

**DEPARTMENT OF DEFENSE  
DEPARTMENT OF THE NAVY**

**FINDING OF NO SIGNIFICANT IMPACT FOR THE ENVIRONMENTAL  
ASSESSMENT FOR TRAINING OPERATIONS AT THE PINECASTLE RANGE  
COMPLEX, FLORIDA**

Pursuant to Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500-1508) implementing the National Environmental Policy Act (NEPA), Navy Regulations (32 Code of Federal Regulations [CFR] part 775), and Chief of Naval Operations Manual M 5090.1, the Department of the Navy (Navy) gives notice that an Environmental Assessment (EA) has been prepared and an Environmental Impact Statement is not required for continuing existing military readiness activities and conducting anticipated future military readiness activities, which include changes in aircraft usage amounts, at the Pinecastle Range Complex (PRC), Florida. The PRC consists of three ranges: Lake George Range, a water range leased from the state of Florida; Rodman Range, wholly owned by the Navy; and Pinecastle Range, leased by the Navy from the U.S. Forest Service (USFS) and surrounded by the Ocala National Forest. This action will be implemented as set out in the Proposed Action Alternative.

**Proposed Action:** The Proposed Action consists of continuing existing military readiness activities and conducting anticipated future military readiness activities, which include changes in aircraft usage amounts, at the PRC. Existing military readiness activities include aviation and ground activities at Pinecastle Range, Rodman Range, and aviation activities at Lake George Range. Collectively, these three ranges support rotary, fixed-wing, and tilt-rotor aircraft traveling from land military bases and sea-based military platforms. The continuation of military readiness activities also includes periodic closures of access gates along roads near and around the Pinecastle Range when certain activities are conducted. Anticipated future range mission requirements at the PRC include the incorporation of mobile electronic warfare equipment, and mission support for the A-29, F/A-18, F-35, T-45, and other aircraft as identified in the Range Air Installations Compatible Use Zones (RAICUZ) Study

for the Pinecastle Range Complex (September 2017) (2017 RAICUZ Study).

**Purpose and Need:** The purpose of the Proposed Action is to achieve and sustain fleet training and aviation readiness using the PRC to support and conduct current and future training activities.

The Proposed Action is needed to maintain and expand Fleet operational readiness to support national defense requirements under Title 10 United States Code (U.S.C.) section 8062. The proximity of the PRC to homeports and air stations along the east coast of the United States is a critical component of naval readiness. Naval forces must be prepared for a broad and changing range of capabilities, from full-scale armed conflict in a variety of different geographic areas to disaster relief efforts, prior to deployment. To learn these capabilities, personnel must train at PRC with the equipment and systems required to achieve military objectives. Continued access to PRC is critical to accomplish Navy and Marine Corps required aviation training, as well as use by other DoD, federal, and state agencies.

**Alternatives Considered:** The EA analyzes the potential environmental impacts of one action alternative for the Proposed Action as well as the No Action alternative.

Proposed Action Alternative. The Proposed Action calls for continued military readiness activities and anticipated future military readiness activities, which include both increases and decreases in aircraft use, at the PRC. Existing military readiness activities include aviation and ground activities at Pinecastle Range, Rodman Range, and aviation activities at Lake George Range. The continuation of military readiness activities also includes periodic closures of access gates along roads near and around Pinecastle Range when certain activities are conducted. Anticipated future range mission requirements at the PRC include the incorporation of mobile electronic warfare equipment, and mission support for the A-29, F/A-18, F-35, T-45, and other aircraft as identified in the 2017 RAICUZ Study.

The continuation of existing operations includes:

- Landing operations at Centroid/USFS Helibase/Pinecastle Range/Rodman Range by Marine Corps, Army, Air Force, Navy, and Coast Guard rotary-wing aircraft.
- Pinecastle Range:
  - Air-to-ground training, including air-to-ground bombing (non-explosive and high explosive munitions), lasing, and strafing.
  - Ground operations related to small arms fire.
  - Helicopter operations at landing zones and combat search and rescue training.
  - Aerial lasing operations that are used for target designating; weaponized lasers are not used. Lasing can occur in combination with bombing operations or alone.
  - Approximately four to six major training exercises per year involving multiple events of multiple aircraft in each event from an aircraft carrier in the Jacksonville Operating Area over an extended period of time.
- Lake George Range:
  - Air-to-surface non-explosive munitions delivery by fixed-wing aircraft.
  - Sea search and rescue training and mine warfare exercises in Lake George.
  - Tactical use of flares.
  - Approximately six electronic warfare training exercises occur each year and generally last for three weeks.
    - During that training period, there may be up to approximately 12 electronic warfare threat training events (72 events/year).
    - Fixed/stationary electronic warfare locations include two sites at the Centroid/R-2910.
  - Air-to-surface training for mine laying exercises conducted by fixed-wing aircraft.
- Rodman Range:
  - Helicopter operations at landing zones and combat search and rescue training.

