



PACIFIC MISSILE RANGE FACILITY LAND-BASED TRAINING AND TESTING FINAL ENVIRONMENTAL ASSESSMENT

AUGUST 2025

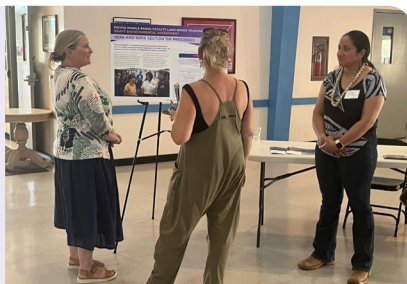
E Pane Mai Ka Nono'i O Nohili *Answering the Requests of Nohili*

The U.S. Navy, in cooperation with the Missile Defense Agency (MDA), prepared a Final Environmental Assessment (EA) for land-based training and testing at Pacific Missile Range Facility (PMRF). The Navy evaluated the potential environmental impacts of the Proposed Action to continue conducting land-based, multi-domain (air, land, sea, space, and cyberspace) training and testing, including an increase in activities among the military services on lands under federal jurisdiction at PMRF and Ka'ula Island. No new types of training or testing activities were proposed at PMRF or Ka'ula Island; the activities are currently being or have previously been conducted at these locations and are similar to those previously analyzed in environmental documentation.

Based on the analysis presented in the Final EA, consideration of public comments received on the Draft EA, and potential effects on historic properties, the Navy determined that implementation of its Proposed Action would not have reasonably foreseeable significant effects on the quality of the human or natural environment. As a result, an Environmental Impact Statement will not be prepared. A Finding of No Significant Impact has been signed and is available at www.nepa.navy.mil/pmrflbttea, along with the Final EA.

Public Involvement

The Navy sincerely thanks all who participated in the National



Environmental Policy Act (NEPA) process for this important project. Members of the public, Native Hawaiian Organizations, nongovernmental organizations, and State of Hawai'i agencies provided valuable input and shared their cultural, ecological, and traditional knowledge of Kaua'i and Ka'ula Island to improve and strengthen the environmental impact analysis. Public involvement is an integral part of the NEPA and National Historic Preservation Act (NHPA) Section 106 processes.

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Pacific Missile Range Facility

PMRF is a premier testing and training area where new technologies are tested and military service members are trained to defend the United States and its territories, interests, and allies. Strategically situated in the Hawaiian Islands, PMRF provides a realistic environment for training and testing in the use of surface, subsurface, land, air, and space weapons systems. PMRF's unique location includes relatively isolated ocean areas to the north, south, and west that safely and effectively support military readiness activities. Training and testing activities have been conducted at PMRF for decades.

PMRF provides integrated range services to the military and MDA to ensure activities are conducted safely and properly evaluated. The PMRF mission is to oversee and coordinate training events from unit-level to multi-national exercises, while at the same time conducting or supporting the research, development, test, and evaluation missions of the Navy, Department of Defense, and other federal agencies.

PMRF is a major economic driver on Kaua'i. The Navy is the third largest employer overall on the island, and PMRF is the largest high-tech employer, bringing skilled, high-paying jobs to Kaua'i. Most of PMRF's civilian and contract workforce are long-time Kaua'i residents.

PROPOSED ACTION

The Proposed Action is to continue conducting land-based, multi-domain training and testing, including an increase in activities among the military services on lands under federal jurisdiction at PMRF and Ka'ula Island. These activities will be conducted by the Navy, Army, Air Force, Marine Corps, and MDA and may also include the participation of foreign militaries under U.S. planning and direction. The Proposed Action includes standard operating procedures and best management practices to minimize potential impacts on environmental and cultural resources.

The purpose of the Proposed Action is to provide the U.S. military services and MDA with land-based training and testing activities at a level that supports military readiness into the reasonably foreseeable future. The Proposed Action is needed to ensure U.S. military services are able to organize, train, and equip service members and personnel to meet their respective national defense missions.

STUDY AREA

The Study Area for the EA (Figure 1) consists of lands within federal jurisdiction at PMRF Barking Sands (Main Base)*, a roughly 0.5-mile-wide and 7.5-miles-long area, beginning at the high tide line and extending inland to the boundary of the PMRF installation. The Study Area also includes Ka'ula Island, an offshore islet under federal jurisdiction where gunnery and bombing exercises with non-explosive (inert) ordnance occur.

