

# Appendix A

## Regulatory Setting

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## Appendix A: Regulatory Setting Environmental Assessment

### Marine Corps Base Hawaii Home Basing of the MQ-9A Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay

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## Abbreviations and Acronyms

%	percent	NHPA	National Historic Preservation Act
ACHP	Advisory Council on Historic Preservation	NMFS	National Marine Fisheries Service
AICUZ	Air Installations Compatible Use Zone	NO <sub>2</sub>	nitrogen dioxide
APE	Area of Potential Effects	NPDES	National Pollutant Discharge Elimination System
CAA	Clean Air Act	NRHP	National Register of Historic Places
CEQ	Council on Environmental Quality	O <sub>3</sub>	ozone
CFR	Code of Federal Regulations	OPNAVINST	Chief of Naval Operations Instruction
CO	carbon monoxide	Pb	lead
CWA	Clean Water Act	PM <sub>10</sub>	particulate matter with diameter less than or equal to 10 micrometers
CZMA	Coastal Zone Management Act	PM <sub>2.5</sub>	particulate matter with diameter less than or equal to 2.5 micrometers
DoD	Department of Defense	SHPO	State Historic Preservation Office(r)
EA	Environmental Assessment	SO <sub>2</sub>	sulfur dioxide
EO	Executive Order	SWPPP	Storm Water Pollution Prevention Plan
ESA	Endangered Species Act	U.S.	United States
FAA	Federal Aviation Administration	U.S.C.	United States Code
GHG	Greenhouse Gas	USEPA	United States Environmental Protection Agency
HDOH	Hawaii Department of Health	USFWS	United States Fish and Wildlife Service
MBTA	Migratory Bird Treaty Act		
MCB	Marine Corps Base		
MCO	Marine Corps Order		
NAAQS	National Ambient Air Quality Standards		
NAGPRA	Native American Graves Protection and Repatriation Act		
NEPA	National Environmental Policy Act		
NHO	Native Hawaiian Organization		

## Appendix A: Regulatory Setting

The Marine Corps has prepared this Environmental Assessment (EA) based upon federal and state laws, statutes, regulations, and policies pertinent to the implementation of the proposed action. These are summarized in Table 1 and in the text below.

**Table 1      Applicable Laws and Regulations**

<i>Title</i>	<i>Citation</i>
Archaeological Resources Protection Act (ARPA)	16 U.S.C. §§ 470aa-470mm
Clean Air Act (CAA)	42 U.S.C. §§ 7401-7671q
Clean Water Act (CWA)	33 U.S.C. §§ 1251-1387
Coastal Zone Management Act (CZMA)	16 U.S.C. §§ 1451 et seq.
Council on Environmental Quality National Environmental Policy Act Regulations	40 CFR §§ 1500-1508
Endangered Species Act	16 U.S.C. §§ 1531-1544
EO 11988, Floodplain Management	42 Fed. Reg. 26951
EO 12088, Federal Compliance with Pollution Control Standards	43 Fed. Reg. 47707
EO 12372, Intergovernmental Review of Federal Programs	47 Fed. Reg. 30959
EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations	59 Fed. Reg. 7629
EO 13045, Protection of Children from Environmental Health Risks and Safety Risks	62 Fed. Reg. 19885
EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, and the Migratory Bird Treaty Act (MBTA)	66 Fed. Reg. 3853, 16 U.S.C. §§ 703-712
National Environmental Policy Act (NEPA)	42 U.S.C. §§ 4321-4370h
National Historic Preservation Act (NHPA)	54 U.S.C. §§ 300101 et seq.
Native American Graves Protection and Repatriation Act (NAGPRA)	25 U.S.C. §§ 3001-3013
Policies and Responsibilities for Implementation of the National Environmental Policy Act Within the Department of the Navy	32 CFR Part 775
Pollution Prevention Act (NPA)	42 U.S.C. §§ 13101-13109
Protection of Historic Properties	36 CFR Part 800
Resource Conservation and Recovery Act (RCRA)	42 U.S.C. §§ 6901 et seq.
Marine Corps Environmental Compliance and Protection Program	MCO 5090.2

Notes: CFR = Code of Federal Regulations; EO = Executive Order; MCO = Marine Corps Order; U.S.C. = United States Code.

### 1.1 Noise

Federal, state, and local governments regulate noise to prevent noise sources from affecting noise sensitive areas, such as residences, hospitals, and schools, and to protect human health and welfare. The Noise Control Act of 1972, 42 United States Code (U.S.C.) 4901 et seq., established a national policy “to promote an environment for all Americans free from noise that jeopardizes their health or welfare.” The joint instruction, Chief of Naval Operations Instruction (OPNAVINST) 11010.36C and Marine Corps Order (MCO) 11010.16, *Air Installations Compatible Use Zones (AICUZ) Program*, provides guidance administering the AICUZ program, which recommends land uses that are compatible with aircraft noise levels. Per OPNAVINST 11010.36C/MCO 11010.16, NOISEMAP is used for developing noise contours.

## 1.2 Air Quality

### 1.2.1 Criteria Pollutants

Under the Clean Air Act (CAA), the United States (U.S.) Environmental Protection Agency (USEPA) established National Ambient Air Quality Standards (NAAQS) (40 Code of Federal Regulations [CFR] Part 50) for six criteria air pollutants, including ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter with diameters less than or equal to 10 and 2.5 micrometers (PM<sub>10</sub> and PM<sub>2.5</sub>). The USEPA classifies NAAQS as primary or secondary. Primary standards protect against adverse health effects; secondary standards protect against welfare effects, such as damage to farm crops and vegetation and damage to buildings. Some pollutants have long-term and short-term standards. The USEPA designated short-term standards to protect against acute health effects and established long-term standards to protect against chronic health effects.

The USEPA designates areas that are and have historically been in compliance with the NAAQS as attainment areas and designates areas that violate a federal air quality standard as nonattainment areas. The USEPA designates areas that have transitioned from nonattainment to attainment as maintenance areas; these areas must adhere to maintenance plans to ensure continued attainment.

The CAA requires states to develop a general plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated as nonattainment. State and local air quality management agencies develop these plans, known as State Implementation Plans, and submit them to the USEPA for approval.

### 1.2.2 Greenhouse Gases

Greenhouse gases (GHGs) are gas emissions that trap heat in the atmosphere. These emissions occur from natural processes and human activities. Scientific evidence indicates a trend of increasing global temperature over the past century due to an increase in GHG emissions from human activities. The scientific community predicts the climate change associated with this global warming will produce negative environmental, economic, and social consequences across the globe.

The Council on Environmental Quality (CEQ) provides guidance on how GHG emissions and climate change impacts should be analyzed under the National Environmental Policy Act (NEPA) in its 2016 *Final Guidance for Federal Departments and Agencies on Consideration of GHG Gas Emissions and the Effects of Climate Change in NEPA Reviews*. That guidance was withdrawn in 2017 and is currently under review by the CEQ for revision and update.

## 1.3 Water Resources

Several statutes regulate water resources. The Safe Drinking Water Act, 42 U.S.C. 300 et seq. (1974) sets standards for maximum levels of contaminants in drinking water.

The Clean Water Act (CWA), 33 U.S.C. 1251 et seq. (1972) establishes federal limits, through the National Pollutant Discharge Elimination System (NPDES), on the amount of pollutants that can be discharged into surface waters to restore and maintain the chemical, physical, and biological integrity of the water. The NPDES program regulates the discharge of point (e.g., end of pipe) and nonpoint (e.g., storm water) sources of water pollution. The NPDES program is administered through the Hawaii Department of Health (HDOH). The state NPDES program requires construction site operators engaged in clearing, grading, and excavating activities that disturb 1 acre or more to obtain coverage under a NPDES Construction General Permit for storm water discharges. Construction or demolition that

necessitates an individual permit also requires preparation of a Notice of Intent to discharge storm water and a Storm Water Pollution Prevention Plan (SWPPP) that is implemented during construction.

Impacts to wetlands are regulated by the U.S. Army Corps of Engineers under Section 404 of the CWA as a subset of all “waters of the United States.” Section 404 of the CWA establishes a program to regulate the discharge or fill of material into a wetland, and authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredge or fill into wetlands.

Executive Order (EO) 11988, *Floodplain Management*, requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of development in a floodplain unless it is the only practicable alternative. Flood potential of a site is usually determined by the 100-year floodplain, which is defined as the area that has a 1 percent (%) chance of inundation by a flood event in a given year. EO 11988 states that agencies shall provide opportunity for early public review of any plans or proposals for actions in floodplains.

EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, amends EO 11988 and establishes the Federal Flood Risk Management Standard to improve the nation’s resilience to current and future flood risks, which are anticipated to increase over time as a result of climate change and other threats.

Section 307 of the Coastal Zone Management Act (CZMA) stipulates that where a federal project initiates reasonably foreseeable effects to any coastal use or resource (land or water use, or natural resource), the action must be consistent to the maximum extent practicable with the enforceable policies of the affected state’s federally approved coastal management plan. The Hawaii State Office of Planning implements the state’s CZMA program.

#### **1.4 Cultural**

Federal laws and regulations that protect cultural resources include the National Historic Preservation Act (NHPA) (16 U.S.C. §§470aa–470mm); the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (25 U.S.C. §§3001-3013); and the American Indian Religious Freedom Act (42 U.S.C. § 1996).

Section 110 and Section 106 of the NHPA define federal agencies’ responsibilities for protecting historic properties. Section 110 of the NHPA requires federal agencies to establish historic preservation programs for the identification, evaluation, and protection of historic properties. Section 106 requires federal agencies to consider the effects of their undertakings on historic properties either listed in or eligible for listing in the National Register of Historic Places (NRHP). The Section 106 consultation process affords the State Historic Preservation Officer (SHPO), the Advisory Council on Historic Preservation (ACHP), Native Hawaiian Organizations (NHOs), interested parties, and the public an opportunity to consult on a proposed undertaking. Additionally, the NHPA and its implementing regulations include provisions for consultation with NHOs that attach religious and cultural significance to historic properties that may be affected by an undertaking (36 CFR 800.2).

An undertaking is defined in NHPA Section 106 regulations as a “project, activity or program funded in whole or part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; and those requiring a federal permit, license or approval” (36 CFR 800.16). An undertaking adversely affects a historic

property if it alters the characteristics that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property (36 CFR 800.5).

The NHPA defines a historic property as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the NRHP, including related artifacts, records, and remains (36 CFR 800.16). During Section 106 consultation, the federal agency identifies historic properties that may be affected by an undertaking (36 CFR 800.4). The NRHP includes criteria for evaluating the significance and integrity of a historic property to determine eligibility, as set forth in 36 CFR 60.4. In addition to significance, eligible properties must retain historic integrity, defined as the ability of a property to convey its significance, based on its location, design, setting, materials, workmanship, feeling, and association. Once historic properties are identified, the federal agency assesses whether there are adverse effects on historic properties in the Area of Potential Effects (APE) of the undertaking. The APE is defined in 36 CFR Part 800.16(d) as “the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist.”

The assessment of effects on historic properties under NEPA identifies and describes the consequences of the proposed action on cultural resources. This analysis is aligned with the determinations and assessments prepared under the concurrent Section 106 consultation process for the proposed undertaking, which is equivalent to the NEPA Preferred Alternative.

## 1.5 Biological Resources

The purpose of the Endangered Species Act (ESA) is to conserve the ecosystems upon which threatened or endangered species depend and to conserve and recover listed species. Section 7 of the ESA requires action proponents to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) in assessing whether the proposed action may jeopardize the continued existence of federally listed threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. There is no federally designated critical habitat for any ESA-listed species on, or close to, the project area or within the ROI.

Birds, both migratory and most native-resident bird species, are protected under the Migratory Bird Treaty Act (MBTA), and their conservation by federal agencies is mandated by EO 13186, *Migratory Bird Conservation*. Under the MBTA, it is unlawful to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, or possess migratory birds or their nests or eggs at any time, unless permitted by regulation. The 2003 National Defense Authorization Act authorized the Secretary of the Interior to prescribe regulations exempting the Department of Defense (DoD) from the incidental taking of migratory birds during authorized military readiness activities. These regulations require DoD to confer with the USFWS to develop and implement appropriate conservation measures to minimize or avoid adverse effects of the proposed action if it would have a significant negative impact to the sustainability of a population of a migratory bird species.

## 1.6 Public Health and Safety

Aircraft operations are regulated by the Federal Aviation Administration (FAA) (see Federal Aviation Regulations Part 91, *General Operating and Flight Rules*). These regulations and associated FAA Orders set forth rules for military aircraft operating in commercial and military airspace. In addition, Navy policy and procedural guidance provides further operating requirements for military aircraft (e.g., Naval Air Training and Operating Procedures Standardization General Flight and Operating Instruction,

OPNAVINST 3710.7U [2009], and various Naval Air Training and Operating Procedures Standardization manuals).

### 1.7 Transportation

The State of Hawaii follows the U.S. Department of Transportation Federal Highway Administration’s highway functional classification definitions. The functional classification process groups streets and highways according to the character of service they are intended to provide. The types of functional classifications are presented in Table 2 and apply in both urban and rural settings.

**Table 2 Highway/Roadway Functional Classification**

<i>Highway/Roadway Functional Classification</i>		<i>Description</i>
Interstate		Provide basic interstate service and link major cities
Arterial	Principal	Provide high level of interstate and intrastate service and connect major generators of internal city traffic
	Minor	Serve trans-state travel to and through principal cities and provide a system for the major traffic generators within a city
Collector	Major	Provide connections to and through the large centers of population within the state
	Minor	Provide inter-county service
Local		Service small rural communities and provide access to residential areas and neighborhoods within cities

Source: Federal Highway Administration, 2013.

Along with identifying the intended role of each roadway, the classification can also align with roadway design characteristics, such as the speed, capacity, and connection to existing and future land uses in the area.



## **Appendix B**

### **Responses to Public Comments**

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## Appendix B: Public Comments and Responses

### ENVIRONMENTAL ASSESSMENT

# HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE BAY

## OAHU, HAWAII

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## Abbreviations and Acronyms

EA	Environmental Assessment	NEPA	National Environmental Policy Act
ESA	Endangered Species Act		
FONSI	Finding of No Significant Impact	NHPA	National Historic Preservation Act
MCB	Marine Corps Base		

## Appendix B: Public Comments and Responses

### 1.1 Overview of Comments and Responses

#### 1.1.1 Timing and Methods of Comment Submittal

The 44-day public comment period provided an opportunity for government agencies, interest groups, and the general public to comment on the Draft Environmental Assessment (EA) to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircraft) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated 15 aircraft) at Marine Corps Base (MCB) Hawaii Kaneohe Bay.

There were two primary methods to submit comments: (1) written comments mailed to the EA project office and (2) written comments emailed to the project Point of Contact. The Marine Corps published a notice of availability for the review of the Draft EA in the Honolulu Advertiser on August 8, 2022. The Marine Corps published a notice in the Honolulu Star-Advertiser on September 4, 2022, extending the 30-day public comment period by 14 days for a total comment period of 44 days. Originally open from August 8<sup>th</sup> to September 7<sup>th</sup>, public comments were accepted through September 21<sup>st</sup>. The Marine Corps received additional comments as part of the Section 106 National Historic Preservation Act (NHPA) consultation process. Because these comments focused on the adequacy of the EA analysis, they were considered by the Marine Corps in the National Environmental Policy Act (NEPA) process and in the revision of the EA. Relative to the reuse of other hangars and the Navy's proposed demolition of Hangar 104 (separate project analyzed in the cumulative impacts chapter), comments are addressed in Section 2.2.2.3 (Use of Hangars 104 and 105) and Section 4.4 (Cumulative Impacts Analysis).

This appendix contains all comments received during the public comment period. All received comments were assessed and considered individually and collectively during development of this Final EA and in the Finding of No Significant Impact (FONSI). Based on the comments, clarifications and improvements were made in the Final EA. Written responses were prepared for all comments and are included in this appendix.

#### 1.1.2 Comment Response Process

The Marine Corps implemented the following process for reviewing and responding to all comments received during the public comment period for the Draft EA:

- The Marine Corps carefully reviewed all comments and assigned a unique identifier to each. Comment letters for which distinct and separable points could be identified and addressed were delineated and, where appropriate, subdivided into numbered "sub-comments." In certain cases, the commenter subdivided their own letter into sub-paragraphs.
- Resource specialists and Marine Corps authorities considered all comments and prepared written responses.
- As a result of the comments, the Marine Corps modified the Final EA to improve or clarify the analysis presented in the Draft EA.

#### 1.1.3 Summary of Draft EA Public Comments

A total of 127 comments were received in response to the Draft EA. Table B-1 shows a breakdown of the number of comments received by agency, organization, and the general public. It includes a listing of

commenters by group and the page number for the comment. For comments received from the general public, personal information was redacted from the comment if the commenter requested it.

**Table B-1 Summary of Comments Received During Public Review of the Draft EA**

<i>Commenter</i>	<i>Number of Comments Received</i>	<i>Comment Number</i>	<i>Page Number</i>
<b>Agency</b>	<b>3</b>	--	--
Board of Water Supply, City and County of Honolulu	1	126	B-309
City Council, City and County of Honolulu	2	106, 125	B-251, B-306
<b>Organization</b>	<b>11</b>		
Historic Hawaii Foundation	1	048	B-100
Kahalu'u Neighborhood Board #29	1	114	B-275
Kailua Neighborhood Board	1	088	B-186
Kaneohe Neighborhood Board	1	105	B-247
Malu 'Aina Center For Non-violent Education & Action	2	099, 110	B-227, B-264
Sierra Club	1	117	B-282
Waimanalo Hawaiian Homes Association	1	067	B-133
We Are One, Inc.	1	016	B-28
Whistleblower & Source Protection Program (WHISPeR)	1	103	B-242
Windward Coalition	1	098	B-221
<b>General Public</b>	<b>113</b>	--	--
<b>Total</b>	<b>127</b>	--	--

**1.1.4 Summary of Revisions to the Final EA in Response to Public Comments**

The main revisions to the Final EA in response to public comments are summarized below.

- Section 1.6: revised to update status of the EA and associated consultations.
- Section 2.1: revised to provide more detail on the proposed action, including specifics about the proposed Aircraft Direct Refueling System and wash rack, as well as additional detail on proposed aircraft operations.
- Section 2.2: revised to explain the alternatives development process in greater detail, including rationale for why certain alternatives were not feasible.
- Section 3.1: revised to provide more detail on proposed aircraft operations and explanation of the effect of noise in the local communities.
- Section 3.3: revised to provide additional analysis of proposed Aircraft Direct Refueling System and wash rack, as well as additional analysis of effects to drinking water.
- Section 3.4: revised to include proposed mitigation measures developed in the Section 106 NHPA process and to update status of consultation.

- Section 3.5: revised to update analysis of potential effects to Hawaiian monk seals and green sea turtles, include effects of air emissions to wildlife, and update status of Section 7 Endangered Species Act (ESA) consultation.
- Section 3.6: revised to include effects of construction to public health and safety and to clarify safety aspects of proposed aircraft operations.
- Section 4.4: revised cumulative impact analysis of cultural resources based on subsequent discussions during the Section 106 NHPA consultation process.
- Appendix B: included public comments and responses.
- Appendix C: updated with Section 106 NHPA consultation documentation.
- Appendix D: updated with Section 7 ESA consultation documentation.

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## Appendix B – Responses to Public Comments

### Comment 001

#### Comment

**From:** [Risio, Charles R. CTR OSD OUSD P-R \(USA\)](#)  
**To:** [NFPAC-Recieve](#)  
**Subject:** FW: Comment on MCB Kbay construction  
**Date:** Thursday, August 11, 2022 8:33:24 AM  
**Attachments:** Draft NCMAS Excerpt.docx

Resending.

---

Chuck Risio | SA | CTC  
OUSD (P&R) | FSOH | 2E593  
[charles.r.risio\\_ctr@mail.mil](mailto:charles.r.risio_ctr@mail.mil)  
703-693-6295 (Office)

---

**From:** Risio, Charles R. CTR OSD OUSD P-R (USA)  
**Sent:** Thursday, August 11, 2022 12:30 PM  
**To:** [nfpac-recieve@us.navy.mil](mailto:nfpac-recieve@us.navy.mil)  
**Subject:** Comment on MCB Kbay construction

Good morning –

I was on staff of the National Commission on Military Aviation Safety and as part of our studies we visited MCB K-bay, JBPHH, and Wheeler. A common complaint we heard from personnel was the condition of some of the hangars and buildings that dated to WWII. Part of our work was a series of white papers that the staff and commissioners debated for inclusion in the Final Report – which unfortunately Facilities did not make it.

I'm attaching an excerpt from my paper on Facilities & Infrastructure that tried to point out how the military is the only part of government that is forced to work out of obsolete buildings due to historical significance.

R,

---

Chuck Risio | SA | CTC  
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#### Response to Comment

Thank you for your comment.

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

**Appendix B – Responses to Public Comments**

**Comment 001 (continued)**

**Comment**

Excerpt from draft white paper on Facilities & Infrastructure prepared for the National Commission on Military Aviation Safety (NCMAS) 2020 – not included in final report.

**EXCLUSION FOR HISTORICAL STRUCTURES**

The National Historic Preservation Act of 1966 was not the first legislative effort to preserve unique historical sites but it is the strongest and most widespread. Many beautiful buildings have been spared the wrecking ball to provide the public with a tangible history. There are many structures of historical significance that have been both preserved and modernized to offer the public continued access.

Congress Hall in Philadelphia, originally constructed as the Philadelphia County Court House in the late 1700s, served as the US Capitol for ten years before Washington, DC was selected as a permanent capitol. Now maintained by the National Park Service, Congress Hall underwent several restoration efforts and in its present condition has modern electrical, heating, plumbing and fire suppression systems. While a wonderful site to visit, it is NOT in use by the national government to debate and vote on legislation. Despite modernization, it is still an obsolete building that cannot support the requirements of Congress.

Union Station in Tacoma, WA was designed and built in the early 1900s by the same architects as Grand Central Terminal in New York, and was intended to be just as ornate with a large dome allowing natural light. Due to declining rail traffic the US government bought the building to serve as a federal courthouse. A complete renovation and restoration took three years.

Ten courtrooms were needed for the federal courts. Two were created within the north and south wings of the 1911 building, while the addition provided eight more. All the courtrooms offer state-of-the-art technology, and are designed so that each can be used, inter-changeably, for District, Bankruptcy, or Magistrate proceedings.<sup>1</sup>

While it no longer serves its original purpose as a rail station, the Federal Courthouse at Union Station is now both beautiful and practical, but only because of a complete modernization effort that allows it to fulfil the requirements of modern law.

Hickam Field, which is now Joint Base Pearl Harbor-Hickam (JBPHH), was built in the late 1930s to defend the Hawaiian territory using B-18 bombers, P-26 fighters, and P-12 biplane pursuit fighters. The Japanese attack in December 1941 and resulting US response holds a wealth of historical significance in all of national strategy, operational warfare, aerial tactics, technology, culture, and social implications. But none of these things are still in use or practiced in modern times. While those aircraft now only patrol museums, there still exist hangars and other buildings that are in operational use.

Hangar 15 on the Hickam side of the base is one such structure that was built for maintaining aircraft that predate jet engine technology. There are several other modern hangars on that base that allow for proper maintenance of modern aircraft but Hangar 15 is not one of them. During a visit to JBPHH, officers from the Air Force 15<sup>th</sup> Wing showed the Commission

<sup>1</sup> "Tacoma Union Station, Tacoma, WA," Government website., U.S. General Services Administration, December 19, 2019, <https://www.gsa.gov/historic-buildings/tacoma-union-station-tacoma-wa>.

**Response to Comment**

## Appendix B – Responses to Public Comments

### Comment 001 (continued)

#### Comment

remaining bullet holes in the walls of Hangar 15, as well as the decrepit state the hangar is in. “[There are numerous] hazards and challenges associated with the sustainment and effective use of this building as a safe, productive industrial work environment.”<sup>2</sup> The variation in color and condition of the concrete floor makes it difficult to find fallen parts or spilled fluids. It also makes it difficult to move wheeled equipment due to cracks and imperfections. The concrete wall supports are crumbling and the building’s electrical system still uses screw fuses. Unfortunately Hangar 15’s only sin is to have suffered just enough damage to warrant repairs 78 years ago and thus carry the additional title of historical structure which inhibits efforts to make it a building of practical use.

Other than bullet holes in Hangar 15 there is little additional historical significance that is not available elsewhere. Nearby Pearl Harbor Aviation Museum on Ford Island offers the public a historical perspective of the aircraft used in WWII housed in hangars that are the same age and show the same damage as Hangar 15, which is on a military base and not publicly accessible. The problems of Hangar 15 is not unique in JBPHH or other bases, but it does represent a failure to provide service members with best possible work conditions or even reasonably good.

At Langley AFB in Virginia, the 1<sup>st</sup> Fighter Wing operates 5<sup>th</sup> generation F-22 Raptors which are described as “a flying computer.” About a dozen of the hangars and shops were built between 90 to 100 years ago to house and maintain cloth-skinned, open cockpit biplanes. According to a senior officer, the two main reasons that prevent replacing the buildings are fiscal constraints and historic preservation. Junior officers and maintainers in the wing commented on the mismatch between the new fighter jet and old buildings. The ‘paint’ on an F-22 is a unique low-observable coating that requires constant attention, yet the ‘paint shop’ is in an old hangar where the ventilation system pulls that air and sends it to another adjacent hangar. As one pilot said of the infrastructure concerns, “it’s not the vents, it’s the whole building.”<sup>3</sup>

<sup>2</sup> An officer in the 15<sup>th</sup> wing, email to Charles Risio, April 28, 2020.

<sup>3</sup> NCMAS visit to Langley AFB, July 14-17, 2019.

#### Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 001 (continued)**

**Comment**

Proposed Recommendation:

Revise and/or remove historical protection for buildings in current use. Military buildings that are also National Historic Landmarks (NHL) require US military personnel to work in facilities that no longer meet the standards that are required to maintain modern equipment. Prohibitions on facility maintenance, modernization and utilization due to historical designation must also be revisited. Requiring uniformed military, government civilians and contractors to work in facilities that are obsolete, unsuitable for modern operational needs and unsafe, belies stated Congressional support to the defense of the nation.

Recommendation: Congress should remove NHL protection for those structures that are in current military use, allowing them to be upgraded/demolished to provide a proper work environment for military and civilian workers.

**Response to Comment**

## Appendix B – Responses to Public Comments

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### Comment 002

#### Comment

**From:** [linda.zaner](#)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] Kaneohe base additional squadrons  
**Date:** Thursday, August 11, 2022 9:38:44 AM

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Good morning,

Thanks for the overall informative email, always pertinent.

In response to the request for 2 additional squadrons at Kaneohe Marine Base, we should, all of us, sit back and ponder a future without the military on these islands. Perhaps an example of be careful with what you choose. Tourism is going to be the only major industry? So my vote would be for the expansion, seems the environmental report covered all bases.

In this day and age, things are not going to stay in the past, unfortunately. Truthfully I was not able to wade through all 178 pages, and also cannot see attending the meeting in Kailua. I feel it will be acrimonious, locals vs. "newcomers" disregarding length of habitation. I want to pretend all is friendly here.

Hopefully the meeting will not fall into what I feel it may. Good luck.  
As a caveat I will admit we lived here 30 yrs ago assigned to Hickam AFB and chose to return on retirement. We are now in midst of moving back to mainland, with a real infrastructure in addition to many other issues. I am sorry that the island has fallen into too many rabbit holes.

Aloha,  
Linda Zaner

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 003**

**Comment**

**From:** [Peter Mathews](#)  
**To:** [NEPAC-Recieve](#)  
**Subject:** [Non-DoD Source] Environmental evaluation of MQ-9 and KC-30  
**Date:** Wednesday, August 17, 2022 3:29:02 PM

I am writing to oppose the plan to base the MQ-9 and KC-130 squadrons at MCB Hawaii Kaneohe Bay. Kaneohe Bay already suffers from the presence of the base and activities on the base, such as sewage release, industrial runoff, and noise/light pollution. Increasing aircraft flights from 28,758 to 37,038 is a nearly 29% increase in number of flights. I understand this is calculated to be less than prior to May 2022. However, I reject the use of this as a baseline. The current number of flights should be the baseline.

I believe increasing the number of base personnel, aircraft flights, and associated construction activities will significantly increase the adverse impact of the base on the surrounding environment, especially marine, and I oppose the plan.

Sincerely,  
Peter Mathews

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Although fixed wing and rotary-wing/tilt-rotor aircraft are operationally and acoustically different, flight tracks and noise profiles for all aircraft are well understood. Noise modeling accounts for these acoustic and operational differences to enable meaningful comparisons between the platforms. The baseline for aircraft operations that was incorporated into the noise modeling reflects existing conditions. As shown at Table 2-2, “existing conditions” reflect the departure of the AH-1W and CH-53E helicopters.

**Appendix B – Responses to Public Comments**

**Comment 004**

**Comment**

**From:** [Janice Glennie](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] No assassin drone base in Hawai'i  
**Date:** Thursday, August 18, 2022 11:29:14 AM  
**Importance:** High

Attn: EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr  
Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Aloha,

I steadfastly oppose the proposal to activate an assassin drone base in Hawai'i — not just at Kaneohe, but anywhere in our state.

The use of these drones is fraught with deadly errors which should NEVER have happened in a civilized world. The creation of a base in Hawai'i will further increase our state's chances of being targeted by terrorism including perpetuated by individuals, groups and nations. Why would our state acquiesce to such a plan?

Please use your integrity and stop this insane idea for our beautiful, irreplaceable Hawai'i nei.

Mahalo and sincerely,  
Janice Palma-Glennie

P.O. Box 4849  
Kailua-Kona, Hawai'i 96745

**Response to Comment**

Thank you for your comment.

MQ-9 aircraft operations safety data are included in the analysis of public health and safety. Pilot training, redundant communications systems, programmed failsafe mechanisms, and the operating area of the proposed aircraft all help ensure safe operations of the MQ-9.

The proposed action has no effect on the potential for terrorism, and such contingencies are outside the scope of NEPA analyses conducted for DoD construction and operations actions. The proposed action does not change the status of MCB Hawaii Kaneohe Bay, which has been an active military installation for over eighty years, nor does it change force protection requirements in place to protect the facility from a terrorist attack.

## Appendix B – Responses to Public Comments

### Comment 005

#### Comment

From: [Robert Gould](#)  
To: [NEPAC-Receive](#)  
Subject: [Non-OOB Source] Comments on MCBH Draft EA  
Date: Thursday, August 18, 2022 5:17:08 PM  
Attachments: [000130Jr79PFAE.png](#)

These comments are on the

Draft  
ENVIRONMENTAL ASSESSMENT  
for  
HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE  
SQUADRON AND  
KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON  
AT MARINE CORPS BASE HAWAII KANEHOE BAY  
OAHU, HAWAII

From Robert A. Gould

After a fairly cursory reading of the EA, and based primarily on a gut feeling for the noise impacts, the only potential problems I see are the increased use of Bravo ramp by MV-22s and C-130s. That has the potential of noise impacts on the community that could be avoided by a much more expensive alternative of a new (call it Delta) ramp on the opposite side of the line of hangars from Bravo ramp, leaving the Bravo ramp area for vehicular parking (a la Blues On The Bay) and relocation of non noise producing buildings. If you look at "Figure 2-4. Planning Constraints at MCB Hawaii Kaneohe Bay", you will see depicted a line of 11 aircraft with their tails pointed toward the community. Thus that is where the C-130s will be parked, and every time they start, taxi, or run their engines for any reason, there will be much more noise in the community than if they were on the opposite (Northeast) side of the hangars. The same is true of the relocated MV-22s if they are parked on Bravo ramp. Having said that, the C-130 is a quiet airplane, and frankly in normal operations, we have found the MV-22 to be much less of a problem for the Kaneohe community than expected. That impact could be made much worse, however, by the proposed relocation, but in any case would be less of a problem, in my opinion than the noise generated by the CH-53s and Cobras, so I am inclined to think that we (in the best case) would be trading one problematic noise source for another less problematic one.

All of the noise impacts could be solved by placing the aircraft parking on the northeast side of the hangars on a new ramp. They could also be solved by enlarging and extending Charlie ramp parallel to the runway as far as the NE runway threshold and building new hangars as needed rather than demolishing and building at least one new hangar adjacent to Bravo ramp. The transient parking and wash rack could be located along Bravo ramp if the space were needed. Of course that option would have a negative effect on the upper crust housing (and perhaps wetlands) on the base and is therefore probably out of the question.

#### Response to Comment

Thank you for your comment.

KC-130J aircraft would not operate on Bravo Ramp. The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

The Green Field site is not a viable alternative for the proposed action. The Marine Corps conducted an extensive analysis of the Green Field site, shared this with consulting parties in a series of Section 106 consultation meetings, and documented the findings in Section 2.2.2 of the Draft EA. In addition to the multiple planning constraints identified in the EA, relocation of the displaced facilities in this area would delay hangar construction for the proposed action by an estimated 10–12 years, which would unacceptably disrupt base activities and adversely affect the Marine Corps mission at MCB Hawaii Kaneohe Bay.

## Appendix B – Responses to Public Comments

### Comment 005 (continued)



However, it might not be necessary to go that far, simply extending across Green Field might well be sufficient, as it is already under consideration as a "New MV-22 Parking Apron (Notional Location)". Width will make it contiguous with existing MCAS terminal apron to the south and existing MV-22 Parking Apron to the north."