- o Helicopter training operations can include training in a variety of aviation tasks including low-level flight and hoisting operations that involve lowering a crew member by winch for search and rescue training.
- o Air-to-ground training, including air-to-ground bombing (non-explosive munitions only).

Anticipated future range missions would consist of the following:

- Training by Chief of Naval Air Training T-45 (Goshawk) aircraft at Pinecastle and Rodman Ranges:
  - o Training staging and flying would originate from local existing airfields that are currently being used by DoD Services. These include, but are not limited to, Naval Air Station Jacksonville, Naval Station Mayport, and the commercial airfield at Cecil Field.
  - o Training events would usually occur over a three-week period consisting of approximately 60 events and 240 sorties, occurring under the regular training schedule and operating hours of when the designated range is open.
  - o Aircraft would be on-range up to 40 minutes at a time.
  - o Total training at either range (Pinecastle or Rodman) would consist of approximately 180 events and 720 sorties annually.
  - o Mobile emitters siting for electronic warfare training activities.
    - The mobile emitters would be parked on established roads and existing roadways and would be energized in accordance with the training activity scenario.
    - Pyrotechnic simulators would be used during the electronic warfare threat training for visual cueing. The simulators are consumed in flight with no falling debris. Under the Proposed Action, the number of pyrotechnic simulator rounds expected to be used per year at the PRC is approximately 180.

No Action Alternative. Under the No Action Alternative, existing operations at the PRC would continue, but there would be no new additional future training and range missions, and no new aircraft and associated operations would be introduced to the

PRC. Mobile electronic warfare equipment and associated training operations would not be incorporated. The No Action Alternative is not a viable alternative since it does not meet the purpose and need for the Proposed Action but was assessed as a baseline from which to compare the potential effects of the action alternatives.

**Environmental Effects:** As summarized below, the EA examined potential effects of the Proposed Action on seven resource areas affected by the Proposed Action.

Noise: The Proposed Action would result in an increase in military readiness activities. The estimated total sorties for PRC would increase from 4,132 to 11,290. However, most activities would occur under the regular training schedule and operating hours of the designated range. The additional operations would be dispersed across Pinecastle Range, Lake George Range, and Rodman Range. The increase in aircraft operations would also increase estimated munitions expenditures from 606,220 to 1,090,740. New small arms ground fire totaling an estimated 12,000 expenditures annually would be added to Rodman Range as part of the Proposed Action.

At Pinecastle Range, the greatest noise would be focused at the helicopter landing zone due to the relatively low aircraft altitudes in this area. Although the size of the 65 dB DNL contour would increase to cover most of on the ground targets, the noise contour would be contained within the Pinecastle Range boundary and not affect noise sensitive points of interest. Increased noise from aircraft gunnery and large arms would extend the 62 dB CDNL noise contour beyond the Pinecastle Range boundary on all sides and up to 2.5 miles to the north; however, this area is part of the Ocala National Forest and uninhabited. The residential area at Summit Pond would be exposed to CDNL between 57 and 62 dB, which corresponds to a low risk for noise impacts. The noise contours for small arms ground fire would not change.

At Lake George Range, aircraft activity would not generate noise exposure levels of 75 dB DNL or greater. The 65 dB DNL contour would follow the Mine Exercise flight patterns and would extend 3 miles to the northwest to the shore of Drayton Island and 1.5

miles to the east of the range boundary but remain over Lake George. Residences on Drayton Island and the Pine Island Resort would not be impacted by the Proposed Action because DNL would remain below 65 dB at these noise sensitive locations.

Noise impacts from aircraft large arms would be contained within the range boundary.

At Rodman Range, noise would continue to be focused at the eight landing zones and would increase 15 to 20 dB but remain within the range boundary and not impact noise sensitive points of interest. Noise levels from small arms firing would only occur under the Proposed Action due to new operations involving aircraft gunnery and ground firing. Noise impacts would extend outside of the range boundary but would not impact noise sensitive points of interest. Noise from ground firing would largely remain within the range boundary and would have no impacts on noise sensitive receptors.