The Study Area does not include any of the lease or easement lands (Kōke'e, Makaha Ridge, Miloli'i Ridge, Kamokalā, Mānā Water Well, or lease lands that about Barking Sands) for which the State of Hawai'i currently maintains jurisdiction. There are no proposed changes in use or operations at these locations and the current level of

operations are analyzed in the PMRF and Kōke'e Park Geophysical Observatory Real Estate Environmental Impact Statement (EIS) that is concurrently in development. There are no proposed changes in use or testing and training activities at Port Allen or Ni'ihau; therefore these locations were not included in the scope of the EA. Activities at these locations were analyzed in the 2008 Hawai'i Range Complex EIS, available at pmrf-kpgo-eis.com/documents.

**Note that "Main Base" is a common naming convention for Navy fee simple, leasehold, and easement lands on the Mānā Plain. The PMRF Land-Based Training and Testing EA includes an analysis of the potential impacts from the Proposed Action only on the fee simple (federal jurisdiction) lands.*

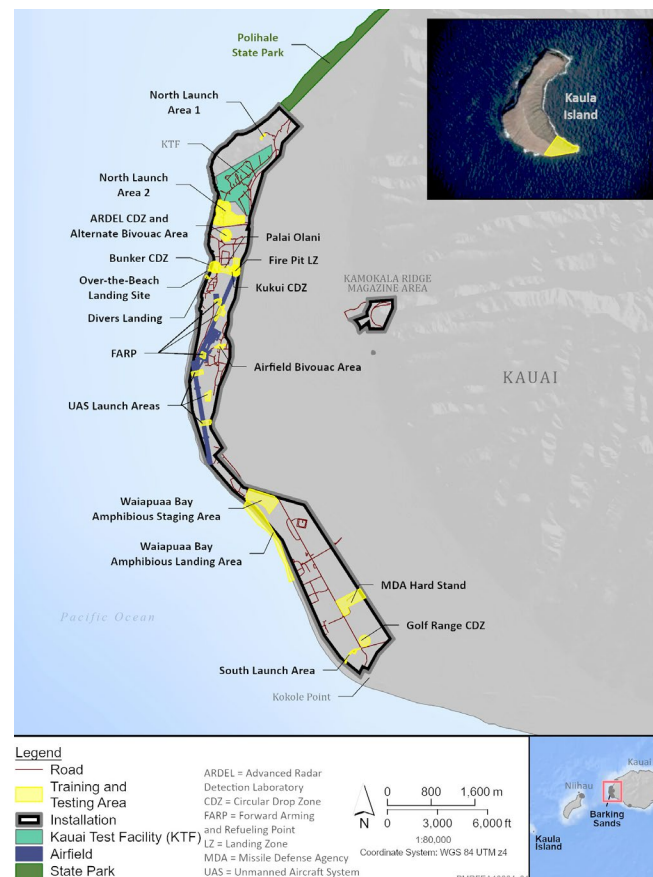


Figure 1: Training and Testing in the Study Area.

The Study Area encompasses the typical training and testing sites used at PMRF and Ka'ula Island.

TRAINING ON KA'ULA ISLAND

Ka'ula Island has been under U.S. federal jurisdiction since 1924. The Navy has managed and utilized Ka'ula Island for training activities since 1952. For the past 44 years, only non-explosive (inert) ordnance has been authorized during aviation training activities.

Ka'ula Island is a critical location for aviation training involving air-to-ground gunnery and the deployment of non-explosive ordnance from the air. The island provides the opportunity for overwater air-to-ground training that is not available at other locations in Hawai'i.

Navy vessels do not fire at Ka'ula Island and military aircraft use only non-explosive practice munitions during gunnery and target practice. The number of events considered for Ka'ula Island are 24 gunnery exercises and 31 air-to-ground bombing/target exercises annually across all military services. Only authorized non-explosive munitions (weighing no more than 500 pounds) are approved for use on Ka'ula Island.

Maintaining this area as a target range is critical for the tactical combat training of Navy, Marine Corps, Army, and Air Force personnel to develop proficiency in long-range overwater strikes. This training is essential for forces to respond to contingencies in the Western Pacific or threats against the Hawaiian Islands or continental United States.

Training activities on Ka'ula Island will occur only within the designated impact area at the southernmost 1,000 feet of the island (Figure 2). The impact area represents approximately 8% of Ka'ula Island's total land area. There is no change to the historically used impact area in this Proposed Action.



Figure 2: Training at Ka'ula Island. Training activities are limited to the southernmost 1,000 feet of Ka'ula Island (yellow shaded area), which represents approximately 8% of its total land.