I don't see the placement of a C-130 hangar or the placement of an MV-22 hangar in the locations suggested on the current hangar line to be a significant problem. Those hangars don't hold very many airplanes if they indeed can hold more than one at a time. It's the placement of a line of parked aircraft on the makai side of the existing hangars that is the biggest problem in terms of noise and pollution that is the issue in my opinion. Operationally, I think the noise situation would be improved by the replacement of CH-53s and Cobras with C-130s. Bravo ramp, although it has a curb on the water side (which is why I could not bring my seaplane up the ramp during previous airshows) is MUCH more problematical in terms of fuel spills there because it is MUCH closer to the water than is the case on Charlie (or even my suggested Delta) ramp. That is also true of exhaust from idling or starting engines and taxiing.

I think the increased use of Bravo ramp is a poor choice that could largely be obviated by the extension of Charlie or a new Delta ramp NE of the hangar line. Bravo ramp was designed for parking of PBYS, not helicopters or C-130s. Avgas used in PBYS is much more volatile and therefore less likely to pollute the water than is the kerosene used by turbine engines. The C-130 wingspan is only about 20 feet (133' vs 109') than that of a PBY, but it has twice as many engines

### Response to Comment

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over eighty years, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population is not annoyed by outdoor sound levels below 65 dBA DNL (FICUN [Federal Interagency Committee on Urban Noise], 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Appendix B – Responses to Public Comments**

**Comment 005 (continued)**

that each burn a lot more fuel than a PBV. Bravo ramp was also necessitated by the requirement for PBVs to use the seaplane ramps. There is no good reason to use that area for land aircraft (or helicopters) other than the fact that it is there.

Given the changes I recommend a full EIS with noise monitoring including ramp noise impacts of idling and operational units on the surrounding neighborhood and increased pattern activities by C-130s and MQ-9s that reflect a 67% increase in pattern operations over existing. The 65 dBA threshold is an industry standard that does not properly measure the detrimental effects of aircraft noise on the psyche of surrounding populations. The increased pattern traffic can have detrimental effects in Kaneohe and Coconut Island compared to existing because CH-53s and H-60s do not fly normal aircraft patterns now. In addition, the existing conditions do not include the CH-53s for some reason, even though that reduction would be beneficial to the community in terms of noise. The aircraft operations in the EA do not specify a time frame, though one assumes it must be annually, and that is an example of how sloppy and off the cuff the EA is as written. In addition, the noise contours in both cases seem to assume a much tighter pattern than is often flown by C-17s (inboard of Coconut Island). If realistic patterns were reflected in the original noise contours, the C-130 should show a decrease because it produces less noise in level flight than does a C-17 and also because it will be more likely to fly a tighter pattern. The Kaneohe community is VERY sensitive to C-17 noise because of the large number of wide patterns that are flown incorrectly over land, and there will therefore be a large pushback against this report due to its obvious shortcomings. In short the EA as presented would probably receive a grade of D from a rigorous school.

Robert A Gould  
44-365 Kaneohe Bay Dr.  
Kaneohe, HI 96744-2664

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The Marine Corps takes its role as a good neighbor seriously and understands the need to minimize aircraft noise in communities surrounding MCB Hawaii Kaneohe Bay. From providing the community with advance notice of busy air operations such as RIMPAC and air shows, to adjusting engine testing maintenance hours to reduce impact to the community, we make every effort, consistent with our primary mission to ensure safe operations, to minimize noise and incompatibility. Local course rules direct aircraft to avoid residential areas generally, as well as avoid direct overflight of Coconut Island on departure from Runway 22. On arrival to Runway 04/22, smaller and more maneuverable aircraft are able to adopt nonstandard approach patterns to avoid Coconut Island, which lies directly in the approach path to that runway. Larger and heavier aircraft, such as the C-130 and heavy transients, are less maneuverable, and may overfly the island to ensure safe arrival at the air station.

Comment 006

Comment

From: [h.huyler](#)  
To: [NEPAC-Receive](#)  
Cc: [hw.huyler](#)  
Subject: [Non-DoD Source] A full EIS should be done  
Date: Thursday, August 18, 2022 12:34:28 PM

A full EIS should be done and provide answers to the questions and concerns outlined in EA and below .

Current flyover noise disrupts my home environment causing (1) loss in conversations, (2) advances my hearing loss, (3) causes interruptions and loss in TV and Radio broadcasts, (4) disrupts my 87 year body required rejuvenation naps, and (5) interruption in long distance family phone calls. Aircraft flyover noise is doubled between the mountains on base and the Kaneohe Kailua mountains.

Additional aircraft will cause additional fuel oil consumption, added traffic delivering fuel on base, added fuel consumption will lead to increased fuel prices and diversion from mainland facilities.

[Sent from Yahoo Mail for iPhone](#)

Harry Huyler, 147-3 Oko St, Kailua HI 96734

Response to Comment

Thank you for your comment.

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above (e.g., sleep, hearing, and nonauditory health effects). This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

Operational traffic associated with the proposed action would result in less than significant changes to traffic volumes on the H-3 or other roadways outside the installation.

The proposed action would increase fuel usage compared to existing conditions, but this increase would be less than recent levels at the installation. This change in fuel consumption is not significant enough to result in any diversion from mainland facilities, nor will it impact fuel prices, which are determined by national and international factors.

**Comment 007**

**Comment**

**From:** [h.huyler](#)  
**To:** [NEPAC-Receive](#)  
**Cc:** [hw.huyler](#)  
**Subject:** [Non-DoD Source] 8000 Plus Annual Additional Aircraft Flights Cause Additional Air Pollution  
**Date:** Thursday, August 18, 2022 4:59:53 PM

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8000 Plus Annual Additional Aircraft Flights Causes Additional Air Pollution 8000 times Annually.

[Sent from Yahoo Mail for iPhone](#)  
Harry Huyler, 147-3 Oko St, Kailua HI 96734

**Response to Comment**

Thank you for your comment.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu's National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, the very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

## Appendix B – Responses to Public Comments

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### Comment 008

#### Comment

**From:** [snapconger@gmail.com](mailto:snapconger@gmail.com)  
**To:** [NFPAC-Recative](#)  
**Cc:** [Hawaii Soap](#)  
**Subject:** [Non-DoD Source] Additional a/c to KBay  
**Date:** Thursday, August 18, 2022 8:18:31 AM

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Re: ENVIRONMENTAL ASSESSMENT PLAN TO BRING NEW AIRCRAFT TO MARINE CORPS BASE HAWAII

We are ok with the US Navy home basing a new squadron (15 planes) of KC-130J aircraft and MQ-9 Drones (about 6) at MCBH.

Mahalo,  
Michael Snap Conger  
CAPT, USN (Ret.)  
Kaneohe, HI 96744

Flown from Snap's iPhone

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 009

#### Comment

**From:** [Mindy Mizobe](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] re: environmental assessment to bring new aircraft to MCBH  
**Date:** Thursday, August 18, 2022 11:20:05 AM

To: EV21 Project Manager

This increase in type and quantity of aircraft activity requires a full Environmental Impact Assessment Statement (EIA/EIS).

I am a full time employee at the Hawaii Institute of Marine Biology located in Kaneohe Bay on Moku O Lo'e. I have first-hand experience with the disturbances that fly-overs cause. In addition, I was told that the MCBH aircrafts were not supposed to fly directly over our institute, however they routinely do so several times a day when they are practicing. This type of flagrant disregard for their own rules gives added concern to the lack of transparency and public discourse regarding the increase in aircraft number and activity being proposed. A full environmental impact assessment needs to be conducted.

Regards,

Mindy Mizobe

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Mindy Mizobe  
Confocal Microscopy Facilities Manager  
Hawaii Institute of Marine Biology  
46-007 Liliupuna Road  
Kaneohe, HI 96744  
[808-236-7462](tel:808-236-7462)

#### Response to Comment

Thank you for your comment.

The Marine Corps takes its role as a good neighbor seriously and understands the need to minimize aircraft noise in communities surrounding MCB Hawaii Kaneohe Bay. From providing the community with advance notice of busy air operations such as RIMPAC and air shows, to adjusting engine testing maintenance hours to reduce impact to the community, we make every effort, consistent with our primary mission to ensure safe operations and effective training, to minimize noise and incompatibility. Local course rules direct aircraft to avoid residential areas generally, as well as avoid direct overflight of Coconut Island on departure from Runway 22. On arrival to Runway 04/22, smaller and more maneuverable aircraft are able to adopt nonstandard approach patterns to avoid Coconut Island, which lies directly in the approach path to that runway. Larger and heavier aircraft, such as the C-130 and heavy transients, are less maneuverable, and may overfly the island to ensure safe arrival at the air station.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 010

#### Comment

**From:** [Marlena Santoyo](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Comment: Proposal to station a MQ-9 Marine Unmanned Aerial Vehicle Squadron  
**Date:** Thursday, August 18, 2022 7:34:22 AM

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It's not enough that the Navy has polluted the freshwater aquifer in Oahu - the Marines want a drone base for assassination....There is no end in sight to this madness.

I oppose the MQ-9 Marine Unmanned Aerial Vehicle Squadron

Marlena Santoyo  
515 Glen Echo Rd.  
Philadelphia, PA 19119  
215-247-4385

#### Response to Comment

Thank you for your comment.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

Comment 011

Comment

**From:** [John Poole](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] EIS needed for new aircraft and drones at Marine Corp Base Kaneohe  
**Date:** Friday, August 19, 2022 12:36:23 PM

These new aircraft pose more noise to the surrounding areas adjacent to the base. But reading their EA, this was never measured! Further, the frequency annually of 8,280 operations is absolutely frightening to consider!

An EIS is definitely needed. I'll register this with my state representative and WWC.

John Poole  
Kailua

Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over eighty years, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL as a result of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due to the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

**Comment 011 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 012

#### Comment

**From:** [Norman Rowley](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil)  
**Subject:** [Non-DoD Source] Request for Involvement in MCBH Sec 106 process  
**Date:** Friday, August 19, 2022 8:30:29 AM

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Dear June Cleghorn,

I am requesting that I be involved in Marine Corps Base Hawaii's Section 106 process as a consulting party. I am a retired Marine and the former Director of the Environmental Department at both Marine Corps Base Hawaii and Marine Corps Air Ground Combat Center. I have a demonstrated interest in the Marine Corps Base Hawaii's undertakings and I am concerned with the Bases undertaking's effects on historic properties.

William M. Rowley

Kailua-Kona, Hawaii

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 013

#### Comment

**From:** [Stephen Canham](#)  
**To:** [NEPAC-Recieve](#)  
**Subject:** [Non-DoD Source] EIS Necessary for MQ-9 & KC-135 Squadron Home Basing  
**Date:** Sunday, August 21, 2022 9:26:21 AM

August 20, 2022

RE: ENVIRONMENTAL ASSESSMENT for HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE BAY

I firmly believe that the home-basing proposal above should require a full Environmental Impact Assessment Statement (EIS), not just a limited Environmental Assessment (EA).

I'll keep this short and focused on potential noise. I have lived in the Alii Shores neighborhood of Kaneohe for 34 years. During that time, aircraft noise from MCBH has increased significantly. When the current C-17s fly over land and directly over our home, which happens not infrequently, the noise is deafening. Various military helicopters add to our day/night residential noise load, as do the engine test stands that often run late at night.

The draft EA on page S-4 claims that the noise from the new squadrons will have "Less than significant impacts. Minimal increase in average noise contours from aircraft operations." Define "significant." Define "minimal increase." I cannot in good faith believe that a fully loaded KC-130, with its four huge turboprop engines, is going to have only a "minimal" effect on the quality of my life. And then there are the proposed drones.

Changes as "significant" as these demand the more full disclosure of a complete EIS. Not to mention concerns about historic preservation, air pollution, ordnance loads, etc.

Yours,

Stephen Canham  
46-156 Nahiku Place  
Kaneohe, HI 96744

USAF 1969-73

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

The NEPA terminology for "significance" is explained in the introduction to Chapter 3 of the EA.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 013 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Appendix B – Responses to Public Comments**

**Comment 014**

**Comment**

[Redacted]

August 21, 2022

EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive, Suite 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134  
Email: [NFPAC-Receive@navy.mil](mailto:NFPAC-Receive@navy.mil)

Dear Project Manager,

\*\*\* I wish to withhold my name and street address from public review and from disclosure under the Freedom of Information Act. I am stating this at the beginning of my comments. \*\*\*

I am a Kaneohe resident and did a quick read of the draft Environmental Assessment for Home Basing of the KC-130J Marine MQ9 Marine Unmanned Aerial Vehicle Squadron and Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Oahu, Hawaii August 2022.

I am impacted by aircraft noise as planes currently fly over my residence and am concerned about additional noise impacts due to the increased use of Bravo ramp by MV-22s and C-130s.

Fellow Kaneohe residents shared their insights and I agree with them.

The plans in the draft EA describe potential noise impacts that could be avoided by considering and constructing a new ramp on the opposite side of the line of hangars from Bravo ramp, leaving the Bravo ramp area for vehicular parking (for community events such as Blues on the Bay / Blue Angels show).

The noise impacts could be solved by placing the aircraft parking on the northeast side of the hangars on a new ramp. They could also be solved by enlarging and extending Charlie ramp parallel to the runway as far as the NE runway threshold and building new hangars as needed rather than demolishing and building at least one new hangar adjacent to Bravo ramp. The transient parking and wash rack could be located along Bravo ramp if the space were needed.

The 65 dBA threshold is an industry standard that does not properly measure the detrimental effects of aircraft noise on the psyche of surrounding populations. The increased pattern traffic can have detrimental effects to Kaneohe residents.

I recommend a full Environmental Impact Statement with noise monitoring including ramp noise impacts of idling and operational units on the surrounding neighborhood and increased pattern activities by C-130s and MQ-9s that reflect a 67% increase in pattern operations over existing.

Very Respectfully,

[Redacted]

**Response to Comment**

Thank you for your comment.

Section 2.2.2 presents the constraints associated with West Field. Development for KC-130J facilities is constrained by explosive safety quantity distance arcs, a magnetic quiet zone around the compass calibration pad, taxiway obstacle-free areas, and flood hazards. In addition, West Field's proximity to the runway and other airfield surfaces results in an inability to place a suitably sized hangar and apron at this site. Also, construction at West Field is infeasible because it would require frequent and extended closure of the runway over a period of many years, unacceptably impacting the base's mission. To accommodate the proposed action's increased mission traffic while ensuring operational availability of the runway, any hangar development north of the Mokapu Road crossing would require construction of an underground tunnel beneath the runway at the current Mokapu Road crossing. This is infeasible because construction of such a tunnel would require frequent and extended closure of the runway, unacceptably impacting the base's mission; the high-water table in the area; the high potential to impact subsurface archaeological resources; and would be unreasonably expensive.

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

**Comment 014 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

## Appendix B – Responses to Public Comments

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### Comment 015

#### Comment

**From:** [Patricia Blair](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [Kyle Kaithiro](#); [Wayne Tanaka](#); [ann Wright](#)  
**Subject:** [Non-DoD Source] No killer drones to Hawaii. And No KC tanker squadron to Hawaii. We are over populated with US military destroying our water, ocean, Aina.  
**Date:** Monday, August 22, 2022 10:13:04 AM

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Nor do we wish to be a part of US military destroying other cultures, islands, lands.  
Patricia Blair, Kaihua  
Sent from my iPad

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 016: We Are One, Inc.**

**Comment**

**From:** [Joseph Kohn MD](#) on behalf of [Joseph@WeAreOne.cc](mailto:Joseph@WeAreOne.cc)  
**To:** [NFPAC-Recieve](#)  
**Subject:** [URL Verdict: Unknown][Non-DoD Source] No Killer Drone Zone at Mōkapū!  
**Date:** Monday, August 22, 2022 5:24:52 PM

ALOHA PEOPLE!

Time to stop the death machine.

Joseph Kohn MD  
Founder, We Are One, Inc. - [www.WeAreOne.cc](http://www.WeAreOne.cc) - WAO  
493 Pio Dr Apt 209  
Wailuku, HI 96793-2641  
808-359-6605  
[Joseph@WeAreOne.cc](mailto:Joseph@WeAreOne.cc)  
[www.WeAreOne.cc](http://www.WeAreOne.cc)

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

Comment 017

Comment

**From:** [Marsha Bolson](#)  
**To:** [NEPAC-Recative](#)  
**Cc:** [Marsha Bolson](#)  
**Subject:** [Non-DoD Source] ENVIRONMENTAL ASSESSMENT RE: PLAN TO BRING NEW AIRCRAFT TO MARINE CORPS BASE HAWAII  
**Date:** Tuesday, August 23, 2022 5:26:56 PM

To Whom It May Concern:

I am submitting my comments on the above referenced Environmental Assessment (EA). Simply put, I agree 100 percent with the comments submitted by the Windward Coalition Executive Committee that the EA does NOT provide the community with enough information to support a finding of **No Impact**. We deserve answers to all of the Coalition's questions and requests for further studies and additional data.

Additionally, the provision of a more detailed explanation and quantitative data to support the claims of only a "slight increase" in noise, and "no significant increase in populated areas off base" would certainly increase our understanding of and belief in the Navy's assurances of little or no impacts to our daily lives.

I request that a full EIS be executed, and public hearings be held to solicit community input, and to provide complete information, including, but not limited to, flight patterns, elevations, times and frequencies and all the communities to be impacted. Also, data and comparisons of the flights and noise impacts of the KC-130J aircraft and MQ-9 Drones in other communities similar in size and scope to the Kaneohe community would be extremely informative.

As a resident of Ali'i Shores for 45 years, my family has lived with the noise of the C-17 aircraft for many years. While we have learned to "live" with this noise, it has not been without personal cost and adjustment -- our children, elders and pets have been startled or alarmed by the noise, or perhaps endured slight pain or unknown negative health effects.

Please know that our questions and requests for honesty and clarity on this issue in no way negates our appreciation for the incredible service the Navy and Marine Corps provide our nation and our communities, and the many sacrifices that are made to do so. We simply want straightforward information and honest responses, unlike the recent lack of honesty and clarity surrounding the Red Hill water contamination.

Mahalo nui for the opportunity to offer my comments. I look forward to your positive response to the requests and concerns of our community.

Marsha Bolson  
[mhbolson@gmail.com](mailto:mhbolson@gmail.com)

Response to Comment

Thank you for your comment.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 017 (continued)

Comment

does not provide the community with enough information to support a finding of *no significant impact*. A full EIS should be done and provide answers to the questions and concerns outlined above.

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Comment 017 (continued)**

**Comment**

(see above)

**Response to Comment**

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 018

#### Comment

**From:** [Ben Creps](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Public Comments to Draft EA for Home Basing at Kaneohe MCB  
**Date:** Tuesday, August 23, 2022 4:25:43 PM

To whom it may concern:

Please consider this comment to the August 2022 draft EA linked here: [2022-08-08-OA-NEPA-DEA-Home-Basing-of-MQ-9-and-KC-130J-Squadrons-at-MCB-Kaneohe-Bay.pdf](#) ([hawaii.gov](#))

The draft EA is legally deficient in its assessment of the impact of the proposed project on water resources. The EA needs to address the presence of per- and polyfluoroalkyl substances (PFAS), which are colloquially known as "forever chemicals". This family of toxic chemicals is mentioned not once in the EA.

We know these chemicals are hazardous to human health. We also know they bioaccumulate. For example, one source estimates that PFAS levels in fish can be as high as 7,000 times the ambient PFAS levels of surrounding water.

We also know that fire fighting foams and other compounds utilized by the military in connection with aviation operations contain PFAS. The EA briefly mentions that filter socks will be used and that some unspecified treatment of surface water will occur before being discharged into the bay, the wetland, or municipal systems. But the EA fails to provide whether the purported filtration will remove petrochemicals or PFAS. Given the extensive capabilities required to remove PFAS from water, this is very doubtful.

The EA also seemingly implies that recent deactivations somehow reduces the adverse impacts caused by the proposed increases in aircraft operations. I'm familiar with this type of incrementalism logic. Of course, if you continually increase a baseline, then you skew environmental analysis. By way of analogy, I point to the Hawaii Supreme Court's cautioning that "BLNR does not have license to endlessly approve permits for construction in conservation districts, based purely on the rationale that every additional facility is purely incremental. It cannot be the case that the presence of one facility necessarily renders all additional facilities as an 'incremental' addition." [Kilakila 'O Haleakala v. Bd. of Land](#), 138 Hawai'i 383, 404, 382 P.3d 195, 216 (2016). This logic applies with equal force here.

We know the military is already responsible for PFAs ending up in our coastal waters. Citizen scientist have noted this: [Canals at Kapolei and Sand Island carry PFAS to the Ocean in Oahu, Hawaii — Military Poisons](#). The proposed project will add 21 new planes, roughly 8,000 more aviation operations, and construct a wash rack, among other things. Will this significantly impact water resources with respect to petrochemicals and PFAS? The EA does not say. What will be done to prevent PFAs (and petrochemicals) from poisoning our water resources? The EA does not say. These concerns must be addressed.

Very truly yours,

Ben Creps  
Kailua Resident

#### Response to Comment

Thank you for your comment.

The water resource impact analysis addressed operations of the proposed Aircraft Direct Refueling System and wash rack. Additional details about these project components, including compliance with spill prevention/response and storm water procedures, were added in the Final EA to provide additional clarification, but this did not change the impact analysis conclusions.

**Appendix B – Responses to Public Comments**

**Comment 019**

**Comment**

**From:** [Kapu](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] the Assassin drone ... PLEASE No Killer Drone Zone at Mōkapu!  
**Date:** Tuesday, August 23, 2022 8:42:48 AM

I just read that the Marine Corps wants to station a MQ-9 Marine Unmanned Aerial Vehicle Squadron (ASSASSIN DRONES-Ann's comment) and a KC-130J Aerial Refueler Transport Squadron at Marine Corps Base Hawaii at Kaneohe Bay to enhance aerial refueling, transport, surveillance, and reconnaissance capabilities.

I am writing to state that I am against this type of weaponry on the Hawaiian Islands. Drones have killed many innocent people and I am not sure I trust that type of artillery to be safe for use here or anywhere in the USA.

Please reconsider this action before it's too late. I have been a citizen of Hawaii for 40 years.

Sincerely,  
Marie Isom

**Response to Comment**

Thank you for your comment.

Thank you for your comment. MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

**Appendix B – Responses to Public Comments**

**Comment 020**

**Comment**

**From:** [Erich Wida](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] EIS study.  
**Date:** Tuesday, August 23, 2022 11:13:54 AM

To whom it may concern,  
My name is Erich Wida. I want the military to do a full EIS on the proposed increase in plane and drone noise on Kaneohe Marine Corps Base. This base affects the sleep of my children. They claimed the osprey helicopters would not increase noise, but they did by ALOT. I support the US military and recognize the need to train our pilots, but I have lived here on Kbay for 20 years and at times it appears the military could care less what effect the noise is having on our families and kids. Please do a full EIS and allow public input.  
Mahalo,  
Erich Wida

**Response to Comment**

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Comment 020 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 021

#### Comment

**From:** [kraigcantwell@yahoo.com](mailto:kraigcantwell@yahoo.com)  
**To:** [NFPAC-Receive](mailto:NFPAC-Receive)  
**Subject:** [URL Verdict: Unknown][Non-DoD Source] FW: Environmental Impact Study Requirement - MCBH Aircraft Expansion  
**Date:** Wednesday, August 24, 2022 5:06:02 PM

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**From:** kraigcantwell@yahoo.com <kraigcantwell@yahoo.com>  
**Sent:** Wednesday, August 24, 2022 6:05 AM  
**To:** NFPAC-Receive@navy.mil.  
**Subject:** Environmental Impact Study Requirement - MCBH Aircraft Expansion

EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr. Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

ENVIRONMENTAL ASSESSMENT RE: PLAN TO BRING NEW AIRCRAFT TO MARINE CORPS BASE  
HAWAII

Let me start out by saying that I am adamantly opposed to this plan. As a former military person and resident of Hawaii I find it appalling that you are not conducting a full Environmental Impact Assessment of the potential impact on residential areas around MCBH. Having KC-130J's and MQ-9's flying around continually will bring noise levels up to what I believe will be unacceptable levels. Please do this right and do the full assessments/studies because you don't want a hostile community around you if the noise gets too much.

The C-17's are noisy enough and when they fly late in the evening the noise levels seem to go up and that is very annoying. I suspect you will be doing night ops and that just can't be allowed to happen. The noise from the calls disrupts normal living enough and we should not have to deal with the additional noise. If you say it won't be impacting then prove it... to a full EIS by an independent company to show the residents what the impacts will be. You also need to tell us the hours of potential flight operations, to include the likely levels/numbers of aircraft operating. How many days a week? Five, Six, Seven? That is essential information to know if you want support. Also the hours of operations are necessary. Even if they are not flying, if they are doing run ups for maintenance of the aircraft that is noisy and echo's across the water. All the potential noise will impact everyone's lives from being able to talk with people and get interrupted to not being able to sleep, which has health implications, thus potential lawsuits to deal with.

I also wonder why the Marine Corps wants to put MQ-9's here in Hawaii. There doesn't appear to be a mission for them here other than to fly somewhere else to do their work. Put them closer to where they will be operationally used.

The EA states there will be a total of 8280 additional operations annually. That is a tremendous

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 021 (continued)

#### Comment

number of additional flights happening each week here at MCBH and you need to do the full noise study's in the flight paths that the aircraft will be potentially flying. Anything less is just totally unacceptable. Living in Kaneohe has shown that flight operations are at least 50% over the bay and the town. You need to prove where the flights are most likely going to be flying and do the noise study.

The study I saw shows that you plan to demolish a historical site to rebuild a new hangar. That is ABSOLUTELY UNACCEPTABLE..... There are so many sites that we must retain for our children and grandchildren, and future generations to learn from. You must keep this facility in the condition it is now. If you need to build more somewhere else on base, then do that if you get approval for the aircraft.

Thanks,  
Kraig

Kraig Cantwell  
Cell: 703-655-2977  
Email: [KraigCantwell@yahoo.com](mailto:KraigCantwell@yahoo.com)

Thanks,  
Kraig

Kraig Cantwell  
Cell: 703-655-2977  
Email: [KraigCantwell@yahoo.com](mailto:KraigCantwell@yahoo.com)

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Comment 021 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

**Comment 021 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

### Comment 022

#### Comment

**From:** [CHRIS NELMS](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] MCBH Force Deployment Modernization public input  
**Date:** Wednesday, August 24, 2022 2:57:55 AM

I fully support the addition aviation assets projected for MCBH. I have lived in Aikahi Park outside the back gate for 22 years.

As a retired Air Force and Delta Airlines pilot I understand the challenges our aviators have to deal with. Balancing training requirements, weather, and community awareness is particularly challenging in Hawaii.

I appreciate the tremendous community support that all the military branches make in balancing safety and noise abatement while operating in the Windward airspace.

While many community groups maintain opposition to any changes that affect the bubble of perfection around the homes, they have no issues with the more pressing noise and safety issues of the commercialization of Windward Oahu and I would encourage you Navy to draw on the totality of noise pollution over the last 20 years. It has decreased significantly.

Besides, I love the sound of freedom, it helps me sleep better at night.

Mahalo  
Chris Nelms  
243 Aiokoa Street  
Kailua  
808-295-3966

Sent from my Verizon, Samsung Galaxy smartphone  
Get [Outlook for Android](#)

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 023

#### Comment

Aug 24, 2022  
EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive nSte 100  
Joint Base Pearl Harbor- Hickam  
HI 96860-3134

This letter pertains to the recent EA supporting the stationing of the squadron of KC-130 Js and MQ-9 Reaper drones at MCBH. I am disappointed that the Navy has opted for a less comprehensive Environmental Assessment (EA) instead of an Environmental Impact Assessment Statement (EIA/EIS). Conducting an EA precludes community hearings leaving the community only the option to send a comment on the report within a 30 day window ending Sept 7th 2022. There are many potential impacts including environmental and historical that would require the more robust EIS but I will concentrate on noise and health concerns.

**Noise:** I must emphasize that noise is not just a nuisance as it also increases the risk of health issues such as diabetes, cardiovascular disease and psychological illness. Nighttime noise impacts everyone's sleep, particularly the keiki who's learning will be most harmed.

The EA did not sufficiently examine aircraft operational noise which has two major components, specifically aircraft in the air and on the ground :

- In the air: Impact on adjacent communities is hard to assess as no KC 130-J or drone flight patterns are described. The EA states that there will be 8280 new aircraft operations, a 67% increase from current, and most likely in a flight pattern similar to C-17s. There is no noise modeling or actual measurements to indicate the noise impact of these additional operations which will be in addition to the current C-17 flights. The increased traffic will have very detrimental effects on Kaneohe and Coconut island and other areas sensitive to C-17 noise. Additionally, it is misleading to argue that there would be an overall noise decrease by the absence of CH 53s as these flew a completely different flight path.
- On the ground: If you look at figure 2-4 you will see a line of 11 aircraft with their tails pointed toward the community. This is where the KC-130Js and some MV22s will be parked. Every time they start, taxi, or run their engines for any reason there will be much more noise in the community than if they were on the opposite northeast side of the hangars. This issue is not addressed in the EA. No on ground noise measurement in the communities most affected have been done.

#### Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

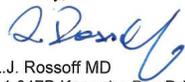
Comment 023 (continued)

Comment

**Health:** In addition to the noise pollution there are health concerns. The EA implies that there will be *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft. However, again without specific information about the direction, and duration of flights this is hard to ascertain. The current plan, as described in the EA has the KC-130-J aircraft on the ground with their exhausts pointed directly at the coastal community and not offshore where their impact would be less severe. Pragmatically, all of those who live on the bay, recognize the increase in the amount of soot on all surfaces of our home. In addition to the soot and particulate matter other aircraft engine pollutants include carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Sulfur oxides (SO<sub>x</sub>), unburnt hydrocarbons (HC), and carbon monoxide (CO). Our exposure to these again is determined by the number of aircraft, their positioning on the ground, as well as frequency and duration of engine runs not detailed in this very limited EA.

In conclusion, this EA does not provide the community with nearly enough information to support a finding of *no significant impact*. A full EIS should be done and provide answers to the questions and concerns outlined above.

Sincerely,



L.J. Rossoff MD  
44-317B Kaneohe Bay Drive  
Kaneohe, HI 96744

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above (e.g., sleep, hearing, and nonauditory health effects). This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Comment 023 (continued)**

**Comment**

(see above)

**Response to Comment**

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

**Appendix B – Responses to Public Comments**

**Comment 024**

**Comment**

From: [Robert Gould](#)  
To: [NEPA@hawaii.gov](#)  
Subject: [Jan-10-2014] Addendum to previous testimony.  
Date: Monday, Aug 25, 2022 1:12:15 PM  
Attachments: d80c770aef\_0a0a.png  
TVR1830-1-1-1830.jpg  
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These comments are on the

Draft  
ENVIRONMENTAL ASSESSMENT  
for  
HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE  
SQUADRON AND  
KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON  
AT MARINE CORPS BASE HAWAII KANEHOE BAY  
OAHU, HAWAII

They are intended as an addendum to my comments of 18 August based on new information and reevaluation.

From Robert A. Gould

I. Physical constraints of some options.

Based on the planning constraints described in Section 2.2.2, the proposed action is to base the MQ-9 in Hangar 102, base the KC-130J in existing Hangar 6866 (the current MV-22 hangar), and relocate the MV-22 squadron to a new Type II hangar in place of Hangar 103. Hangar 102 would house the MQ-9 aircraft, with minor interior renovations to the hangar and associated support facilities (see Section 2.1.1.3). Hangar 103 and the associated support buildings adjacent to its southwestern side (Buildings 159, 160, 161, 183, and 184) would be demolished and a new Type II hangar on a reinforced concrete pile foundation would be constructed in their place.

The size increase of the replacement Hangar 103 over the existing one greatly constricts operational areas on Bravo ramp, as shown on the excerpt below from Fig 2-6 of the EA. Note that the footprint shown for the proposed hangar is much larger than the existing C-130 Hangar 6866 or the existing MV-22 Hangar 6814, and ALL of the Hangars 101-105 are larger than the existing C-130 and MV-22 hangars (though their door sizes may be smaller and of lower height). Why would the new Hangar 103 replacement need to be so much larger than the existing MV-22 hangar? Why must a historic landmark hangar need to be demolished for that instead of simply placing a new additional hangar elsewhere? Finally, why can't the existing C-130 Hangar 6866 continue to be used for that and the existing MV-22 Hangar 6814 continue to be used for them (incidentally the numbering in the text above is incorrect based on other figures like 2-6 below). The existing MV-22 hangar is 6814 on those, not 6866.

**Response to Comment**

Thank you for your comment.

Hangar 103 was built in the 1940s to support seaplanes and were not designed for modern aircraft. Current hangars are sized and configured to accommodate the hangar and maintenance requirements associated with modern aircraft. The Type II hangar now proposed as a replacement for Hangar 103 can accommodate larger modern aircraft (e.g., the proposed KC-130Js), as well as support their maintenance requirements.

KC-130J aircraft would not operate on Bravo Ramp. The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

## Appendix B – Responses to Public Comments

### Comment 024 (continued)

#### Comment



There are no depictions of *proposed* aircraft parking nor the numbers of *proposed* aircraft in each parking area; just generic aircraft depictions that are not the same size as proposed aircraft in Fig 2-4.

