 4.u. Local Noise Ordinances
- 7.b. Land Use Compatibility and Air Installations Compatible Use Zones
- 8.c. Noise and Vibration Impacts to Cultural Resources

**Discussions of groundwater in the DEIS are inaccurate and out of date.**

At page ES-9 the DEIS states, "There would be no significant impacts on water resources from construction activities or operation of new aircraft." Regarding hazardous waste, it states at page ES-10, "The existing practices and strategies would successfully manage the use and disposal of these materials." 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." 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 statements are contradicted by recent revelations of groundwater pollution. On January 21, 2017, the *Whidbey News-Times* reported that a mile-long plume of 1,4-dioxane, a likely carcinogen, was leaking from a dumpsite at NAS Ault Field. The existence of this plume suggests that "existing practices" for handling of hazardous waste are not effective.

Additional groundwater contamination has been found around Ault Field and OLF Coupeville. At least eight wells have been found to be contaminated with perfluorinated compounds from fire-fighting foam as reported in the *Whidbey News-Times* on January 28, 2017. The Navy is now drilling test wells to determine the extent of the contamination. Given this ongoing testing, the extent of contamination around both Ault Field and OLF cannot be determined at this time. Section 3.9.2.1 is also out of date regarding this issue.

The final EIS must include an up-to-date discussion of this recently identified groundwater contamination, including current information on the extent of well and aquifer contamination, planned steps for remediation, and plans to compensate affected water users. The final EIS must also include a discussion of how procedures for the safe handling, use, and disposal of hazardous substances and waste is to be improved prior to basing additional Growlers at NASWI.

**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" per 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 misstates 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/>). Ault Field is located within a liquefaction zone. Should an earthquake occur, damage to the Growler fleet would be substantial. Please address this in the final EIS.

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 at pages 3-179 to 3-180), which was built in the early 1930s. The Deception Pass Bridge needs 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 at page 3-180), and storage tanks or reservoirs are also likely to be damaged. The final EIS must correctly describe the earthquake hazard at NAS Whidbey **based on best available science**. The final EIS must also explain how the Navy will mitigate these hazards. 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. Alternative basing sites for at least a portion of the Growler fleet should be given more serious consideration.

**The DEIS does not give proper consideration to real, on-site noise measurements.**

On-site noise measurements, which are briefly discussed in the DEIS, contradict the Navy's noise models. The DEIS dismisses these measurements without justification. Measurements made by the National Park Service (DEIS at page 1-23) are dismissed because high noise levels "occurred less than 1 percent of the time during the study period." However, if use of OLF Coupeville is increase up to 6-fold as in the proposed "A" scenarios, these high noise levels would occur nearly 6% of the time (7 hours/week). This is a significant amount of noise in a reserve that was created to preserve the "historic, cultural, and rural character" of central Whidbey Island (*Ebey's Landing National Historical Reserve Long-Range Interpretive Plan*, National Park Service, 2009). The sound monitoring at Ebey's Landing is described in Natural Resource Report NPS/EBLA/NRR—2016/1299, *Ebey's Landing National Historical Reserve Acoustical Monitoring Report*. Sound measurements made by the Park Service were collected over 31 days using equipment meeting ANSI standards, and data were analyzed by trained technicians. These results must be taken more seriously, and raise questions about the accuracy of the models used to prepare the DEIS. Additional on-site acoustic sampling was conducted by JGL Acoustics, Inc. in 2013. This report is mentioned 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. However, the JGL Acoustics report is dismissed in the DEIS at page 1-23 on the grounds that it contains "methodological flaws", but no actual flaws are identified. The DEIS is therefore deficient in not giving sufficient consideration to actual on-site noise measurements. If these measurements are somehow flawed, based on a "best available science" standard, then those flaws should be identified.

OSHA maximum noise exposure limits are 110 dB for 30 min per day, or 115 dB for 15 min per day (slow response). Growler operations at the OLF have been measured exceeding these sound levels at several locations, including Rhododendron Park. Thus, the proposed action may exceed OSHA guidelines. The EIS should evaluate noise exposure based on OSHA guidelines, and state that OSHA noise exposure limits may be exceeded.

Washington State law (WAC 296-817-20025) requires that employers in the State post warning signs in areas where noise levels will exceed 115 dB. The EIS should state that the Navy will make public notice, and request local jurisdictions to post warning signs, in public areas where noise levels exceed 115 dB.

A-weighted sound measurements (dBA) are used in the noise analysis of the DEIS, which emphasizes the 1,000 to 4,000 Hz range (DEIS at p. A-142). However, the Growler emits substantial low-frequency sound, not reported by dBA. See 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"), Department of the Navy, pages 38-39, 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 of that report, indicate substantial sound levels at frequencies below 100 Hz. dBA sound levels are, therefore, an incomplete measurement of Growler noise during FCLP operations, which leads to underestimating perceived sound levels and effects on people and property. The final EIS should clearly convey the lack of correlation between A-weighted measurements and the Growler sound spectrum, or should adopt a different, or additional, measurement standard.

**The DEIS relies on noise models that are outdated and inaccurate.**

The DEIS is relies too heavily on noise modeling in lieu of actual sound measurement. There is no indication in the DEIS that the noise models were ever tested against actual measurements made in the affected area. Given that noise measurements made by the National Park Service (DEIS at page 1-23) and JGL Acoustics, Inc. (DEIS at page C-124) differ significantly from model-based predictions, the models should be tested and modified if necessary.

The NOISEMAP software used for computer modeling appears to be an outdated version from 2008 or earlier (DEIS at 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.*" (<https://www.serdp-estcp.org/Program-Areas/Weapons-Systems-and-Platforms/Noise-and-Emissions/Noise/WP-1304>; emphasis added).

The noise modeling used for the DEIS is also inaccurate because it relies on A-weighted sound measurements, which emphasize the 1,000 to 4,000 Hz range (DEIS at page A-142). However, the Growler is known to produce substantial low-frequency sound according to the Department of the Navy in *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 at pages 38-39 of the included Wyle report WR 10-22. This study states, "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 of the report, 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.

**The DEIS improperly omits Coupeville Middle/High School as a "Point of Interest."**

Coupeville Middle/High School should be added to the Points of Interest (Section 3.2.4.2 and elsewhere in the DEIS). 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 (DEIS at 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 (DEIS at 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, increasing the noise level to greater than 109 dBA. According to the DEIS at page A-169, "One laboratory study (Ising et al. 1999) concluded that events with Lmax above 114 dB have the potential to cause hearing loss."

A Boys and Girls Club is slated to be built on South 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. It is recognized in the DEIS that daycare centers are incompatible with high noise levels: "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). Coupeville Middle/High School should also be added to the Points of Interest 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 Lane area. Data for Coupeville Middle/High School should be included in all tables of noise impacts on residential areas.

The DEIS assumes that all learning takes place indoors (pp.4-37 and 4-66). In fact, Coupeville schools have an active garden program, and athletics and recess take place outside year – round. The DEIS does not address this impact

**Increased use of OLF under scenario "A" or "B" will create unacceptable noise impacts on residential areas.**

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 [*Accident Potential Zone*] 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 Jehovah'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 at 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.

**The discussion of "Housing Impacts" in the DEIS is out-of-date and unrealistic.**

Under "Housing Impacts" (p. 4-231), the DEIS states that "nearly 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 (DEIS at p. 4-232). This statement is 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.

**The proposed "A" and "B" Scenarios would create economic hardship for homeowners, and no mitigation measures are described in the DEIS.**

The DEIS states, at page 4-232, that "aircraft noise has a real effect on property values" and that 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 property values around the OLF due to (a) the offsetting effect of higher commercial property values around airports and (b) the episodic nature of the FCLP operations, which create much higher noise levels than the DNL averaging algorithm would suggest. The OLF is not a commercial airport and does not attract high-value commercial development. The only commercial activities adjacent to OLF are a storage facility and a gravel pit.

If property values near OLF would decline by only 0.5% to 1.0% per dB of noise increase (which is consistent with the studies cited in the DEIS), loss of value in the area would be substantial. Taking predicted increases in noise from Fig. 6-9 of the DEIS, 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. &amp; Byrd Dr Dr.; 1A 12 dB \$18,000 \$36,000

Admirals Dr. &amp; 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

Since the home is the largest asset for most home-owning families, these losses would be a tremendous financial burden on many residents. Figure 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.