As a result of Proposed Action, the noise contours at Pinecastle, Lake George, and Rodman Ranges would extend beyond their range boundaries; however, no noise sensitive points of interest would be impacted in these areas. These increases would likely be noticeable, but the areas are currently exposed to noise from aircraft operations and munitions expenditure under existing conditions. These changes to DNL and single event noise levels would not constitute a significant impact due to the intensity of noise in the local environment.

Air Quality: Under the Proposed Action, there would be no significant effects to air quality. The net increases in emissions for each criteria pollutant would not exceed the 100 tons per year comparative impact threshold. Emissions would not create a major regional source of air pollutants or affect the current attainment status at PRC in Florida and would comply with all applicable state and regional air agency rules and regulations. An increase in CO<sub>2</sub> emissions would occur but would not exceed de minimis criteria. Aircraft and weapon operational activities would generate approximately 8,178 tons (7,419 metric tons) of CO<sub>2</sub> emissions if the proposed activities occurred at the three ranges. This limited amount of emissions would represent approximately 0.1 percent increase of the existing greenhouse

gases inventory over the three counties in the region of influence to be affected by the proposed training activities, and would not contribute to global warming to any discernible extent.

Airspace/Range Safety: The Proposed Action would have no significant impacts on airspace or range safety. Under the Proposed Action, all training operations would be conducted within the existing boundaries of the three ranges, and within airspace currently utilized by PRC, using all existing standard operating procedures, *Naval Air Training and Operating Procedures Standardization* (OPNAVINST 3710.7), instructor supervision, and specific Federal Aviation Administration (FAA) regulations. The new aircraft are similar in function to existing aircraft and would not result in a change to predominant flight paths. Flight patterns, altitudes, and airspeeds for training operations would remain similar to those currently conducted at the respective ranges. The proposed increase in air operations would result in a greater number of flight hours flown in PRC that is not significant.

The Proposed Action Alternative would have no effect on the existing ranges and target areas at the PRC. The existing ranges would continue to adhere to the parameters set out in the 2017 RAICUZ Study, existing standard operating procedures and the Operational Range Clearance Plan; and the PRC would not require the reorientation of any range to retain optimal safety and efficiency. The proposed increased munitions expenditures are not significant.

While the siting of the electronic warfare equipment proposed at the PRC would potentially consist of new locations, the sites would be locations historically used for electronic warfare equipment, and existing safety procedures with respect to electronic warfare equipment would be implemented. Emitters would only produce electromagnetic signals in frequency bands in accordance with approvals that are attained through the Navy Marine Spectrum Office and reviewed by the Federal Communications Commission, the FAA, and the National Telecommunications and Information Administration. The Navy would continue to follow OPNAVINST 5100.23H, *Navy Safety and Occupational Health Program Manual*, for its radiation protection

requirements and safety guidelines. If a public safety issue is present (e.g., active hunting, camping, or hiking in the area) during the operation of the mobile emitter, the mobile emitter would be de-energized and relocated, as necessary. Therefore, the Proposed Action Alternative would not result in impacts to airspace and range safety.

Biological Resources: The Proposed Action would have minor adverse effects on biological resources. Munitions could potentially ignite fires, resulting in the loss of vegetation, causing an immediate change in the habitat. While this would initially be an adverse effect, positive effects would result over time, because scrub vegetation is adapted to a high level of disturbance, especially disturbance by intense fire. However, the use of air-delivered munitions, to include both high-explosive and non-explosive, is prohibited when fire risk is elevated to minimize the potential for fire.

There are limited activities as part of the Proposed Action that may have an effect on sensitive plant species. No vegetation is present at Lake George Range, and Rodman Range vegetation consists of grasses and other herbaceous species, which is routinely maintained by mowing and occasional plowing. Therefore, impacts to vegetation would be negligible and would not be likely to result in a trend towards federal listing or loss of viability.

Aircraft movement and munitions use could result in wildlife injury/mortality and loss of habitat. Slower or less mobile wildlife species, and those seeking refuge in burrows, may not be able to evade a fire. However, the chances of a fire occurring are low, due to protective measures implemented by the Navy in cooperation with the USFS. Additionally, many wildlife species found within the scrub community of the Pinecastle Range live in or use fire-dependent communities. Therefore, a fire could be beneficial to the community that these wildlife species depend upon.