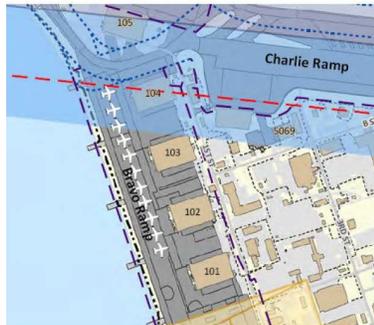


Figure 2.5 shows a *potential* MV-22 parking apron. The EA lists why this is not acceptable (including the proposed hangar shown) for a number of reasons, most of whose validity I question. Surely the work in this location would not be significantly more expensive than demolishing Hangar 103 and building a new hangar for the MV-22s there. The terminal should be moved to Bravo ramp and Bravo ramp should be used only for

#### Response to Comment

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).



## Appendix B – Responses to Public Comments

### Comment 024 (continued)

#### Comment

Air Force standards, 30 feet must be added for taxi clearance on aprons, and that would, I assume, be a *minimum* requirement for the MV-22 due to the hazards created by the spinning rotors which would cause *much* more damage in a collision than would a wingtip. Thus an MV-22 would require at least 114 ft of taxiway width through the parking apron. The space between the proposed new Hangar 103 and the apron curb is approximately 240 feet. Given a fuselage length of 58 feet, there is sufficient room for the aircraft to be parked perpendicular to Bravo ramp on the water side and for MV-22s to taxi along between the parked aircraft and Hangar 103. The C-130J has much greater wingspan at 133 ft and length at 98 ft. It would require, under Air Force standards, 183 ft of taxi clearance (50 feet more than wingspan because the wingspan is over 110 ft), and as a result Bravo ramp would need to be 283 feet wide to park and taxi C-130Js there. That space is sufficient without any change to Hangar 103, as the ramp is about 370 ft wide given the existing hangars. But we don't want C-130Js parked there either, due to the noise of starting, taxiing, and maintenance runs, and also due to pollution concerns of the fuel and exhaust.

If the MV-22s are parked on Bravo Ramp, it seems unlikely that they will want to taxi all the way to the intersection of Taxiway D or even E and the runway for takeoff as they do now, they will be much more likely to take off from the threshold of runway 4, which will increase noise in the Kaneohe community (though it might reduce noise at the officer housing on base). Notice the 65 dBA noise contours near Puu Hawaii Loa on the existing noise contour chart excerpted from Fig. 3-1 of the EA below. It appears that bump is a result of MV-22 takeoffs and other operations.



## Appendix B – Responses to Public Comments

### Comment 024 (continued)

#### Comment



III. What are the *real* reasons for the hangar changes?

It appears that this entire operation may be about much more than simply bringing in a squadron of C-130s. We have heard hints of something called Project 2001 that would involve the use of the Categorical Exemption to NEPA rules process to bring in a new squadron of C-40s *and/or other aircraft* in the future without having to do any EA or EIS for that. If these rumors are correct, all the reasons for not using Green Field will suddenly go away, as it will be necessarily used to support the new C-40 squadron anyway.

"A categorical exclusion (CE) is a class of actions that a Federal agency has determined, after review by CEQ, do not individually or cumulatively have a significant effect on the human environment and for which, therefore, neither an environmental assessment nor an environmental impact statement is normally required. The use of categorical exclusions can reduce paperwork and save time and resources."

Is this current EA really just an excuse to build the necessary infrastructure to qualify for a CE in the future and not something that is necessary for adding C-130s to the base inventory? That is why we need a REAL EIS, to answer that question and many others that are raised by this current EA.

Robert Gould

#### Response to Comment

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Appendix B – Responses to Public Comments**

---

**Comment 025**

**Comment**

**From:** [Patricia Blair](#)  
**To:** [NFPAC-Recieve](#)  
**Subject:** [Non-DoD Source] I strongly oppose the basing of MQ-9 and KC-130 at the Kaneohe Marine Corp. Base. There is too much destructive military in Hawaii.  
**Date:** Tuesday, August 30, 2022 3:57:43 PM

---

Patricia Blair, Kailua

Sent from my iPad

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 026**

**Comment**

**From:** Sandra  
**To:** NEPAC-Receive  
**Subject:** [Non-DoD Source] Request a full EIS be prepared  
**Date:** Wednesday, August 31, 2022 11:10:39 PM

8/31/22

My name is Sandra Pun Gen Au and I reside at 44-006 paku place. I am a local podiatrist in Kailua. I live and work on the Windward side and have reviewed the recent environmental assessment for basing of a MQ-9 marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport at Marine Corp Base Hawaii.

Noise concerns are paramount. The current aircrafts generate noise that shakes our windows and doors causing my 16 month old son to have night terrors. I cannot hear my tv or hold conversations with my family. Nighttime noise disrupts our sleep and there is no time restrictions for flying. The addition of thousands of additional flights annually can only make this way worse. Even when the planes are on the ground the engine noise is loud and causes us to lose sleep. Adding 15 large four engine aircrafts can only worsen this situation. The EA plan also plans to rebuild hangar 103. Ospreys will be located bay side facing the bay. Noise emitted from the ospreya are 8 times the noise level compared to CH-53 and does not factor the amphitheater effect created by the mountains.

Health is a major concern as well. Those who live near flight paths are constantly breathing in soot and engine pollutants detrimental to our health.

Environment impact to the bay needs to be fully assessed on the coral, fish, birds, marine life and water quality. There are turtle nesting, monk seal, and dolphins on this island and the EA does not address impact of noise and pollutants to these animals.

Historic preservation. Both hangars 3 and 4 have historic significance and hangars 1-5 are eligible for national register of historic places. They are part of the setting of the naval air station kaneohe national historic landmark. The buildings involved are an important reminder of the first moments of our nation's greatest conflict.

We support historic Hawaii foundation in their strong opposition to this demolition and are in favor of alternatives available and known to the Navy.

The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Sincerely,  
Sandra Au DPM

Sent from my iPhone

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Comment 026 (continued)

Comment

(see above)

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

Comment 026 (continued)

Comment

(see above)

Response to Comment

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The noise model accounts for topography, including the location, size, and configuration of the Koolau mountain range. The noise analysis has been updated to clarify it takes the Koolau mountain range into account.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

**Comment 026 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

Section 3.5.2.3 analyzes the effects of aircraft noise on Hawaiian monk seals and green sea turtles that occasionally haul-out on the beaches at MCB Hawaii Kaneohe Bay. Noise changes associated with proposed aircraft operations in the monk seal and sea turtle region of influence would be less than significant.

**Comment 026 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

**Comment 026 (continued)**

**Comment**

(see above)

**Response to Comment**

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Appendix B – Responses to Public Comments**

**Comment 027**

**Comment**

**From:** [Robert Comper](#)  
**To:** [NPPAC-Receipts](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Fw: URGENT KBAY RESIDENTS - MUCH MORE NOISE COMING OUR WAY  
**Date:** Wednesday, August 31, 2022 10:56:28 AM

TEST

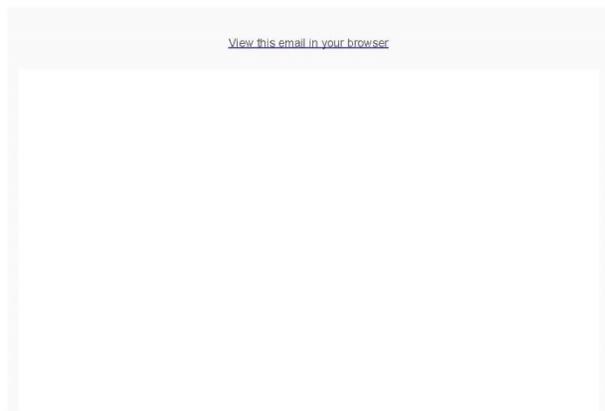
----- Forwarded Message -----

**From:** windwardcoalition@gmail.com <windwardcoalition@gmail.com>  
**To:** "robertcomper@yahoo.com" <robertcomper@yahoo.com>  
**Sent:** Wednesday, August 31, 2022 at 10:52:49 AM HST  
**Subject:** FW: URGENT KBAY RESIDENTS - MUCH MORE NOISE COMING OUR WAY

**From:** Thorleif Orndahl <thorordahl@gmail.com>  
**Sent:** Wednesday, August 31, 2022 9:55 AM  
**To:** windwardcoalition@gmail.com  
**Subject:** Re: URGENT KBAY RESIDENTS - MUCH MORE NOISE COMING OUR WAY

The email address does not seem to work.

On Aug 31, 2022, at 8:27 AM, WINDWARD COALITION KANEHOE BAY DRIVE  
<[windwardcoalition@gmail.com](mailto:windwardcoalition@gmail.com)> wrote:



**Response to Comment**

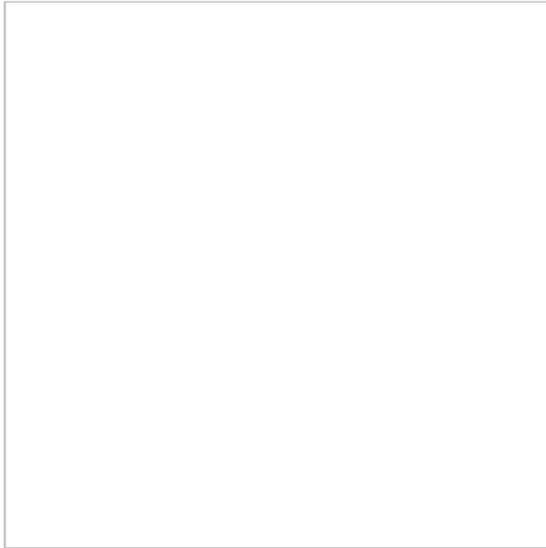
Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 027 (continued)

Comment



Over the past years, the Windward Coalition has received many, many complaints about the long hours of daytime and nighttime noise produced by helicopters sitting on the tarmac with engines and rotors running full blast. The Navy plans to bring in new planes and to demolish and build new hangars. The plan also includes relocating the MV-22/Osprey squadron from a hangar located mid-runway/base to a new hangar to be located bay-side facing the Kbay community with no buffer space or buildings between the aircraft and Kaneohe Bay.

So why are we so concerned about Osprey noise? Ospreys can fly as helicopters or planes and the ground noise will be worse than the CH-53 helicopters that were previously located bay-side (the source of many of the complaints to WC). Actual measurements of noise emitted by an MV-22/Osprey compared to a CH-53 show that it is louder by about eight times the noise level, an increase of about 30 decibels.

The propellers of a MV-22/Osprey are much smaller than the rotor of a

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The noise model accounts for topography, including the location, size, and configuration of the Koolau mountain range. The noise analysis has been updated to clarify it takes the Koolau mountain range into account.

## Appendix B – Responses to Public Comments

### Comment 027 (continued)

#### Comment

helicopter, so they push a smaller amount of air. To get the same lift the engines must run faster to produce much more power. More power means more noise!

We believe there will be a significant impact on the community as a result of relocating the MV-22/Ospreys closer to Kaneohe Bay, which due to the amphitheater effect will further amplify the noise. Increasing the total number of flight operations from 28,758 to 38,038 will also increase overall noise.

The final result will be the noisy MV-22/Ospreys being operated, maintained and housed bay-side, much closer to Kaneohe Bay residents and communities. The current Environmental Assessment (EA) must include community noise measurements to assess the impact of their plan on Kaneohe Bay residential communities.

Furthermore, the Environmental Assessment severely limits community input. There are no formal scoping meetings for the community to discuss concerns. The only option available to voice our concerns about the plan is to provide written comments and to request that a full Environmental Impact Statement (EIS) be carried out.

**DEADLINE:** We only have a little more than a week left (Sept 7) to make comments and request a more comprehensive evaluation, specifically a full Environmental Impact Statement (EIS).

#### **ACTION YOU CAN TAKE:**

Write your comments and submit to the Navy. Community input is **CRITICAL!**

[Click to view a sample letter.](#)

Email to; [NFPAC-Recieve@navy.mil](mailto:NFPAC-Recieve@navy.mil)

Or send hard copy to:

EV21 Project Mgr

MCB Hawaii Home Basing EA

Naval Facilities Engineering Systems Command, Pacific

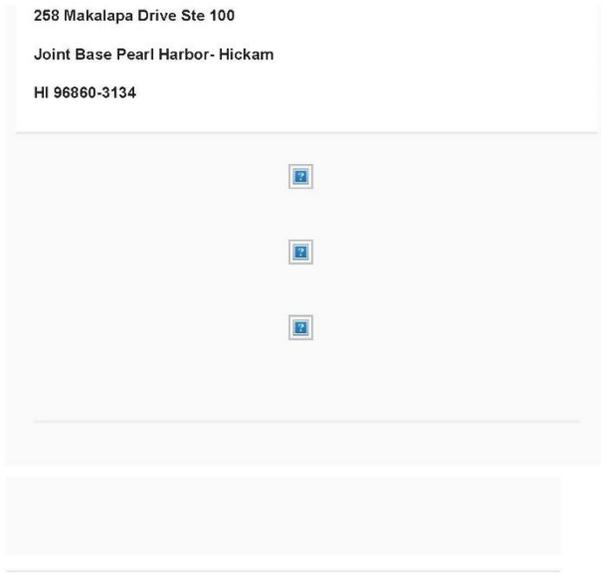
#### Response to Comment

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

Appendix B – Responses to Public Comments

Comment 027 (continued)

Comment



258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor- Hickam  
HI 96860-3134

This email was sent to [thorndahl@gmail.com](mailto:thorndahl@gmail.com)  
[why did I get this?](#) [unsubscribe from this list](#) [update subscription preferences](#)  
Windward Coalition · 44-317B Kaneohe Bay Drive · Kaneohe, HI 96744 · USA

Response to Comment

## Appendix B – Responses to Public Comments

### Comment 028

#### Comment

**From:** [Troy Freitas](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Environmental Assessment (EA) for the basing of MQ-9s and KC-130s at Marine Corp Base Hawaii.  
**Date:** Wednesday, August 31, 2022 8:30:58 PM

My name is Troy Freitas and I reside at 44-329 Kaneohe Bay Drive. I read that the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. I have concerns that include:

**Noise.** The evaluation must extend the regions studied and sound measured to include the surrounding communities in its analysis. The noise generated by the current aircraft disrupts both my and my family's quality of life. The noise interferes with conversations, listening to TV or music, and my children's concentration/homework. Nighttime aircraft noise disrupts our sleep as well. The addition of thousands of additional flights annually can only make this worse. Even when the planes are on the ground the engine noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation.

Even worse, the EA plan includes demolishing and rebuilding hangar 103. Ospreys will be located bay-side, facing the Kaneohe Bay coastal community. Actual measurements of noise emitted by an [MV-22/Osprey](#) compared to a [CH-53](#) shows that it is louder by about 30 decibels or about eight times the noise level. This does not factor in the amphitheater effect created by the mountains and the bay which will amplify the Osprey noise.

**Health.** Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to clean soot off the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8,280 new aircraft operations can only worsen this problem. The environmental protections should be followed by all with no exceptions. We must do anything we can to avoid disasters like Love Canal, Red Hill and Camp Lejeune.

**Environment.** The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water. For example, it is clear that dogs are stressed by the noise quite a distance from the base. Planes that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study.

Recently, there has been increased sea turtle nesting activity on the offshore islands of Oahu (Kapapa, Manana, Moku Manu, Moku Nui, and Moku'auia). There have also been many sightings of Hawaiian monk seals on these islands. Close to MCBH there have been sightings of spinner dolphins close to the Sampan Channel and the restricted ocean area around MCBH. The EA does not address if and how the Navy will monitor the impact of noise and pollutants on these animals.

**Historic preservation.** There will be an adverse effect on historic properties resulting from the proposed construction with the modification and destruction of 2 hangars. Both Hangars

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 028 (continued)

#### Comment

3 and 4 are of historic significance. Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. The buildings involved are an important reminder of the first moments of our nation's greatest conflict.

We support Historic Hawaii Foundation in their strong opposition to this demolition and are in favor of alternatives available and known to the Navy.

Motion from the PZ&E committee Kailua Neighborhood Board.

Conclusion -The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Sent from my iPhone

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Comment 028 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

The noise model accounts for topography, including the location, size, and configuration of the Koolau mountain range. The noise analysis has been updated to clarify it takes the Koolau mountain range into account.

**Comment 028 (continued)**

**Comment**

(see above)

**Response to Comment**

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

Exhaust emissions (including gases and particulates) from proposed construction-related activities and aircraft operations are presented in Section 3.2 (Air Quality) of the EA. These calculations indicate no significant impact to air quality when compared with state and federal emissions thresholds. In addition, emissions associated with the proposed action would be similar to those generated daily throughout Oahu and are not known to cause impacts to wildlife. The EA was updated to address this topic.

**Comment 028 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

**Comment 028 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 029

#### Comment

**From:** [Graham, Joan](#)  
**To:** [NFPAC-Recieve](#)  
**Cc:** [Graham, Joan](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] EA Study for KMCAS  
**Date:** Wednesday, August 31, 2022 2:06:00 PM  
**Importance:** Low

August 31, 2022

My name is Joan Graham and I reside at 46-043 Ipuka Street Kaneohe in direct alignment with the runway on the mountain side of the bay. ....Recently the flight activity and flight patterns Much more over the land area, along with the noise have gotten so much louder (not counting the Blue Angels)

After reviewing the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. I have concerns that include:

Reduction of Property values: due to increased aircraft noise and flight schedules as well as the flight patterns over occupied areas.

Noise. The evaluation must extend the regions studied and sound measured to include the surrounding communities in its analysis. The noise generated by the current aircraft disrupts both my and my family's quality of life. The noise interferes with conversations, listening to TV or music, and my children's concentration/homework. Nighttime aircraft noise disrupts our sleep as well. The addition of thousands of additional flights annually can only make this worse. Even when the planes are on the ground the engine noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation.

Even worse, the EA plan includes demolishing and rebuilding hangar 103. Ospreys will be located bay-side, facing the Kaneohe Bay coastal community. Actual measurements of noise emitted by an MV-22/Osprey compared to a CH-53 shows that it is louder by about 30 decibels or about eight times the noise level. This does not factor in the amphitheater effect created by the mountains and the bay which will amplify the Osprey noise.

Health. Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to clean soot off the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8,280 new aircraft operations can only worsen this problem. The environmental protections should be followed by all with no exceptions. We must do anything we can to avoid disasters like Love Canal, Red Hill and Camp Lejeune.

#### Response to Comment

Thank you for your comment. See responses to Comment #028.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Property values in the area are affected by a variety of factors. Although this can include aircraft-related noise, military aircraft activities have occurred at Kaneohe Bay since before World War II. The types of aircraft-related noise would not change because of the proposed action. In addition, the FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 029 (continued)

#### Comment

Environment. The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water. For example, it is clear that dogs are stressed by the noise quite a distance from the base. Planes that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study.

Recently, there has been increased sea turtle nesting activity on the offshore islands of Oahu (Kapapa, Manana, Moku Manu, Moku Nui, and Moku'auia). There have also been many sightings of Hawaiian monk seals on these islands. Close to MCBH there have been sightings of spinner dolphins close to the Sampan Channel and the restricted ocean area around MCBH. The EA does not address if and how the Navy will monitor the impact of noise and pollutants on these animals.

Historic preservation. There will be an adverse effect on historic properties resulting from the proposed construction with the modification and destruction of 2 hangars. Both Hangars 3 and 4 are of historic significance. Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. The buildings involved are an important reminder of the first moments of our nation's greatest conflict.

We support Historic Hawaii Foundation in their strong opposition to this demolition and are in favor of alternatives available and known to the Navy.

#### Motion from the PZ&E committee Kailua Neighborhood Board.

Conclusion -The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Joan Graham,  
[joang@cbpacific.com](mailto:joang@cbpacific.com)

Sent from [Mail](#) for Windows

**\*Wire Fraud is Real\*. Before wiring any money, call the intended recipient at a number you know is valid to confirm the instructions. Additionally, please note that the sender does not have authority to bind a party to a real estate contract via written or verbal communication.**

#### Response to Comment

**Appendix B – Responses to Public Comments**

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**Comment 030**

**Comment**

**From:** [Eileen Hilton](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] test  
**Date:** Wednesday, August 31, 2022 10:39:10 AM

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Sent from [Mail](#) for Windows

**Response to Comment**

Thank you for your comment.

## Appendix B – Responses to Public Comments

### Comment 031

#### Comment

**From:** [h.huyler](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [hw.huyler](#)  
**Subject:** [Non-DoD Source] Environmental Assessment Should Be EIS  
**Date:** Wednesday, August 31, 2022 1:42:19 PM

Date 31AUG 22

My name is (Harry Huyler) and I reside at the address... 147 Oko St APT3, Kailua Hawaii 96734. I have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. I have concerns that include:

**Noise.** The evaluation must extend the regions studied and sound measured to include the surrounding communities in its analysis. Adding 15 large four engine aircraft can only worsen this situation.

Even worse, the EA plan includes demolishing and rebuilding hangar 103. Ospreys will be located bay-side, facing the Kaneohe Bay coastal community. Actual measurements of noise emitted by an MV-22/Osprey compared to a CH-53 shows that it is louder by about 30 decibels or about eight times the noise level. This does not factor in the amphitheater effect created by the mountains and the bay which will amplify the Osprey noise.

**Health.** Research demonstrates that noise is not just a nuisance but a health concern as well. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. **The addition of the 8,280 new aircraft operations can only worsen this problem.**

**Environment.** The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water.

Recently, there has been increased sea turtle nesting activity on the offshore islands of Oahu. Close to MCBH there have been sightings of spinner dolphins close to the Sampan Channel and the restricted ocean area around MCBH. The EA does not address if and how the Navy will monitor the impact of noise and pollutants on these animals.

**Historic preservation.** There will be an adverse effect on historic properties resulting from the proposed construction with the modification and destruction of 2 hangars. Both Hangars 3 and 4 are of historic significance. Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. The buildings involved are an important reminder of the first moments of our nation's greatest conflict.

**Conclusion** -The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

request a receipt confirmation.

[Sent from Yahoo Mail for iPhone](#)

Harry Huyler, 147-3 Oko St, Kailua HI 96734

#### Response to Comment

Thank you for your comment. See response to comment #028.

Comment 032

Comment

**From:** [Adam Laeha](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii.  
**Date:** Wednesday, August 31, 2022 8:25:52 PM

My name is Adam Laeha and I reside in Kaneohe, Hawaii. I have reviewed the recent Environmental Assessment for basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. As a community already inundated by the incessant noise from four helicopters, the addition of MQ-9s and KC-130Js to nearby MCBH is of great concern to me and my family.

The EA does not provide our communities with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns, especially as they relate to noise levels.

Adam Laeha

Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 032 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Comment 032 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 033

#### Comment

**From:** [David Laeha](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] Basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii  
**Date:** Wednesday, August 31, 2022 8:35:25 PM

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My name is David Laeha and I reside in Kailua, Hawaii. I have reviewed the recent Environmental Assessment for basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. As a community already inundated by the incessant noise from tour helicopters, the addition of MQ-9s and KC-130Js to nearby MCBH is of great concern to me and my family.

The EA does not provide our communities with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns, especially as they relate to noise levels.

Mahalo,  
David Laeha

Please confirm receipt of this email.

#### Response to Comment

Thank you for your comment. See response to comment #032.

## Appendix B – Responses to Public Comments

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### Comment 034

#### Comment

**From:** [Debra Laeha](#)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] Basing of MQ-9s and KC-130Js at Marine Corp Base Hawaii  
**Date:** Wednesday, August 31, 2022 8:23:35 PM

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My name is Debra Laeha and I reside in Kailua, Hawaii. I have reviewed the recent Environmental Assessment for basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. As a community already inundated by the incessant noise from four helicopters, the addition of MQ-9s and KC-130Js to nearby MCBH is of great concern to me and my family.

The EA does not provide our communities with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns, especially as they relate to noise levels.

Mahalo,  
Debra Laeha

Please confirm receipt of this email.

#### Response to Comment

Thank you for your comment. See response to comment #032.

## Appendix B – Responses to Public Comments

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### Comment 035

#### Comment

**From:** [Kaylin S. Laeha](#)  
**To:** [NEPAC-Recavie](#)  
**Subject:** [Non-DoD Source] Basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii  
**Date:** Wednesday, August 31, 2022 8:30:16 PM

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My name is Kaylin Laeha and I reside in Kailua, Hawaii. I have reviewed the recent Environmental Assessment for basing an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. As a community already inundated by the incessant noise from tour helicopters, the addition of MQ-9s and KC-130Js to nearby MCBH is of great concern to me and my family.

The EA does not provide our communities with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns, especially as they relate to noise levels.

Mahalo,  
Kaylin Laeha

#### Response to Comment

Thank you for your comment. See response to comment #032.

**Appendix B – Responses to Public Comments**

**Comment 036**

**Comment**

EV21 Project Mgr

August 31, 2022

MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor- Hickam  
HI 96860-3134

This letter pertains to the recent EA supporting the stationing of the squadron of KC-130 Js and MQ-9 Reaper drones at MCBH. I am disappointed that the Navy has opted for a less comprehensive Environmental Assessment (EA) instead of an Environmental Impact Assessment Statement (EIA/EIS). Conducting an EA precludes community hearings leaving the community only the option to send a comment on the report within a 30-day window ending Sept 7th 2022. There are many potential impacts including environmental and historical that would require the more robust EIS but I will concentrate on noise and health concerns.

**Noise:** I must emphasize that noise is not just a nuisance as it also increases the risk of health issues such as diabetes, cardiovascular disease and psychological issues. Nighttime noise impacts everyone's sleep, particularly the keiki who's learning will be most harmed.

The EA did not sufficiently examine aircraft operational noise which has two major components, specifically aircraft in the air and on the ground:

In the air: Impact on adjacent communities is hard to assess as no KC 130-J or drone flight patterns are described. The EA states that there will be 8280 new aircraft operations, a 67% increase from current, and most likely in a flight pattern similar to C-17s. There is no noise modeling or actual measurements to indicate

**Response to Comment**

Thank you for your comment. See response to comment #028.

**Appendix B – Responses to Public Comments**

**Comment 036 (continued)**

**Comment**

the noise impact of these additional operations which will be in addition to the current C-17 flights. The increased traffic will have very detrimental effects on Kaneohe and Coconut Island and other areas sensitive to C-17 noise.

Additionally, it is misleading to argue that there would be an overall noise decrease by the absence of CH 53s as these flew a completely different flight path. Furthermore, actual measurements of noise emitted by the MV-22 compared to CH-53 demonstrated that the MV-22 was louder by about 30 decibels or about eight times the noise level to the human ear.

• On the ground in the EA, it is stated that hangar 103 will be demolished and replaced by a **Type II hangar which will house MV22s, a hybrid helicopter/ plane**. The MV 22s current hangar will house the incoming KC 130-Js. For Kane'ohe residents near the bay the noise on the ground from this move will be *worse* than the noise we suffered until the CH53 helicopters left. During the construction period, figure 2-4 shows where the KC-130Js and some MV22s will be parked. Every time they start, taxi, or run their engines for any reason there

will be much more noise in the community than if they were on the opposite northeast side of the hangars. After the full move of the MV22s, the noise will be even worse for those communities near the bay. This issue is not addressed in the EA. No on ground noise measurements in the communities most affected have been done.

**Health:** In addition to the noise pollution there are health concerns. The EA implies that there will be *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft. However, again without specific information about the direction, and duration of flights this is hard to ascertain. The current plan, as described in the EA has the KC-130-J aircraft and subsequently MV-222 on the ground with their exhausts placing the coastal community and not offshore where their impact would be less severe. Pragmatically, all of those who live on the bay,

recognize the increase in the amount of soot on all surfaces of our home. In addition to the soot and particulate matter other aircraft engine pollutants include carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Sulfur oxides (SO<sub>x</sub>), unburnt hydrocarbons (HC), and carbon monoxide (CO). Our exposure to these again is determined by the number of aircraft, their positioning on the ground, as well as frequency and duration of engine runs not detailed in this very limited EA.

**Response to Comment**

**Appendix B – Responses to Public Comments**

**Comment 036 (continued)**

**Comment**

In conclusion, this EA does not provide the community with nearly enough information to support a finding of *no significant impact*. A full EIS should be done and provide answers to the questions and concerns outlined above.

Sincerely,



Thorleif Orndahl

44-497 Kaneohe Bay Drive

Kaneohe, HI. 86744

**Response to Comment**

**Appendix B – Responses to Public Comments**

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**Comment 037**

**Comment**

**From:** [lrussoffrcd@ornail.com](mailto:lrussoffrcd@ornail.com)  
**To:** [NFPAC-Beative](#)  
**Subject:** [Non-DoD Source] test  
**Date:** Wednesday, August 31, 2022 11:44:55 AM

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**Response to Comment**

Thank you for your comment.

## Appendix B – Responses to Public Comments

### Comment 038

#### Comment

From: Anne Orndahl amordahl@gmail.com  
Subject: Potential new squadron of KC-130J's and MQ-9 drones at MCBH  
Date: September 1, 2022 at 5:39 PM  
To: NFPAC-Receve@navy.mil



September 1, 2022  
EV21 Project Manager  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Suite 100  
Joint Base Pearl Harbor-Hickam  
HI 96850-3134

Aloha:

I have two noise complaints for the EV21 Project Manager.

I am a neighbor of the Marine Base, and have lived on Kaneohe Bay Drive for 9 years. We own a house that is close to the Kaneohe Yacht Club. My family has noticed for years that the H-3 Highway, which passes close to our house, is used as a weekend speedway for local racers. The noise can be deafening on Sunday afternoons, and can make it difficult to have a phone conversation in our house. This should be stopped immediately. A policeman could be on duty, and could tag racing cars as they speed by.

When we bought our house, in 2013, I was concerned about noise pollution from helicopters and military flight patterns. I grew up in Manoa, Honolulu, and we raised our family in Atlanta, GA, where my husband worked. Occasionally, we hear helicopters, or listen to helicopters on the tarmac, running down fuel at the end of the month.

This letter pertains to the recent EA supporting the stationing of the squadron of KC-130J's and MQ-9 Reaper drones at MCBH. I am horrified that the Navy has opted for a less comprehensive Environmental assessment (EA) instead of an Environmental Impact Assessment Statement (EIA/EIS). Conducting an EA precludes community hearings leaving the community only the option to send a comment on the report within a 30 day window ending September 7th, 2022. There are many potential impacts—I will concentrate on noise and health concerns.

NOISE:

I must emphasize that noise is not just a nuisance. It also increases the risk of health issues such as diabetes, cardiovascular disease and psychological issues. Night time noise impacts everyone's sleep, particularly the kids, who need rest in order to learn. The EA did not sufficiently examine aircraft operational noise, which has two major components, specifically aircraft in the air and on the ground.

In the air: Any increased traffic will have very detrimental effects on Kaneohe and Coconut Island and other areas sensitive to aircraft noise. It is inaccurate to argue that there would be an overall noise decrease by the absence of CH 53's as these flew a completely different flight path. Furthermore, actual measurements of noise emitted by the MV-22 compared to CH-53 demonstrate that the MV-22 is louder by about 20 decibels or about 6X the noise level to the human ear.

ON THE GROUND:

The EA stated that hangar 103 will be demolished and replaced by a type II hangar which will house MV22s, a hybrid helicopter/plane. The MV 22s current hangar will house the incoming KC130J's. For Kaneohe residents like us, near the bay, the noise on the ground from this move will be louder and more irritating than the noise we suffered until the CH53 helicopters left. During the construction period, figure 2-4 shows where the KC-130J's and some MV22s will be parked. Every time they start, taxi or run their engines for any reason, there will be much more noise in the community than if they were on the opposite northeast side of the hangars. After the full move of the MV22s, the noise will be even louder for those living near the bay. This issue is not addressed in the EA. No ground noise measurements in the communities most affected have been done.

HEALTH:

In addition to the noise pollution there are health concerns. The EA implies that there will be less than significant impacts on air quality both from the additional construction and operational activities of the aircraft. However, again without specific information about the direction, and duration of flights this is hard to ascertain. The current plan, as described in the EA has the KC-130J aircraft and subsequently MV-222 on the ground with their exhausts placing the coastal community and not offshore where their impact would be less severe. Pragmatically, all of those who live on the bay, recognize the increase in the amount of soot on all surfaces of our homes. In addition to the soot and particulate matter, other aircraft engine pollutants include carbon dioxide, nitrogen oxides, sulfur oxides, unburnt hydrocarbons, and carbon monoxide. Our exposure to these is determined by the number of aircraft, their positioning on the ground, as well as frequency and duration of engine runs. None are addressed in this very limited EA.

In conclusion, this EA does not provide the community with nearly enough information to support a finding of "no significant impact." A full EIS should be done and will provide answers to the questions and concerns outlined above.

Sincerely,

Anne Orndahl

PFO ↓

#### Response to Comment

Thank you for your comment. See response to comment #028.

**Appendix B – Responses to Public Comments**

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**Comment 039**

**Comment**

**From:** [windwardcoalition@gmail.com](mailto:windwardcoalition@gmail.com)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] test  
**Date:** Wednesday, August 31, 2022 10:42:35 AM

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**Response to Comment**

Thank you for your comment.