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). This article fails to mention the resultant financial costs to both local government and the Federal government. The City of Virginia Beach and the State of Virginia spent at least \$129 million on mitigation for loss of property values (Virginia LIS Report Document No. 337, 2011; Vergakis, Brock, *The Virginian-Pilot*, April 18, 2016). In addition, the Federal Government paid \$34.4 million to settle a class-action lawsuit in 2007.

**The runway at OLF Coupeville is too short for the proposed actions.**

The OLF runway is the Navy's shortest FCLP runway and does not meet the Navy's own standards for FCLP use. According to a EIS prepared for basing F/A-18 aircraft, a primary runway must be at least 9,000 feet long, and "[t]he minimum length acceptable for secondary runways is 6,500 ft" (*Draft Environmental Impact Statement (EIS) for Development of Facilities to Support the West Coast Basing of the F/A-18E/F Aircraft*, 1997; see 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). The deficiencies of OLF, the shortest FCLP runway in the Navy, are also discussed in the DEIS in Appendix H ("An EA-18G requires a Class B [8,000 ft.] runway"). Not only is OLF, at 5,400 feet, well below the requisite length, it also abuts residential areas. The Navy's rationalization for use of OLF appears to be that it is close enough to Ault Field to divert there in an emergency, but Ault Field also fails to meet the previously stated standards as it comprises intersecting runways each only 8,000 feet long.

**The majority of FCLPs should be conducted at Ault Field as they have in the past.**

The DEIS states that under the proposed actions, "operational conditions would be similar to historic flight operations" (page ES-4). If this statement is correct there is no good reason given to greatly increase FCLPs at OLF as in the "A" and "B" scenarios. The historical record demonstrates that Ault Field can accommodate 2/3 of FCLPs even in a year with 190,000 total operations (DEIS at page 1-6). High levels of FCLP (up to 56,000) were conducted at Ault Field ca. 1990. The DEIS does not demonstrate 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. NAS Whidbey Island 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. Zoning and land use patterns also favor use of Ault Field for FCLP as in the "C" scenarios.

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 (DEIS at page 3-69). There is substantial residential development around OLF, development deemed by the Navy to be incompatible with the proposed action. The most feasible option among the action alternatives is therefore one of the "C" scenarios, whereby most FCLP operations will be conducted at Ault Field.

**The DEIS does not suggest an Alternative OLF location that would lessen environmental impacts to the community.**

The Navy should consider NWSTF Boardman as an alternative OLF site to accommodate the increased FCLPs expected as the number of EA-18G Growler aircraft planned for NAS Whidbey is increased. This alternative would minimize new environmental impacts for Ebey's Landing Historic Reserve and the Central Whidbey Island community. It could also decrease FCLPs at Ault Field while retaining the economic benefits of the Growler community in Oak Harbor.

There are a number of other existing sites that could be used for training. These sites were eliminated using selected criteria in Appendix H. However, using the same criteria, both Ault Field and OLF fail to meet the requirements. The following sites should be evaluated in detail: NAS Lemoore, NAF El Centro, NAWS China Lake, NAS Jacksonville, NAS Oceana, NAS Meridian, NAS Fallon, Mt Home SFB, NAS Kingsville, and NAS Corpus Christi.

**Increasing Field Carrier Landing Practice (FCLP) at OLF will degrade the visitor experience at Ebey's Landing National Historical Reserve, resulting in economic losses.**

The DEIS discusses noise measurements made by the National Park Service, stating at page 1-23, "In 2016, the National Park Service performed acoustical monitoring for the Ebey's Landing National Historic 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." If this volume of noise occurred close to 1% of the time in 2016, under scenario A of any of the proposed Action Alternatives noise levels above 60 dB could occur up to 5-6% of the time, or 7 hours/week if jets were flying only on weekdays. Even more hours of high noise would occur during periods of high-tempo operations or if OLF was used on weekends.

The disruptive effects of increased jet noise on visitors to Ebey's Reserve should be given greater consideration in the final EIS.

"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 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 consider the qualitative changes 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. Such an increase will defeat the purpose of the Reserve, degrade the visitor experience, and reduce tourism. Many businesses in Coupeville rely heavily on tourism. The DEIS does not address the economic consequences of these aesthetic effects on the Reserve.

**The DEIS does not adequately address the physical impact of Growler vibration on historic and cultural properties.**

These properties are protected under NHPA and the National Park Service cultural resource guidelines. There are studies available to assess some of these impacts, but none are cited in the DEIS. Please see the bibliography on noise impacts prepared by Dale Stirling. Again, the DEIS is supposed to be based on best available science. That includes the preservation of historic properties and cultural resources, and assessing any impacts the Growlers have on them due to the low frequency vibration over time.

**The DEIS does not address the socio-economic impacts of increased noise on the Central Whidbey Farming Community.** Some of the farms in our area have been routinely showing decibels at well over 85 when Growlers have been flying previously, and with proposed GREATLY increased additional flights, this is of major concern to farmers in the central Whidbey area. Who is liable for damaged hearing to these farm workers? Is it the farmer, who put the employees into the field while noise was above the 85 decibels? It is the responsibility of the Navy to address this issue. What is the Navy's plan to prevent hearing loss for agricultural employees and to compensate for irreversible hearing loss.

This issue has been asked by farmers and never adequately answered., but IF those farming in the area are being affected by noise levels above the 85 decibels by the Growlers, putting us into the L&I threshold. What is the Navy's plan to compensate for increased employee costs? This would include all the costs incurred with having to meet L&I requirements – ear safety equipment, noise monitoring, and hearing tests for employees? Even if hearing protection is acquired that brings decibel levels down to acceptable level (and one of the farmers in this area, most directly under the flight path, has to date not been able to purchase hearing safety equipment that would bring decibel levels under 85 there is still a huge effect on production and capability to communicate with employees when we are in a work situation and none of them can hear. Either because of how loud the Growlers are, or because they are wearing noise reducing hearing protection. This can even cause dangerous situations at times, and certainly is a huge loss in efficiency.

**Risks of single siting of all the electronic warfare aircraft for the entire U.S. military mission at NASWI is not sufficiently evaluated in the DEIS.**

Such risks should be evaluated and include: Seismic events, as discussed above. Terrorism should be addressed, including access vulnerability of Ault Field and OLF. State Highway 20 borders the east side of OLF Coupeville. Patmore Road crosses the North end of runway 32 at the OLF. Keystone road borders the West boundary of the OLF. All these roads very close to and within eyesight of the runway. Additionally, the bridge, ferries, and NASWI Base utilities (water, electricity, gas) are an easy target for terrorists.

Access to the base. Many NASWI personnel live off of Whidbey Island and commute via the ferries and Deception Pass Bridge. Disruption of service or failure of access of these will pose a major operational

risk. Indeed, when all Coupeville to Port Townsend ferries were summarily removed from service on 11/21/2008 it caused a major transportation crisis. The 82-year old Deception Pass bridge is a critical access point risk that must be evaluated. The bridge has been identified as in-need of a seismic retrofit.

Damage or maintenance to Ault Field runways will affect readiness and ability to deploy aircraft, or conduct routine training, leaving much of the military's EW aircraft grounded. Utilities are vulnerable. The NASWI base and Oak Harbor city water supply cross the Deception Pass Bridge. The entire electricity supply for Whidbey Island crosses at Deception Pass – there is not a secondary supply route. The natural gas supply to North Whidbey Island, including the Base, also crosses at Deception Pass. A single, catastrophic event at Deception Pass could affect

**OLF operations are misrepresented as historically normal in Section 1-A**

Section 41.2.1 misstates that the proposed action “represents a level of operation similar to historic levels experience over the life of the airfield.” The graph of Previous Airfield Operation for Ault Field and OLF Coupeville on page 1-6 shows that from 1976 through 2015 OLF Coupeville experienced an average of 13,200 operations per year. A more representational average would be the 18 years since the A-6 Intruder stopped flying, which is about 5,500 operations per year.

The proposed increase of 29,000 operations under Alternative A would be a total of approximately 34,500 operations a year. **At no time in the history of OLF Coupeville has the number of operations been at the proposed level under the alternative.** This action would be a 530% increase over the average operations in 1997. The proposed increase under Alternative C would be a total of 8,200 operations per year. This would represent a 49% increase over the historical average. The DEIS should state that, under any scenario, the action represents a significant change in the number of operations at OLF Coupeville.

Please address the health effects raised in the February 2107 Washington Department of Health report on the Association of Noise and Health. What mitigation measures will the Navy undertake to protect the health of the Central Whidbey population?