Although there would be an increase in aircraft operations, the potential for bird/bat-aircraft strikes would remain very low. Bats would be less likely to strike aircraft, as the majority of aircraft operations would occur during daytime hours. Fixed-wing



aircraft would typically operate higher than 1,500 feet above ground level and do not take off or land at the ranges. Rotary-wing aircraft operate at lower altitudes and fly at relatively low airspeeds during training exercises allowing wildlife to hear or see an oncoming rotary-wing aircraft and avoid being struck. Lower airspeeds also allow pilots to avoid striking wildlife. Therefore, an incremental increase to existing aircraft operations would not result in a significant increase in aircraft strikes on bird/bat species.

Increased operations would cause noise and visual disturbance to wildlife. As the Proposed Action would allow continued aircraft and munitions training, wildlife in the region of influence are already partially habituated to such visual and aural disturbance. Exposure of wildlife to low altitude aircraft overflights and munition noise would not adversely affect the general health of individuals or populations. Noise impacts would not be expected to result in chronic stress based on the short duration and infrequency of exposure. In addition, the proposed aircraft activities would not be continuous as they would occur sporadically throughout the year, and disturbance would cease upon training event completion.

The Proposed Action would not have a significant adverse effect on migratory bird populations. Military readiness activities are exempt from the take prohibitions of the Migratory Bird Treaty Act, provided they would not result in a significant adverse effect on a population of migratory bird species. The Proposed Action may eliminate visitation by certain migratory bird species or reduce the amount of time they spend in the region of influence. However, displacement of these species during training exercises would not be considered significant. Bald eagles are not present in the proposed project areas; therefore, the Proposed Action at PRC would not result in take of bald eagles or to disturb bald eagles as defined by the Bald and Golden Eagle Protection Act.

The Proposed Action would have no impact on aquatic vegetation at Lake George Range as aquatic vegetation is not present within the range boundaries. Impacts from non-explosive munitions would result in localized disturbance to the water column and benthic habitat. Impact with the lake bottom could create small craters

and bottom sediments would be temporarily resuspended, resulting in increased water turbidity. The effects would be short-term and localized. Turbidity levels would return to normal shortly after an event and benthic habitat would recover through natural sedimentation processes. It is likely that some fish would be in the target area at the time of munitions delivery because some species are attracted by the structure and cover provided by the expended munitions on the bottom. The number of fish that might be affected by direct strikes cannot be quantified but is expected to be minimal because the benthic environment in the Lake George Range does not support dense populations of fish.

Several sensitive and protected species may occur within the proposed project areas. A Biological Assessment was prepared and submitted to the U.S. Fish and Wildlife Service (USFWS) consistent with the Endangered Species Act Section 7 Consultation on 16 April 2020. The Navy determined that the Proposed Action may affect, and is likely to adversely affect, Florida bonamia, Lewton's polygala, scrub buckwheat, Florida scrub-jay, eastern indigo snake, gopher tortoise, and sand skink due to the potential for fire caused by high-explosive munitions; mortality from explosions and vehicle traffic on the range; and/or increased exposure to aircraft overflights. It is expected that a relatively low but unquantifiable number of these species may be affected by the Proposed Action, representing a small fraction of the population. The potential for direct harm to individuals within the proposed project areas is unlikely. The USFWS issued a Biological Opinion dated 10 November 2020, and determined that the Proposed Action is not likely to jeopardize the continued existence of these species.

Water Resources: The Proposed Action would have negligible impacts on water resources. Proposed increases in munitions expenditures would occur at existing, established range sites, and these ranges have ongoing standard operating procedures and best management practices to minimize impacts to water resources. Groundwater quality monitoring is conducted in accordance with the groundwater monitoring plan within the Pinecastle Range as a condition of the Special Use Permit. The results of groundwater monitoring since 2005 indicate that no off-range releases of munitions constituents have been observed.

As a result, the impacts of munitions constituents entering the natural environment under the Proposed Action would not be significant.

It is anticipated that signal cartridges (visual cues) expended over Lake George Range would be consumed in the air and no material would be deposited in the water.

The Proposed Action does not involve construction or development in floodplains or wetlands and has been evaluated for consistency with the enforceable policies of the Florida Coastal Management Act. The Florida Department of Environmental Protection concurred with the Navy's coastal consistency determination in a response dated 26 September 2019.