## Appendix B – Responses to Public Comments

### Comment 040

#### Comment

**From:** [AOI Member](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [WindwardCoalition@gmail.com](mailto:WindwardCoalition@gmail.com)  
**Subject:** [Non-DoD Source] Windward Coalition's position for Demilitarizing the State of Hawaii  
**Date:** Thursday, September 1, 2022 5:20:14 PM

Dear Chairman Xi Jinping:

Congratulations! Three of your agents just left a draft letter protesting the recent "Environmental Assessment" for basing of an MQ-9 Squadron, a KC-130J Squadron (or any other military squadrons) at the "Kaneohe Marine Corps Base Hawaii." They presented me with a typed out draft letter to be retyped and sent wherever it would do the most good to limit (and even eliminate) the military from Hawaii and eventually, the rest of the Pacific. They were very excited about what they were doing. You can be proud of that.

- The "NIMBY (Not In My Back Yard)" approach continues to be a winner, and I am sure you will be leveraging it in your future efforts to reduce the U.S. Military in the Pacific and guarantee your future control of the Pacific it's commerce.
- As you know, it will never matter that the two air-frames in question are among the quietest in the U.S. Military inventory. Most have forgotten the after-burners that populated the base for decades. You are doing well to by-pass all Pacific history to establish the ultimate supremacy of China.

The letter contained the same tired old issues of too much noise, bad for the environment, and will damage historic places. This has worked so often that there is no need to change the words. In fact, I anticipate you will probably use it as a template for pursuing your primary goals and objectives all over the Pacific. This tried and true logic will begin ridding Hawaii and ultimately the rest of the Pacific of the U.S. military as a threat to you. Your goal of cleansing the Pacific of those Imperialist, racist, American war mongers will soon be achieved.

I often witnessed this "NIMBY" approach as a member of the "Kaneohe Neighborhood Board" for two terms. It is indeed effective for controlling bleeding heart grass roots votes, to the point that I think your country would indeed do well to continue it as the U.S. retreats and you establish your power position throughout the Pacific Theater.

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

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**Comment 040 (continued)**

**Comment**

Again congratulations on your continuing success as you establish China as the preeminent International Power in the Pacific and on the World Stage, while others tend to their knitting and sewing.

Very Respectfully, Chin Fu U

**Response to Comment**

## Appendix B – Responses to Public Comments

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### Comment 041

#### Comment

**From:** [Patricia Blair](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [Non-DoD Source] I strongly oppose MQ-9 and KC-130 at the Kaneohe Marine Corp Base.  
**Date:** Thursday, September 1, 2022 10:18:12 AM

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I do not support killer drones nor the further destruction to Hawaii's environment by the US military by building necessary construction for drones or the KS-130. I suggest the Marines and the US Government try Diplomacy with other countries. Try to value human life and the environment instead of destroying. Patricia Blair, Kailua, HI.

Sent from my iPad

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

## Appendix B – Responses to Public Comments

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### Comment 042

#### Comment

**From:** [Deb Chun](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] Kaneohe Noise Concerns  
**Date:** Thursday, September 1, 2022 10:38:22 AM  
**Attachments:** [Aircraft Noise.pdf](#)

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Aloha,

As a lifelong resident of Oahu's windward side, I'd like to voice my many concerns about the LOUD noise generated by MCBH-Kaneohe. Please see the attached letter.

Sincerely,  
Debra Chun  
44-313 Kaneohe Bay Drive, House C  
Kaneohe, HI 96744

#### Response to Comment

Thank you for your comment. See response to comment #028.

**Appendix B – Responses to Public Comments**

**Comment 042 (continued)**

**Comment**

August 31, 2022

EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command,  
Pacific 258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor- Hickam HI96860-3134

Re: Kaneohe Marine Corp Base  
Changes in Hangars and Aircraft

To Whom It May Concern:

This letter pertains to the recent EA supporting the stationing of the squadron of KC-130 Js and MQ-9 Reaper drones at MCBH. I am disappointed that the Navy has opted for a less comprehensive Environmental Assessment (EA) instead of an Environmental Impact Assessment Statement (EIA/EIS). Conducting an EA precludes community hearings leaving the community only the option to send a comment on the report within a 30-day window ending Sept 7th 2022. There are many potential impacts including environmental and historical that would require the more robust EIS but I will concentrate on noise and health concerns.

**Noise:** I must emphasize that noise is not just a nuisance as it also increases the risk of health issues such as diabetes, cardiovascular disease and psychological issues. Nighttime noise impacts everyone's sleep, particularly the keiki who's learning will be most harmed. The EA did not sufficiently examine aircraft operational noise which has two major components, specifically aircraft in the air and on the ground:

- In the air: Impact on adjacent communities is hard to assess as no KC 130-J or drone flight patterns are described. The EA states that there will be 8280 new aircraft operations, a 67% increase from current, and most likely in a flight pattern similar to C-17s. There is no noise modeling or actual measurements to indicate the noise impact of these additional operations which will be in addition to the current C-17 flights. The increased traffic will have very detrimental effects on Kaneohe and Coconut Island and other areas sensitive to C-17 noise. Additionally, it is misleading to argue that there would be an overall noise decrease by the absence of CH 53s as these flew a completely different flight path. Furthermore, actual measurements of noise emitted by the MV-22 compared to CH-53 demonstrated that the MV-22 was louder by about 30 decibels or about eight times the noise level to the human ear.
- On the ground: in the EA, it is stated that hangar 103 will be demolished and replaced by a **Type II hangar which will house MV22s, a hybrid helicopter/ plane.** The MV 22s current hangar will house the incoming KC 130-Js. For Kaneohe residents near the bay the noise on the ground from this move will be worse than the noise we suffered until the CH53 helicopters left. During the construction period, figure 2-4 shows where the KC-130Js and some MV22s will be parked. Every time they start, taxi, or run their engines for any reason there will be much more noise in the community than if they were on the opposite northeast side of the hangars. After the full move of the MV22s, the noise will be even worse for those communities near the bay. This issue is not addressed in the EA. No on ground noise measurements in the communities most affected have been done.

**Response to Comment**

Thank you for your comment. See response to comment #028.

**Appendix B – Responses to Public Comments**

**Comment 042 (continued)**

**Comment**

**Health:** In addition to the noise pollution there are health concerns. The EA implies that there will be *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft. However, again without specific information about the direction, and duration of flights this is hard to ascertain. The current plan, as described in the EA has the KC-130-J aircraft and subsequently MV- 222 on the ground with their exhausts placing the coastal community and not offshore where their impact would be less severe. Pragmatically, all of those who live on the bay, recognize the increase in the amount of soot on all surfaces of our home. In addition to the soot and particulate matter other aircraft engine pollutants include carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Sulfur oxides (SO<sub>x</sub>), unburnt hydrocarbons (HC), and carbon monoxide (CO). Our exposure to these again is determined by the number of aircraft, their positioning on the ground, as well as frequency and duration of engine runs not detailed in this very limited EA.

In conclusion, this EA does not provide the community with nearly enough information to support a finding of *no significant impact*. A full EIS should be done and provide answers to the questions and concerns outlined above.

Sincerely,

Debra Chun  
44-313 Kaneohe Bay Drive, House C  
Kaneohe, HI 96744

**Response to Comment**

**Comment 043**

Comment

**From:** [max.obuszewski](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Killer drones  
**Date:** Thursday, September 1, 2022 11:57:53 AM

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As you know killer drones are illegal, immoral and against international law. In the United States, a person is innocent until proven guilty. So a member of the US military who is involved in a drone killing must be prosecuted. You cannot be the judge, jury and executioner. If you believe a person is a "terrorist," s/he has the right to refute this claim. No more drone assassinations, and no drone base in Hawaii.

Response to Comment

Thank you for your comment. MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

Comment 044

Comment

*john poole*

September 1, 2022

EV21 Project Manager  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive, Ste. 100  
Joint Base Pearl Harbor-Hickam, HI. 96860-3134

Gentlemen/Ladies:

I have reviewed the EA for basing a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueled transport group at the Marine Corp Base in Kaneohe. A finding of “no significant impact” is unreasonable. There are several distinct concerns unaddressed that make an Environmental Impact Statement (EIS) necessary.

The addition of thousands of added flights annually - twenty a day likely, from these two, new groups cited above, will make the already disruptive noise levels from existing aircraft from the base even worse. Further, demolishing/rebuilding hangar 103, aside from its historic significance that has strong opposition by the Historic Hawaii Foundation, will move the MV-22/Osprey aircraft bayside facing Kaneohe Bay with their decibel levels much louder than the CH-53 helicopters that are already loud. This would be radical for the community to live with and, the draft EA doesn't include noise levels in the surrounding communities adjacent to Kaneohe Bay which WILL be directly impacted.

Additionally, the Kailua Neighborhood Board passed a motion for a full EIS from the PZ&E committee.

The draft EA is inadequate to support no significant impact. A full EIS needs to be done.

Best regards,

  
John Poole

*269 aikahi place  
kailua, hawaii 96734*

Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 044 (continued)

Comment

(see above)

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Comment 044 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 045

#### Comment

**From:** [Susan F. Stahl](#)  
**To:** [NFPAC-Recative](#)  
**Cc:** [Brian Schatz](#); [U.S. Senator Mazie Hirono](#); [president@whitehouse.gov](#)  
**Subject:** [Non-DoD Source] MCBH - EA for Flying Over Civilian Homes - Noise, Etc.  
**Date:** Thursday, September 1, 2022 10:28:00 AM

Gentlemen:

I understand that MCBH is planning to move an additional 15 aircraft to the Marine Corps Base Hawai'i. This is a terrible idea and will worsen the already-tense relationship between MCBH and civilian neighbors in Hawai'i - specifically the people who live in He'eia, Kane'ohe, Haiku and Kailua. The Marine base is located where it is only with the permission of the State of Hawai'i and the location should not be assumed to be separate from the Windward neighborhood. The decision to base additional aircraft in Kane'ohe should be vetted by the civilian authorities - and take into account the impact this change will have on the local population.

MCBH is now applying to the State for an EA - Environmental Assessment - of the move. An EA is not sufficient assessment of the impact on civilian neighborhoods. A full EA/EIS - an Environmental Impact Assessment Statement - is required, and I strongly urge MCBH to pursue that more extensive analysis of the negative effects having additional aircraft on the civilian homes in the area.

There needs to be public hearings on this proposal which would take into account the opinions of the civilian neighbors.

Specifically, the noise that will be generated by the additional aircraft is absolutely unacceptable. The current noise is over 65 DNL and the new KC-130J will generate significantly more negative impact on neighboring civilian areas. Already, with the current take-off and landing excessive noise, it is impossible to have a conversation. For example, conferences at the nearby Poha Kea Point condominium community have had to stop the proceedings because of aircraft noise. The interference created by large aircraft, much less jet fighter planes, is unacceptable. Your neighbors are compelled to hear this invasive noise at all hours of the day or night. Needless to say, talking on the phone is impossible during aircraft operations near the base. This noise is extremely unacceptable. An increase of 26 operations daily is

The EA compares overall noise reduction to a time when more helicopter squadrons were stationed at the base. This is misleading. The helicopters that were deactivated used completely different flight paths than the new aircraft which are fixed wing planes. Flight paths and sound assessments in affected areas are critical to understanding the environmental impact.

Historic sites will be affected.

Because of the interference of normal, everyday activities in surrounding neighborhoods due to MCBH aircraft operations, the Base risks additional negativity in the already-fraught relationship between the U.S. military and Hawai'i hosting U.S. military facilities.

Please initiate an Environmental Impact Assessment Statement as soon as possible and include

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Comment 045 (continued)

Comment

public hearings which would take into account the negative impact on the citizens in Kane'ohe, He'eia, Kailua and all local neighbors.

Ver respectfully,

Susan E. Stahl  
46-055 Meheanu Pl.  
Kane'ohe, HI 96744

\*\*\*\*\*

*Susan E. Stahl*

Response to Comment

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Comment 045 (continued)**

**Comment**

(see above)

**Response to Comment**

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

**Comment 045 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

### Comment 046

#### Comment

**From:** [Karen Wurlitzer](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source]  
**Date:** Thursday, September 1, 2022 6:33:21 PM

To Whom it may concern,

Our name is Erik and Karen Wurlitzer. We live on Malae Place right across the bay from Kaneohe Marine Core Air Station. We have endured much noise, the smell of fuel from helicopters, jets, planes and so forth from the military base on a daily basis for many, many, many years. I have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at the Marine Corp Base Hawaii. We are troubled and worried about how adding 15 large four engine aircraft will impact our lives.

Furthermore, We are concerned about the EA plan in regards to the hangers being demolished and replaced causing an impact of more noise and pollution for all of us and the environment due to location. I feel that I need to reach out to you and let you know that this is violating the environment and our health and livelihood.

Please take into consideration all of the terrible problems that this will have for us loyal and hard working USA citizens.

Respectfully,

Karen and Erik Wurlitzer

#### Response to Comment

Thank you for your comment. Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

**Comment 046 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

### Comment 047

#### Comment

**From:** [Jennifer Ching](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] World War II Era Sites  
**Date:** Saturday, September 3, 2022 9:17:12 AM

I, Jennifer Judd Ching, oppose the proposed demolition of any hangars and I support an alternative location for new hangars that would be less impactful to historic and cultural resources.

All five historic hangars are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark.

It goes against our history of place and we need to treasure these monuments for future generations to remember the past generations!!

Mahalo for considering my objection,

Jennifer Judd Ching

#### Response to Comment

Thank you for your comment.

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

**Comment 047 (continued)**

**Comment**

(see above)

**Response to Comment**

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

**Appendix B – Responses to Public Comments**

**Comment 048: Historic Hawaii Foundation**

**Comment**



680 Iwilei Road Suite 690, Honolulu HI 96817 • (808) 523-2900 • [preservation@historichawaii.org](mailto:preservation@historichawaii.org) • [www.historichawaii.org](http://www.historichawaii.org)

September 3, 2022

EV21 Project Mgr, MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste. 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Via email to [NFPAC-Receive@Navy.mil](mailto:NFPAC-Receive@Navy.mil)

RE: **NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine  
Aerial Refueler Transport Squadron  
Marine Corps Base Hawaii Kāneʻohe Bay  
District of Koʻolaupoko, Ahupuaʻa of Heʻeia, Island of Oʻahu**

Dear EV21 Project Manager:

Historic Hawaii Foundation (HHF) is providing comment on the Draft Environmental Assessment (DEA) for a proposed action to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle (UAV) (MQ-9) Squadron and a KC-130J Aerial Refueler Transport (KC-130J) Squadron at Marine Corps Base Hawaii (MCBH) Kāneʻohe Bay as part of Marine Aircraft Group 24 (MAG-24).

These comments are also provided on the project's potential to affect historic properties pursuant to Sections 110 and 106 of the National Historic Preservation Act of 1966 (NHPA) and its implementing regulations at 36 CFR Part 800. HHF is a consulting party to the US Marine Corps and the US Navy pursuant to the implementing regulations of the NHPA at 36 CFR § 800.2(c)(5) as an organization with a demonstrated interest in the undertaking and a concern for the effects on historic properties.

**Historic Hawaii Foundation opposes the proposed demolition of Hangar 103 and the reasonably foreseeable potential demolition of Hangar 104. HHF strongly recommends that MCBH and Navy select alternative locations that would be less impactful to historic and cultural resources.**

**Project Description**

The DEA describes the project as: The proposed action is to home base an MQ-9 UAV squadron and a KC-130J squadron at MCB Hawaii Kāneʻohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation

HHF Comments to MCBH/NAVFAC PAC on NEPA Draft Environmental Assessment  
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**Response to Comment**

Thank you for your comment.

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

## Appendix B – Responses to Public Comments

### Comment 048: Historic Hawaii Foundation (continued)

#### Comment

maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC-130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay (DEA Sec. 2.1).

Major project elements that have the potential to affect historic and cultural resources include:

- Demolition of Hangar 103 (a contributing feature of the NAS Kāneʻohe Aviation Historic District and part of the setting of the Kāneʻohe Naval Air Station National Historic Landmark);
- Modification of Hangar 102 with interior renovations to electrical, mechanical and communications systems (a contributing feature of the NAS Kāneʻohe Aviation Historic District and part of the setting of the Kāneʻohe Naval Air Station National Historic Landmark);
- Installation of two Ground Data Terminals, at Keawanui Hill (located in the Mōkapu House Lots Archaeological District) and adjacent to Hangar 105 (a contributing feature of the NAS Kāneʻohe Aviation Historic District);
- Resurfacing, repaving, striping and installing tie-downs at Bravo Ramp (a contributing feature of both the NAS Kāneʻohe Aviation Historic District and the Kāneʻohe Naval Air Station National Historic Landmark);
- Constructing a new Type II Hangar in the Aviation Historic District on the footprint of the historic Hangar 103;
- Demolition of Facilities 159, 160 and 161 (aircraft spares storage buildings adjacent to Hangar 103); and
- Demolition of Facilities 183 and 184 (aircraft armament storage buildings adjacent to Hangar 103).

#### Identification of Historic and Cultural Resources

There are several historic properties affected by the proposed project. These include:

- The **NAS Kāneʻohe Bay Aviation District** includes 45 buildings and structures and the historic portion of the present runway. It also includes the wreckage of a PBY (patrol bomber manufactured by Consolidated Aircraft) offshore in Kāneʻohe Bay. The major contributing facilities include five aircraft hangars, five seaplane ramps, and numerous ancillary buildings.
- The **NAS Kāneʻohe Bay National Historic Landmark (NHL)** is a smaller section within the larger Aviation District. It includes Hangar 1, the five seaplane ramps, the seaplane parking area to the east of Hangar 1, and the seaplane parking area between the hangars. The parking aprons still carry strafing marks and bomb craters from the 1941 attack. Extant hangars 1, 3 and 4 were present at the time of the attack. The current hangar 2 was present but was modified and rebuilt during the war. Hangar Row is an aspect of the setting that provides historic integrity to the NHL.

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September 3, 2022  
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#### Response to Comment

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

### Comment 048: Historic Hawaii Foundation (continued)

#### Comment

- The **Mōkapu Houselots Archaeological District** encompasses a portion of the geographical area of Pali Kilo. Its significance is described as multi-layered, and includes multiple periods, types, and associations of significance. The Archaeological District includes numerous sites associated with the pre-Contact period as well as with the pre-military period, including the remains of early twentieth-century house sites that were part of the 350-parcel residential Mōkapu Tract Subdivision developed between 1932 and 1941.
- **Archaeological Site 7723** is recommended as potentially eligible for inclusion on the National Register of Historic Places under Criteria C and D, and as a contributing property of the Mōkapu Houselots Archaeological District at Pali Kilo. MCBH found that it is probable that the pre-Contact components of this site have their origins during the Late Pre-Contact period.

#### HHF Comments on Effects on Historic and Cultural Resources

The Environmental Assessment identifies historic and cultural properties affected by the project. Historic Hawaii Foundation notes the acknowledgement of significant adverse effects on several historic properties and the effort to resolve those effects through the NHPA Section 106 process. HHF affirms its continuing participating in the Section 106 consultation to resolve effects.

However, the draft Environmental Assessment fails to adequately identify and address cumulative and indirect effects that are reasonably foreseeable, and also fails to adequately engage in planning to minimize effects on the National Historic Landmark.

#### **1. Effect on National Historic Landmark**

The project location includes the NAS Kaneohe National Historic Landmark. It will have direct effects on Bravo Ramp and to the NHL setting by demolishing Hangar 103. NHPA Section 110(f) requires that the agency official, **to the maximum extent possible**, undertake such planning and actions as may be necessary to **minimize harm to any National Historic Landmark** that may be directly and adversely affected by an undertaking. This requirement is also enacted in 36 CFR § 800.10 as special requirements for protecting National Historic Landmarks (emphasis added).

#### **2. Cumulative Impacts**

MCBH fails to accurately describe the proposal to demolish another historic hangar (Hangar 104) under a separate undertaking. Table 4-1 of Past, Present and Reasonably Foreseeable Actions Item 35 describes the proposal as “renovation of Hangar 104 to accommodate two C-40 aircraft” (page 4-5), while the narrative describes the proposal as “replacement of an existing hangar for C-40 aircraft” (page 4-8).

During the NHPA Section 106 consultation, MCBH described the 10-year timeframe of potential projects that could affect contributing resources in the Naval Air Station Kaneohe Bay Aviation District:

At the time the district nomination was prepared, there were 60 contributing resources. Currently, there are 45 extant. If all proposed actions are carried forward, at the conclusion of the Hangar Modernization effort there will be an additional 18 contributing resources razed.

HHF Comments to MCBH/NAVFAC/PAC on NEPA Draft Environmental Assessment  
Hombasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron  
September 3, 2022  
Page 3 of 4

#### Response to Comment

Hangars in Hangar Row were built in the 1940s to support seaplanes and other aircraft of the time, they were not designed for modern aircraft. MCB Hawaii undertook planning and actions to minimize harm to the NHL in accordance with Section 110, including the development of the Draft EA and early and regular consultation with SHPD and consulting parties. In particular, these planning actions included incorporation of cultural SMEs into the planning process, conducting a series of Section 106 consultation meetings with consulting parties, requesting public input during the consultation process, and coordinating potential mitigation measures. The Marine Corps identified potential mitigation measures, shared them collaboratively with consulting parties, and updated them per the consulting parties’ input.

The cumulative impact analysis addresses this change in number of contributing resources over time. For an active military base to remain operational, certain facilities require modernization or replacement. The Marine Corps conducted a screening and alternatives development process to identify suitable locations for the proposed action while attempting to minimize effects to historic resources. For unavoidable effects, the Marine Corps developed mitigation measures to offset these unavoidable effects and coordinated them with the consulting parties. The NAS Kaneohe Aviation District has been impacted over time with the demolition of 15 contributing buildings, structures, and objects between 2006 and 2022. There are an additional 7 buildings proposed for demolition in connection with future projects, including the proposed action. Hangars 103 and support buildings 159, 160, 161, 183 and 184 would be demolished under the proposed action. The Navy has proposed replacing Hangar 104; however, the final disposition of Hangar 104 is not part of this proposed action and is dependent on the outcome of a separate EA and NHPA Section 106 process.

## Appendix B – Responses to Public Comments

### Comment 048: Historic Hawaii Foundation (continued)

#### Comment

This will leave 27 contributing resources remaining, of which only 5 are buildings, the others being contributing structures and objects. (MCBH presentation Feb. 10, 2022).

#### 3. Alternatives Analysis

MCBH's analysis of alternatives included no action; alternative locations at Joint Base Pearl Harbor Hickam; USCG Air Station Barbers Point; Wheeler Army Airfield and Dillingham Military Reservation. Each of these was eliminated from consideration due to the inability to meet specific criteria and project needs.

MCBH also assessed alternate siting locations within the Kāne'ohe Bay base. Sites at West Field, Pali Kilo and Greenfield were eliminated due to various technical criteria and the long-lead time for construction, delaying the proposed action by 10-12 years.

**HHF disagrees with the decision to eliminate the Greenfield alternative.** Conceptual site plans indicate that with design adjustments, the location can address the perceived barriers and still meet the purpose and need for the project. This site has roughly the same construction feasibility issues as the proposed alternative (such as demolishing and replacing facilities and utilities) and is much less impactful to historic properties and the historic district.

**Therefore, HHF requests that MCBH and Navy consider the Greenfield site as a potential alternative location for the Homebasing project, the C-40 Hangar project or both.** This would be a reasonable alternative to avoid significant and irreversible impacts on a nationally significant historic property.

Thank you for the opportunity to comment. Historic Hawai'i Foundation looks forward to continuing consultation.

Very truly yours,



Kiersten Faulkner, FAICP  
Executive Director

Copies via email:

- Maj Jeff Hart, June Cleghorn, Wendy Wichman and Chris Frantz, MCBH
- Alan Downer, Susan Lebo, Stephanie Hacker and Julia Flauaus, Hawai'i State Historic Preservation Division
- Elaine Jackson-Retondo, National Park Service
- Elizabeth Merritt, National Trust for Historic Preservation

HHF Comments to MCBH/NAVFACPAC on NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron  
September 3, 2022  
Page 4 of 4

#### Response to Comment

The Green Field site is not a viable alternative for the proposed action. The Marine Corps conducted an extensive analysis of the Green Field site, shared this with consulting parties in a series of Section 106 consultation meetings, and documented the findings in Section 2.2.2 of the Draft EA. In addition to the multiple planning constraints identified in the EA, relocation of the displaced facilities in this area would delay hangar construction for the proposed action by an estimated 10–12 years, which would unacceptably disrupt base activities and adversely affect the Marine Corps mission at MCB Hawaii Kaneohe Bay.

**Comment 049**

Comment

**From:** [Laurel Leslie](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] EA and EIS request attached  
**Date:** Saturday, September 3, 2022 5:38:38 PM  
**Attachments:** EA EAS.docx

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Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 049 (continued)

#### Comment

Date: September 3, 2022  
To: [NFPAC-Receive@Navy.mil](mailto:NFPAC-Receive@Navy.mil)  
From: Ms. Laurel Leslie  
223 Aikapa St, Kailua, HI 96734

Upon a thorough review of the environmental assessment (EA) for the basing of MQ-9s and KC-130Js at Marine Corp Base Hawaii, I have concerns about the EA that need to be addressed.

I live in a community that has been impacted by the area aircraft 24/7 for the last 40 years. The aircraft noise has disrupted my TV, and interpersonal conversations in my home. Often this occurs late at night. This disruption interferes with the quality of life I deserve. I do not understand how the proposed fifteen additional aircraft could possibly mitigate the current noise level. Any EA that evaluates the noise impact also needs to also address the exhaust residue on water in Kaneohe Bay as well as the residents that already feel the fuel residue impact from continual aircraft from the base. I am forced to clean a black coat of burned fuel from my home.

What is needed is an evaluation of the noise and pollution that the additional of many flights will bring to the community surrounding MCBH.

The EAs assessment in and around the base is vague and does not consider the noise and pollution in my neighborhood of Aikahi Park. My family is opposed to the Ospreys in the Kaneohe Bay area and the basing of fifteen planes MQ-9s and KC130Js.

The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS needs to be completed prior to action by MCBH. This community deserves better answers to their questions and concerns.

Thank you for considering the EIS as a better alternative to the EA.

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

**Comment 049 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 050

#### Comment

**From:** [Respiratory and Environmental Disabilities Assoc of HI](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] EV21 Project Mgr  
**Date:** Sunday, September 4, 2022 5:54:56 AM

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Besides the historical damage and destruction of the environment this project will cause, my primary concern is for the health of the surrounding communities. There are numerous studies of the health effects of noise, vibrations and air pollution. I am in complete opposition to this project.

B. A. McClintock, REDAHI-Respiratory and Environmental Disabilities Assoc of HI

#### Response to Comment

Thank you for your comment.

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Comment 050 (continued)**

**Comment**

(see above)

**Response to Comment**

There is no demonstrated causative connection between intermittent exposure to aviation noise and non-auditory health effects in local communities. Numerous epidemiological studies and meta-analyses have been conducted on the long-term health impacts of exposure to noise, finding that noise can cause annoyance, annoyance can cause stress, and prolonged stress is known to be a contributor to some health disorders. Beyond this general conditional premise, there is no evidence that aircraft noise is a significant contributor to health disorders. Moreover, individual health is greatly influenced by a variety of factors such as genetics and lifestyle issues such as smoking, diet, and exercise. These factors have a much greater impact on an individual’s overall health than intermittent exposure to aircraft noise.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu’s National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

Potential impacts of the proposed action to public health and safety are addressed in Section 3.6 of the EA.

## Appendix B – Responses to Public Comments

### Comment 051

#### Comment

**From:** [Judy Mick](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] Marine Corps Base Hawaii Expansion  
**Date:** Sunday, September 4, 2022 11:36:07 AM

Aloha- Thank you for allowing the public to comment on these future plans.

I am very concerned at the idea of having large unmanned aerial vehicles in the area. Numerous civilian neighborhoods and schools are close to the base and safety is my prime reason for not wanting these "drones" nearby.

By redirecting the lay of the runways it would seem that the noise factor for everyone along Kaneohe Bay and across the bay itself will be subjected to horrible noise pollution. I don't wish that on anyone.

There needs to be a complete and thorough EIS done for this type of upgrading. I hope you will agree it is needed so the very people you are sworn to protect can feel that you do have their best interest at the top of your list. Thank you for considering my thoughts.

Sincerely, Judith A. Mick, Kailua

#### Response to Comment

Thank you for your comment.

MQ-9 aircraft operations safety data are included in the analysis of public health and safety. Pilot training, redundant communications systems, programmed failsafe mechanisms, and the operating area of the proposed aircraft all help ensure safe operations of the MQ-9.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

Appendix B – Responses to Public Comments

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Comment 052

Comment

From: [Nai'a](#)  
To: [NEPAC-Receive](#)  
Subject: [Non-DoD Source] drones@Schofield & Kahakuloa  
Date: Sunday, September 4, 2022 5:20:54 AM

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Vehemently opposed!  
"Thou shalt not kill."

Nadine Newlight  
2040A Kauhikoa Road  
Haiku, HI 96708-5823  
808-573-7730

*I acknowledge that this 'āina is part of the larger territory recognized by Indigenous Hawaiians as their ancestral grandmother, Papahānaumoku. I recognize that her majesty Queen Lili'uokalani yielded the Hawaiian Kingdom and these territories under duress and protest to the United States to avoid the bloodshed of her people. I further recognize that Hawai'i remains an illegally occupied state of America.*

Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

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**Comment 053**

**Comment**

**From:** [Jeff Sawyer](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] MQ-9 & C-130s Home Basing at KBAY  
**Date:** Sunday, September 4, 2022 6:22:53 PM

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Outstanding! Bring them on! The sounds of freedom. Semper Fi!

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 054

#### Comment

**From:** [Emma Smith](#)  
**To:** [NFPAC-Recavire](#)  
**Subject:** [Non-DoD Source] Demolishing of historical hangers, KBay  
**Date:** Sunday, September 4, 2022 5:04:46 AM

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Aloha mai e, I would like to express that the historical hangers at KBay be preserved.

With increasing opinion of desired peace on earth, I believe in importance of wartime history remembrance, and structural preservation of the hangers for the current and next generations to come.

Mahalo mui loa

Rika Emilia Malulani Smith

Sent from my iPhone

#### Response to Comment

Thank you for your comment.

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

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### Comment 055

#### Comment

**From:** [Don Wilcox](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] comments on EA for MQ-9's and KC-130's at Kaneohe  
**Date:** Sunday, September 4, 2022 11:44:27 AM

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I am a Kaneohe resident. My windows already rattle and I am kept awake by the current helicopters. The P3's used to be worse. I suspect that what is coming will be louder and the proposed positioning of the hangers will bring even more noise. There must be a way to handle this which reduces, rather than increases to noise levels for nearby residents.

Thank you,

Don Wilcox  
Sept 4, 2022

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 055 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

Comment 056

Comment

**From:** [Joe\\_DeGregorio - Southwest Louisiana Weather](#)  
**To:** [NEPAC-Recavue](#)  
**Subject:** [Non-DoD Source] Hanger 2!!  
**Date:** Monday, September 5, 2022 5:02:29 PM

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In regards to famed, historical Hanger 2 as it was known during WWII and as a military veteran myself I am asking that the Marine Corps find another solution to a new drone/tanker base. Don't say you can't, because "can't" is NOT in a Marine's vocabulary!!! Don't you think the Woke Left has erased enough of our history already?  
Regards,  
Joe DeGregorio

Response to Comment

Thank you for your comment. The Marine Corps requires enough land for the necessary support facilities and infrastructure to support the proposed aircraft squadrons. As explained at Section 2.2.1.3, there is insufficient developable land at USCG Air Station Barbers Point to support new hangars and supporting infrastructure for the two squadrons. It does not have adequate hangars even for its existing HC-130J aircraft, nor the space to construct new hangars. The amount of space required to construct new hangars and supporting infrastructure for two new squadrons is approximately 32 acres. The DoD coordinated with HDOT to discuss the availability of suitable land for the proposed action. While the current operating agreement shows 106 acres of Navy property adjacent to the airfield (Naval Facilities Engineering Systems Command [NAVFAC], 2021), only a small, disaggregated portion of that acreage is possibly developable. This collection of disparate parcels is insufficient to accommodate the minimum footprint for the hangar, apron, and supporting facilities. In addition, USCG Barbers Point does not satisfy Criterion 3 because FAA restrictions forbid unmanned aircraft operations of any type in the vicinity of Honolulu International Airport.

Section 2.2.2 presents the constraints associated with West Field. Development for KC-130J facilities is constrained by explosive safety quantity distance arcs, a magnetic quiet zone around the compass calibration pad, taxiway obstacle-free areas, and flood hazards. In addition, West Field's proximity to the runway and other airfield surfaces results in an inability to place a suitably sized hangar and apron at this site. Also, construction at West Field is infeasible because it would require frequent and extended closure of the runway over a period of many years, unacceptably impacting the base's mission. To accommodate the proposed action's increased mission traffic while ensuring operational availability of the runway, any hangar development north of the Mokapu Road crossing would require construction of an underground tunnel beneath the runway at the current Mokapu Road crossing. This is infeasible because construction of such a tunnel would require frequent and extended closure of the runway, unacceptably impacting the base's mission; the high-water table in the area; the high potential to impact subsurface archaeological resources; and would be unreasonably expensive.

Comment 056 (continued)

Comment

(see above)

Response to Comment

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

Bravo Ramp is both an active taxiway and a parking apron, each of which require minimum separation distances depending on aircraft type. It is not possible to locate the KC-130J squadron along Bravo Ramp in a new replacement hangar because the KC-130J wingspan is too wide to use Bravo Ramp with parked aircraft on the apron. The ramp cannot be expanded due to its location adjacent to Kaneohe Bay. The only viable alternative is to locate the KC-130J in Hangar 6886, utilize Charlie Ramp for KC-130J parking, and relocate the MV-22 squadron to a replacement Type II hangar on Hangar Row.