KA'ULA ISLAND AND NATIONAL HISTORIC PRESERVATION ACT SECTION 106 CONSULTATION

Through the NHPA consultation process, the Navy conducted extensive initial consultation with the Hawai'i State Historic Preservation Officer (SHPO), Office of Hawaiian Affairs, and consulting parties, to include Native Hawaiian Organizations (NHOs). Based on cultural significance information provided by those parties, the Navy first determined that Ka'ula Island is eligible for listing on the National Register of Historic Places as a traditional cultural place (TCP). After making that determination, the Navy considered the effects of the proposed undertaking (land-based training and testing activities) on Ka'ula Island and determined the training would adversely affect the island.

The Navy has begun development of a memorandum of agreement and consultations are ongoing with the aim to develop an agreement that includes measures to minimize or mitigate adverse effects on the historic property. During the continued consultation process, no training on Ka'ula Island is expected. If training becomes necessary, approval will be required from Commander, U.S. Pacific Fleet. This approval requirement is an additional step should training become critical for national security or national defense purposes while the Navy finalizes the NHPA process.

ALTERNATIVES ANALYZED

Using screening criteria, the Navy considered several locations for training and testing that would be feasible and reasonable (e.g., technically and economically practical); meet the purpose of and need for the Proposed Action; and be in accordance with NEPA. The Navy also considered simulated training and testing.

Alternatives were eliminated from further consideration because no other reasonable locations could achieve the level of readiness the military services need to fulfill their congressionally mandated responsibilities. PMRF is the most geographically practical, technologically advanced, and economically feasible location for the proposed training and testing activities. Simulated training and testing activities were determined to be significantly limited in their effectiveness for readiness preparation when compared to realistic training and testing.

In response to public comments received on the Draft EA and the designation of Ka'ula Island as a TCP, the Navy considered eliminating training on Ka'ula Island. Incorporating input from the Army, Air Force, and Marine Corps, the Navy examined the last 13 years of usage data and determined that training on Ka'ula Island is necessary for gunnery and non-explosive bombing exercises. These training exercises are essential in preparing for maritime conflicts and necessary for Army and Marine Corps aviation units operating in the Indo-Pacific region. Ka'ula Island provides a unique, controlled, and secure environment for this critical training. Based on this analysis, the Navy determined that Ka'ula Island is the only location within the Hawaiian Islands where overwater-to-land training with non-explosive munitions can currently occur.



PMRF and Ka'ula Island offer diverse and multi-dimensional capabilities that allow range users to develop and maintain requisite levels of military readiness. No other alternative locations were identified that could achieve the level of readiness the military services need to meet their congressionally mandated responsibilities.



SUMMARY OF THE ENVIRONMENTAL ASSESSMENT

The Navy analyzed potential impacts of the Proposed Action on environmental resource areas, including:

- Air quality
- Greenhouse gases
- Noise
- Public health and safety
- Terrestrial biological resources
- Cultural resources

Impacts on other environmental resource areas were considered to be negligible or non-existent and therefore not analyzed in the EA.

The scope of the analysis focused on the potential environmental impacts on land associated with land-based training and testing activities. Potential impacts are summarized below; for more detailed information, please refer to the Final EA.

Air Quality

Due to relatively low and infrequent emissions of pollutants and considering the distance to downwind receptors (and no receptors on the uninhabited Ka'ula Island), emissions are not expected to interfere with the attainment of ambient air quality standards or contribute to human health risks. Therefore, impacts on air quality would be less than significant.

Greenhouse Gases

Expected greenhouse gas emissions would be relatively minor and make up a negligible percentage of global greenhouse gas emissions. Therefore, greenhouse impacts would be less than significant.

Noise

Proposed increases in training and testing activities at PMRF would not result in an appreciable increase in noise levels near the public or sensitive noise receptors (e.g., individuals in hospitals, schools, daycare facilities, elderly housing convalescent facilities). There are no sensitive human receptors on Ka'ula Island. Based on the analysis, impacts due to noise would be less than significant.

Public Health and Safety

Training and testing activities, including proposed increases in activities, will not increase risks to the safety of military personnel or the public. The Navy will continue to take every reasonable precaution during the planning and execution of training and testing activities to prevent injury to human life or property. Standard operating procedures will continue to be implemented; therefore, public health and safety impacts would be less than significant.

The area around Ka'ula Island is subject to a safety zone established by the U.S. Coast Guard when active training is occurring. Otherwise, the waters and airspace are open to other users. Notification of training occurs through notices to airmen and mariners. The Navy is working to provide better, updated information to mariners regarding the open availability of the waters around Ka'ula Island at all times when training is not scheduled to occur.