Cultural Resources: The Proposed Action would result in no adverse effects on cultural resources. The Navy initiated National Historic Preservation Act Section 106 consultation with the Florida State Historic Preservation Office (SHPO) in a letter dated 26 February 2020 requesting concurrence with the finding of "no historic properties affected" with respect to both architectural and archaeological resources in the proposed project areas. The SHPO concurred in a letter dated 17 June 2020.

There are no known traditional cultural properties at PRC. The Navy consulted with the following federally recognized tribes: Miccosukee Tribe of Indians of Florida, Seminole Nation of Oklahoma, and Seminole Tribe of Florida in letters dated 26 February 2020 requesting concurrence with the Navy's finding of "no historic properties affected" and any comments or questions on the Proposed Action. The Seminole Nation of Oklahoma replied they had no objection to the Proposed Action and concurred with the Navy's finding in a letter dated 11 March 2020. The Seminole Tribe of Florida responded they did not object in an email dated 15 April 2020.

Recreational and Socioeconomic Resources: The Proposed Action would have negligible impacts on recreational and socioeconomic resources. The Ocala National Forest is a highly utilized recreational resource, particularly for activities such as hiking, hunting, camping, accessing the Florida Trail, or off-highway vehicle (OHV) and guiding companies conducting trips in

the forest. Under the Proposed Action Alternative, there would be an increase in aircraft operations; however, in general, training activities and use of the PRC would occur under the regular training schedule and operating hours of when the designated range is already open, and access is already restricted.

Hunters and OHV trail users could potentially notice increased restricted access. Hunting is not authorized at Pinecastle Range, and signs are posted along the range boundary. Impacts to OHV trail users would be minimized through informational kiosks posted in the area that provide maps of alternate trail locations within 20 minutes of the Ocala National Forest.

Effects to recreational experiences at the Ocala National Forest due to training range noise would remain at levels similar to existing conditions. Although increased training operations could diminish the recreation experience for some users, existing users of the public recreational amenities in this area would be already acclimated to the noise and visual disturbance generated by overflying aircraft. Likewise, the in-air noise would be temporary, short in duration, and dissipate quickly once the training operation is completed.

Cumulative Impacts: Other past, present, and reasonably foreseeable actions that could influence the resource areas analyzed include consideration of the other past and present actions and their locations, the extent of their direct and indirect effects, any likely future actions, and their relative contribution to cumulative effects on the specific resource. After a review of other past, present, and reasonably foreseeable actions, implementation of the Proposed Action in conjunction with the other identified actions would not represent a significant cumulative effect on the resource areas evaluated. Not all of the projects would occur simultaneously and, when viewed collectively, there is nothing inherently incompatible between these projects and those included in the Proposed Action, nor anything to indicate that the Proposed Action would exacerbate or otherwise collectively increase the potential for effects to the environment.

**Public Outreach:** A Notice of Availability of the Draft EA was published in the *Florida Times-Union* (Jacksonville, FL) on 26-28 July 2020 (both in print and online). Publication of the Draft EA was announced via press release to local media outlets, and posted on the Naval Air Station Jacksonville public Facebook page. The Draft EA was made available on the U.S. Fleet Forces NEPA website (<https://www.nepa.navy.mil/pinecastle>) for review for 42 days (4 September 2020). All comments received were reviewed, considered, and addressed appropriately in the Final EA.

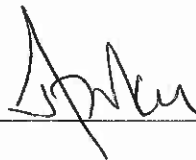
**Finding:** Based on analysis presented in the EA, which has been prepared in accordance with the requirements of NEPA and Navy policies and procedures (32 CFR Part 775), and in coordination with the FAA, U.S. Environmental Protection Agency, USFS, USFWS, Miccosukee Tribe of Indians, Seminole Nation of Oklahoma, Seminole Tribe of Florida, the Florida SHPO, and Florida Clearinghouse, the Navy finds that implementation of the Proposed Action as set out in the Proposed Action Alternative will not significantly impact the quality of the human environment. Therefore, an Environmental Impact Statement will not be prepared.

Electronic copies of this EA and Finding of No Significant Impact may be obtained by written request to:

COMMANDING OFFICER  
NAVFAC SOUTHEAST  
ATTN: STEPHEN BIEMILLER (CODE EV 21)  
P.O. BOX 30 BLDG 135N  
JACKSONVILLE, FL 32212-0030

2 December 2020

Date



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