**Comment 057**

**Comment**

**From:** [Richard Exnicios III](#)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] Tearing Down Hangar 2.  
**Date:** Monday, September 5, 2022 3:27:42 PM

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Dear Lt

Is the Marine Corp loosing it's mind? I think so to tear down where the "first Medal of Honor" winner became a "Medal of Honor" recipient during the Greatest Disaster of our country's history at that time is disrespectful and a disgrace to the Marine Corp and the Navy!! By far the Marine Corp should be hanging their collective heads in shame and apologize to all those remaining WW2 Marine Corp and Navy Vets who fought right there at the MCBH and at "Pearl Harbor" like my dad a submariner(USS Plaice) or my late uncle LtJG Earl deBouchel served on the USS Shipley Bay to even consider tearing down that hangar!! What happen to the Marine Corp motto "the few the proud, the marines"

Well that hangar is just one of thoes "few" buildings that came through the fire and bullets of the "Japanese's surprise attack" on that faithful day" that our Lord and Savior" saw fit to help us in our country's time of need!! Thank you. Sincerely Samuel Richard Exnicios III (Vietnam Vet)Sp4

**Response to Comment**

Thank you for your comment.

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

### Comment 058

#### Comment

**From:** [Lorraine Lunow-Luke](#)  
**To:** [NFPA-Recative](#)  
**Subject:** [Non-DoD Source] Requesting Full EIS to assess basing of MQ-9s and KC-130s at MCBH  
**Date:** Monday, September 5, 2022 1:58:10 PM  
**Attachments:** [The Kailua PZ E Committee Motion.pdf](#),  
[ATT00001.htm](#)

EV21 Project Manager:

I am writing to express my concern that the Environmental Assessment for basing MQ-9s and KC-120Js at MCBH is inadequate and does not sufficiently evaluate the impact on the surrounding community, including noise and environmental impacts.

I agree with the Kailua Neighborhood Board's identified concerns with the ES (see attached) and request that a full EIS be conducted to provide a more thorough and transparent evaluation of these concerns.

As a resident of Aikahi Park, bordering MCBH, the noise disruption from base aircraft is already significant. I have also been dismayed at the deterioration in the water quality in Kailua Bay over the 25 years I have lived here. An EIS should be done to evaluate whether the project will further exacerbate these issues and what can be done to ameliorate them.

In addition, I support the Historic Hawaii Foundation's strong opposition to demolition of historic structures on the base.

Sincerely,  
Lorraine Lunow-Luke  
218 Iihau Street  
Kailua, HI 96734

#### Response to Comment

Thank you for your comment.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 058 (continued)

#### Comment

The Kailua PZ&E committee approved submitting the following motion:

- The Kailua Neighborhood Board recommends that the Marine Corps Base Hawaii conduct an Environmental Impact Statement (EIS) under the National Environmental Protection Act (NEPA) instead of or to replace the Environmental Assessment (EA) for the home basing of the MZ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii for the following reasons:
- The proposed Project is a major Federal action, which will significantly affect the quality of the natural and human environment and therefore requires the preparation of an EIS under NEPA.
  - The EA does not provide a comprehensive evaluation of short- and long-term and cumulative impacts from the proposed Project including demolition of multiple buildings on burials, historic buildings, historic districts, endangered birds, storm water runoff, water quality as it enters Kaneohe and Kailua Bays, and noise.
  - The EA does not provide the community with enough information to support a finding of no significant impact.
  - The EA does not identify the type of noise modeling the Marine Corps is using nor does it include impacts from the amphitheater effect of the surrounding mountains.
  - The EA does not include information on whether the proposed aircraft will carry ordnance.
  - The EA does not include an air quality impact analysis.
  - The EA does not provide information on the type of noise or level of noise that will be generated by maintenance or the hours that maintenance will be performed.
  - The EA does not provide information on the minimum altitude for the MQ-9s.
  - The EA does not provide information on where the aerial KC-130J refueling operations will take place.
  - The EA does not contain noise measurements for the communities that they will fly over or nearby.
  - The EA does not describe the planned flight paths for the KC-130Js or drone patterns and how those flight patterns will impact surrounding residential communities.
  - The EA provides very little information on the Project's impact on 'iwi burial sites known and yet to be discovered.
  - Since past construction on the base has unearthed over 1,500 sets of human remains greater attention and research must be spent on locating 'iwi before they are bulldozed.
  - The EA states that tie-downs and striping at the end of Runway 4/22, west of Hangar 105 (Hanger 5) will occur. The EA describes Site 50-80-11-4453 as a subsurface traditional Hawaiian cultural deposit located west of Hangar 105, near or within the location of Project Element 4. (1/7/22 letter from Marine Corps to Dr. Alan Downer State Historic Preservation Department page 4)
  - The EA does not include the cumulative effects of stormwater runoff and decreased permeability from past and future projects.
  - 3.3.1 page 54: "Activities occurring in the portion of the project area near the Kaneohe Bay shoreline would consist of demolition, renovations, and construction upon impervious surfaces that would follow standard construction conservation measures for control of water contamination risk due to runoff."
  - 3.3.1.5 page 55: "Box culverts drain the runway area southward to the bay. Other box drains discharge runoff for the area west of the runway to the ocean toward the west. The base main cantonment area east of the runway is drained by a series of pipe drain systems to Kailua Bay or overland."
  - The EA does not describe how or if the stormwater measures and storm drainage infrastructure concur with the recent EPA stormwater consent decree between the Marine Corps Base and EPA, which was issued for violations of the existing National Pollutant Discharge Elimination System (NPDES) storm water permit.
  - Page 3-15: Following construction, all storm water runoff from operations would be managed by existing on-site storm drainage infrastructure.
  - The EA does not provide information on the location, dimensions, capacity, etc. of the new storm water detention basin. (Page 2-7)
  - The EA does not provide any information on the quality of the storm water runoff that will be collected at the Project area and directed to the Nuupia Ponds Complex and ultimately into Kaneohe and Kailua Bays.
  - The EA does not provide information on impacts from developing the project within the FEMA Zone D, an area where flood hazards are possible, but undetermined.
  - Under Appendix A, Regulatory Setting on page 125: "Executive Order (EO) 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of development in a floodplain unless it is the only practicable alternative."
  - 3.3.1 page 54: "Construction of the new washdown and refueling areas near Hangar 6886 would create 4.25 acres of new impervious surface."
  - The EA does not clarify the type of cleaning agents or solvents which will be used to clean the exteriors of the new aircraft, nor does it state the procedures that will be followed to safely dispose of those cleaning agents/solvents.
  - In the past the Marine Corps was forced to permanently and completely close at least one Marine Corps Base, El

#### Response to Comment

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

## Appendix B – Responses to Public Comments

### Comment 058 (continued)

#### Comment

Toro Marine Corps Air Station in Orange County in Southern California, in 1993 because of toxic ground contaminants.

- El Toro Marine Corps Air Station was placed on the EPA Superfund priorities list where 25 separate areas were identified as potentially contaminated areas.
- The EA does not list any considerations of the effects of climate change, and the overall and cumulative effects of this construction on the overall resilience of the airfield.
- The area is classified as being within the State of Hawaii's "Coastal Flood Hazard Zone with Sea Level Rise" according to the Sea Level Rise. State of Hawaii's Sea Level Rise Viewer: An Interactive Mapping Tool in Support of the State of Hawaii's Sea Level Rise Vulnerability and Adaptation Report, found here: <https://www.pacificos.hawaii.edu/shoreline/sr-hawaii/>
- The EA does not address effects and impacts of a tsunami even though the majority of the Project area is within a "Tsunami Evacuation Zone".
- The EA gives conflicting information. Page 3-15 states, "there would not be an increased volume of water entering wetlands in the immediate vicinity of the project" and "this project area does not overlie a drinking water source and is not located near any freshwater surface waters or wetlands". (Emphasis added.)
- The EA makes statements such as this small increase in impervious surface consisting of activities presently found on MCAS Kaneohe Bay, results in less than significant increases in the amount and type of storm water flow going into Kaneohe Bay from current conditions without defining the increases and impacts on the bay and its marine life. (Emphasis added.)
- The EA does not define less than significant increases.
- The water quality of Kailua and Kaneohe Bays depends on the quality of the water sent into these water bodies.
- The EA does not provide information on whether the proposed upgrades to the Waste Water Treatment Plant (WWTP) will be completed or have sufficient capacity to adequately handle the additional 676 active-duty personnel and their dependents.
- The Marine Corps base was cited by the State Department of Health for "unauthorized wastewater discharge from its Kaneohe Bay Water Reclamation Facility" and ordered by EPA to upgrade the facility.
- The EA does not explain what is meant by no brighter than necessary when referring to lighting and impacts on migratory birds.
- The EA does not explain the circumstances under which pre-approval would be necessary for construction lighting.
- Bird/bat disorientation/fallout. Minimize brightness. Be no brighter than necessary, all nighttime construction work and construction lighting would be pre-approved with Environmental Compliance & Protection Division Natural Resources. (Page 2-21)
- The EA does not identify impacts from day and nighttime construction work and construction lighting on listed endangered birds, which are known to fly over and inhabit the base.
- Thirteen of the 17 bird species found on the base are native with 12 species listed as endangered under the Endangered Species Act or identified as state endangered, state threatened. The monarch butterfly is a candidate species for listing under federal Endangered Species Act.
- The EA states that there is suitable pueo foraging habitat in the project area but does not provide information on the Project's impact to pueo foraging habitat. (Page 3-48)
- The EA states that MCBH has determined that implementation of Alternative 1 would result in adverse effects to historic properties but does not identify the adverse effects on each site or cumulative impact from demolition of historic buildings and construction of new buildings to the historical integrity of the project areas.
- Page 1-5 ...the SHPD (State Historic Protection Division) concurred with the determination the project would result in adverse effects to the Naval Air Station (NAS) Kaneohe Historic Aviation District.
- Page 3-31 Archaeological Resources Demolition activities requiring ground disturbance have the potential to disturb or destroy subsurface archaeological resources, including known sites as well as those not yet identified. Buildings and structures proposed for demolition include 10 buildings.
- Project area of potential effects (APE): NAS Kaneohe HNHL District; NAS Kaneohe Historic Aviation District; Mokapu House Lots Archaeological District at Pali Kilo; and areas adjacent to the Aviation District along First Street, in West Field, south and east of Charlie Ramp and north and east of the transient ramp. This includes demolition of Hangar 103, one of 5 historic hangers and areas damaged from the December 7, 1941 attack.
- The EA identifies the locations of and states the need for Temporary facilities such as trailers, equipment storage, and communications connections. . .but does not discuss stormwater discharge locations or water quality from these temporary facilities as stormwater runoff enters Kaneohe and Kailua Bays.

#### Response to Comment

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

See also responses to comment #088.

**Appendix B – Responses to Public Comments**

**Comment 059**

**Comment**

September 5, 2022

To Whom It May Concern,

I am in complete agreement with the Windward Coalition's resolution that a full EIS needs to be done in place of the current EA at MCBH for the basing of the Reaper drones (MQ-9s), the KC-130Js and also the replacement of the MV22s to the hangars on the sheltered side of Kaneohe Bay. The current EA for the addition of these new squadrons and replacement of the MV22s is woefully inadequate to represent the noise, health and environmental issues that will impact those of us living in the surrounding community. I am enclosing the findings of the Windward Coalition so as not to belabor the points of contention in this letter.

I am enormously grateful for our Marines and I am well aware of past efforts by MCBH to work with our community when similar issues have arisen. I am confident that this latest challenge can be addressed for the good of all involved.

Most sincerely,  
  
Mary Ann Mack  
44-309 Kaneohe Bay Dr.  
Kaneohe, HI 96744

**Response to Comment**

Thank you for your comment.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

See also responses to comment #098.

Appendix B – Responses to Public Comments

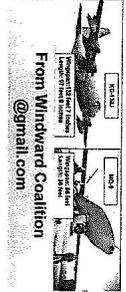
Comment 059 (continued)

Comment

**URGENT!** It is extremely important that you reply with your comments on the environmental assessment (EA) for the basing of MQ-9s and KC-130s at Marine Corp Base Hawaii. **The deadline is Sept 7, 2022.**

- The Windward Coalition's position is that the draft EA is inadequate and does not provide the community with nearly enough information to support a finding of no significant impact. If you agree with this, share your concerns and feedback, and request a full EIS be prepared.
- Some of you have asked for examples of points made in letters sent by others. See below:

**Start**



**Date**

- My name is (first, middle last) and I reside at the address: .... I have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. I have concerns that include:
  - Noise. The evaluation must extend the regions studied and sound measured to include the surrounding communities in its analysis. The noise generated by the current aircraft disrupts both my and my family's quality of life. The noise interferes with conversations, listening to TV or music, and my children's speech/reading homework. Nighttime noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation. Even worse, the EA also includes demolishing and rebuilding hangar 103. Ospreys will be located bay-side, facing the Kaneohe Bay coastal community. Actual measurements of noise emitted by an MH-53 Osprey, compared to a CH-53 shows that it is louder by about 30 decibels or about eight times the noise level. This does not factor in the amphitheater effect created by the mountains and the bay which will amplify the Osprey noise.
  - Health. Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to sleep with the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8,280 new aircraft operators can only worsen this problem. The environmental protections should be followed by all with no exceptions. We must do anything we can to avoid disasters like the Love Canal, Red Hill and Camp Lejeune.
  - Environment. The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base, and some surrounding water. For example, it is clear that dogs are stressed by the noise quite a distance from the base. Things that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coast fish, birds, marine life and sea turtles should be addressed in the study. Recently, there has been increased sea turtle nesting activity on the offshore islands of Oahu (Kapaemahu, Menehune, Moku Manu, Moku Nui, and Mokuauia). There have also been many sightings of Hawaiian monk seals on these islands. Close to MCBH there have been sightings of sperm whales closer to the Samuan Channel and the restricted ocean area around MCBH. The EA does not address if and how the Navy will monitor the impact of noise and pollutants on these animals.
  - Historic preservation. There will be an adverse effect on historic properties resulting from the proposed construction with the modification and/or destruction of 2 hangars, both Historic Places. They are anchor buildings in the Aiea Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. The buildings involved are an important reminder of the first moments of our nation's greatest conflict.
  - We support Historic Hawaii Foundation in their strong opposition to this demolition and are in favor of alternatives available and known to the Navy.
  - Conclusion -The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Send your comments to:  
Email: [MRPAC-Receive@navy.mil](mailto:MRPAC-Receive@navy.mil)

OR Share with:  
Project Mgr  
MC91 Project Home Basing EA  
Naval Facilities Engineering Station  
258 Makielua Drive Ste. 100 Joint Base Pearl Harbor-Hickam, HI 96860-3134

Response to Comment

## Appendix B – Responses to Public Comments

### Comment 060

#### Comment

**From:** [Nick McCall](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] DRAFT ENVIRONMENTAL ASSESSMENT FOR HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEHOE BAY OAHU, HAWAII  
**Date:** Monday, September 5, 2022 4:18:32 AM

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr  
Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Ladies and Gentlemen:

I wish to add my own comment with respect to the pending EA and NEPA review that, while recognizing the legitimate military needs pressing upon the Marine Corps with respect to the basing of its MQ-9 UAV squadron and the KC-130J squadron at MCB Kaneohe Bay, there must be some viable alternative in doing so that does not cause the destruction of the historic former Hangar 2, now known as Hangar 103. That hangar's historic basis, tied directly to its role during the December 7, 1941 Pearl Harbor attack, is quite simply irreplaceable.

Even significant modifications that would enable the USMC to reutilize or repurpose as much of that historic facility as possible would appear to be preferable to the loss and demolition of the entirety of that structure.

In all other respects, I support the comments of the Historic Hawaii Foundation.

Respectfully submitted-- Jack H. McCall, Jr.

Jack H. McCall, Jr.  
P.O. Box 11193  
Knoxville, TN 37939-1193  
Phone: (865) 803-8996  
Email: [nick.mccall@gmail.com](mailto:nick.mccall@gmail.com)

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#### Response to Comment

Thank you for your comment.

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

**Comment 060 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

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### Comment 061

#### Comment

**From:** [Benjamin Shafer](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [bdshafer@gmail.com](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Do not support the housing Drones, et al anywhere in Hawaii.  
**Date:** Monday, September 5, 2022 3:33:13 PM

---

Aloha kakou,  
I do not support the housing of drones anywhere in Hawaii.

Respectfully submitted,  
Benjamin Shafer  
bdshafer@gmail.com  
8083885777

Sent via the Samsung Galaxy S22 5G, an AT&T 5G smartphone  
Get [Outlook for Android](#)

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 062**

**Comment**

**From:** [Thomas Therrien](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] MQ-9's & KC-130J's  
**Date:** Monday, September 5, 2022 8:50:46 PM

My Name is Thomas Therrien I reside at 44-613 Kaneohe Bay Drive. Just across the bay from the base.

I have reviewed the Envirometal Assessment for the basing a squadron of MSQ-9s and KC-130s at KMCAS.

Personally love watching the touch and goes and the helicopter drills etc. But with some discretion as lately especially during RIM PAC the constant all day then into the night and up to 1am at times was just about enough.

We do not have A/C and rely on open windows and fans. This past month we had a tenant move out due to the amount of noise, we live on the upper level. I know RIM PAC was an exercise long over due and we settled that it was going to end soon but then of course the Blue Angel show was right after with all their practise runs etc Although that was the most awesome, and ended at 4pm, the all day after RIM PAC was just a little too much.

Had to keep dogs on tranquilizers during this whole escapade of flying. My sleep has been horrible.

Still respect and love the base, and the occasional visits of the F-22s, the Ospreys etc. But having 2 squadrons of this type of plane in constant use all day every day and working on them on the run way, which is the worst. Will change the bay from peace to war games.

So will there be a significant impact, YES !! The EA study needs to be really be done with intent of discovery of the impacts on the community.

I know we need to keep our pilots trained. But no reason for it being every day and into late in the evening.

Thanks for your ear, but mostly for all of your service.

Thomas E Therrien



Thom Therrien  
HD Inspections, LLC  
The House Doctors  
Home Inspection Services  
808-864-3892  
[hdinspections@gmail.com](mailto:hdinspections@gmail.com)

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 062 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

Appendix B – Responses to Public Comments

Comment 063

Comment

From: [Paki Wieland](#)  
To: [NFPAC-Recieve](#)  
Subject: [Non-DoD Source] Ban killer drones  
Date: Monday, September 5, 2022 10:51:40 AM

NO ASSASSIN DRONES IN HAWAII

Years ago I spent glorious times in Hawaii, I especially loved the beaches, the Na pali coast, swimming with sea turtles off the Big Island, watching the earth being created as the lava flowed and cooled, and so much more. I had the good fortune to meet and get to know Nona Beamer who taught me so much both about her life and the history of Hawaii. I love Hawaii, and and because of this love I implore you to keep weaponized drones out of Hawaii. Thank you or reading this and *PLEASE take this request to heart.*  
*Sincerely,*  
*Paki Wieland*

Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

## Appendix B – Responses to Public Comments

### Comment 064

#### Comment

**From:** [Patricia Blair](#)  
**To:** [Robert H. Stiver](#)  
**Cc:** [NFPAC-Receiver](#); [ann Wright](#); [Leatrice Fung](#)  
**Subject:** [Non-DoD Source] Re: Not to Killer Drones in Hawaii!  
**Date:** Tuesday, September 6, 2022 10:21:03 AM

Bravo! well stated! I agree 100%. Patricia Blair, Kailua

Sent from my iPad

On Sep 6, 2022, at 9:45 AM, Robert H Stiver <bobfromoahu@gmail.com> wrote:

I hereby advise you my adamant opposition to the stationing of military-killer drones in Hawaii...at Kaneohe MCB...or anywhere else on land controlled by the military.

My reasons are simple but real, primarily:

(1) Cost. Our national debt now exceeds **30 Trillion Dollars**. That is unconscionable. It must be reduced and eliminated. Prime among my passions is DEFUNDING/DISARMING DoD -- not mere token 10 percent REDUCTIONS in the bloated, rapacious mil/intel/sec budget -- with transfer to crucially demanded domestic priorities. DISARMAMENT of military machines (MICs) globally is an absolute ESSENTIAL if we are ever to have an opportunity for world peace and harmony.

(2) Morality. Case in searing/tragic point: that Afghan NGO peace-worker and his entire family (10 members) murdered in Kabul in (?) August 2020. Innocents must not have the immorality of a killer drone override their morality and lives. Memo: No US military member was held to account -- **ACCOUNTABILITY** -- for that egregious act of murder of civilians.

(3) Continuing/Ongoing Citizen Unrest and Protest of killer drones at KMCB. Surely you're aware that, inter alia, a demonstration/rally against drone stationing, training and use was held in September 2021 at a gate of KMCB. The citizenry has spoken: **No Drones!**

Testimony submitted with sincerity and passion this 9-06-2022:

Robert H. Stiver  
98-434 Hoomailani Street  
Pearl City, HI 96782

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

## Appendix B – Responses to Public Comments

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### Comment 065

#### Comment

**From:** [Philip Green](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] EIS Kaneohe Bay  
**Date:** Tuesday, September 6, 2022 4:39:23 AM

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I received a flyer attached to my front door asking that we protest the environmental impact of Heres and MQ9 reapers being based at MCBH (or as I still call it MCAS Kaneohe).

I can't think of two less problematic platforms than those. Bring 'em on and how about some F-35s while you're at it. If the state really wanted to protect the aina they'd limit the number of visitors and control access to stressed spots like the sandbar. Kaneohe Bay isn't going to suffer due to drones and Heres flying overhead. I suspect the motivation has less to do with environmental concerns and more with an anti-military stance.

I disagree with this group's beliefs but I spent many years defending their right to have their voices heard.

Thank you for the opportunity to share my views.

Phil Green  
808 226-3735

Sent from my iPhone

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 066

#### Comment

**From:** [mickie\\_bethema](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Community Concerns  
**Date:** Tuesday, September 6, 2022 11:03:19 AM

My name is Michelle Watt and I reside at 95-208 Waikalani Dr. in Mililani.

While not living on the Windward side now, I grew up in Kaneohe in the 50s and even then, the noise from the base was noticeable. I also remember crouching under my desk during drills for attacks and being told "Face AWAY from the Base", as if that would have done us any good.

My uncle in Kailua was a retired MC Colonel, and I fully understand the need for readiness and regretful inevitability of the need for increased air power. But my sympathies do lie with human beings stressed by the constant noise. Right now, I live near Wheeler, and the daily noise of helicopters here, up to and after midnight on some evenings, puts me in sympathy with MCBH neighbors. They literally fly directly over my home and it does get stressful.

I know China is looming as a serious threat and I tried to understand when very recently the Wheeler helicopter noise above my rental in Waikakalau Gulch markedly increased in both number of aircraft and duration through day and night, presumably due to a recent large training exercise. So yes, there is an impact.

The rest of this email is a form letter from Kailua neighbors with which I essentially agree. I feel fairly certain that MCBH plans will not be halted by this opposition, however, please do consider an EIS instead of just the EA, and do explore flight pathways and timing of increased noise which may help mitigate the valid concerns of your Kaneohe and Kailua neighbors.

I am writing regarding the Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii.

I have concerns that include:

**Noise.** The EA only assesses the noise of new aircraft in the "region of influence" in and around the base and some surrounding water. The noise evaluation should be extended to include the surrounding communities.

The noise generated by the current aircraft disrupts both my and my family's quality of life. The noise interferes with conversations, listening to TV or music, and my children's concentration/homework. Nighttime aircraft noise disrupts our sleep as well. The addition of thousands of additional flights annually can only make this worse. Even when the planes are on the ground the engine noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation.

The EA includes demolishing the historical Hangar 103 (Hangar 2 of World War II fame) The plan is rebuild a new hanger 103 and relocate the Ospreys from their current hanger (mid runway) to the new hangar **closer to the coastal community**. Noise will be markedly increased especially during maintenance activities which may

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 066 (continued)

#### Comment

go on for hours. Actual measurements of noise from an Osprey is 8 times more than the large noisy CH53E helicopters that recently left the base.

**Health.** Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to clean soot off the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8280 new aircraft operations can only worsen this problem. The environmental protections should be followed by all with no exceptions. We must do anything we can to avoid disasters like Love Canal, Red Hill and Camp Lejeune.

**Environment.** The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water. For example, it is clear that people and animals are stressed by the noise quite a distance from the base. Planes that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study.

**Historic preservation.** There will be an adverse effect on historic properties resulting from the proposed construction with the destruction of Hangar 103 (Hangar 2 in WWII). Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. [The buildings involved are an important reminder of the first moments our nation was attacked during WWII.](#)

We support the HHF in their strong opposition to this demolition of any of these structures and are in favor of alternatives available and known to the Navy.

**Conclusion** - The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

See also responses to comment # 028.

## Appendix B – Responses to Public Comments

### Comment 067: Waimanalo Hawaiian Homes Association

#### Comment

**From:** Ken Ho  
**To:** [mark.mcdonough@usmc.mil](mailto:mark.mcdonough@usmc.mil); NFPAC-Receive  
**Subject:** [Non-DoD Source] Waimanalo Hawaiian Homes Association: Marine Corps Base Hawaii Home Basing EA Public Comment  
**Date:** Tuesday, September 6, 2022 5:24:24 PM  
**Attachments:** MCBH Aircraft (Signed).pdf

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Aloha.

Please find the attached letter. Our organization is also submitting the same letter via US mail.

Mahalo.  
Kenneth

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 067: Waimanalo Hawaiian Homes Association (continued)

#### Comment



September 6, 2022

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr  
Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Re: **STRONG OPPOSITION** to Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay O'ahu, Hawai'i; Public Comment on the Analysis and Conclusions of Draft Environmental Assessment

Aloha mai.

On behalf of the membership of the Waimānalo Hawaiian Homes Association (WHHA), I would like to express our **STRONG OPPOSITION** to the home basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay, O'ahu, Hawai'i. This letter will address a number of issues we find to be contrary to both welfare and protections for our membership, including problems with proposed construction and fuel, water, JBPHH, withheld information in the Draft Environmental Assessment (EA), and Section 106 Correspondence.

**Construction and Fuel.** On page 2-4, in Table 2-1, regarding the direct refueling system, the document states, there is to be construction of "fuel lines from the existing fuel farm, and a drainage system with storm water detention capability." The fact that fuel rerouting is necessary for the success of the proposed aircraft squadron is terrifying.

The water table at Red Hill has been affected by fuel contamination by the U.S. Navy as of November 2021. As of this August 2022, another water monitoring well 1,500 feet southeast of the Red Hill facility was reporting petroleum contamination. These current events lead us to believe that because the U.S. Navy, the service under which the U.S. Marine Corps is housed, cares so little for freshwater resources, the same is true for our ocean at both Kaneohe and Kailua Bays. That said, we feel the construction of fuel lines for this new aircraft squadron will lead to environmental damage to our natural resources.

**Water:** Regarding water issues, page 2-6 describes that aircraft are to be washed every 105 days. With the number of aircraft in the squadron, that frequency would result in one wash per week. The document

#### Board of Directors

Kenneth Ho, Jr., Denise Ka'a'a, Apela Peahi, Kirk Deitschman, Ilima Ho-Lastimosa, Joe Aipa, Kilauea Wilson

#### Response to Comment

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

The screening criteria are in Section 2.2.1. Coordination with JBPHH personnel (which included the cited documentation) confirmed the lack of available space/facilities for the proposed action.

## Appendix B – Responses to Public Comments

### Comment 067: Waimanalo Hawaiian Homes Association (continued)

#### Comment

Re: **STRONG OPPOSITION** to Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay O'ahu, Hawaii; Public Comment on the Analysis and Conclusions of Draft Environmental Assessment

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further asserts that each wash will use up to 350 gallons of water. Thus, 350 gallons x 52 weeks = 18,200 gallons of water per year. As previously mentioned, the U.S. Navy has already caused a major disruption to O'ahu's freshwater resources at Red Hill. An additional ask of 18,200 gallons of water per year is a slap in the faces of the people that live here. No!

**JBPHH.** In researching the components of this letter, I found that there was an Alternative Screening Analysis on page 2-10. The supposed due diligence of this Draft EA was exemplified in section 2.2.1.2 JBPHH. The referenced work in this section is labeled "JBPHH, 2021." When seeking out in the References section on page 5-3, I found "Joint Base Pearl Harbor-Hickam. (2021). Joint Base Pearl Harbor Hickam Space Allocation Frequently Asked Questions." However, when a lay person, like myself, Googles the referenced work, there is nothing that describes the criteria described in section 2.2.1.2.

Notwithstanding this truth, the due diligence of this section is found, once again, to be weak. What this section fails to mention is that there is a squadron of 12 KC-135R Stratotankers stationed at JBPHH. This aircraft can fulfill all of the missions that the KC-130J is looking to complete. As the former officer in charge of that squadron, I can personally attest to that fact, having deployed with those aircraft in 2006, 2007, 2008, and 2012.

**Withheld Information in the Draft EA.** To have a complete understanding of the issues that we will have to endure with the addition of the two proposed aircraft squadrons, we believe it is critical that all information be made available in the Draft EA. This is not the case. Appendices B, D, and E are empty with a form statement: "To be provided." This, too, is unacceptable.

**Section 106 Correspondence.** According to the Section 106 letter dated January 7, 2022, on page 5, paragraph 1 under "Determination of Effect," Major Hart Asserts that "MCBH has determined the proposed undertaking will result in adverse effects on historic properties."

In a letter dated February 7, 2022, Dr. Alan Downer wrote, "The MCBH has determined the proposed project will result in *adverse effect*... The SHPO agrees with the basis for a determination of *adverse effect* but opines MCBH must still take into consideration comments received from the public and interested parties, which may result in the identification of additional historic properties and/or raise additional concerns regarding project impacts prior to the SHPO's concurrence and drafting of a Memorandum of Agreement to address the identified effects." Dr. Downer continued, "**Please provide** a determination of availability for the four archaeological sites identified and an assessment of the projects [*sic*] potential impact to those sites. **Please also provide** copies, or a summary of, responses received from the public and consulting parties to date."

In a second letter, dated July 11, 2022, Dr. Downer wrote on page 2, "In a letter dated February 7, 2022, the SHPO agreed with the basis for a determination of *adverse effect*... Additionally, the SHPD asked MCBH to provide a determination of eligibility for the four archaeological sites identified and an assessment of the project's potential impact to those sites. **The SHPD maintains this request** which

#### **Board of Directors**

Kenneth Ho, Jr., Denise Ka'a'a, Apela Peahi, Kirk Deitschman, Ilima Ho-Lastimosa, Joe Aipa, Kilauea Wilson

#### Response to Comment

The Air Force KC-135 refueling capabilities currently based at JBPHH, support Air Force, Navy, Marine Corps, and allied nation aircraft. While the Marine Corps will continue to operate jointly with the other services, the proposed action would develop organic Marine Corps refueling and transport capability to increase our ability to support the INDOPACOM commander.

Specifically, Marine Corps KC-130s are used for refueling and cargo. Air Force KC-135s are strategic-level tankers that are not immediately available for exclusive tasking to the Marine Corps. They do not have the capability to refuel Marine Corps helicopters and tiltrotors, and do not have a tactical cargo mission for the Marine Corps, so they do not cover the same requirements. In addition, there are not enough of KC-135s to meet persistent training and deterrence operational requirements in the Indo-Pacific. The joint demand for mobile aerial refueling capabilities currently exceeds the amount of aerial refueling platforms and the amount of globally positioned, defense-approved supply points required to enable mobile and agile flight operations in support of humanitarian support and contingency response.

This is a Draft EA, which was distributed for public review prior to completion of agency coordination and consultations. The Final EA includes appendices regarding this coordination and consultation.

In accordance with Section 106 of the NHPA, the Marine Corps consulted with the State Historic Preservation Division (SHPD), Native Hawaiian Organizations (NHOs), interested parties, the National Park Service, and the public regarding a determination of adverse effects to historic properties resulting from the proposed action. The Section 106 consultation process included meetings and collaborative development of a Memorandum of Agreement (MOA) to mitigate for any adverse effects to historic properties.

**Appendix B – Responses to Public Comments**

**Comment 067: Waimanalo Hawaiian Homes Association (continued)**

**Comment**

Re: **STRONG OPPOSITION** to Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay O'ahu, Hawaii; Public Comment on the Analysis and Conclusions of Draft Environmental Assessment

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needs to occur prior to finalizing the MOA." In addition, he writes "The SHPD also requested MCBH please provide copies, or a summary of, responses received from the public and consulting parties to date." Finally, Dr. Downer writes, "Further, the SHPD opines there are a number of steps in the Section 106 process that are outstanding." On page 3, he continues "...the SHPD requests all information relating to the location of NAGPRA related items previously encountered in, or adjacent to, the APE." The doctor continues, "At this time the SHPO opines the MOA was developed prematurely, as there are requirements of the Section 106 process that have not yet been met." Finally, Dr. Downer states, "The SHPD opines the proposed mitigation is not sufficient."

Ultimately, we believe that the multiple correspondences from Dr. Alan Downer of the State Historic Preservation Division of the Department of Land and Natural Resources illustrate, in no uncertain terms, the shortcomings of the requirements to move forward with the National Historic Preservation Act: Section 106 process, let alone the proposed project. The manner in which the MCBH has forcefully moved forward in the Section 106 and EA processes are reminiscent of anecdotal occurrences that have been the accepted norm from the U.S., its military forces, and its occupation of these Hawaiian Islands. No more!