Clinton, WA 98236

I have read with alarm about the possible increase of Growlers' flight operations at the Outlying Field near Coupeville, Washington. My primary concerns involve the noise impacts on local school students, residents, visitors to parks, farmers, tourists who might hike or enjoy local beaches, wildlife, and the property values of land owners. I imagine the noise would be uncomfortable, if not unbearable, for people both inside and outside of buildings, i.e., being inside would provide no protection. Although my family lives on South Whidbey, we are often in the Coupeville area, particularly to shop and eat out and to visit Rhododendron Park and other parks, Ebey's Landing National Historic Reserve, Pacific Rim Institute, and events in Coupeville. The constant noise of Growlers would be detrimental to all such activities. Tourism certainly would decline in such a noisy atmosphere. I believe this Draft Environmental Impact Statement should consider the following issues: the economic impact on communities on and off the island; alternatives to using OLF; the health of students in the Coupeville schools; the health of all residents; the possibility of plane crashes; water contamination in Coupeville's wells; and fuel dumping (where will that occur? near salmon and orcas?). I hope the Navy will choose Scenario C, though my preference is to use the prior flight operations of 2015 and 2016. I appreciate the Navy's contributions to Island County; however, this potentially excessive noise level is really more than any community should accept. Thank you considering my comments.

- 1.a. Thank You
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.c. Socioeconomic Impacts
- 12.h. Tourism
- 2.k. Range of Alternatives
- 2.m. Record of Decision/Preferred Alternative
- 4.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children
- 6.f. Fuel Dumping

1.a. Thank You

Burlington, WA 98233

The sound of freedom. So many people complain for a few minutes of noise. It is well worth the putting up with noise for the security of our great country. I lived 68 years in Anacortes, it was load at times, but I truly accepted the need for our defense department training and practice. "Practice Makes Perfect"

Brinnon , WA 98320

Olympic Canal Tracts is a Corporation of concerned citizens who own property along the Duckabush River. We are aware of the flights of the Growler along, and through the Olympic National Forest and have NO Objection to these flights. We have found flights of helicopters, jets and the resultant sounds generated by these flights to be NO problem. We have a herd of 60-70 Elk that are quiet content to ignore the flight and noise. The wildlife has been able to have their ducklings, coyote pups, Grouse, birds, eagles and continue their lives without any problems. The largest complaints come from what we consider to be malcontents who wish only to protect their ideal of what a stable wildlife habitat should be. They do not represent the concerns of our area which is south of the Port Townsend conglomerate of environmental activists. Port Townsend is a group of malcontents who want to control that which they do not understand and have 50+ organizations(containing 10-20 vocal members with plans to control the National parks, and National forest. These voting precincts do not represent the whole or the majority of the populace of Jefferson county which extends its range from Hood Canal to the Pacific Ocean. It is a large county and the majority of the population are concentrated around Port Townsend and Port Hadlock, a very small land area that is in no way indicative of the concerns of the southern/eastern portions of the County. We in fact represent the wildlife concerns and realize what the true impact is on wildlife. Port Townsend is a group of malcontents who are interested only in stopping what is necessary for the training and experience of our American Military. They have an agenda, unfortunately this agenda is contrary to the safety and well-being of the United States. Thank you, [REDACTED]

1.a. Thank You

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

19.d. Electronic Warfare

Freeland, WA 98249

- 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).

Freeland, WA 98249

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 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.

Freeland, WA 98249

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.



Freeland, WA 98249

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 reanalyzed.

Freeland, WA 98249

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.

Freeland, WA 98249

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.

Freeland, WA

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.

1.a. Thank You

4.d. Day-Night Average Sound Level Metric

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

Freeland, WA 98249

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).

Portland, OR 97229

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".

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 10.l. Bird Migration
- 18.a. Climate Change and Greenhouse Gases
- 18.b. Average Carbon Dioxide per Aircraft
- 19.d. Electronic Warfare

Seattle, WA 98112

The Olympic Peninsula should not be subjected to wargames and overflights. An EIS should be done to study the impact on animal life and connected plant life of high volume activities, and increased human presence. It is in our economic and social interest to protect the species in this unique area.

- 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

freeland, WA 98249

This Navy plan to train aircraft personnel and do air warfare exercises over and around Whidbey Is. is extremely dangerous to its civilian population, to say nothing of the wildlife on, over and around Whidbey Is., as well as Naval personnel. This plan is a disaster in the making, and must be stopped until it is revised to meet the safety and environmental stipulations below in the final EIS, and/or be moved to where these EIS provisions can be met. 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 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 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 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

- 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.o. Classroom Learning Interference
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss
- 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



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 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.

To NAVY conc. E.I.S.

I have concerns about the govts  
E.I.S. for Ault Field & OLF.

My family has been next to Ault Fld  
for 30 yrs. & I work by OLF.

The noise at both locations has increased  
dramatically since the arrival of the Growlers.

My familys use & enjoyment of our  
property has been reduced. We can no longer  
go outside to garden or play w/ the grand kids.  
They dont like to be here when the planes fly.  
We cannot plan family outdoor activities anywhere  
arround the base, i.e. Deception Pass fishing  
Ft Casey or the Ebey Reserve. Ball games at  
Redadendrom Park are painful to watch. Kids  
trying to catch balls while holding their ears.

I cannot watch TV or talk on the phone  
I cannot sleep at nite when they fly. My ears  
ring almost continually worse if I'm caught  
outside. If I'm caught outside my chest feels  
internally pounded by noise. Its a strange  
feeling never before growlers arrived.

- 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.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.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 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.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

Not only ~~do~~ have my property devalued by APZ rules but now my well water is suspect for contamination. None of these problems are addressed adequately in the EIS.

Your modeling of noise on homes is in my view unscientific. I have taken sound readings in my yard & in my home with calibrated equipment & routinely they are off the charts louder.

I live on 10 acres my livestock is negatively affected chicks born with bleeding eardrums they die soon after. My dogs have tumors drinking water & now my garden is problematic.

Move well I'd like to except as my value ~~diminishes~~ goes away I'm captive. My neighbor was told until the water issue goes away his property HAS NO VALUE. His well is positive, for contaminants. I'm afraid for our health.

You fly way outside of zone's more planes the bad record of crashes. It's only a matter of time. These planes should fly in remote areas away from people. I've also had a fuel drop on my property again soil contamination. No one would even come out to look.

All the meetings and frankly little or no information that is accurate.

I've been lied to & given No help. I've helped others write letters heard the stories. No one helps. You should protect us here at home 1st. All the bad in the world but the one I fear the most is right next door. Thirty years ago I felt different but... alot has happened.

I hope you will reduce all plans for both Ault Fld. & Coupeville. Eggs in 1 basket doesn't make sense. More & more folks are speaking up & are tired. You are burning bridges in the whole area.

Your EIS is flawed on a variety of topics

A proud taxpayer with family that has served thier country. We deserve better.

[REDACTED]  
[REDACTED]  
[REDACTED] Oak Harbor, Wa 98277  
[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 \_\_\_\_\_
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)

- 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:**

*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](http://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.

**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](http://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)  
*Retired NASA*

3. Address [REDACTED] *Coupeville WA 98239*

4. Email [REDACTED]

5. Phone [REDACTED]

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/whidbeyeis](http://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:

## What else you can do

1. **Get involved.** To volunteer, email us: [coupevillecommunityallies@gmail.com](mailto: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](http://www.murray.senate.gov)
  - b. U.S. Senator Maria Cantwell: 425.303.0114; [www.cantwell.senate.gov](http://www.cantwell.senate.gov)
  - c. U.S. Congressman Rick Larson: 800.652.1385; [rick.larsen@mail.house.gov](mailto:rick.larsen@mail.house.gov)
  - d. Governor Jay Inslee: 360.902.4111; [governor.wa.gov](http://governor.wa.gov)

## To Learn More

- ✓ To receive email updates, or to get involved, **email us** at [coupevillecommunityallies@gmail.com](mailto:coupevillecommunityallies@gmail.com)
- ✓ **Follow us on Facebook at Coupeville Community Allies**
- ✓ Review the Draft EIS and appendices at [www.whidbeyeis.com](http://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 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,

[Redacted Signature]

Name:

Address:

[Redacted Address] Neal Bay, WA 98357

cc: Hon. Derek Kilmer, U.S. Congressman, 6<sup>th</sup> 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

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
- 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](http://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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**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.**

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- 12. Add your own comments here:

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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 LOPEZ ISLAND WA 98264

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**

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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.**

[REDACTED]  
[REDACTED]  
Clinton, WA 98236

February 21, 2017

Naval Facilities Engineering Command Atlantic  
6506 Hampton Blvd  
Norfolk, VA 23508

Attn: Code EV21/SS

Dear Sir,

It is with great concern for our island quality of life that I write to comment on the Draft EIS for EA-18G Growler Airfield Operations at Naval Air Station Whidbey Island Complex.