Terrestrial Biological Resources

Vegetation: Damage to vegetation is unlikely since the movement of personnel, vehicles, and equipment will be limited to existing routes and maneuvering personnel will stay within previously disturbed areas. Ground disturbance during missile launch activities will be minimal, localized, and would not significantly impact vegetation. Vegetation on Ka'ula Island is very sparse and brush fires from

activities are unlikely to occur. Therefore, because vegetation on Ka'ula Island is minimal, impacts on vegetation would be less than significant.

One ESA-listed plant species, *Portulaca villosa*, was recorded on Ka'ula Island in 1998. However, given that only a small portion of Ka'ula Island used for ordnance training, the Proposed Action may affect but is not likely to adversely affect *Portulaca villosa*.

To better manage the vegetation on Ka'ula Island, the Navy is conducting high-resolution drone and aircraft surveys to safely capture images of Ka'ula Island for inventory.

Wildlife and Special-Status Species: Proposed activities will be short in duration and occur within regularly used training and testing sites. Any displacement of wildlife would be temporary and brief, and wildlife would likely return to the area once activities are complete. Special-status species at PMRF may be impacted; however, impacts would be short-term. Increases in training and testing activities would not result in a greater disturbance to hauled-out Hawaiian monk seals. Therefore, impacts on wildlife and special-status species would be less than significant.

Cultural Resources

PMRF Main Base: Training and testing activities will occur on previously disturbed land and personnel will not deviate from designated pathways. Standard operating procedures will continue to be implemented, and the Navy will avoid any known historic properties. Any ground-disturbing activities require approval and implementation of appropriate mitigation measures. Therefore, impacts on cultural resources at this location would be less than significant.

In the unlikely event cultural materials are discovered during training and testing, all activities in the immediate vicinity will halt. The PMRF Cultural Resources Manager and Range Point of Contact will be contacted to implement appropriate documentation procedures.

Ka'ula Island: In accordance with the NHPA, the Navy is consulting with NHOs and the Hawai'i SHPO to develop a memorandum of agreement that will minimize or mitigate adverse effects on Ka'ula Island, a recently identified traditional cultural place. While this consultation is pending, no training will occur on the island unless the Commander, U.S. Pacific Fleet authorizes it for national defense or national security.



Sunset at PMRF

Land-based training and testing activities, including increases in activities, are not expected to result in significant impacts on any of the resource areas analyzed in the Final EA. However, in evaluating activities at Ka'ula Island, the Navy determined under the National Historic Preservation Act that activities are expected to adversely affect Ka'ula Island, a newly identified traditional cultural place that is eligible for listing on the National Register of Historic Places. The Navy will strive to minimize or mitigate adverse effects through a memorandum of agreement.



Rare native grass *Panicum nilghauense*



Laysan albatross

Protecting the Kauaʻi Environment

The Proposed Action includes the implementation of standard operating procedures to minimize or mitigate potential impacts on environmental and cultural resources. Procedures at PMRF include, but are not limited to:

- Wetting vegetation prior to launches and live-fire events to reduce the risk of fire.
- Using existing cleared or previously disturbed areas, trails, and roads.
- Cleaning equipment and vehicles between locations to stop the spread of invasive species.
- Using technology to detect the presence of bats before using radar.
- Surveying beaches one hour prior to landings, launches, and live-fire training exercises to detect the presence of sea turtles or Hawaiian monk seals; if present, delaying activities until the animal voluntarily leaves the area.
- Avoiding trimming or removing trees higher than 15 feet during Hawaiian hoary bat pupping season (June 1–Sept. 15).
- Strengthening the existing Bird Aircraft Strike Hazard program to reduce the risk of migratory bird and wildlife strikes by aircraft.
- Continuing the long-time successful Dark Skies Program during seabird breeding and fallout season (when fledglings rely on moonlight to guide them on inaugural flights from their burrows out to sea but become disoriented by artificial lights and “fallout” or drop from exhaustion).

- Flagging and avoiding sea turtle nests.
- Monitoring archaeological sites.
- Minimizing or mitigating impacts on known historic properties and sensitive areas.
- Educating personnel working in culturally sensitive areas.

For training on Kaʻula Island, only non-explosive munitions may be used in the impact area and aviation units must follow procedures to ensure there are no monk seals hauled out on ledges prior to commencing activity. The Navy is continuing the monitoring of bird populations at Kaʻula Island and will explore additional minimization measures during the NHPA Section 106 consultation, which may result in a memorandum of agreement memorializing those measures.

The Navy has heard the concerns of the public regarding continued use of Kaʻula Island. As land manager, Navy will continue biennial bird surveys to support natural resource protections, ensure standard operating procedures are followed during training, and work to understand and document the cultural relevance of Kaʻula Island in coordination with various stakeholders.