Because of the matters enumerated above, including issues with construction and fuel, water, JBPHH, withheld information in the Draft EA, and Section 106 correspondence, we believe that the proposed project to home base the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay, O'ahu, Hawaii should **NOT** move forward.

To be perfectly clear, we, at the Waimanalo Hawaiian Homes Association **STRONGLY OPPOSE** this project. I make myself available to reply to any questions and/or concerns that arise regarding this letter. Please utilize any of the contact information in the letterhead above.

Na Mākou Nō.



Kenneth K. L. Ho, Jr., EdD  
President  
Waimanalo Hawaiian Homes Association

**Board of Directors**

Kenneth Ho, Jr., Denise Ka'a'a, Apela Peahi, Kirk Deitschman, Ilima Ho-Lastimoso, Joe Aipa, Kilauea Wilson

**Response to Comment**

As provided for in applicable regulations, the Marine Corps conducted the Section 106 process concurrently with the NEPA process. The Marine Corps initiated discussions with consulting parties early in the project and they continued through a series of consultation meetings, presentation materials, and iterative development of the MOA. These consultation meetings will run concurrently through the end of the NEPA process.

## Appendix B – Responses to Public Comments

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### Comment 068

#### Comment

**From:** [Kim Holland](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] Kaneohe EA  
**Date:** Tuesday, September 6, 2022 4:51:57 PM

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To Whom it May Concern - I am strongly opposed to the introduction of fixed wing aircraft as a component of operations at the Kaneohe Marine Base. I have worked in Kaneohe Bay for over 50 years and can clearly remember when fixed wing aircraft were permanent component of the operations at MCBH. The noise was extreme and frequent. When they were replaced with helicopters, the difference in noise levels was dramatic. Returning to heavy use of fixed wing aircraft to MCBH will cause a very significant disruption in what is basically a residential area. Please put these plans on hold.

Kim Holland  
2738 Waiomao Rd  
Honolulu  
Hawaii

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 068 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Appendix B – Responses to Public Comments**

**Comment 069**

**Comment**

**From:** [Augusta Hollers](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Public comment on Environmental Assessment re: Plan to bring new aircraft to Marine Corps Base Hawaii  
**Date:** Tuesday, September 6, 2022 4:23:54 PM

Dear project management,  
I believe that the Environmental Assessment does NOT provide the community with enough information to determine the impact of bringing a new squadron of 15 planes and 6 drones to the Marine Corps Base. There needs to be a better measurement of the actual noise impact, and more public involvement (hearings and meetings). I request that a full Environmental Impact Statement be submitted for this project.  
Sincerely,  
Augusta Hollers

**Response to Comment**

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

No noise monitoring is proposed. The noise analysis shows that all areas exposed to the 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Comment 069 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.



## Appendix B – Responses to Public Comments

### Comment 070 (continued)

#### Comment

The Kailua PZ&E committee approved submitting the following motion:

- The Kailua Neighborhood Board recommends that the Marine Corps Base Hawaii conduct an Environmental Impact Statement (EIS) under the National Environmental Protection Act (NEPA) instead of or to replace the Environmental Assessment (EA) for the home basing of the MZ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii for the following reasons:
- The proposed Project is a major Federal action, which will significantly affect the quality of the natural and human environment and therefore requires the preparation of an EIS under NEPA.
  - The EA does not provide a comprehensive evaluation of short- and long-term and cumulative impacts from the proposed Project including demolition of multiple buildings on burials, historic buildings, historic districts, endangered birds, storm water runoff, water quality as it enters Kaneohe and Kailua Bays, and noise.
  - The EA does not provide the community with enough information to support a finding of no significant impact.
  - The EA does not identify the type of noise modeling the Marine Corps is using nor does it include impacts from the amphitheater effect of the surrounding mountains.
  - The EA does not include information on whether the proposed aircraft will carry ordnance.
  - The EA does not include an air quality impact analysis.
  - The EA does not provide information on the type of noise or level of noise that will be generated by maintenance or the hours that maintenance will be performed.
  - The EA does not provide information on the minimum altitude for the MQ-9s.
  - The EA does not provide information on where the aerial KC-130J refueling operations will take place.
  - The EA does not contain noise measurements for the communities that they will fly over or nearby.
  - The EA does not describe the planned flight paths for the KC-130Js or drone patterns and how those flight patterns will impact surrounding residential communities.
  - The EA provides very little information on the Project's impact on 'iwi burial sites known and yet to be discovered.
  - Since past construction on the base has unearthed over 1,500 sets of human remains greater attention and research must be spent on locating 'iwi before they are bulldozed.
  - The EA states that tie-downs and striping at the end of Runway 4/22, west of Hangar 105 (Hanger 5) will occur. The EA describes Site 50-80-11-4453 as a subsurface traditional Hawaiian cultural deposit located west of Hangar 105, near or within the location of Project Element 4. (1/7/22 letter from Marine Corps to Dr. Alan Downer State Historic Preservation Department page 4)
  - The EA does not include the cumulative effects of stormwater runoff and decreased permeability from past and future projects.
  - 3.3.1 page 54: "Activities occurring in the portion of the project area near the Kaneohe Bay shoreline would consist of demolition, renovations, and construction upon impervious surfaces that would follow standard construction conservation measures for control of water contamination risk due to runoff."
  - 3.3.1.5 page 55: "Box culverts drain the runway area southward to the bay. Other box drains discharge runoff for the area west of the runway to the ocean toward the west. The base main cantonment area east of the runway is drained by a series of pipe drain systems to Kailua Bay or overland."
  - The EA does not describe how or if the stormwater measures and storm drainage infrastructure concur with the recent EPA stormwater consent decree between the Marine Corps Base and EPA, which was issued for violations to the existing National Pollutant Discharge Elimination System (NPDES) storm water permit.
  - Page 3-15: Following construction, all storm water runoff from operations would be managed by existing on-site storm drainage infrastructure.
  - The EA does not provide information on the location, dimensions, capacity, etc. of the new storm water detention basin. (Page 2-7)
  - The EA does not provide any information on the quality of the storm water runoff that will be collected at the Project area and directed to the Nuupia Ponds Complex and ultimately into Kaneohe and Kailua Bays.
  - The EA does not provide information on impacts from developing the project within the FEMA Zone D, an area where flood hazards are possible, but undetermined.
  - Under Appendix A, Regulatory Setting on page 125: "Executive Order (EO) 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of development in a floodplain unless it is the only practicable alternative."
  - 3.3.1 page 54: "Construction of the new washdown and refueling areas near Hangar 8886 would create 4.25 acres of new impervious surface."
  - The EA does not clarify the type of cleaning agents or solvents which will be used to clean the exteriors of the new aircraft, nor does it state the procedures that will be followed to safely dispose of those cleaning agents/solvents.
  - In the past the Marine Corps was forced to permanently and completely close at least one Marine Corps Base, El

#### Response to Comment

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

See responses to comment #088.

## Appendix B – Responses to Public Comments

### Comment 070 (continued)

#### Comment

Toro Marine Corps Air Station in Orange County in Southern California, in 1993 because of toxic ground contaminants.

- El Toro Marine Corps Air Station was placed on the EPA Superfund priorities list where 25 separate areas were identified as potentially contaminated areas.
- The EA does not list any considerations of the effects of climate change, and the overall and cumulative effects of this construction on the overall resilience of the airfield.
- The area is classified as being within the State of Hawaii's "Coastal Flood Hazard Zone with Sea Level Rise" according to the Sea Level Rise. State of Hawaii Sea Level Rise Viewer: An Interactive Mapping Tool in Support of the State of Hawaii Sea Level Rise Vulnerability and Adaptation Report, found here: <https://www.pacificos.hawaii.edu/shoreline/slr-hawaii/>
- The EA does not address effects and impacts of a tsunami even though the majority of the Project area is within a "Tsunami Evacuation Zone".
- The EA gives conflicting information. Page 3-15 states, "there would not be an increased volume of water entering wetlands in the immediate vicinity of the project" and "this project area does not overlie a drinking water source and is not located near any freshwater surface waters or wetlands". (Emphasis added.)
- The EA makes statements such as this small increase in impervious surface consisting of activities presently found on MCAS Kaneohe Bay, results in less than significant increases in the amount and type of storm water flow going into Kaneohe Bay from current conditions without defining the increases and impacts on the bay and its marine life. (Emphasis added.)
- The EA does not define less than significant increases.
- The water quality of Kailua and Kaneohe Bays depends on the quality of the water sent into these water bodies.
- The EA does not provide information on whether the proposed upgrades to the Waste Water Treatment Plant (WWTP) will be completed or have sufficient capacity to adequately handle the additional 676 active-duty personnel and their dependents.
- The Marine Corps base was cited by the State Department of Health for "unauthorized wastewater discharge from its Kaneohe Bay Water Reclamation Facility" and ordered by EPA to upgrade the facility.
- The EA does not explain what is meant by no brighter than necessary when referring to lighting and impacts on migratory birds.
- The EA does not explain the circumstances under which pre-approval would be necessary for construction lighting.
- Bird/bat disorientation/fallout. Minimize brightness. Be no brighter than necessary, all nighttime construction work and construction lighting would be pre-approved with Environmental Compliance & Protection Division Natural Resources. (Page 2-21)
- The EA does not identify impacts from day and nighttime construction work and construction lighting on listed endangered birds, which are known to fly over and inhabit the base.
- Thirteen of the 17 bird species found on the base are native with 12 species listed as endangered under the Endangered Species Act or identified as state endangered, state threatened. The monarch butterfly is a candidate species for listing under federal Endangered Species Act.
- The EA states that there is suitable pueo foraging habitat in the project area but does not provide information on the Project's impact to pueo foraging habitat. (Page 3-48)
- The EA states that MCBH has determined that implementation of Alternative 1 would result in adverse effects to historic properties but does not identify the adverse effects on each site or cumulative impact from demolition of historic buildings and construction of new buildings to the historical integrity of the project areas.
- Page 1-5 ...the SHPD (State Historic Protection Division) concurred with the determination the project would result in adverse effects to the Naval Air Station (NAS) Kaneohe Historic Aviation District.
- Page 3-31 Archaeological Resources Demolition activities requiring ground disturbance have the potential to disturb or destroy subsurface archaeological resources, including known sites as well as those not yet identified. Buildings and structures proposed for demolition include 10 buildings.
- Project area of potential effects (APE): NAS Kaneohe HNHL District; NAS Kaneohe Historic Aviation District; Mokapu House Lots Archaeological District at Pali Kilo; and areas adjacent to the Aviation District along First Street, in West Field, south and east of Charlie Ramp and north and east of the transient ramp. This includes demolition of Hangar 103, one of 5 historic hangers and areas damaged from the December 7, 1941 attack.
- The EA identifies the locations of and states the need for Temporary facilities such as trailers, equipment storage, and communications connections. . . but does not discuss stormwater discharge locations or water quality from these temporary facilities as stormwater runoff enters Kaneohe and Kailua Bays.

#### Response to Comment

Appendix B – Responses to Public Comments

Comment 070 (continued)

Comment



680 Iwilei Road Suite 690, Honolulu HI 96817 • (808) 523-2900 • preservation@historichawaii.org • www.historichawaii.org

September 3, 2022

EV21 Project Mgr, MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste. 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Via email to [NFPAC-Receive@Navy.mil](mailto:NFPAC-Receive@Navy.mil)

RE: **NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine  
Aerial Refueler Transport Squadron  
Marine Corps Base Hawaii Kāneʻohe Bay  
District of Koʻolaupoko, ‘Ahupuaʻa of Heʻeia, Island of Oʻahu**

Dear EV21 Project Manager:

Historic Hawaii Foundation (HHF) is providing comment on the Draft Environmental Assessment (DEA) for a proposed action to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle (UAV) (MQ-9) Squadron and a KC-130J Aerial Refueler Transport (KC-130J) Squadron at Marine Corps Base Hawaii (MCBH) Kāneʻohe Bay as part of Marine Aircraft Group 24 (MAG-24).

These comments are also provided on the project’s potential to affect historic properties pursuant to Sections 110 and 106 of the National Historic Preservation Act of 1966 (NHPA) and its implementing regulations at 36 CFR Part 800. HHF is a consulting party to the US Marine Corps and the US Navy pursuant to the implementing regulations of the NHPA at 36 CFR § 800.2(c)(5) as an organization with a demonstrated interest in the undertaking and a concern for the effects on historic properties.

**Historic Hawaii Foundation opposes the proposed demolition of Hangar 103 and the reasonably foreseeable potential demolition of Hangar 104. HHF strongly recommends that MCBH and Navy select alternative locations that would be less impactful to historic and cultural resources.**

Project Description

The DEA describes the project as: The proposed action is to home base an MQ-9 UAV squadron and a KC-130J squadron at MCB Hawaii Kāneʻohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation

HHF Comments to MCBH/NAVFAC PAC on NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron  
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Response to Comment

See responses to comment #048.

## Appendix B – Responses to Public Comments

### Comment 070 (continued)

#### Comment

maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC-130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay (DEA Sec. 2.1).

Major project elements that have the potential to affect historic and cultural resources include:

- Demolition of Hangar 103 (a contributing feature of the NAS Kāneʻohe Aviation Historic District and part of the setting of the Kāneʻohe Naval Air Station National Historic Landmark);
- Modification of Hangar 102 with interior renovations to electrical, mechanical and communications systems (a contributing feature of the NAS Kāneʻohe Aviation Historic District and part of the setting of the Kāneʻohe Naval Air Station National Historic Landmark);
- Installation of two Ground Data Terminals, at Keawanui Hill (located in the Mōkapu House Lots Archaeological District) and adjacent to Hangar 105 (a contributing feature of the NAS Kāneʻohe Aviation Historic District);
- Resurfacing, repaving, striping and installing tie-downs at Bravo Ramp (a contributing feature of both the NAS Kāneʻohe Aviation Historic District and the Kāneʻohe Naval Air Station National Historic Landmark);
- Constructing a new Type II Hangar in the Aviation Historic District on the footprint of the historic Hangar 103;
- Demolition of Facilities 159, 160 and 161 (aircraft spares storage buildings adjacent to Hangar 103); and
- Demolition of Facilities 183 and 184 (aircraft armament storage buildings adjacent to Hangar 103).

#### Identification of Historic and Cultural Resources

There are several historic properties affected by the proposed project. These include:

- The **NAS Kāneʻohe Bay Aviation District** includes 45 buildings and structures and the historic portion of the present runway. It also includes the wreckage of a PB7Y (patrol bomber manufactured by Consolidated Aircraft) offshore in Kāneʻohe Bay. The major contributing facilities include five aircraft hangars, five seaplane ramps, and numerous ancillary buildings.
- The **NAS Kāneʻohe Bay National Historic Landmark (NHL)** is a smaller section within the larger Aviation District. It includes Hangar 1, the five seaplane ramps, the seaplane parking area to the east of Hangar 1, and the seaplane parking area between the hangars. The parking aprons still carry strafing marks and bomb craters from the 1941 attack. Extant hangars 1, 3 and 4 were present at the time of the attack. The current hangar 2 was present but was modified and rebuilt during the war. Hangar Row is an aspect of the setting that provides historic integrity to the NHL.

HHF Comments to MCBH/NAVFAC PAC on NEPA Draft Environmental Assessment  
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#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 070 (continued)

#### Comment

- The **Mōkapu Houselots Archaeological District** encompasses a portion of the geographical area of Pali Kilo. Its significance is described as multi-layered, and includes multiple periods, types, and associations of significance. The Archaeological District includes numerous sites associated with the pre-Contact period as well as with the pre-military period, including the remains of early twentieth-century house sites that were part of the 350-parcel residential Mōkapu Tract Subdivision developed between 1932 and 1941.
- **Archaeological Site 7723** is recommended as potentially eligible for inclusion on the National Register of Historic Places under Criteria C and D, and as a contributing property of the Mōkapu Houselots Archaeological District at Pali Kilo. MCBH found that it is probable that the pre-Contact components of this site have their origins during the Late Pre-Contact period.

#### HHF Comments on Effects on Historic and Cultural Resources

The Environmental Assessment identifies historic and cultural properties affected by the project. Historic Hawaʻi Foundation notes the acknowledgement of significant adverse effects on several historic properties and the effort to resolve those effects through the NHPA Section 106 process. HHF affirms its continuing participating in the Section 106 consultation to resolve effects.

However, the draft Environmental Assessment fails to adequately identify and address cumulative and indirect effects that are reasonably foreseeable, and also fails to adequately engage in planning to minimize effects on the National Historic Landmark.

#### **1. Effect on National Historic Landmark**

The project location includes the NAS Kāneʻohe National Historic Landmark. It will have direct effects on Bravo Ramp and to the NHL setting by demolishing Hangar 103. NHPA Section 110(f) requires that the agency official, **to the maximum extent possible**, undertake such planning and actions as may be necessary to **minimize harm to any National Historic Landmark** that may be directly and adversely affected by an undertaking. This requirement is also enacted in 36 CFR § 800.10 as special requirements for protecting National Historic Landmarks (emphasis added).

#### **2. Cumulative Impacts**

MCBH fails to accurately describe the proposal to demolish another historic hangar (Hangar 104) under a separate undertaking. Table 4-1 of Past, Present and Reasonably Foreseeable Actions Item 35 describes the proposal as “renovation of Hangar 104 to accommodate two C-40 aircraft” (page 4-5), while the narrative describes the proposal as “replacement of an existing hangar for C-40 aircraft” (page 4-8).

During the NHPA Section 106 consultation, MCBH described the 10-year timeframe of potential projects that could affect contributing resources in the Naval Air Station Kāneʻohe Bay Aviation District:

At the time the district nomination was prepared, there were 60 contributing resources. Currently, there are 45 extant. If all proposed actions are carried forward, at the conclusion of the Hangar Modernization effort there will be an additional 18 contributing resources razed.

HHF Comments to MCBH/NAVACPAC on NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron  
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#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 070 (continued)

#### Comment

This will leave 27 contributing resources remaining, of which only 5 are buildings, the others being contributing structures and objects. (MCBH presentation Feb. 10, 2022).

#### 3. Alternatives Analysis

MCBH's analysis of alternatives included no action; alternative locations at Joint Base Pearl Harbor Hickam; USCG Air Station Barbers Point; Wheeler Army Airfield and Dillingham Military Reservation. Each of these was eliminated from consideration due to the inability to meet specific criteria and project needs.

MCBH also assessed alternate siting locations within the Kāne'ohe Bay base. Sites at West Field, Pali Kilo and Greenfield were eliminated due to various technical criteria and the long-lead time for construction, delaying the proposed action by 10-12 years.

**HHF disagrees with the decision to eliminate the Greenfield alternative.** Conceptual site plans indicate that with design adjustments, the location can address the perceived barriers and still meet the purpose and need for the project. This site has roughly the same construction feasibility issues as the proposed alternative (such as demolishing and replacing facilities and utilities) and is much less impactful to historic properties and the historic district.

**Therefore, HHF requests that MCBH and Navy consider the Greenfield site as a potential alternative location for the Homebasing project, the C-40 Hangar project or both.** This would be a reasonable alternative to avoid significant and irreversible impacts on a nationally significant historic property.

Thank you for the opportunity to comment. Historic Hawai'i Foundation looks forward to continuing consultation.

Very truly yours,



Kiersten Faulkner, FAICP  
Executive Director

Copies via email:

- Maj Jeff Hart, June Cleghorn, Wendy Wichman and Chris Frantz, MCBH
- Alan Downer, Susan Lebo, Stephanie Hacker and Julia Flauaus, Hawai'i State Historic Preservation Division
- Elaine Jackson-Retondo, National Park Service
- Elizabeth Merritt, National Trust for Historic Preservation

HHF Comments to MCBH/NAVFACPAC on NEPA Draft Environmental Assessment  
Homebasing of the MQ-9 Marine Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron  
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#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 071

#### Comment

**From:** [Koohan Paik-Mander](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] COMMENT ON Draft Environmental Assessment, Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron, Marine Corps Base (MCB) Hawaii Kaneohe Bay.  
**Date:** Tuesday, September 6, 2022 3:41:50 PM

**Draft Environmental Assessment, Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron, Marine Corps Base (MCB) Hawaii Kaneohe Bay.**

#### COMMENT

**Koohan Paik-Mander**

**August 30, 2022**

The Draft EIS to home-base a squadron of six Reaper drones and 15 refueling aircraft exemplifies the tragedy of dystopian America, when public moneys by the tens of billions are being poured into efforts that put all of humanity and life on Earth at risk. It is part of a grand, diabolical experiment to conduct warfare through robots and artificial intelligence (AI). And Hawaii, the land of aloha, is heart-wrenchingly “ground zero” for the Grand Experiment that is on track to pit algorithm against algorithm. Once the battling algorithms escalate into high-stakes stages marked by nanoseconds, the Experiment will have ended, and we will weep for the untold suffering caused, and if we are still alive, swear -- once again -- to never let history repeat itself.

Oh—did I mention? Each MQ-9 Reaper drone costs the public over \$1.6 billion apiece.

We are careening into a free-fall arms race with China and Russia. No one benefits except the weapons dealers like Lockheed Martin and General Atomics, which indeed profit richly and criminally. It's time to slam on the brakes. **Follow the clarion call for AI-arms control by Germany Foreign Minister Heiko Maas. Nations of the world can and must work toward a global treaty to ban lethal autonomous weapons.**

**Favor the NO ACTION alternative in the Draft EIS.**

The awkward and flimsy Draft EIS exists to supposedly ensure democratic process and environmental oversight. But how can democracy be served with a document as non-transparent as this Draft EIS? It gives no hint of the implications of waging networked, AI-driven war that sees Hawaii – and the entire Pacific hemisphere – as a geography in which the U.S. can do whatever it pleases, regardless of impacts to environment and communities.

THE JADC2:  
FOSTERING A SYMBIOTIC RELATIONSHIP BETWEEN THE MQ-9 AND THE OTHER COMPONENTS OF THE “KILL CHAIN”

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

All types of aircraft use the electromagnetic spectrum for a variety of functions essential for flight safety – radio communications, transponder/IFF, radar (weather, ground-mapping, air-to-air communications, etc. Military aircraft use the electromagnetic spectrum. Radio communications conducted for proposed KC-130J and MQ-9 operations are similar to those used for civilian, commercial, and military aircraft activities at all locations in the U.S., and have not been found to have the potential to adversely affect wildlife species at civilian or military airfields across the country, including Marine Corps installations throughout the country that support aircraft operations. Electromagnetic frequency use for the proposed aircraft squadrons would be similar to and consistent with aircraft operations that presently occur at MCB Hawaii Kaneohe Bay. All electromagnetic spectrum bands for current and proposed aircraft operations are within limits from federal agencies such as FAA and FCC. No interference with civilian and emergency services frequencies would occur, and the power levels and frequencies would not affect public health and safety or wildlife as they are consistent with those used at civilian, commercial, and military airfields. Safety elements associated with data linkage infrastructure and proposed aircraft activities are addressed in Section 3.6 of the EA.

## Appendix B – Responses to Public Comments

### Comment 071 (continued)

#### Comment

The Draft EIS fails to mention the Joint All Domain Command and Control concept, or "JADC2," in which the Marines squadron of MQ-9 Reaper Drones will play a key role.

The JADC2, still in development, will be a scalable, AI-driven, networked system of distributed warfare. Its development is of paramount importance to the Pentagon. It is intended to be the foundation for 21<sup>st</sup> century warfare. It involves much more than overlaying new technologies and hardware over existing force structures; it is a process of far-reaching, disruptive change. The Draft EIS must reflect this.

For the Marines' part, it is positioning the MQ-9 Reaper drone at the center of its vision to integrate seamlessly with the other forces of the military, by seeking to "develop multi-axis, multi-domain precision fires organic at all echelons, enabled by a federated system of networks to ensure all elements can fight in a degraded command and control environment." This is according to Force Design 2030, the "vision" to restructure the Marine Corps for the 21<sup>st</sup> century.

To put it more simply, General Eric Smith, Assistant Commandant of the Marine Corps, has described, "[The MQ-9] is an airborne "quarterback" to pass data, because when we are cut off from the space layer for short periods of time in a maritime environment or any environment, we have to be able to work inside that bubble to pass data back to our navy and joint partners. Back to an Aegis system or back to an Air Force passing fighter."

Smith continues, "The drone piece, it's both AI, the ability to use a drone for spotting, though that's five years ago, Now it's a matter of using the algorithms that connect what you see to Joint All Domain Command and Control, which is something the Department of Defense works on daily so that every sensor on the battlefield is fused to *then provide that target-quality data to the best possible shooter* (italics mine), be it a HIMARS launcher, be it a fighter, be it a bomber."

What Smith explains above is the operative kernel to how the squadron of six MQ-9s are intended to function for the Marines. Yet this essential information has been omitted from the Draft EIS. While the Draft EIS blandly states that the Reaper will conduct "persistent intelligence, surveillance, and reconnaissance," it neglects to include that it will transmit data of a kind that is less than benign. Actually, its key role is to transmit "target-quality" data at an early and integral stage in the "kill chain." The network itself is the instrument of lethality, just as an orchestra is the instrument of symphonic music. It is the network of converged weapons that should be assessed, not just the MQ-9, which is only one component of it. To assess only the MQ-9 is deceptive, rendering the current Draft EIS incomplete and nontransparent -- yet this is what has been generated for the public. America deserves better.

Excluding the JADC2 context from an impacts-assessment of the proposed Reaper Drone squadron is a glaring omission of the Draft EIS. It is like trying to assess impacts of a quarterback's performance without ever mentioning football. Or like assessing the

#### Response to Comment

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

KC-130J aircraft are long range refueling aircraft, and their training would occur away from MCB Kaneohe Bay. KC-130J training occurs in established airspace within the U.S. and is coordinated with other VMGR units for mutual benefit. The KC-130J and MQ-9 aircraft are key enablers to military exercises and participate in planned detachments for training and support to locations throughout the Indo-Pacific region such as Japan, Australia, and the Philippines. Locally, MQ-9 training would occur within existing Special Use Area restricted airspace on the island of Oahu, at the U.S. Navy training range (Pacific Missile Range Facility Barking Sands) on the island of Kauai, and at the U.S. Army Pohakuloa Training Area on the island of Hawaii under existing environmental analysis and FAA airspace designation.

## Appendix B – Responses to Public Comments

### Comment 071 (continued)

#### Comment

performance of an orchestral instrument without ever mentioning music. They are inextricably linked and should be assessed as such. Not doing so is segmentation of the full proposal and its impacts.

**Because the JADC2 operates on electromagnetic frequencies, bandwidth and electromagnetic frequency concerns should also be included in the EIS. How will civilian bandwidth be affected? What are the sources of electromagnetic frequencies for any given scenario, especially those that will be used and practiced in Hawaii? Please cite studies on the impacts of these frequencies on Hawaii's birds, insects and other biodiverse wildlife. What method of wireless communication will be used to transmit underwater, to submarines? If these communications networks will impact cetaceans, corals, turtles or other endangered sea creatures, please cite studies.**

#### THE CULTURAL, SOCIAL AND ENVIRONMENTAL IMPACTS OF DISRUPTING HUMANITY

It is often said that the first revolution in warfare was gun powder, the second was nuclear weapons, and the third revolution is the present development of AI-driven, networked warfare. That is how game-changing the metamorphosis, now underway, is.

For any technology this existentially disruptive, the EIS must conduct an exhaustive examination of the MQ-9's widely diverse functions, as the MQ-9 fulfills one of the most important roles in the operation – hovering overhead for endless lengths of time, and gathering and processing data around the clock while passing along target-quality data to every other fire-able weapon in the system. This is no “normal” aircraft, and its impacts should not be assessed as such. It is all the more urgent that we wrestle with the social, political, environmental and cultural impacts RIGHT NOW, before a horrific incident of destruction takes place, made ever more likely by the experimental nature of the foolhardy pursuit to prevail with robots, machines and AI. Our instrument for this examination is the EIS. **A proper EIS must assess impacts in the context of its symbiotic relationship with the other weapons in its networked system, and across the spectrum of possible mission and war-game permutations that the system is called to perform. To do anything less would not be a consideration of the cumulative impacts required by NEPA, and would also be an expression of deceptive segmentation.**

For example, during RIMPAC 2022, one MQ-9 supported 63 missions, which included 25 maritime operation missions, seven personnel recovery missions, six opposition forces missions, and six intelligence, surveillance and reconnaissance missions, an amphibious assault scenario, war-at-sea and surface exercises, and sinking a decommissioned warship. They also loaded and launched 16 Hellfire missiles.

**An adequate EIS must conduct studies on the environmental, social and cultural impacts of each and every exercise and operation that the MQ-9 supports now, as well as those that it**

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 071 (continued)

#### Comment

**is anticipated to support in future technological generations. Please rectify this glaring omission of Cumulative Impacts.**

EXPERIMENTS IN KILLING ARE NOT WELCOME IN HAWAII

A May 6, 2022 article in Marine Corps Times reported that the MQ-9 will “serve as the base for a kind of ‘family of systems’.” Retired Lieutenant General Mark Wise stated in the same article, “The MQ-9 will not be the end state. There will be something after that and something after that.”

**Please provide models of systems and missions that are anticipated to emerge from operation of the MQ-9, as well as from the networked warfare with which it is inextricably linked.**

General David Berger, who wrote Force Design 2030, a report that describes how the Marines are being restructured, said, “We have made significant progress to date in our force design efforts. While these efforts have undeniably been productive and will inform our divestment and investment decisions going-forward, we should view them as first steps in a longer journey... We simply must have more analysis and evidence, which comes from modeling and *experimentation* (italics mine).”

It is more than a little disquieting that General Berger admits that Force Design 2030 (to which the Hawaii homing of the MQ-9 Marine Unmanned Aerial Vehicle and the KC-130J Marine Aerial Refueler Transport Squadrons are central) is a giant “experiment.” For many in Hawaii, the statement is downright infuriating, after the ever-forgiving Pacific has already borne the atrocities of other “experiments,” such as the atomic bombs dropped on the Marshall Islands, the battering of numerous islands used for war practice, or hundreds of thousands of injuries and deaths to whales, endangered turtles, migratory birds and other creatures.

**We in Hawaii, and all peoples of the Pacific, are not testing grounds and guinea pigs. Our islands and waters are sacred and do not exist for military ravaging. We vehemently oppose the homing of Reaper drones anywhere in Hawaii can call for the NO ACTION alternative.**

Given Berger’s cavalier attitude over matters of existential consequence, it becomes more important than ever to ask, and have answered, the following, and similar, questions:

**What are each of the projected permutations of missions that the MQ-9 will serve? What additional hardware and software is anticipated in the realization of each of these projected missions?**

ON THE PATH TO AN OBSOLETE HUMANITY

In an interview with the Center for Strategic and International Studies, General Eric Smith,

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Assistant Commandant of the Marine Corps, described the speeds with which current warfighting takes place:

You have to be able to fire and move immediately. You no longer have six minutes, which is a really well oiled gun crew, artillery. From pulling-the-last-round, to you're-on-the-move. You know, six, seven minutes [means] you're pretty well oiled, you're good. What we have to see now is that there are autonomous, loitering munitions that are looking for that "signature," and as soon as they see that signature, we call it a POO -- a point of origin -- they've already got lethal authority to strike that. You don't have six minutes to move. Whereas a HIMARS (High Mobility Artillery Rocket System), you can shoot and be gone in literally seconds, less than a minute.

General Smith gives us a sense of the prized value of weapons that eradicate the limitations of time. Given that humans require time for decision-making, human involvement becomes a deficit in the new way of war. For this reason, hundreds of billions of dollars are now being spent to develop ways to eliminate as much of "cumbersome" humanity from the process as possible. What we would then be left with would be algorithms fighting algorithms, which raises the risk of escalation and its irreversible consequences.

**Clearly, the use of robotics and AI in war raises a multitude of profoundly existential ethical issues, all of which must be addressed in the EIS. The first ethical issue to address is that the people of Hawaii have not had adequate public discussion on the fact that our archipelago will be one of two premiere experimentation grounds (the Mariana archipelago being the other) for these comprehensively disruptive systems of killing. Until such public fora take place, the only ethical conclusion is a NO ACTION alternative.**

ON THE PATH TO ARMAGAEDDON

Given how our economic model of capitalism is prone to enabling "efficient" algorithms to hijack nearly every aspect of our lives -- from booking flights to monitoring what posts gets distributed on Facebook -- it is quite easy to see AI at the helm of warfare decisions, especially when human decision-making is now considered too time-consuming. For example, hypersonic interception is being designed so that artificial intelligence will actually do most of the "thinking" required to "pull the trigger." Because the time between launch and strike of an incoming missile could be as brief as 6 minutes, it is believed that humans would be prone to panic within such a short duration of time, whereas machines would not. The rapid, rational thought processing required during such a moment of urgency is thought to be best handled by machines.

As machine decision-making accelerates warfare, it is plain to see how conflict would easily escalate. Compressed time and space creates the incentive for each side to strike first and

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strike fast in a perceived crisis. This is a recipe for crisis instability. It's sort of like a Twitter war, with WMDs instead of words. Even if neither party initially planned to strike first, the accelerated dynamic inherent in an AI-driven scenario forces the likelihood of mutually assured destruction.