The Draft EIS appears to me to be incomplete and lacking thorough consideration in the following areas:

1. Questions have been raised about the decibel calculation. I would like your assurance that actual noise levels on training days are measured.
2. Potential hearing loss for area residents seems a real threat with increased flight activity.
3. The much higher potential for crashes with such increased activity over residential areas needs to be acknowledged.
4. Although well contamination has not yet reached the Lifetime exposure limit, vulnerable citizens, such as the elderly, the ill and young children may be put at risk. Will the same chemicals continue to be used, potentially increasing contamination?
5. Part of this island's lifeblood is our tourist economy. The impact on

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.h. Tourism
- 2.b. Scope of the Environmental Impact Statement and Analysis Conducted
- 2.c. Compliance with the National Environmental Policy Act
- 2.n. Alternatives Considered But Eliminated
- 4.f. Noise Measurements/Modeling/On-Site Validation
- 4.q. Potential Hearing Loss
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

frequency of flights would likely discourage visitors who come from the cities to experience our quiet, rural communities.

6. An alternative option needs to be studied. It would make sense to move this kind of intensified training to an uninhabited area.

Thank you for your consideration,

Respectfully,





Port Townsend, WA 98368

1.a. Thank You

12.n. Quality of Life

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

I live below the flight pattern of Growler jets and hear them on many evenings, especially Tuesdays. I do not like it. And I backpack in the Olympics where Growlers destroy the peace and quiet. But it is obvious to me that not only am I impacted by the loud noise of these jets but that animals are too. I do not think that the Navy should have any operations in National Parks. They were not set aside for that purpose. [REDACTED]

Port Townsend, WA 98368

- 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).

Port Townsend, WA 98368

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.

Port Townsend, WA 98368

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Port Townsend, WA 98368

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

Port Townsend, WA 98368

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 misconception has to be credibly revised to properly characterize the real impacts.

Port Townsend, WA 98368

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.

Port Townsend, WA 98368

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).



Port Townsend, WA 98368

1.a. Thank You  
7.c. Noise Disclosure

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.

Port Townsend, WA 98368

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 off a suitable 21st century off-Whidbey site I

- 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

Port Townsend, WA 98368

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.

1.a. Thank You

11.d. Per- and Polyfluoroalkyl Substances

Port Townsend, WA 98368

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.

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

Port Townsend, WA 98368

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 or 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.

Port Townsend, WA 98368

- 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 reanalyzed.

Port Townsend, WA 98368

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.



Port Townsend, WA 98368

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Seattle, WA 98119

The Oak Harbor Navy base planes were loud with the Prowler jets. Now with the increased activity of the GROWLER jets there is NOT JUST NOISE - IT IS DEAFENING NOISE (literally). A day at Deception Pass State Park was ruined by incessant noise. Many people on Whidbey cannot even remain in their homes, or sleep at nite. The only TRUE SOLUTION is to somehow re-engineer these plane to be quieter. This may not be easy, BUT IT MAY BE NECESSARY as these planes continue to increase in number. Nobody ANYWHERE wants this invasive noise. It is totally inappropriate over parks and wild land as well as over towns. Perhaps the best place for this noise is over LARGE CITIES where noise is omni-present anyway. The noise is LEAST APPROPRIATE over small towns parks and wild public land where people go for solitude and peaceful quiet.

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.p. Sleep Disturbance
- 4.q. Potential Hearing Loss

COUPEVILLE, WA 98239

FIRST OF ALL, I HAVE LIVED UNDER THE OLF FLY PATTERN FOR OVER 27 YEARS, AND I KNOWINGLY BUILT MY HOUSE AT THIS SITE. I DON'T CARE FOR THE NOISE OF JETS WHEN THEY STRAY FROM THE DESIGNATED FLY PATTERN, BUT I UNDERSTAND THE NEED FOR TRAINING OF PILOTS. I DO, HOWEVER, FEEL THAT THE ADDITION OF MORE GROWLERS WOULD BE MORE BENEFICIAL TO A DIFFERENT BASE, WHOSE CITY COULD BENEFIT FROM THE ADDITIONAL INCOME AND ECONOMIC BOOST. I ALSO FEEL THAT HAVING SUCH A LARGE NUMBER OF OUR VALUABLE JETS IN ONE PLACE IS NOT A WISE DECISION, IN THE EVENT OF TERRORISM OR WAR.

- 1.a. Thank You
- 1.e. Risk of Terrorist Attack
- 15.a. Infrastructure
- 2.a. Purpose and Need
- 2.d. Program of Record for Buying Growler Aircraft
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
- 3.a. Aircraft Operations
- 3.i. Runway Operating Hours and Flight Schedules

Oak Harbor, WA 98277

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

Please use OLF equally. Ault Field should not bear the brunt of the majority of flights. The citizens of Oak Harbor shouldn't bear all of the burden while the area fields built specifically for these flights reap the benefits of the US military, income from NASWI etc. without bearing any of the burden of the noise.

Seattle, WA 98119

The national parks are a jewel of our country and it is imperative that we preserve them for use both by current and future generations. I am deeply concerned that the proposed navy growler plane war games will cause damage to the environment and the fauna that call it home both in the short term and long term. I am also concerned that closing the park thousands of times a year will ruin the enjoyment and tranquility that visitors to the park seek. It is also very unfair to people seeking to plan vacations ahead of time. The Olympic National Park is a public place for all to enjoy, not a playground for the military. I urge the navy to conduct their "games" elsewhere.

1.a. Thank You

10.a. Biological Resources Study Area

10.b. Biological Resources Impacts

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

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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
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- 4.r. Nonauditory Health Effects
- 4.t. Noise Mitigation
- 7.h. San Juan Islands National Monument

1. First Name [REDACTED]

2. Last Name [REDACTED]

3. Organization/Affiliation Private concerned citizen

4. City, State, ZIP Lopez Island, Washington, 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

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**January, 2017 Comments**

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*I am concerned for the health impact  
on our youth as well as myself!*

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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:

*I am most concerned for the health impact (negative) on our youth as well as myself*

*Concerned citizen*



Seattle, WA 98125

Are you insane? War games over one of the few remaining pristine areas of the world? Ground the Growlers and set up a Department of Peace. Resolve conflicts before they start. War is a dead-end street for all concerned -- we should be doing all we can to avoid wars, rather than planning for ever bigger and more horrific "engagements". War is deadly to children and all living things. Your job is to make sure wars don't happen. In a time of climate change we cannot afford these polluting, co2 emitting Growlers to be playing games over our heads. The entire project must be stopped because the terrain, flora, fauna and people who depend on the natural spaces along the coast and on Whidby Island cannot afford the damage and excessive noise associated with the "Games". NO! NO! NO!

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 18.a. Climate Change and Greenhouse Gases
- 19.d. Electronic Warfare
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

1.a. Thank You  
12.c. Socioeconomic Impacts

Anacortes, WA 98221

I believe that the many benefits that NAS Whidbey provides to the local communities far out ways the potential for additional noise. The Navy has a huge positive financial impact in Anacortes, Oak Harbor and Coupeville. Navy personnel and their families are active supporters of the local schools, Boy Scout and Girl Scout organizations, as well as various local athletic programs. As an avid hiker, backpacker, mountaineer and Boy Scout leader, I know and appreciate the value of the Navy SAR units. The Navy SAR units conduct a large number of civilian rescues in the Cascades and their capabilities exceed those of the Coast Guard and the civilian units.

Freeland, WA 98253

Whidbey Island, in general, has offered a beautiful habitat for diverse wildlife and is a major stop for migrating, nesting, and resident birds and ducks. The excessive noise of the growlers is extremely disruptive to the animals and birds between the cities of Coupeville and Oak Harbor. Additionally, I urge the Navy to compensate Oak Harbor and Coupeville School Districts for increased student enrollment. I understand that the Navy pays nothing for their enrollment impact on schools, or the impact on our roads used by increased population of Navy personnel and Navy families with the increase of growlers. Right now, there is a shortage of rental properties on Whidbey Island for anyone. Where is the increase of Naval personnel going to live? Whidbey Island can sustainably support a population of 6,000. Population is now 60,000 for the Island. Cannot the Navy use the Oak Harbor base in a less impactful, quieter way?? [REDACTED], Whidbey Resident

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 10.l. Bird Migration
- 12.i. Housing Access and Affordability
- 12.m. Education Impacts
- 14.a. Transportation Impacts
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Blakely Island, WA 98222

1.a. Thank You  
2.k. Range of Alternatives

While I appreciate our military, I do wish they could find a place that doesn't do so much noise damage to our diminishing Orca pods. Head south, young men!

1.a. Thank You

Port townsend, WA 98368

The noise experienced in Port Townsend, Wa is deafening during the day and evening. It affects the quality of life for both residents and animals. Surely there is a better solution to training the pilots.

1.a. Thank You

Port townsend, 98368

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- 1.a. Thank You
- 3.a. Aircraft Operations

Oak Harbor, WA 98277

We were fully aware of NAS Whidbey's presence on the island when we decided to purchase a home. Although we would have preferred a home with a view, we settled on a home in a "No Noise Zone" as outlined in documents provided by our real estate agent. A couple of months ago, we attended one of the Navy's public meetings and filled out a form stating we had no objection to increased flights as long as the no noise zones were not impacted. It seems as though that form was a go signal for planes to begin flying overhead. We now hear them on a regular basis, particularly during evening hours, to the extent that windows rattle and conversations cannot be heard. If the Navy is going to disregard the no noise zones after we specifically bought a home in the middle of one 3 years ago, we are going to be forced to renege on our support. It pains us to have to say this as we are very appreciative of naval personnel. However, we followed the rules and we request that the Navy also follows the rules. [REDACTED]

Port Townsend, WA 98368

POSSIBLE DUPLICATE COMMENT - web site indicated "there was a problem" with previous attempt to submit. 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](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

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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]

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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 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, [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](http://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 NONE

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

ONLY CONCERN IS : WE SPECIFICALLY PURCHASED A HOME 2 3/4 YEARS AGO IN "NO NOISE ZONE." WE DO NOT WANT TO SEE ZONES MOVED TO ACCOMODATE THE COMPLAINERS WHO CHOSE A VIEW OVER NO NOISE.

THANK YOU FOR HAVING THIS VERY INFORMATIVE PRESENTATION. ALL OF THE SPOKESPEOPLE WERE GREAT.

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



# Public Meeting Comment Form

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- 1. Name [REDACTED]
- 2. Organization/Affiliation \_\_\_\_\_
- 3. Address [REDACTED] 98271
- 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 not concerned with the  
 add noise and traffic. I  
 feel a sense of comfort and  
 pride in our armed forces.  
 The noise is our sound of  
 freedom  
 Thank you for your service!

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**

December 9, 2016

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

Hello,

We live by the North Fork Bridge on the Skagit River. In this location we are heavily affected by the Growler as it comes in from various directions, turns and lines up to the East-West strip. This heavily impacts us with increased noise as more power is applied and often wheels and flaps are lowered.

When the Growlers are flying over we cannot be outside. The noise is deafening and at times feels painful. We have to go in and even that is little help.

We are both 80 and I was raised in a house nearby. I remember when Whidbey NAS came into being. The old prop driven planes were somewhat noisy but not bad. Then along came the EA6's and associated and the noise level rose considerably. It was far more than distracting but tolerable for a short time. Now the Growler has a noise level that is different in two ways. First it is extremely loud to the point of painful. I cannot emphasize this enough it is horrible to experience. This is an exponential increase over the EA6's. The second part is something about the quality of the noise. There is a fear, hatefulness or hopelessness that enters the mind. Perhaps it is that it is being inflicted with no apparent care for the victim.

Please do be aware of what is happening to the folks below. We support our military. I am a member of the American Legion, Conway. But do not believe that this training belongs in this heavily populated area.

[REDACTED]  
[REDACTED]  
Mount Vernon, WA  
98273  
[REDACTED]

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.l. Points of Interest
- 4.q. Potential Hearing Loss
- 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 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

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

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 Lopez Hospice & Home Support

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
- 17.a. Hazardous Materials and Waste Impacts
- 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.e. Public Involvement Process
- 2.k. Range of Alternatives
- 2.n. Alternatives Considered But Eliminated
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- 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](http://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 have noticed heightened anxiety levels among clients of Lopez Hospice & Home Support when I visit with them - particularly those who live South & Southwest of School Road at Center Road.*

*Also, I am very disturbed that Olympic National Park is supposed to absorb the stress & perhaps the chemicals that will be used within the War Games.*

Friday Harbor, WA 98250

I am writing as a private property owner to object to the expanded Growler operations. I frequently hear Navy jet aircraft on my property on False Bay, San Juan Island. The noise can be characterized as a low frequency persistent rumble. There is no other noise like it. It disturbs the peaceful use and enjoyment of my home. Occasionally, Growlers will pass over my property, as they did last week. The noise is very loud and objectionable. I also hear and see Growlers operating near Anacortes, particularly when waiting at the ferry terminal. Again, the noise is very objectionable and disturbing. I see Growler noise halting human conversation until they are out of range. I think the Navy made a terrible mistake inflicting Growler noise on residents of the Salish Sea and Olympic Peninsula. The Navy should be working to reduce the noise of their aircraft, not expanding it.

1.a. Thank You  
12.n. Quality of Life  
2.k. Range of Alternatives  
4.n. Speech Interference (Indoor and Outdoor)

Langley, WA 98260

I would like the Navy to reduce growler flights and not increase them over Whidbey Island and surrounding areas due to the impact of noise, exhaust and radiation from the electromagnetic targeting. These all impact the citizens negatively as well as wildlife of all sorts, including birds and marine mammals. Please find less populated inland areas for this practice. Thank you.

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 19.d. Electronic Warfare
- 2.n. Alternatives Considered But Eliminated
- 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](http://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 Protect Olympic Peninsula

3. Address [REDACTED]

4. E-mail Port Townsend WA 98368

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 strongly object to the Growlers flying out of or being based at Whidbey Island. I don't want any more of my tax money wasted on more of them being put there. And I realize this is a total sham + only a meeting required by law and you plan to shove this down our throats regardless of public opposition

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



Sequim, WA 98382

I have been a resident and tax payer of Clallam and Jefferson Counties since 2003. I am opposing the expansion of the Whidbey Island training base for the Growlers. I am not against training our Naval pilots. The issue is more about the appropriate use and location of a Navy jet training facility. There are many nights when the Growlers are flying, that I am woke up after midnight, sometimes as late as 1AM by their engine noise. This is not the normal sound of a well silenced passenger jet approaching SeaTac. It is enormously loud. If you would have asked me if I ever would voluntarily live under a Navy flight training range, the answer would be no. We would not ever allow drag racing to take place within Port Townsend after 10PM. We shut the County Fair down at 10 to keep the noise down. Can you imagine the outcry if we were going to allow four wheel drive mud racing at 1AM? There are thousands of people in eastern Jefferson County that need to get up in the morning and go to work. The least we can expect is not to be subjected to high speed jet noise in the middle of the night. Since 2001 there has been a 300% increase in training flyovers. People on Whidbey Island have measured noise levels inside their homes at 94 decibels. The Navy planes are, obviously, not well muffled, if at all. It is totally inappropriate to fly these planes over the populated areas of Admiralty Inlet. There was a time, many decades ago, when the Admiralty Inlet area was sparsely populated. Those days are long over. The time has come to say no, politely, to the Navy, and ask that it reassign these wings to one of the other 10 training sites around the country, many of which are likely to more appropriately locate the aircraft to a less populated area, such as Tinker AFB, in OK. Or find a new home in Eastern Washington. I am concerned at the unlimited expansion of military training that is happening here in North Puget Sound. We are giving away to the US military a lot for our privacy and quiet. We have witnessed in the last 10 years alone expanded activity and security at Indian Island, with increased random stops of boaters out for an afternoon. We also have been designated a Navy training airspace area over Admiralty Inlet and Port Townsend Bay that allows helicopter overflight for training at low altitudes without warning, along with a doubling of capacity at Bangor on Hood Canal, barely regulated sonar testing in an area that has Orcas and other whales, increased closings of the Hood Canal Bridge at all hours for military boat traffic, and now expansion of high speed jets on Whidbey Island. When added together, these create a picture that we are giving away our peace and quiet, to become surrounded by high security operations that are outside our ability to control, let alone expect a good night's sleep. It's time to say no to this. There are other options for the Navy. There are not for us. This is our home. We pay our taxes to create and maintain these bases. We should have some say where to locate them.