In 2010, we saw how an analogous unintended escalation in the financial markets, wiped over a trillion dollars off the stock market in minutes, driven by trading algorithms feeding off each other in a dizzying spiral. Imagine if those algorithms were controlling not digital currency, but instead weapons of mass destruction. How would one mitigate Armageddon?

**There is only one way to mitigate Armageddon: the NO ACTION alternative and an international treaty to ban lethal autonomous weapons.** (It is true that the Reaper drone is not fully autonomous, nor have fully autonomous weapons been developed so far. Nonetheless, the distinction between partially autonomous and fully autonomous can be very muddy. In any case, fully autonomous weapons are in development, the Reaper drone is a stepping stone to that development, and they would likely be used as part of the same kill-chain that would also involve a Reaper drone.)

COMPLEXITY = VULNERABILITY TO ERROR

One of the reasons that nuclear weapons are so controversial is because the ghastly, irreversible consequences of a mishap leave little to no wiggle room for error. AI-driven warfare is identically controversial, only more so, because nukes converge into the symbiotic mix of ever-evolving algorithms that up the ante by geometric proportions.

Yet, not a whisper is mentioned in the Draft EIS about the risks of complex machine-driven war and how they foster an ever-evolving symbiosis between all weapons, including nuclear warheads. As writer and retired army colonel Ralph Peters explains, "The more complex any system becomes, the more inherent vulnerabilities it has."

**Please elaborate on the vulnerabilities and risks inherent to AI-driven JADC2 as they involve the MQ-9's symbiotic relationships with all other weapons with which it is networked.**

VULNERABILITY TO ERROR = KILLED CIVILIANS

If the costly 20-year Global War on Terror achieved nothing else, it provided data on vulnerabilities and risks of killer-drone operation, including "collateral damage." We were able to see first-hand how the glowing promises of this new technology were not foolproof.

I, personally, had a glimpse of the terror that was inflicted in the middle east when I attended

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the quadrennial World Congress of the International Union for the Conservation of Nature in 2012, in South Korea. Ten thousand members of the international scientific community were in attendance. There, I was approached by an elderly woman who beseeched me to help her country. She had tears in her eyes and a thick accent. I could hardly understand what she was saying. Then, it became clear, that this traumatized woman was telling me, an American, to help her stop drone attacks in her home country of Pakistan. I later learned that the number of civilians killed during the War on Terror were significant.

In the Summer 2018 issue of The Independent Review, Christopher J. Coyne and Abigail R. Hall co-wrote “The Drone Paradox: Fighting Terrorism with Mechanized Terror”. An excerpt is included at the end of this comment as an Addendum. It gives a thorough accounting of various assessments of civilian deaths by drone attacks during the Global War on Terror.

Though Coyne and Hall’s statistics reflect early-style drone strikes, rather than “multi-axis, multi-domain precision fires organic at all echelons” that are characteristic of JADC2 warfare, there are commonalities between the two generations of unmanned warfare. For example, both versions of warfare prioritize “signature” strikes, which means strikes that are based on machine determinations of who to kill. The MQ-9’s surveillance function is integral to this stage in the kill chain. Coyne and Hall explain how signature strikes work, and how they increase the likelihood of killed civilians:

The likelihood that innocent civilians will be harmed by drone strikes is exacerbated by the U.S. government’s commitment to using “signature strikes” against targets (1). Instead of relying on a preidentified target, signature strikes involve targeting a person or group of people based on their geographic location and broad patterns of behavior that are determined to be suspicious. This means that the government cannot be sure exactly who is being killed by drone strikes. Intended targets may be killed by signature strikes, but so, too, might innocent civilians. There is no way to obtain concrete numbers for these two categories because of the lack of specific reporting in areas where drone strikes take place, the methodology of counting enemy combatants, and the general secrecy surrounding the government’s drone program.

#### FOOTNOTE:

(1) De Luce, Dan, and Paul McLeary. 2016. Obama’s Most Dangerous Drone Tactic Is Here to Stay. Foreign Policy, April 5. At <http://foreignpolicy.com/2016/04/05/obamas-most-dangerous-drone-tactic-is-here-to-stay/>.

Numerous, credible studies (described in the Addendum to this comment) prove that drone strikes cause death and injury to innocent civilians. This flies in the face of repeated government claims, such as that from CIA director John Brennan, who stated that drones have “surgical precision—the ability with laser-like focus to eliminate the cancerous tumor called al Qa’ida, while limiting the damage to the tissue around it.” At a minimum, evidence suggests that drones lack the scalpel-like precision that their proponents often claim as a defining feature of this technology.

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Proponents may maintain that the numbers of civilian deaths cited in Coyne and Hall's report reflect drone technology from earlier generations, and therefore, the JADC2's systems are not comparable. Actually, the earlier studies remain more relevant than ever, because what has not changed at all is the reliance on mere machines to determine who should live and who should die. That fact locks in a certain margin of error (civilian deaths), regardless. In fact, it can be deduced that the margin of error will actually increase over early drone strikes with the greater complexity of the JADC2, since greater complexity leads to greater margins of error. The early studies therefore serve as baseline numbers from which to generate new models of risk that do extrapolate JADC2 projections over the much larger Pacific theater.

**Please provide such numbers of anticipated civilian deaths that would occur during JADC2 operations that involve the MQ-9 Reaper drone.**

#### PENTAGON ASSURANCES VERSUS REALITY

Without studying how the numbers of dead civilians betray the Pentagon's promises that drones kill with scalpel-like precision, people in Hawaii have experienced their own cognitive dissonance with the glowing promises bestowed by the U.S. military. For example, the military has been promising for decades that the Red Hill fuel tanks were no threat to Oahu's most important aquifer; today, military and civilian families alike have lost faith in the Navy after thousands of people, as well as pets, were sickened from drinking the tainted water last year.

To add insult to injury, the Navy will not commit to draining the tanks asap, which would thereby remove the serious health and environmental hazard. In fact, a provision in the National Defense Authorization Act says that drainage depends upon the military's ability to provide fuel for war by alternative means. *In other words, the purity of our drinking water is not as important as the Pentagon's assessment of warfighting capabilities.* The U.S. military behaves as if Hawaii and surrounding waters exist only to serve the U.S.'s war economy, whether as a giant range complex to practice death games, or a command from which to project firepower across a hemisphere toward China.

#### COOPERATION, NOT WAR, WILL SOLVE OUR PROBLEMS

The present anticipation of war with China began in 2011 when Obama first announced the "Pacific Pivot." At that time, the spectre of climate catastrophe was still an unknown variable in a vague distant future. Even at the COP 21 conference in 2015, Parisians said that climate was a far less urgent matter than the migrant and refugee crisis.

Who would have guessed that now, in 2022, only seven years hence, the major rivers of the northern hemisphere would be simultaneously evaporating off the face of the Earth? The Yangtze, the Seine, the Thames, the Colorado, the Euphrates, the Danube... and the list goes on. It's as if someone put the whole planet in a giant hot air fryer. Out-of-control fires plague China, the U.S., Europe, Siberia, Canada and more. And then once the planet's moisture rises into the atmosphere, it swells to bursting in the form of Biblical-scale rain bombs that sweep away cars, homes, highways, livestock and people in 500-year-floods (that now seem to be the

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“new normal”) because the ground is too parched to absorb the water. One third of the nation of Pakistan is under water at the time of this writing.

Videos from China show us a giant economy that has been hobbled by climate catastrophe. Temperatures of 120 degrees have been recorded in many places. The Yangtze River has been reduced to a desiccated riverbed. Hydropower plants are producing only half their normal output. Sichuan province has imposed rolling black-outs across factories and international companies have ground to a halt, even with coal-fire plants operating at full capacity. In Dazhou, power has been cut off to communities for 6-7 hours per day. The price of commodities such as silicon metal has risen due to the power restrictions, and there are growing concerns about a shortage of automobile parts in Shanghai for companies including the Shanghai Automotive Industry Corporation and Tesla. The droughts have also been causing problems for farmers, with a shortage of drinking water among nearly 200,000 livestock across farms in Sichuan. About 433,000 hectares (1,069,966 acres) of crops have been affected by the water shortages, with the resulting direct economic loss amounting to 3.5bn yuan, according to data released by Sichuan’s emergency management authorities. (<https://www.theguardian.com/world/2022/aug/30/its-getting-extremely-hard-climate-crisis-forces-china-to-ration-electricity>)

A “rising China” may still be perceived by American military planners as a threat, but in actuality, Mother Earth has slammed China’s economy into grave crisis. We no longer need to throw hundreds of billions of dollars at weapons and war infrastructure to take down China, an action which pulls us ever further from climate equilibrium. China is already down. To continue kicking them smacks of anti-Asian hatred.

In the context of the current climate reality, it is morally (and fiscally) unsound to cling to the outdated “Great Power/Peer Competition” approach cited in the Draft EIS. Again, no one benefits except the weapons manufacturers. Their idea of an ersatz “clash of the Titans” was the fantasy of a bygone era trying to revive the Cold War that once proved so lucrative. Those days are gone. China is hurting and so are we, facing the shared foe of climate catastrophe. Our chances of survival as a human species on our shared planet are wholly contingent upon cooperation – not competition -- with China. Come on, Pentagon! Get REAL!!!

One Reaper drone could pay for 275 half-million-dollar homes to help house those who have lost their homes to fire or flood. Or provide 27,516 60,000-year jobs to Americans suffering from record-level inflation. Or provide healthcare.

I, myself, quit working a full-time job in 2020 to be a full-time caregiver for my husband who suffers from several serious health conditions. We both live on his social security check, which is grossly insufficient. When I occasionally fall ill due to the stress of full-time caregiving, there is no government safety net. It raises my ire to see tens of billions of dollars a pop go toward drones and other unmanned, AI-based warfare, which is scandalously costly. Policy is written to benefit the weapons industry, not the needs of everyday people like me, or those who have lost their homes as climate refugees, or to joint cooperative projects with China to find ways toward a livable future in the face of climate catastrophe. Americans are fed up.

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It doesn't take a rocket scientist to see the injustice and inequity. In the zero-sum game of federal funding, costly high-tech warfare takes from Americans the basic-needs support needed to pursue life, liberty and happiness. As such, it is a violation of the Constitution. It is a double insult when the most dire needs in human history – combatting climate catastrophe – go largely ignored. Ronald Reagan's disarmament partner, Mikhail Gorbachev, who died the day of this writing, wisely queried, "Is it not clear by now that wars and the arms race cannot solve today's global problems?" The elder statesman added, "War is a sign of defeat, a failure of politics."

**Once weapons were manufactured to fight wars. Now wars are manufactured to sell weapons.**

– Arundhati Roy.

#### ADDENDUM

EXCERPT FROM "The Drone Paradox: Fighting Terrorism with Mechanized Terror" by Christopher J. Coyne and Abigail R. Hall

*"Collateral Damage," or the Maiming and Killing of Innocents*

Nearly every argument for the expansion of the U.S. government's use of drones stems from the idea that they are believed to be a more efficient means of achieving the government's foreign-policy goals relative to the alternatives (see Hall 2015). Drones minimize the potential harm to members of the U.S. military, it is argued, while accurately targeting terrorists. When in office, President Barack Obama explicitly stated that drones are better at targeting and killing foreign adversaries. Drones "are effective," he said. "Dozens of highly skilled al Qaeda commanders, trainers, bomb makers and operatives have been taken off the battlefield. . . . [T]he primary alternative to [drones] would be the use of conventional military options. . . . Conventional airpower or missiles are far less precise than drones" (Obama 2013). As this quote illustrates, the use of drones is typically compared and contrasted with conventional bombings assumed to be the relevant alternative.

A related argument is that drones reduce the costs of conflict in terms of reduced civilian casualties or "collateral damage." CIA director John Brennan, for example, stated that drones have "surgical precision—the ability with laser-like focus to eliminate the cancerous tumor called al Qaeda, while limiting the damage to the tissue around it" (Brennan 2012). Harold Koh, the former legal adviser of the State Department, stated that "[b]ecause drone technology is highly precise, if properly controlled, it could be more lawful and more consistent with human rights and humanitarian law than the alternatives" (quoted in The Economist 2015). Other commentators have made similar claims, stating that "drones kill fewer civilians . . . than any other weapon" (Saletan 2013) and that "[drones are] actually the most humane form of warfare" (Lewis 2013). In 2011, Brennan, at the time counterterrorism adviser to the president, stated, "[T]here hasn't been a single collateral death [in a year] because of the exceptional proficiency, precision of the [drone] capabilities we've been able to

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develop” (quoted in Shane 2011).

As these statements suggest, the overarching idea is that the U.S. government can intervene in other societies and exterminate confirmed threats with precision while avoiding harming innocent civilians.(1) Moreover, it is claimed that drones are more effective than alternatives, with conventional bombing typically cited as the relevant substitute. The standard rhetoric and claims about drones raise a range of important issues.

For one, if we take the claim that drones are more accurate than conventional bombing as the appropriate comparison, it is not clear, *ex ante*, that the adoption of drones will result in fewer total deaths of innocent people. The economic logic underlying this claim is that drones reduce the price of an attack, which allows the military to move down the demand curve, increasing the quantity of drone strikes demanded. The result is that although the use of drones might reduce deaths in any single strike by substituting for another, more deadly alternative (conventional bombing), this reduction might be offset by an increase in the total death of innocents due to an increase in the overall number of drone attacks due to the lower relative price of employing drone technology to strike targets.(2)

In addition, presenting conventional bombing as an alternative to drone bombing is an artificially narrow dichotomy. If the U.S. government’s foreign-policy goal is to eliminate individual enemy targets, then it isn’t clear that conventional bombing should be presented as the appropriate alternative to drone bombing. The appropriate alternative should instead be something akin to special-operations missions against specific targets.(3) Drone strikes also raise a host of issues related to international law and state sovereignty, the ethics of robotic warfare, and the international precedent being created by U.S. drone policy. But even if these (significant) issues are put aside, existing evidence calls into question the precision of drones in striking the desired target while avoiding the imposition of significant harms on innocent human beings.

To date, efforts to quantify the number of civilian casualties from U.S. drone strikes have led to different estimates. This variation is due in part to differing methodologies and definitions as well as to alternative sources of data regarding drone strikes and casualties (see Singh 2013). Another confounding factor is the secrecy of the U.S. government’s drone program. The fact that these missions are so covert makes tracking drone strikes and their outcomes extremely difficult if not impossible. Nonetheless, existing estimates provide some range of civilian casualties from drone strikes and, more importantly, highlight the human cost of the use of drones despite rhetoric to the contrary by U.S. government officials.

The New America Foundation (NAF) collects from credible news sources data on U.S. drone strikes in Pakistan (2004–present), Yemen (2002–present), and Somalia (2003–present). (4) The Pakistan data include only U.S. drone strikes, but the Yemen data are broader and includes all U.S. air strikes, drone and non-drone. The Somalia data include air strikes and ground operations by special-operations forces. This means that the data for Yemen and Somalia capture the effects of drone strikes but also of other types of military operations.

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For the 2004–16 (through June) period, the NAF calculates 403 total strikes in Pakistan. These strikes killed between 1,853 and 3,032 militants as well as between 255 and 315 civilians, with between 176 and 278 uncategorized deaths (NAF n.d.a). In Yemen, it estimated 156 strikes over the 2002–16 (through June) period. These strikes killed an estimated 895–1,129 militants and 87–93 civilians, with an estimated 33–52 uncategorized deaths (NAF n.d.c). Finally, in Somalia the NAF estimated that 36 strikes over the 2003–16 (through June) period killed 299–343 militants and 28–40 civilians, with an estimated 0–19 uncategorized deaths (NAF n.d.b).

The Bureau of Investigative Journalism (BIJ) tracks drone strikes in Yemen (2002–present), Pakistan (2004–present), Somalia (2007–present), and Afghanistan (2015–present). The data are collected from a variety of sources, including news sources, publicly available information (e.g., lawsuits), and field investigations. In addition to estimating total deaths, the BIJ presents estimates of civilian deaths as well as a separate death toll for children (up to seventeen years old) killed by drone strikes. It also presents an estimate of the number of people injured by drone strikes.

In Yemen, the BIJ identifies 120–40 confirmed drone strikes through June 2016 (all data from BIJ 2017). These strikes killed 535–782 people, including 65–101 civilians and 8–9 children. An additional 96–227 people are estimated to have been injured by these strikes. There were 424 drone strikes in Pakistan through June 2016, resulting in an estimated 2,499–4,001 total deaths. Of this total, it is estimated that civilian deaths range from 425 to 967, including 172–207 children. The estimated number of people injured by the drone strikes in Pakistan range from 1,161 to 1,744. In Somalia, the BIJ identifies 26–30 drone strikes through June 2016, resulting in 219–383 total deaths. It estimates that 3–10 civilians, including 0–2 children, have been killed by the strikes, with another 0–2 civilians injured. Finally, in Afghanistan, the BIJ estimates that the U.S. government has carried out 332–37 drone strikes (through June 2016), resulting in 1,610–2,123 deaths. Estimated civilian deaths range from 75 to 106, including 4–18 children. An estimated 163–69 people have been injured by the drone strikes.

Other efforts have been made to estimate the number of civilian casualties from drone strikes. For example, a report by the Human Rights Clinic (2012) at Columbia University draws on the data from the aforementioned two independent sources to compile estimates of civilian deaths. Other reports have studied the effects of a specific sample of drone strikes. For example, a report by Human Rights Watch (2013) reviews the effects of six targeted killings via drone strikes by the U.S. government in Yemen over the 2009–12 period. The report concludes: “Two [of] these attacks were in clear violation of international humanitarian law—the laws of war—because they struck only civilians or used indiscriminate weapons. The other four cases may have violated the laws of war because the individual attacked was not a lawful military target or the attack caused disproportionate civilian harm, determinations that require further investigation. In several of these cases the US also did not take all feasible precautions to minimize harm to civilians, as the laws of war require” (2013, 1). A report by Amnesty International (2013) reviews nine drone strikes in Pakistan during the January 2012–August 2013 period. The report details each strike and traces some of the costs incurred by

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innocent civilians, ranging from injury to death.

Further insight into the harm caused to civilians by drone strikes is provided by recently released government documents on Operation Haymaker, which targeted members of the Taliban and al-Qaeda along Afghanistan's northeastern border with Pakistan (see Scahill 2016, 154–76). Haymaker involved a combination of special-operations forces and other members of the intelligence community on the ground with drone strikes from above to carry out targeted killings. Among other things, the government documents reveal that “during a five-month stretch of the campaign, nearly nine out of ten people who died in airstrikes were not the Americans’ direct target” (Scahill 2016, 156). Further, the documents include “a chart revealing that airstrikes killed 219 people over a fourteen-month period in 2012 and 2013, resulting in at least thirty-five jackpots [the killing of intended targets]” (Scahill 2016, 169). This means that the 184 other casualties—84 percent of the total people killed during this period—were not the intended targets of the U.S. airstrikes.

As this review of the existing, public evidence indicates, there is a lack of consensus on the specific number of civilian injuries and deaths caused by drone strikes. **In some cases, the estimated number of civilian deaths and injuries falls within a wide range. For our purposes, this variance is irrelevant. What does matter is that there is evidence from numerous credible sources of drone strikes causing death and injury to innocent civilians.** (5) (boldface mine) At a minimum, this evidence suggests that drones lack the scalpel-like precision that their proponents often claim as a defining feature of this technology.

#### FOOTNOTES:

(1) Even where drone strikes successfully kill the target, there is a lack of consensus as to whether this success actually contributes to achieving the U.S. government's foreign-policy goals (see Trofimov 2016). Evidence indicates that drones and military strikes in general are not the best method for eliminating terrorists (see Jones and Libicki 2008, 18–19). Further, there is evidence that terrorist organizations can use drone strikes as a recruiting tool (see Kilbullen and Fxum 2009), an issue discussed further later in this article.

(2) We thank Robert Whacles for bringing this point to our attention.

(3) Even the standard dichotomy between drone bombing and conventional bombing is not as clear-cut as its proponents make it seem. According to one estimate, drone strikes conducted in Afghanistan from mid-2010 to mid-2011 were ten times more deadly for civilians than air strikes carried out by fighter jets (Ackerman 2013; Zerko and Wolf 2016). In writing about life in the Palestinian territories during the Israeli summer offensive of 2014, Atef Abu Sa'f (2015) describes, among other things, how the Palestinian population experienced different forms of bombing and how drones were no less terrifying than other forms of attack. This suggests that it isn't the technology itself that is the determining factor of precision but rather the manner and context in which the technology is employed.

(4) For the NAF's general report on drones, see NAF n.d.d.

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#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 072

#### Comment

**From:** [Robert H. Stiver](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [ann.Wright](#); [Patricia Blair](#); [Leatrice Fung](#)  
**Subject:** [Non-DoD Source] Nol to Killer Drones in Hawaii!  
**Date:** Tuesday, September 6, 2022 9:46:02 AM

I hereby advise you my adamant opposition to the stationing of military-killer drones in Hawaii...at Kaneohe MCB...or anywhere else on land controlled by the military.

My reasons are simple but real, primarily:

(1) Cost. Our national debt now exceeds **30 Trillion Dollars**. That is unconscionable. It must be reduced and eliminated. Prime among my passions is DEFUNDING/DISARMING DoD -- not mere token 10 percent REDUCTIONS in the bloated, rapacious mil/intel/sec budget -- with transfer to crucially demanded domestic priorities. DISARMAMENT of military machines (MICs) globally is an absolute ESSENTIAL if we are ever to have an opportunity for world peace and harmony.

(2) Morality. Case in searing/tragic point: that Afghan NGO peace-worker and his entire family (10 members) murdered in Kabul in (?) August 2020. Innocents must not have the immorality of a killer drone override their morality and lives. Memo: No US military member was held to account -- **ACCOUNTABILITY** -- for that egregious act of murder of civilians.

(3) Continuing/Ongoing Citizen Unrest and Protest of killer drones at KMCB. Surely you're aware that, inter alia, a demonstration/rally against drone stationing, training and use was held in September 2021 at a gate of KMCB. The citizenry has spoken: **No Drones!**

Testimony submitted with sincerity and passion this 9-06-2022:

Robert H. Stiver  
98-434 Hoomailani Street  
Pearl City, HI 96782  
tel. 808-455-9823

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Appendix B – Responses to Public Comments

Comment 073

Comment

From: [ann.Wright](#)  
To: [Robert H. Stiver](#)  
Cc: [NFPAC-Receiver](#); [Patricia Blair](#); [Leatrice Fungo](#)  
Subject: [URL Verdict: Neutral][Non-DoD Source] Re: Nol to Killer Drones in Hawaii  
Date: Tuesday, September 6, 2022 10:19:47 AM

Thanks Bob!!! Excellent testimony for NO Drones in Hawaii!

Ann

On Tue, Sep 6, 2022 at 9:45 AM Robert H Stiver <[bobfromoahu@gmail.com](mailto:bobfromoahu@gmail.com)> wrote:  
I hereby advise you my adamant opposition to the stationing of military-killer drones in Hawaii...at Kaneohe MCB...or anywhere else on land controlled by the military.

My reasons are simple but real, primarily:

(1) Cost. Our national debt now exceeds **30 Trillion Dollars**. That is unconscionable. It must be reduced and eliminated. Prime among my passions is DEFUNDING/DISARMING DoD -- not mere token 10 percent REDUCTIONS in the bloated, rapacious mil/intel/sec budget -- with transfer to crucially demanded domestic priorities. DISARMAMENT of military machines (MICs) globally is an absolute ESSENTIAL if we are ever to have an opportunity for world peace and harmony.

(2) Morality. Case in searing/tragic point: that Afghan NGO peace-worker and his entire family (10 members) murdered in Kabul in (?) August 2020. Innocents must not have the immorality of a killer drone override their morality and lives. Memo: No US military member was held to account -- **ACCOUNTABILITY** -- for that egregious act of murder of civilians.

(3) Continuing/Ongoing Citizen Unrest and Protest of killer drones at KMCB. Surely you're aware that, inter alia, a demonstration/rally against drone stationing, training and use was held in September 2021 at a gate of KMCB. The citizenry has spoken: **No Drones!**

Testimony submitted with sincerity and passion this 9-06-2022:

Robert H. Stiver  
98-434 Hoomailani Street  
Pearl City, HI 96782  
tel. 808-455-9823

--

Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

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**Comment 073 (continued)**

**Comment**

Ann Wright  
Dissent: Voices of Conscience  
[www.voicesofconscience.com](http://www.voicesofconscience.com)

**Response to Comment**

## Appendix B – Responses to Public Comments

### Comment 074

#### Comment

**From:** [Michelle Harangody](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] MCBH EA comments  
**Date:** Wednesday, September 7, 2022 11:14:57 PM

Aloha,

I am a resident of Kahaluu on the Windward side of Oahu and I am requesting a full EIS for the "HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEHOE BAY."

The current assessment is flawed and lacking important information regarding noise impacts to surrounding communities and ecosystems. I regularly hear military flight practice from my home office and the public has no information on the proposed flight paths of the new aircrafts and drills.

Some of the maps are interestingly reorganizing the Windward area. The maps situate MCBH as remote/facing the Pacific rather than part of Kāne'ohe and He'eia ahupua'a and close to communities. Moku o Lo'e, the island where HMB is located, is missing from all the maps, along with Kāne'ohe Bay's reefs. This is intentional positioning and erasure to make impacts appear less severe. How and why should we trust the FONSI if the information in the EA isn't accurate, and potentially manipulative?

Please do right by the communities impacted, for better or worse, by nearby military bases and complete a full EIS that includes public engagement to address our concerns.

Thank you,  
Michelle Harangody

#### Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Comment 074 (continued)**

**Comment**

(see above)

**Response to Comment**

The maps were updated in the Final EA to include more local place names for reference purposes.

**Appendix B – Responses to Public Comments**

**Comment 075**

**Comment**

**From:** [Claire Lewis](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Proposed new plane fleet at MCBH  
**Date:** Wednesday, September 7, 2022 7:05:15 AM  
**Attachments:** message v4.rpmsa

Message Encryption by Microsoft Office  
365

Claire Lewis (chickflick8434@msn.com) has sent you an encrypted message.

Read the message

Learn about messages protected by Office 365 Message Encryption.

Microsoft respects your privacy. To learn more, please read our [Privacy Statement](#).

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052



**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 075 (continued)

#### Comment

Proposed new plane fleet at MCBH  
Claire Lewis <chickflick8434@msn.com>  
Wed 9/7, 10:04 AM  
NFPAC-Receive@navy.mil  
Hello,

I am a resident of the Windward side, concerned about the proposed new fleet of aircraft for MCBH. The flights are already disruptive to my work, and on days where the flights are frequent, I end the day with painful ringing in my ears. I am requesting that a full EIS be completed, and that noise recordings be made outside of the base to accurately determine the impact of these proposed additional flights.

Thank you,

A concerned resident of 96734

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Comment 075 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

No noise monitoring is proposed. The noise analysis shows that all areas exposed to the 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

## Appendix B – Responses to Public Comments

### Comment 076

#### Comment

**From:** [Elizabeth Madin](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [URL Verdict: Unknown][Non-DoD Source] Community input to Marine Corps Base New Aircraft  
**Date:** Wednesday, September 7, 2022 9:50:57 AM

Dear Sir or Madam,

As a researcher based at Moku o Lo'e (Coconut Island) as part of the Hawai'i Institute of Marine Biology (HIMB), I would like to submit my comments that [the recent EA](#) regarding new aircraft at MCBH. The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done and provide answers to the many questions and concerns that have been raised regarding the impact of the new aircraft on surrounding human and wildlife communities.

We at HIMB are regularly subject to deafening noise from aircraft flying directly overhead, at relatively low altitudes, and it is extremely disruptive to our research and teaching environments (not to mention very uncomfortable to our own ears). For example, numerous times, we've had a) field classes for graduate students and b) media interviews interrupted (often more than once, for repeat flights). There is also the well-known the "Coconut Island Pause" that everyone is used to having to do during the overhead flights. Conversations must cease, and even indoor Zoom calls must often pause because of the noise that is so powerful as to make the buildings shake.

Thank you for your attention to this important matter.

Sincerely,

Dr. Elizabeth Madin

---

Elizabeth M.P. Madin  
Assistant Research Professor  
Hawai'i Institute of Marine Biology  
University of Hawai'i at Mānoa  
Kāne'ohe, HI 96744  
USA

email: [emadin@hawaii.edu](mailto:emadin@hawaii.edu)  
twitter: [@ElizMadin](#)  
web: [www.oceansphere.org](http://www.oceansphere.org)

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

## Appendix B – Responses to Public Comments

### Comment 077

#### Comment

**From:** [Elizabeth Madin](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [URL Verdict: Unknown][Non-DoD Source] Community input to Marine Corps Base New Aircraft  
**Date:** Wednesday, September 7, 2022 9:50:57 AM

Dear Sir or Madam,

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Thank you for your attention to this important matter.

Sincerely,

Dr. Elizabeth Madin

---

Elizabeth M.P. Madin  
Assistant Research Professor  
Hawai'i Institute of Marine Biology  
University of Hawai'i at Mānoa  
Kāne'ohe, HI 96744  
USA

email: [emadin@hawaii.edu](mailto:emadin@hawaii.edu)  
twitter: [@ElizMadin](#)  
web: [www.oceansphere.org](http://www.oceansphere.org)

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

## Appendix B – Responses to Public Comments

### Comment 078

#### Comment

**From:** [kraigcantwell@yahoo.com](mailto:kraigcantwell@yahoo.com)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Environmental Impact Study of MCBH Aircraft Operations Additions  
**Date:** Thursday, September 8, 2022 7:39:22 PM

8 September 2022

My name is Kraig E Cantwell and I reside at 46-038 Heeia Street, Kaneohe, HI. I am writing regarding the Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii. I have several concerns that include:

**Noise.** The Environmental Assessment (EA) only assesses the noise of new aircraft in the “region of influence” in and around the base and some surrounding water. The noise evaluation should be extended to include the surrounding communities. At times, the noise from the existing aircraft is quite bad, especially the C-17’s that lie to fly in the evening and they often come almost over the land, which means the noise in the houses is bad. People live on the windward side of the island to enjoy the quiet evening breezes, not listen to aircraft flying, disturbing our evenings.

The noise generated by the current aircraft disrupts both my quality of life in a very negative manner. The noise interferes with conversations, listening to TV or music, and phone calls with my children and grandchildren. Nighttime aircraft noise disrupts my sleep on a regular basis unless I close all the windows and tun on the air conditioner. That defeats the benefits of living in Kaneohe because I can’t enjoy the trade winds. The addition of thousands of additional flights annually can only make this worse. Even when the planes are on the ground the engine noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation. Right now as I am typing this all I can hear outside is the existing Osprey aircraft flying around, which I find very aggravating after a long day of work. I want to relax and enjoy the outdoors and the backyard.

The EA includes demolishing the historical Hangar 103 (Hangar 2 of World War II fame) The plan, as I understand it, is to rebuild a new hanger 103 and relocate the Ospreys from their current hanger (mid runway) to the new hanger **closer to the coastal community**. Noise will be markedly increased especially during maintenance activities which may go on for hours. Actual measurements of noise from an Osprey is 8 times more than the large noisy CH53E helicopters that recently left the base. Destroying the history of the hanger is deplorable. You should be absolutely ashamed to have even considered such a move.

**Health.** Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to clean soot off the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8280 new

#### Response to Comment

Thank you for your comment.

See responses to comment #028.

## Appendix B – Responses to Public Comments

### Comment 078 (continued)

#### Comment

aircraft operations can only worsen this problem. The environmental protections should be followed by all with no exceptions. We must do anything we can to avoid disasters like Love Canal, Red Hill and Camp Lejeune.

**Environment.** The EA only assesses the environmental impacts of these new aircraft in the “region of influence” in and around the base and some surrounding water.

For example, it is clear that people and animals are stressed by the noise quite a distance from the base. Planes that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study.

**Historic preservation.** There will be an adverse effect on historic properties resulting from the proposed construction with the destruction of Hangar 103 (Hangar 2 in WWII). Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places.

They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. The buildings involved are an important reminder of the first moments our nation was attacked during WWII. The Navy and Marine Corps should be ashamed for the way you are trying to treat our nations historic buildings. We need to remember all the aspects of the horrific attack on our nation, not destroy aspects of it.

We support the HHF in their strong opposition to this demolition of any of these structures and are in favor of alternatives available and known to the Navy.

**Conclusion -** The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Regards,  
Kraig

Kraig Cantwell  
Cell: 703-655-2977  
Email: KraigCantwell@yahoo.com

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 079

#### Comment

**From:** b.chun  
**To:** NFPAC-Receive  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] historic hangers MCBH  
**Date:** Thursday, September 8, 2022 9:00:21 AM

b chun <bslsichun@gmail.com> Wed, Sep 7, 5:16 PM (18 hours ago)

to nfpac-receive



rather than tearing down houses, they used to give them away free to someone who would cut them in half, put them on trailers, and move them at night.

hangers near the Interisland terminal at Honolulu Airport were put on wheels and moved across the (closed) runway to near the reef runway.

the armory building next to Iolani Palace was originally located elsewhere and rebuilt brick by brick to make way for urban renewal.

if the historic organizations want to preserve the hangers, they can have them for free, if they can move them. a plaque on the new building can commemorate the history.