- 1.a. Thank You
- 19.c. Olympic Peninsula, Olympic National Park, and at-Sea Training
- 19.d. Electronic Warfare
- 19.e. Naval Special Operations EA
- 2.n. Alternatives Considered But Eliminated
- 4.l. Points of Interest
- 4.p. Sleep Disturbance



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1. Name

2. Organization/Affiliation

3. Address

Paul Townsend

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

My greatest concern is the noise that is generated by this aircraft. It is already at an unacceptable level and will obviously increase over the next few years to an intolerable level. I vigorously oppose your planned expansion of your proposed program.

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

1.a. Thank You

Anacortes, WA 98221

The growler is critical to our nation's security, a little noise is a small price to pay.

2/19/2017

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 hearing my concerns and many of the people in my area's concerns about the increase in Growler aircraft operations originating at the Whidbey Island Naval Air Station

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. **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.
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;

- 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
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 18.b. Average Carbon Dioxide per Aircraft
- 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
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources

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 may be thought to have 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. **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](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).

**5. The Navy Has Failed to Document that DOD-Owned Lands Are Unsuitable 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.

- 6. 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.
- 7. 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.”

8. **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.
  
9. **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.
  
10. **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.
  
11. **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.

12. **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.
13. **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.
14. **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.

15. **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.
16. **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>)
17. **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.
18. **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.

8  
17

19. **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.
20. **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.
21. **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.
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 concerns,



Port Townsend, WA 98368

2/19/2017 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 hearing my concerns and many of the people in my area's concerns about the increase in Growler aircraft operations originating at the Whidbey Island Naval Air Station 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. 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. 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 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 may be thought to have an insignificant environmental impact, but which collectively have a substantial

- 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
- 10.k. Aircraft-Wildlife Strike and Hazing/Lethal Control of Wildlife
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.k. Compensation to Citizens for Private Property
- 18.a. Climate Change and Greenhouse Gases
- 18.b. Average Carbon Dioxide per Aircraft
- 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.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
- 8.a. Cultural Resources Area of Potential Effect
- 8.b. Section 106 Process
- 8.c. Noise and Vibration Impacts to Cultural Resources

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. 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](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). The Navy Has Failed to Document that DOD-Owned Lands Are Unsuitable or Unavailable for Growler OperationsThe 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. 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. 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." 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. 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. 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. 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. 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. 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>) 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. 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. 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. 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. 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. 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

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(<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 concerns, Nelia Swayze

## Water and the EIS

(topics that must be considered when evaluating the NASWI-EIS)

On November 9th we downloaded the Navy's EIS with it's frightening increase in OLF use. One day later we received the Navy's "we may have contaminated your water supply" letter.

What a 1-2 punch! The following are bullet points (with page numbers) supporting our utter rejection of the Navy's EIS.

Chapter 3, page 191, of the Navy EIS tells it all. The hazardous toxins PFOS & PFOA found in the OLF well and also at Ault Field are **NOT** going to be considered part of this Environmental Impact Statement!!!! Are you serious? These chemicals, once ingested, accumulate in the body over time. Once you stop the intake it takes 3 to 4.5 years of pure water to get just one half of it out of the body. The well at OLF Coupeville has 17 ppt or about 25% of the toxic EPA threshold of 70 for PFOA. Vermont's level is 20 ppt for PFOA+PFOS and New Jersey's is 40 ppt. **The 20 ft. well tested at Ault Field has a combined PFOS+PFOA of greater than 58,000 ppt or roughly 815 times the toxic level. This is surface water. It drains into the Sound and goes up the food chain to the seafood we eat. It also, over time, seeps into the deeper aquifers. Will it reach Penn Cove and our mussels? We don't know. Has the Navy switched to fluorine free biodegradable fire fighting foam and destroyed it's stockpile of AFFF? Why, after knowing years ago that this is a toxic chemical, have they not dug up the contaminated soil and incinerated it to protect our Sound?**

There are, according to the Navy, no records of fire fighting foam being used at the OLF. The A-6 crash in the 1980's was still burning when the fire truck arrived but it is unsure if AFFF was used. How then is there 17 ppt PFOA in a 180 ft deep well at the west side of the OLF runway and zero PFOA in a well on the east side of the runway? **On December 9th we learned that Coupeville's wells, located very near our home, had zero PFOA or PFOS. Two other town wells, one mile from our well, had 62 ppt and 59 ppt. We were elated to learn of the good readings. Hours later, Navy personnel arrived with bottled**

- 1.a. Thank You
- 11.a. Groundwater
- 11.d. Per- and Polyfluoroalkyl Substances
- 12.a. Socioeconomic Study Area
- 12.c. Socioeconomic Impacts
- 12.d. Population Impacts
- 12.e. Agriculture Analysis
- 12.h. Tourism
- 12.n. Quality of Life
- 2.c. Compliance with the National Environmental Policy Act
- 2.e. Public Involvement Process
- 2.f. Use of Public Comments
- 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
- 3.g. Field Carrier Landing Practice Evolutions and High Tempo
- 3.i. Runway Operating Hours and Flight Schedules
- 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.q. Potential Hearing Loss
- 4.t. Noise Mitigation
- 5.c. Condition of Outlying Landing Field Coupeville

water and the preliminary lab results from our well: 440 ppt PFOA and unconfirmed 45ppt PFOS. There was an unwritten promise to find us a clear water source. They advised no use of tap water for drinking or cooking. Our well is relatively shallow at 65ft. The next morning we found out our neighbor's well at 225ft was also contaminated. . . . therefore no possibility for us of a deeper well. We have lived here 17 years and have had long-term renters in our guest house that now stands empty due to the shared well. For 17 years our family drank the water and have irrigated our large "organic garden" which provides 9 months of fresh vegetables. Our properties have been taken and our long-term health is in question. We cannot begin to detoxify or sell our property until a ZERO PFOS+PFOA water source is provided. I contacted the NASWI Base Commander, Capitan G. C. Moore, 12/14/16 and explained our toxic limbo. The EIS should also be in limbo until there is a mutually agreeable settlement to this problem. The contamination of wells and moving the noise zone contours outward represent a taking of property on the part of the Navy. We are protected from these actions in the US Constitution.

#### THE BASIC FLAWS IN THE REST OF THE EIS

There is a hint in chapter 3, page 1, that the noise metrics of the 36 new Growlers are not included in this EIS and that is confirmed in chapter 3, page 23, under heading 3.2.4 titled "Noise, Affected Environment." "This section outlines the affected noise environment as modeled for Calendar Year 2021 (CY21), when the P-3C Orion to P-8A Poseidon aircraft transition will be complete; however, it does not include the Growlers associated with the Proposed Action." The Navy, in its usual way, has chosen the No Action Alternative to measure!!

The EIS itself has more contradictions. In the second paragraph (page 3-11) is a cleverly worded section that compares **all** the flight operations at Ault Field with the low level tree-top FCLP operations at OLF. **One can be factually right and deceitful at the same time when saying "as such, the number of operations at OLF Coupeville is less than at Ault Field."**

On the same page, the first paragraph states the risks of using runway pattern 14. “ **This narrower pattern requires an unacceptably steep angle of bank for the Growler due to performance differences from the former Prowler flying the pattern.**” For this reason, the homes under runway pattern 32 have already seen their noise impact nearly double under the No Action Alternative. There is still 5% use of 14. The Growlers apparently can't safely do the same maneuvers the old Prowlers could perform. The Growlers have roughly half the lift and twice the horsepower of the Prowler. At slow FCLP speeds they avoid a stall by keeping the nose up and increasing thrust directed more toward the ground. This is why those under this noise have noted the increase in FCLP noise with the new jets. With level flight at higher speeds, noise from the old jets and the Growlers is comparable. Why order 36 more jets with this limitation and then impose them on Coupeville?

Scenario C would see: between 8300 and 8800 operations X 95% or roughly 3 times the noise experienced under the old Prowlers by the homes under pattern 32.

Scenario B would see: between 20,900 and 21,900 operations X 95% or roughly 6.8 times the noise experienced under the Prowlers by the homes under pattern 32.

Scenario A would see: between 33,500 and 35,100 operations X 95% or roughly 10.7 times the noise experienced under the Prowlers by the homes under pattern 32

This same 1st paragraph, page 3-11, states that the OLF is available for use 24/7. No consideration for hours of sleep after 11pm and no consideration for Friday night through Sunday is given!! The reason they state 24/7 is to equate OLF with busy 24/7 commercial airfields which use DNL as their measurement of noise impact. The OLF is not an all weather airfield and in practice the Navy has not flown Friday evening through Sunday or flown many nights after 11pm. To use DNL accurately, weekends, holidays, 11pm to 8am hours, and the average number of bad weather days need to be subtracted BEFORE calculating the DNL metric. Ault Field is a 24/7 airfield and has all weather capability so there the DNL fits.

The aircraft noise levels represented in this EIS are generated by a computer model and not by actual noise measurements of FCLP at OLF or Ault Field. (page 3-16)

Table 3.2-4 on page 3-34 shows sound levels for a single Growler at the various sites listed. Why do the metrics always show a single jet noise impact and the omit the impact of multiple jets and/or FCLP style noise?

The Libby aircraft noise study done with 5 Growlers in pattern 32 measured in Admiral's Cove had a FCLP 128db session average. That is sustained noise 16 times the level of hearing loss over a 40 minute session. There were short bursts over 135 db. (in the painful range). This study was done in 2013 and we thought the Navy had learned not to fly more than 3 Growlers at a time at OLF.

If weekends, holidays, and adverse weather days are excluded, the Navy will have to fly all of our precious sunny weekdays under scenarios A and B. (see attached calculations of OLF use under Scenarios A, B, and C page 7)

We citizens under the flights notice a significant difference in noise created by an experienced pilot vs. a newbie. The inexperienced pilot is often off course, too low, and varies the thrust. This makes the Growler seem like it is dragging it's tail and aims the thrust at the ground. At least 50% more noise occurs with the newbie. Why don't these greenhorns learn the basics of thrust and course control in the deserts of California or Nevada away from homes? They could use attack F18s, stationed there, for their learning curve. The Growlers are a more expensive but similar aircraft. In the middle paragraph of 2-18 the Navy is worried about "reducing aircraft service life due to extensive transit". What about reducing service life on the aircraft when the pilot is getting his 'learners permit'?

Speaking of reduced service life (2-18), a deployment to the Atlantic Fleet means a round-trip of 5000+ miles on each Growler. The solution is obvious: **Do the 90% of training that includes some FCLP here and do the final qualifying on the East Coast with a significant portion of the 36 new Growlers stored and serviced there. Fly the pilots and any needed support**

**on Navy transports prior to deployment— a considerable cost saving and you keep the “Growler Family intact!”**

When the Growlers ‘bounce’ and leave the OLF they use their afterburners and bank sharply left over the Recycling Center, WAIF, Ryan’s House, the Transit Center, Rhododendron Park and homes on Jacobs Road. The thrust required for this maneuver almost always results in painful noise levels (135+). People working in these areas will lose hearing and should have required hearing protection out-of-doors.

Under the topic of Financial Impacts, the EIS lists the money coming into Island County when it should more properly say Oak Harbor. When the overnight campers at Ft. Casey and Deception Pass are asking for refunds, there is indeed an impact on tourism. Coupeville, on the other hand, is on the losing end especially with regard to property values. Near the base, signs protesting the noise are defaced and the word MOVE scribbled across them. So much for free speech! Under scenarios A and B and with the toxic well our property has been taken....who then pays the property tax?? Full-time residents spend money in Coupeville, Freeland and in Oak Harbor. Weekend mainlanders are the only possible buyers for homes impacted by weekday jet noise. Even they don’t buy properties with toxic wells. They shop on the mainland and do not contribute vitality to the local community. The reduced taxes they pay will reflect the property value loss.

Ebey’s Reserve, Coupeville’s gem of a tourist attraction, is now the second noisiest location in the National Park system. There is no reason to shoot for the #1 title. Maintaining the farming flavor of the Reserve requires farmworkers out in the fields subjected to jet noise-induced hearing loss .

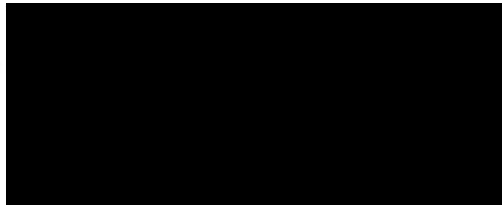
Unmentioned in the EIS is seismic risk. In the 2011 tsunami in Japan, measurements of coastal inundation heights above sea level were 30 to 40 ft. at Fukushima. Further north and closer to the epicenter the sea level rises were 50 to 75 ft. Ault Field is 41 ft above 0 tide. I have to ask, why is it in our national security interest to have all our electronic warfare assets under this threat? In the event of a large subduction earthquake off our coast the Navy would have less than 25 to 30 minutes to scramble jets assuming that there were no cracks in the



runways or jammed hanger doors. The ground crews also need to head for high ground and training centers would be lost. We are overdue in geologic time for such an event. I guess in this case the environment would get to dictate the impact statement.

**We have until the end of January to comment on the Navy EIS. Samples taken from local wells began November 28, 2016. We will not have full results on the well toxicity before the end of January. Therefore we must demand an extension of the comment period until results are back and a plan is in place to repair and clean up the toxic Navy mess at both Ault Field and OLF.**

Submitted by



## A computation of the Navy's Latest Proposed Action Alternatives

In 2013, when full scale introduction of the EA18G at OLF, Coupeville became reality, acoustic measurements were independently done at multiple sites around the OLF. Each 40 minute session involved 5 Growlers doing FCLP on runway pattern 32. Admirals Cove is a dense community under the incoming flight path to 32. The session average was 40 minutes of 128db. This is 16 times the level required for hearing loss. A jet flew over the test site every 60 seconds. (This use of 5 jets in a pattern is what prompted the law suit over the Navy's lack of an EIS).

From this is likely that the time to do a complete loop on pattern 32 is 5 to 6 Minutes.

The Navy is predominately using 3 jets in a pattern now to roughly cut the noise level in half, or about 118db. (Each 10db change is a doubling of noise).

The number of touch-and-go bounces in a session is  $3 \times 40 \text{ min} / 5 \text{ min loop time}$  or roughly 24.

Under current usage the OLF is not used on holidays or weekends including Friday evening and only rarely after 11pm. It is not used in rain or heavy wind conditions.

Thus, subtract from 365 days

15 for holidays	=350
$52 \times 2.5 = 130$ for Fri evening to Sunday	=220
30% of remaining days for weather	=154

Under Scenario A: 35,000 operations yearly.

$35,000 / 154 = 227$ operations daily	=114 touch-and-go
$114 / 24$ per session	= five 40 minute sessions daily

**This scenario wipes out all of our mild weather days!!!**

Under Scenario B: Between 20,900 and 21,900 operations yearly.

$21,900 / 154 = 142$ operations daily	=71 touch-and-go
$20,900 / 154 = 136$ operations daily	=68 touch-and-go
$70 / 24$ per session	= three 40 minute sessions daily.

**Still a lot of noise every nice day. Maybe the Navy could spare us a few days once in while if they went to 5 sessions on other days. Big of them!**

Under Scenario C: Roughly 9000 operations yearly equals about 29 touch-and-go or a little over one session daily or one 5 session day and 4 days of peace and Quiet. This is still a 3 fold increase in the use of pattern 32 since the Growlers arrived.

## ADDITIONAL COMMENTS ON THE NASWI EIS

- 1.a. Thank You
- 11.d. Per- and Polyfluoroalkyl Substances
- 5.a. Accident Potential Zones
- 5.d. Environmental Health Risks and Safety Risks to Children

To whom it may concern,

It has been two months now since we were notified of our well being possibly contaminated with PFOA & PFOS. Our reading came back 440ppt PFOA (6+ times the current EPA safe level) and a qualified reading of 44ppt PFOS and a % number for PFHxA. Multiple calls have been made to the Navy to try to understand the PFOS and PFHxA levels and no answers forthcoming. Why are we being stonewalled???

PFOS, PFOA, and PFHxA are 'franken-chemicals' that do NOT break-down in nature. Medical literature states that these chemicals are 100% absorbed by the gut, bind to proteins in the serum, travel to the liver, are separated there, then are sent down the bile duct into the gut where they are again 100% absorbed. There is a small amount of leakage in the urine which accounts for the half-life in the body of 3 to 4.5 years for PFOA & PFOS respectively. We have a productive organic home garden which had been irrigated with this water. Green leafy vegetables take up PFOA and root crops take up PFOS. After 15 years of drinking this water and eating from our garden, my wife and I and the renters of our rental cottage likely have high levels of these toxins in our blood with the attendant risk to our health. We have been drinking and cooking with bottled water provided by the Navy but our dishes, laundry, and showering remain contaminated. With a half-life of 3 to 4.5 years on these chemicals, we are not able to even begin clearing the toxins. Our rental cottage is vacant for a loss of \$1000/ month. There is a straight line of toxic wells extending from the OLF Coupeville to our two downhill neighbors who share a well with 660ppt PFOA and our neighbor to the west at 600ppt PFOA. We need to see plans for bringing zero contaminant water to our homes. With the Navy threatening to increase the flights over our home by a factor of 6 to 10 we would like to sell but a toxic well makes this impossible.

The C-8 AFFF used in the past is still stockpiled at Ault Field with its risk of more PFOS & PFOA being released. We have been told a newer biodegradable foam is being used in the trucks but not in the hanger fire suppression systems. I have checked the MSDS on the new 'biodegradable' Buckeye foam and the biodegrading is from PFHxS (just as toxic as PFOS) to the 6- carbon chain carboxylate PFHxA which is the C-6 sister to PFOA. Both these end- products are NOT biodegradable. There are very few studies on PFHxA except to note that it has a shorter half-life and is more likely to be absorbed through the skin. It is likely that the companies that manufacture the newer C-6 compounds have learned from 3M and Dupont. The workers will have more protection and the local rivers and landfills will not again be used as dumps. I predict that C-6 human toxicity will not be realized for a decade. Europe has gone away from all fluorinated hydrocarbons in its firefighting foams for class B fires. Even though the European 'Blue Foam' is not sold in the US it has wide distribution in the rest of the world. Here, Solberg (3-M) has a fluorine-free foam that has been tested against the Kidder and Buckeye military grade foam at the Navy's testing facility. It missed the 30 second extinguishing military requirement by 5 seconds but was superior in three other categories. With a hydrocarbon fire aboard ship, seconds count especially on an aircraft carrier. This is not as critical on land especially on land that is dependent on aquifers. It is definitely extremely negligent to use any fluorinated foam for practice anywhere near an aquifer whether it be Ault Field or the OLF. If the Navy plans to use the OLF Coupeville for FCLP, totally biodegradable fluorine free foam is the only acceptable alternative. The Solberg product also is compatible with most hanger fire-suppression systems.

National Security is the buzz word these days. Security at Ault Field is tight with road blocks and armed guards. At the OLF Coupeville it borders on zero. The sides of Keystone Hill Road are a carnival of tourists when the jets are flying (unlike we residents, they can leave when they have had enough). There are fewer than 200 yards separating the 'bounce' from the road. Patmore Road sits at the end of the runway between the road and the crash zone. A single sign, full of bullet holes, warns of low-flying aircraft (40 feet) overhead. State Highway 20 runs along the opposite side

of the field, filled with 55mph+ drivers, distracted by the jets. The OLF does not come close to meeting either the acreage requirements or the runway length requirements that the Navy has specified for FCLP practice. The requirement of not flying less than 500 ft above homes is definitely NOT being met at the OLF (we live this experience and not one of our representatives has ever come to monitor what actually happens here). Navy regulations are being broken. EXPLAIN THIS. A crash caused by equipment failure or terrorist attack are serious concerns.

██████ | ████████████████████ ████████████████████

Greenbank, WA 98253

Increasing the number of flights as you have proposed will destroy quality of life on Central Whidbey. The Navy doesn't seem to care about being a good neighbor at all. Even those UGLY blocks surrounding the OLF - makes it look like a Russian GULAG. 1) Flights should be PROHIBITED from 2300 to 1000 ALWAYS. How are people supposed to sleep with jets flying now above their heads all night, then get up ready for work the next morning? 2) GREENBANK and places south are NOT in the noise zone. The Navy should make certain that pilots are instructed about that before commencing training missions. No noise bombardment over GREENBANK and locales south. 3) MORE flights should be conducted over sparsely inhabited areas in central Eastern Washington. 4) Don't forget who forking out taxes to pay for all your planes and training A little respect for "We the People" who live here would be welcome for once. 5) The UGLY blocks surrounding the OLF make it look like some GULAG in the reserve. I guess having a little respect and some class is too much to ask. Thank you.

1.a. Thank You

1.c. Segmentation and Connected Actions

19.f. Outlying Landing Field Coupeville Security Blocks

2.n. Alternatives Considered But Eliminated

3.a. Aircraft Operations

My home is located at [REDACTED] Road Coupeville, Whidbey Island. Our home is just about due east of OLF. When wind patterns dictate a flight pattern that is to the east of OLF, the Growlers and the old Prowlers fly literally right over our home. The Growlers are much louder than the old Prowlers. The house shakes, the dog howls and we can't talk. I have experienced this for 20 years. When the aircraft are in the air, I have regularly been awakened at night, or have been unable to sleep until they stop. The noise is so loud that we have to stop conversation till they pass. The noise is stressful as is and if the flights are increased as proposed with flights every day of the week, I won't be able to stand it and will have to sell and move. I know that it will be much more difficult to sell our home with all of the increased noise and the value of the place will be significantly less.

Why can't the Navy use NWSTF Boardman which is larger, and which is available for the training?

Please don't increase air traffic at OLF.

Sincerely

[REDACTED]

[REDACTED] Coupeville, WA  
98203

[REDACTED]

- 1.a. Thank You
- 2.n. Alternatives Considered But Eliminated
- 4.h. C-Weighted Noise, Low Frequency Noise, and Vibrations
- 4.n. Speech Interference (Indoor and Outdoor)
- 4.p. Sleep Disturbance
- 4.r. Nonauditory Health Effects
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife

Oak Harbor, WA 98277

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

I am supportive of continued flight operations at NAS Whidbey and OLF Coupeville. Since NASWI must also bear all the P-3/P-8 operations, a 50/50% split of increased operations is fair and just for NASWI/OLF.



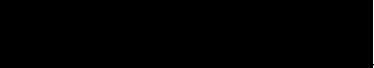


# Public Meeting Comment Form

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.*

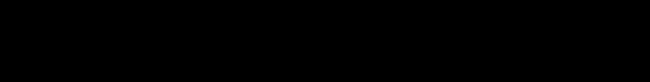
To be most helpful, your comments should be clearly written and describe specific issues or topics. Comments may be submitted in one of the following four ways: **(1) Provide written comments at today's public meeting;** **(2) Speak with the stenographer, who will record your comments;** **(3) Submit your comments on the project website at [www.whidbeyeis.com](http://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  retired

3. Address   O.H., WA 98279

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

Would like 50/50 "bouncing" between Coupeville + Whidbey  
Good looking set, Buy more!

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

Oak Harbor, WA 98277

1.a. Thank You

2.m. Record of Decision/Preferred Alternative

I am supportive of continued flight operations at NAS Whidbey and OLF Coupeville. Since NASWI must also bear all the P-3/P-8 operations, a 50/50% split of increased operations is fair and just for NASWI/OLF. Thank you.

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 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

- 1.a. Thank You
- 10.b. Biological Resources Impacts
- 10.c. Wildlife Sensory Disturbance and Habituation
- 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
- 4.v. Impacts to Domestic Pets, Livestock, or Wildlife
- 7.h. San Juan Islands National Monument

public comment before the Final EIS is prepared. 12. Furthermore, our domestic and wild animals show by their disturbed behavior during Growler exercises that they suffer from the effects of the noise. The speculative presumption in the DEIS that wild and domestic animals become habituated to the noise levels produced by the Growlers needs more scientific proof. (4-307, 4-308).

Seabeck, WA 98380

The flight of the Growler aircraft will be disruptive to me and disturbing to wildlife. Disrupting one of the last remaining quiet areas in our country is not warranted. Flights of aircraft over this area should be limited. The amount of pollution from these planes is not warranted in fighting climate change as well.

1.a. Thank You

18.a. Climate Change and Greenhouse Gases

4.v. Impacts to Domestic Pets, Livestock, or Wildlife

**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 \_\_\_\_\_ *Portland OR*

4. Email \_\_\_\_\_ *97206*

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.
- 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:**

Several farm<sup>ers</sup> on Central Whidbey have expressed their concerns and said they will no longer be able to continue farming because of noise. One of these farmers is 4th generation. This is unconstitutional, is it not? Does this fit the definition of "life, liberty, and the pursuit of happiness"?

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](http://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.