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 080**

**Comment**

PO Box 30848

Anahola, Hawai'i 96703-0848

9 September 2022

EV21 Project Manager  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive – Suite 100  
Joint Base Pearl Harbor – Hickam  
Hawai'i 96860-3134

RE *Draft EA proposal: Home Basing MQ-9s and C-MCBH*

To Whom It May Concern:

Aloha! We are horror-struck that the U.S. Marines has in their senselessness – wasted taxpayers' monies on preparing a draft Environmental Assessment (dEA). The proposal of 'home' basing KC-130J and MQ-9 aircraft at Marine Corps Base (MCB) at Kaneohe on the island of O'ahu is an assault of yet more unprecedented magnitude: Please, give 'Peace' a Chance – build homes not War.

Unless, the entities of Section 106 of the National Historic Preservation Act (NHPA) and other 'interested parties' under the NHPA are corrupt, it is unquestionably in violation – to jeopardize marine life and certainly jeopardize human life and their ability to hear AND the flora and fauna associated in *revered* Kaneohe Bay.

We are against all the proposal to create a 'home base' of KC-130J and MQ-9 aircraft at Marine Corps Base (MCB) at Kaneohe on the island of O'ahu.

## “NO ACTION”

To 'home base' the MQ-9 (Marine Unmanned Aerial Vehicle Squadrons) and C-MCBH (Marine Aerial Refueler Transport Squadrons) fleet is ludicrous, especially in light of the disaster to Honolulu drinking water due to the Red Hill quandary – which is staggeringly despicable.

The predicament of potential environment impacts of the proposed action to the ocean and water quality from exhaust fumes from both the fuel burned and/or transported in the proposal of 'home basing' the fleet of deplorable intolerable C-MCBH (Marine Aerial Refueler Transport Squadrons) and MQ-9 (Marine Unmanned Aerial Vehicle Squadrons) is yet another *unacceptable* potential of life-threatening 'accident' or 'accidents'.

Hawai'i Nei has suffered an unacceptable amount of rape and pillage already  
– the Life of the Land has not been perpetuated in Righteousness' – by the U.S. military

### Stop poisoning the `Aina ~ Stop poisoning the Air

Environmental impacts of the proposed action including but not limited to Public Health and Safety are immense... the U.S. Marines are making yet another target of Hawaii – hmmmmmm, ever hear of the bombing of Pearl Harbor?! *OR Climate Crisis?!*

As well, potential environmental impacts by proposed action are our precious water resources, mental health (concern of being targeted & the bombardment of noise) damage to the human ear drums under siege by NOISE, the eco-system of marine environment, cultural resources etc.

MAHALO ( THANKS ) for please keeping us abreast via USPS (U.S. Postal Service) of the dEA (draft Environmental Assessment) upon its publication.

Sincerely With ALOHA, *Bonnie P. Bator* Bonnie P. Bator and 'Ohana: Keana`aina, Keli`ikoa, Kai`aokamalie, & Kai

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 081

#### Comment

**From:** [ianetbrennan17@gmail.com](mailto:ianetbrennan17@gmail.com)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] noise  
**Date:** Friday, September 9, 2022 4:19:50 PM

---

To whom it may concern

I am very concerned about the noise from the base from the Ospreys. I live near Kaneohe Bay. I have heard a lot of noise from the helicopters in the past, and am very concerned about worse noise when you move the Ospreys closer to the Bay and the community. I request that a full Environmental Impact Statement be carried out.

Edward A Brennan

#### Response to Comment

Thank you for your comment.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Comment 082**

**Comment**

**From:** Janet  
**To:** [NFPAC-Receive@Navy.mil](mailto:NFPAC-Receive@Navy.mil)  
**Cc:** [NFPAC-Receive](mailto:NFPAC-Receive)  
**Subject:** [Non-DoD Source] please have an EIA/EIS  
**Date:** Friday, September 9, 2022 4:10:14 PM

---

Dear Sirs

I am a senior citizen that lives in Kaneohe. I am concerned about the noise from your base with the Osprey. The noise was a problem before from the helicopters and I know the Osprey has the potential to be even louder. Please conduct an EIA/IES.

Sincerely  
Janet L. Brennan

**Response to Comment**

Thank you for your comment.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 083

#### Comment

**From:** [myrdal@hawaii.navy.mil](mailto:myrdal@hawaii.navy.mil)  
**To:** [NEPAC-Receive@navy.mil](mailto:NEPAC-Receive@navy.mil); [NEPAC-Receive](mailto:NEPAC-Receive@navy.mil)  
**Subject:** [Non-DoD Source] Request at EIA/EIS at Kaneohe Bay Marine Corps Base  
**Date:** Friday, September 9, 2022 4:19:56 PM

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To Whom It May Concern,

I live in Kaneohe near the Marine Corps base. I am concerned about the noise from your base with the Ospreys and the planned move to make their runway closer to the bay. The noise has been a problem from the helicopters and Osprey has the potential to be even louder. Please conduct an EIA and EIS. Thank you for your consideration.

Sincerely

John Myrdal  
(808) 753-0989

#### Response to Comment

Thank you for your comment.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 084

#### Comment

Kaneohe, Sept 10, 2022

Dear Sirs,

my name is Giorgio Onetti and I reside at 44-149 Kauinohea pl, 96744 Kaneohe. I have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corp Base Hawaii.

I have concerns that include:

Noise.

Extend the regions studied and sound measured to include surrounding communities as addition of thousands of flights annually will only make this worse. Aircraft noise disrupts both my and my family's quality of life interfering with conversations, TV or music listening and our sleep as well. Even on the ground the aircraft engine noise is loud and prolonged. Adding 15 large four engine aircrafts can only worsen this situation. EA plan demolishing/rebuilding hangar 103 where very noisy Osprays will be located bay-side, facing the Kaneohe Bay coastal community. Actual measurements of noise emitted by an MV-22 Ospray compared to a CH-53 shows that it is louder by about 30 db or about 8 times. Current modeling does not factor in the amphitheater effect created by the mountains and the bay.

Health.

Research demonstrates that noise is not just a nuisance but a health concern.

Homes near flight paths frequently clean soot off the windows, and other surfaces of the home. Adding 8,280 new aircraft operations can only worsen this problem.

We breathe in soot and other dangerous engine pollutants.

Environmental protections should be followed with no exceptions or we risk disasters like Love-canal, Red Hills and Camp Lejeune.

Environment.

EA only assesses environmental impact of new aircrafts in "region of influence" in and around the base and some surrounding water.

Obvious humans and pets are stressed by the noise quite a distance from the base so larger area should be studied.

Planes flying over the Bay are adding to the overall pollution of the already stressed Bay.

Impact of the exhaust pollutants on the coral, fish, birds, marine life and water quality should be addressed. Recent reports of increased sea turtle nesting activity on the offshore island of Oahu (Kapapa, Manana, Moku Manu, Moku Nui and Moku'auia). Many sightings of Hawaiian monk seals on these islands close to MCBH

#### Response to Comment

Thank you for your comment.

See responses to comment #028.

**Appendix B – Responses to Public Comments**

**Comment 084 (continued)**

**Comment**

and sightings of spinner dolphins close to the Sampan Channel and the restricted ocean area around MCBH. How will the Navy monitor the impact of noise and pollutants on these animals?

Historic preservations.

Adverse effect on historic properties by proposed construction with modifications and destruction of 2 hangars (3 and 4) both of historic significance. Hangars 1-4 constructed in 1941; Hangar 5 in 1943 and all 5 are eligible for the National Register of Historic Places. The buildings are an important reminder of the first moments of our nation's greatest conflict. We support Historic Hawaii Foundation in their strong opposition to this demolition and are in favour of alternatives available and known to the Navy.

The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions.

With respectful regards

Giorgio Onetti

**Response to Comment**

**Appendix B – Responses to Public Comments**

**Comment 085**

**Comment**

**From:** [AGI Member](#)  
**To:** [WindwardCoalition@gmail.com](mailto:WindwardCoalition@gmail.com)  
**Cc:** [NFPAC-Receive](#)  
**Subject:** [Non-DoD Source] "MCB Hawaii Home Basing EA" --  
**Date:** Saturday, September 10, 2022 9:58:14 PM

**"MCB Hawaii Home Basing EA"**

Article Title: "[Marine Corps extends comment period on plans for Kaneohe Base](#)"

When I saw this article in the "Advertiser" 3 days ago, I initially began to read it with great interest. However, I soon discovered that there was not the slightest mention, or apparent interest in the Marine Base as a National Security Resource.

First, let me explain why that is one of the first things I think of in these circumstances.

1. I'm a USAF officer that retired after 30 years of Service, mostly here in the Pacific.
2. In retirement, I continued to provide contract support to the HQ Pacific Command in the areas of: Command & Control, Major Joint Training Exercises and writing Intelligence Joint Operations Plans.
3. Since 1987 I have lived in Kaneohe and served twice on the Kaneohe Neighborhood Board. I worked on other community based organizations and issues as well.

I was appalled that the "Windward Coalition" apparently had no interest in the "National Security Issues" affected by this decision about utilization of resources and capabilities at the Marine Base. The author of the article seemed mainly focused upon making the Marine Base Hangars into Museums, by quoting highly honored veterans who fought there in WWII. We need to continue to honor them? Honor them?

I think I might be one of the first veterans to speak for those that fought

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 085 (continued)**

**Comment**

in those days. They would roll over in their graves if they became aware that today we plan to enshrine them by compromising, even destroying the capability the base represents to prevent, deter or if necessary fight again for all the same reasons they did in WWII.

Our opposition in the far Pacific is at the very least, a peer competitor that poses great risk to our way of life both in Hawaii, the entire Pacific Basin and even the heart of our country. Due to the current paucity of funding, we need every asset we can muster to pursue our National Security Requirements in the Pacific – To DETER, or if necessary, fight and win.

The resources being questioned by the “Windward Coalition” and the author of this article need to be assessed and considered in the context as enablers for our military forces in the Pacific. They are part of the plans of our military experts to do their job, to protect the country in general and us citizens in particular. In my considerable Neighborhood Board experience, I came to fully understand that there are those that have their own personal interests as their highest priority and they come up with all manner of tearful community rational to get what they want. I came to know these folks as NIMBYs, that is “Not In My Backyard” petitioners before the Neighborhood Board. After a while it was more obvious that they were diminishing themselves more than anything else. They were indeed focused upon themselves. Using all manner of reasons like: no noise (at my house)? The aircraft exhaust is bad for my kid’s health (Huh)? They will pollute everything? We can’t have them near us (Environment)? Historical preservation? (Like make monuments to all of our heroic successes, even if it destroys our ability to counter those that would do us harm again, both now and in the future.

Beyond that, we might consider that our opposition (call them enemies?) may be indirectly involved at internally chipping away at our military capabilities? Gee! Who’d da thunk that could happen?

**Response to Comment**

**Appendix B – Responses to Public Comments**

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**Comment 085 (continued)**

**Comment**

We need to be truly fully informed, not driven by emotion. I don't mind a full and complete analysis of things that affect our security, as long as the citizen's realize that there may be something like slitting our own throats involved in making poorly informed or even dumb decisions.

Sincerely, Charles Rushforth (Toby)

Kaneohe, HI

**Response to Comment**

## Appendix B – Responses to Public Comments

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### Comment 086

#### Comment

**From:** [Kit Scales](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] MCAS Kaneohe Hangers  
**Date:** Saturday, September 10, 2022 10:26:22 PM

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How historic are hangers, they are functional structures, not architectural statements. I was stationed at MCAS, Kaneohe 1963-1965. It is a military installation full stop, not a tourist attraction, Pearl Harbor. In the 60's the issues or residence complaints were F8U take offs, general aircraft noise and high speed low passes with unrestricted, after burner climb out. MCAS Kaneohe preceded most of the Bay's residences, it is there for their protection and defense. Equip the Corps. Semper Paratus

Christopher Scales  
USMC 1671744

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 087

#### Comment

**From:** [Wayne Gold](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] MCBH Basing Proposal  
**Date:** Sunday, September 11, 2022 4:01:19 PM

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I would like to register my strong opposition to the current proposal to base KC-130J aircraft and drones at MCBH, and to move MV-22/Ospreys to operate bay-side where house from Osprey operations may well adversely affect Kaneohe Bay residents, WITHOUT a full Environmental Impact Assessment Statement including community noise measurements. While I support the mission of the military I feel there are alternatives to the current proposal that would reduce the impact on area residents. A noise study is CRUCIAL.

Thank you.

Wayne Gold  
44-132 Hako St.  
Kaneohe, HI 96744

#### Response to Comment

Thank you for your comment.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 088: Kailua Neighborhood Board

#### Comment



#### KAILUA NEIGHBORHOOD BOARD NO. 31

WILLIAM M. HICKS, CHAIRMAN • 923 AKUMU STREET • KAILUA, HAWAII, 96734-4004  
PHONE (808) 230-2293 • E-MAIL, billhicksknb@gmail.com

September 12, 2022

EV21 Project Manager  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive, Suite 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134.  
[NFPAC-Receive@navy.mil](mailto:NFPAC-Receive@navy.mil)

Subject: Kailua Neighborhood Board Support for Conducting an Environmental Impact Statement for the Home Basing of a MZ-9 Marine Unmanned Aerial Vehicle Squadron and a KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii

Aloha EV21 Project Manager,

The Kailua Neighborhood Board (KNB) reviewed the draft Environmental Assessment (EA) for the home basing of a MQ-9 Marine Unmanned Aerial Vehicle Squadron and a KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii (MCBH) during the public review comment period and determined that the EA inadequately addresses several pertinent factors and recommends that an Environmental Impact Statement (EIS) be conducted to appropriately address those factors.

The following resolution was unanimously approved by the KNB at the regular meeting on September 1, 2022: **The Kailua Neighborhood Board recommends that the Marine Corps Base Hawaii conduct an Environmental Impact Statement (EIS) under the National Environmental Protection Act (NEPA) instead of or to replace the Environmental Assessment (EA) for the home basing of the MZ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii for the following reasons:**

- The proposed Project is a major Federal action, which will significantly affect the quality of the natural and human environment and therefore requires the preparation of an EIS under NEPA.
- The EA does not provide a comprehensive evaluation of short- and long-term and cumulative impacts from the proposed Project including demolition of multiple buildings on burials, historic buildings, historic districts, endangered birds, storm water runoff, water quality as it enters Kaneohe and Kailua Bays, and noise.
- The EA does not provide the community with enough information to support a finding of no significant impact.
- The EA does not identify the type of noise modeling the Marine Corps is using nor does it include impacts from the amphitheater effect of the surrounding mountains.
- The EA does not include information on whether the proposed aircraft will carry ordnance.
- The EA does not include an air quality impact analysis.
- The EA does not provide information on the type of noise or level of noise that will be generated by maintenance or the hours that maintenance will be performed.
- The EA does not provide information on the minimum altitude for the MQ-9s.
- The EA does not provide information on where the aerial KC-130J refueling operations will take place.
- The EA does not contain noise measurements for the communities that they will fly over or nearby.

*Oahu's Neighborhood Board system – Established 1973*

#### Response to Comment

Thank you for your comment.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

The cumulative impact analysis addresses this change in number of contributing resources over time. For an active military base to remain operational, certain facilities require modernization or replacement. The Marine Corps conducted a screening and alternatives development process to identify suitable locations for the proposed action while attempting to minimize effects to historic resources. For unavoidable effects, the Marine Corps developed mitigation measures to offset these unavoidable effects and coordinated them with the consulting parties. The NAS Kaneohe Aviation District has been impacted over time with the demolition of 15 contributing buildings, structures, and objects between 2006 and 2022. There are an additional 7 buildings proposed for demolition in connection with future projects, including the proposed action. Hangars 103 and support buildings 159, 160, 161, 183 and 184 would be demolished under the proposed action. The Navy has proposed replacing Hangar 104; however, the final disposition of Hangar 104 is not part of this proposed action and is dependent on the outcome of a separate EA and NHPA Section 106 process.

## Appendix B – Responses to Public Comments

### Comment 088: Kailua Neighborhood Board (continued)

#### Comment

- The EA does not describe the planned flight paths for the KC-130Js or drone patterns and how those flight patterns will impact surrounding residential communities.
- The EA provides very little information on the Project's impact on 'iwi burial sites known and yet to be discovered.
  - Since past construction on the base has unearthed over 1,500 sets of human remains greater attention and research must be spent on locating 'iwi before they are bulldozed.
  - The EA states that tie-downs and striping at the end of Runway 4/22, west of Hangar 105 (Hangar 5) will occur. The EA describes Site 50-80-11-4453 as a subsurface traditional Hawaiian cultural deposit located west of Hangar 105, near or within the location of Project Element 4. (1/7/22 letter from Marine Corps to Dr. Alan Downer State Historic Preservation Department page 4)
- The EA does not include the cumulative effects of stormwater runoff and decreased permeability from past and future projects.
  - 3.3.1 page 54: "Activities occurring in the portion of the project area near the Kaneohe Bay shoreline would consist of demolition, renovations, and construction upon impervious surfaces that would follow standard construction conservation measures for control of water contamination risk due to runoff."
  - 3.3.1.5 page 55: "Box culverts drain the runway area southward to the bay. Other box drains discharge runoff for the area west of the runway to the ocean toward the west. The base main cantonment area east of the runway is drained by a series of pipe drain systems to Kailua Bay or overland."
- The EA does not describe how or if the stormwater measures and storm drainage infrastructure concur with the recent EPA stormwater consent decree between the Marine Corps Base and EPA, which was issued for violations to the existing National Pollutant Discharge Elimination System (NPDES) storm water permit.
  - Page 3-15: Following construction, all storm water runoff from operations would be managed by existing on-site storm drainage infrastructure.
- The EA does not provide information on the location, dimensions, capacity, etc. of the new storm water detention basin. (Page 2-7)
- The EA does not provide any information on the quality of the storm water runoff that will be collected at the Project area and directed to the Nuupia Ponds Complex and ultimately into Kaneohe and Kailua Bays.
- The EA does not provide information on impacts from developing the project within the FEMA Zone D, an area where flood hazards are possible, but undetermined.
  - Under Appendix A, Regulatory Setting on page 125: "Executive Order (EO) 11988, Floodplain Management, requires federal agencies to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of development in a floodplain unless it is the only practicable alternative."
  - 3.3.1 page 54: "Construction of the new washdown and refueling areas near Hangar 6886 would create 4.25 acres of new impervious surface."
- The EA does not clarify the type of cleaning agents or solvents which will be used to clean the exteriors of the new aircraft, nor does it state the procedures that will be followed to safely dispose of those cleaning agents/solvents.
  - In the past the Marine Corps was forced to permanently and completely close at least one Marine Corps Base, El Toro Marine Corps Air Station in Orange County in Southern California, in 1993 because of toxic ground contaminants.
  - El Toro Marine Corps Air Station was placed on the EPA Superfund priorities list where 25 separate areas were identified as potentially contaminated areas.
- The EA does not list any considerations of the effects of climate change, and the overall and cumulative effects of this construction on the overall resilience of the airfield.
  - The area is classified as being within the State of Hawaii's "Coastal Flood Hazard Zone with Sea Level Rise" according to the Sea Level Rise: State of Hawai'i Sea Level Rise Viewer: An Interactive Mapping Tool in Support of the State of Hawai'i Sea Level Rise Vulnerability and Adaptation Report, found here: <https://www.pacificos.hawaii.edu/shoreline/slr-hawaii/>

#### Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

## Appendix B – Responses to Public Comments

### Comment 088: Kailua Neighborhood Board (continued)

#### Comment

- The EA does not address effects and impacts of a tsunami even though the majority of the Project area is within a "Tsunami Evacuation Zone".
- The EA gives conflicting information. Page 3-15 states, "there would not be an increased volume of water entering **wetlands in the immediate vicinity of the project**" and "this project area does not overlie a drinking water source and is not located near any freshwater surface waters or **wetlands**". (Emphasis added.)
- The EA makes statements such as this small increase in impervious surface consisting of activities presently found on MCAS Kaneohe Bay, results in **less than significant increases** in the amount and type of storm water flow going into Kaneohe Bay from current conditions without defining the increases and impacts on the bay and its marine life. (Emphasis added.)
- The EA does not define less than significant increases.
  - The water quality of Kailua and Kaneohe Bays depends on the quality of the water sent into these water bodies.
- The EA does not provide information on whether the proposed upgrades to the Waste Water Treatment Plant (WWTP) will be completed or have sufficient capacity to adequately handle the additional 676 active-duty personnel and their dependents.
  - The Marine Corps base was cited by the State Department of Health for "unauthorized wastewater discharge from its Kaneohe Bay Water Reclamation Facility" and ordered by EPA to upgrade the facility.
- The EA does not explain what is meant by no brighter than necessary when referring to lighting and impacts on migratory birds.
- The EA does not explain the circumstances under which pre-approval would be necessary for construction lighting.
  - Bird/bat disorientation/fallout. Minimize brightness. Be no brighter than necessary, all nighttime construction work and construction lighting would be pre-approved with Environmental Compliance & Protection Division Natural Resources. (Page 2-21)
- The EA does not identify impacts from day and nighttime construction work and construction lighting on listed endangered birds, which are known to fly over and inhabit the base.
  - Thirteen of the 17 bird species found on the base are native with 12 species listed as endangered under the Endangered Species Act or identified as state endangered, state threatened. The monarch butterfly is a candidate species for listing under federal Endangered Species Act.
- The EA states that there is suitable pueo foraging habitat in the project area but does not provide information on the Project's impact to pueo foraging habitat. (Page 3-48)
- The EA states that MCBH has determined that implementation of Alternative 1 would result in adverse effects to historic properties but does not identify the adverse effects on each site or cumulative impact from demolition of historic buildings and construction of new buildings to the historical integrity of the project areas.
  - Page 1-5 ...the SHPD (State Historic Protection Division) concurred with the determination the project would result in adverse effects to the Naval Air Station (NAS) Kaneohe Historic Aviation District.
  - Page 3-31 Archaeological Resources Demolition activities requiring ground disturbance have the potential to disturb or destroy subsurface archaeological resources, including known sites as well as those not yet identified. Buildings and structures proposed for demolition include 10 buildings.
  - Project area of potential effects (APE): NAS Kaneohe HNL District; NAS Kaneohe Historic Aviation District; Mokapu House Lots Archaeological District at Pali Kilo; and areas adjacent to the Aviation District along First Street, in West Field, south and east of Charlie Ramp and north and east of the transient ramp. This includes demolition of Hangar 103, one of 5 historic hangers and areas damaged from the December 7, 1941 attack.
- The EA identifies the locations of and states the need for Temporary facilities such as trailers, equipment storage, and communications connections...but does not discuss stormwater discharge locations or water quality from these temporary facilities as stormwater runoff enters Kaneohe and Kailua Bays.

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 088: Kailua Neighborhood Board (continued)

#### Comment

We look forward to reviewing an EIS to gain an informed understanding of these concerns.

Aloha,



William M. Hicks  
Chairman, Kailua Neighborhood Board

Copy:

U.S. Representative Kai Kahele's Representative Roz Makaula [Roz.Makaula@mail.house.gov](mailto:Roz.Makaula@mail.house.gov)  
Governor Ige's Representative Danette Tomiyasu [danette.tomiyasu@doh.hawaii.gov](mailto:danette.tomiyasu@doh.hawaii.gov)  
Senator Jarrett Keohokalole [senkechokaloie@capitol.hawaii.gov](mailto:senkechokaloie@capitol.hawaii.gov)  
Senator Chris Lee [senlee@capitol.hawaii.gov](mailto:senlee@capitol.hawaii.gov)  
Representative Scot Matayoshi [repmatayoshi@capitol.hawaii.gov](mailto:repmatayoshi@capitol.hawaii.gov)  
Representative Patrick Branco [repbranco@capitol.hawaii.gov](mailto:repbranco@capitol.hawaii.gov)  
Representative Lisa Marten [repmarten@capitol.hawaii.gov](mailto:repmarten@capitol.hawaii.gov)  
Mayor Blangiardi's Representative Jim Ireland [james.ireland@honolulu.gov](mailto:james.ireland@honolulu.gov)  
Councilmember Esther Kia'aina, [ekiaaina@honolulu.gov](mailto:ekiaaina@honolulu.gov)

#### Response to Comment

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu's National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

KC-130J aircraft are long range refueling aircraft, and their training would occur away from MCB Kaneohe Bay. KC-130J training occurs in established airspace within the U.S. and is coordinated with other VMGR units for mutual benefit. The KC-130J and MQ-9 aircraft are key enablers to military exercises and participate in planned detachments for training and support to locations throughout the Indo-Pacific region such as Japan, Australia, and the Philippines. Locally, MQ-9 training would occur within existing Special Use Area restricted airspace on the island of Oahu, at the U.S. Navy training range (Pacific Missile Range Facility Barking Sands) on the island of Kauai, and at the U.S. Army Pohakuloa Training Area on the island of Hawaii under existing environmental analysis and FAA airspace designation.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

No noise monitoring is proposed. The noise analysis shows that all areas exposed to the 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

Existing archaeological resources are described in Section 3.4.1.2. Impacts are described in Section 3.4.2.2. Although the potential for disturbance to intact archaeological resources is low, the analysis includes processes for inadvertent discovery of iwi kupuna.

The likelihood of discovering previously unknown archaeological deposits in the APE is low. Much of the subsurface project disturbance would occur on reclaimed land approximately 20–30 meters offshore from the original coastline. While the potential for disturbance to intact archaeological resources is low, redeposited and disturbed cultural materials (including iwi kupuna) may still be encountered. Should such deposits be encountered, the ICRMP and the requirements of NAGPRA identify appropriate processes for managing such discoveries.

In accordance with responsibilities under NAGPRA, MCB Hawaii is currently designing a burial structure in consultation with Native Hawaii Organizations for iwi kupuna. As potential mitigation for the proposed action, MCB Hawaii is pursuing a development of a curation facility that meets 36 CFR 79 standards.

The cumulative impacts of storm water runoff are addressed in Chapter 4 of the EA. All projects would include appropriate storm water quality and LID features similar to the proposed action to reduce the potential for off-site transport of pollutants. While a minor increase in impervious surfaces is expected, the small amount of additional impervious surface coupled with the location of future projects within the highly developed base, would result in only minor increases in storm water runoff, which would be managed in accordance with the SWPPP for industrial activities, as required by the NPDES General Permit Waste Discharge Requirements for Discharges of Storm Water Associated with the Industrial General Permit.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

The EA identifies the project's location near flood zones, and additional details were added to the Final EA. Coastal regions adjacent to the project area to the west and north are in FEMA flood zones. Per Executive Order 13690, it is the policy of the United States to improve the resilience of federal assets against the impacts of flooding. These impacts are anticipated to increase over time due to climate change and other threats. Therefore, the proposed action would be designed to account for this increased flood risk potential. In addition, the project design features in Table 2-5 (such as bioretention, vegetated swales, underground chambers, and pervious pavement) would be implemented to manage storm water volumes and avoid any potential flooding or ponding at or near the project area.

The water resource impact analysis addressed operations of the proposed Aircraft Direct Refueling System and wash rack. Additional details about these project components, including compliance with spill prevention/response and storm water procedures, were added in the Final EA to provide additional clarification, but this did not change the impact analysis conclusions.

The projected greenhouse gas (GHG) emissions associated with construction and operations activities are addressed in the EA in Section 3.2.2.2. That analysis concluded that the annual average GHG increase over the 5-year construction period would be less than 0.002% of the 2020 GHG projection. For operations, statewide GHG projections indicate Hawaii is on target to meet its statewide GHG emissions limit after 2020. The estimated GHG increase attributable to operations is a 0.0005% increase in CO<sub>2</sub> as compared to 2030 GHG projections, which would have little impact on Hawaii's ability to meet its GHG goals.

The sentence was revised for clarity because the project location is not near any wetlands. The closest wetlands are a half mile from the project location.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

Increases to impervious surfaces are detailed in Section 3.3.1. The 4.25 acres of new impervious surfaces include storm water features resulting in less than significant impacts to wildlife.

The NEPA terminology for "significance" is explained in the introduction to Chapter 3 of the EA.

There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

The EA and BA address potential impacts of construction and operational lighting to wildlife. Fallout could occur from lighting in the project area from hangar lights, interior lighting through windows, and exterior lighting. The conservation measures in Section 2.3 of the EA identify lighting specifications; although there is no quantified definition of “no brighter than necessary,” the goal of this conservation measure is to identify the lowest level of lighting possible to meet the military mission. Project design features would minimize these potential impacts, and lighting conservation measures would further reduce this potential.

Pre-approval is not required to implement the conservation measures identified in Section 2.3 of the EA. They are inherently part of the proposed action, not mitigation measures specifically identified as part of the NEPA process.

Potential construction impacts to wildlife are analyzed in Section 3.5.2.2 of this EA. Potential impacts due to construction would be further minimized by conservation measures detailed in Section 2.3.

The pueo nests and forages on the ground and has been documented near the project area. The analysis provided of potential impacts to bird species applies to the pueo. In addition, grass maintenance activity was analyzed in this EA as it pertains to habitat the pueo may utilize. The 4.25 acres of proposed new impervious surfaces (currently landscaped) provides marginal areas for utilization by the pueo and other ground-nesting and foraging bird species. There are no shrubs or trees in the construction area that provide suitable habitat for wildlife. The proposed action would, therefore, have less than significant impacts to bird and other wildlife habitat, including pueo habitat.

Comment 088: Kailua Neighborhood Board (continued)

Comment

(see above)

Response to Comment

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

## Appendix B – Responses to Public Comments

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### Comment 089

#### Comment

**From:** [Hawaii2015](#)  
**To:** [NEPAC-Feedback](#)  
**Subject:** [Non-DoD Source] construction of new hangars at KMCAS  
**Date:** Monday, September 12, 2022 4:15:53 PM

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To KMCAS:

As a Kaneohe resident, I request that no new hangars be constructed in order to accommodate larger aircraft unless we Kaneohe residents can be assured that there will be no increase in noise from the new aircraft.

Please present the public with a detailed plan describing any changes in aircraft noise that may ensue with the new construction & accommodation of larger aircraft.

We are concerned that the serenity of the Windward environment remain unchanged.

Thank you for your consideration,

April Sasaki  
47-425 C Ahuimanu Road  
Kaneohe, HI 96744

#### Response to Comment

Thank you for your comment.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Appendix B – Responses to Public Comments**

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**Comment 090**

**Comment**

**From:** [JBL](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] draft: EA MQ-9s and KC-130s  
**Date:** Tuesday, September 13, 2022 6:33:35 PM

---

To Whom It May Concern,

I have reviewed the Draft EA for the MQ-9s and KC-130Js aircraft to be based at MCBH. My biggest concern is that this EA is too late as it should have been done years ago, and these aircraft should already be here NOW! No full EIS is required for these known aircraft.

How can I help? Please let me know.

aloha,

James Moore

212 Aiokoa St

Kailua, HI 96734

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 091

#### Comment

**From:** [Kathy Burt](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] Ospreys k bay  
**Date:** Wednesday, September 14, 2022 11:43:55 AM

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Aloha,

I'm totally in favor of continuing to fly ospreys out of Marine Base Kaneohe.

It has been done for many years with minimal inconvenience to those of us who live in the area.

I love watching them when they fly near my house or over me when I'm having a day on the bay.

The sound of freedom!!!!

Thank you all for serving and keeping us free from foreign enemies!!

With Blessings,

Kathy Burt  
RB-21879  
Coldwell Banker Realty  
970 N Kalaheo Avenue, Suite C215  
Kailua, HI 96734

808 772-0670

Sent from my iPhone  
\*Wire Fraud is Real\*. Before wiring any money, call the intended recipient at a number you know is valid to confirm the instructions. Additionally, please note that the sender does not have authority to bind a party to a real estate contract via written or verbal communication.

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 092**

**Comment**

**From:** [Tucker Haworth](#)  
**To:** [wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil); [Odo, Kenton A CIV USN NAVFAC PAC PEARL HI \(USA\)](#); [NFBAC-Receive](#)  
**Cc:** [Quinn Vitum](#)  
**Subject:** [Non-DoD Source] K-Bay, Hangar 103 Deconstruction  
**Date:** Wednesday, September 14, 2022 10:18:35 AM

Aloha,  
This is Tucker Haworth, deconstruction project developer with Re-use Hawaii. We understand that Island space is a limiting factor to facility upgrades and that the preservation of Historic sites is of utmost importance. In order to preserve the embodied energy of the materials (all the labor and transportation that went into the materials to get it to it's existing state) deconstruction would be a great option for preserving and redistributing these historic materials to our island community and allow for the upgrade of our military facilities.  
We are a licensed and insured demolition contractor who specialize in deconstruction, taking apart structures in the reverse order they were built. We salvage the materials and redistribute them at a discounted price after processing them (de-nailing and sorting the materials). The economic and social benefits that make it necessary for such a project are huge, with comparable demo costs and diverting tons of waste from our landfills thereby eliminating greenhouse gas emissions.  
Although the projected GHG emissions for demolition is minimal (compared to island wide GHG goals), by choosing to deconstruct the impact would be significantly less than the assumed estimation, especially if the intended materials for demolition are salvageable. Let me know if you have any questions regarding our services.  
We look forward to assisting and providing our military bases with disposal reduction.

Mahalo,  
Tucker  


**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 093

#### Comment

**From:** [Lory Ono](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [Non-DoD Source] Environmental Assessment - Basing of MQ-9s and KC-130s at MCBH  
**Date:** Thursday, September 15, 2022, 12:13:23 PM

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Aloha,

My name is Lory Ono, and I reside near Kaneohe Bay. I am writing because I have concerns regarding the Environmental Assessment (EA) for the basing of an MQ-9 Marine unmanned aerial vehicle squadron and KC-130 J Marine refueler transport squadron at Marine Corps Base Hawaii.

The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water. It is clear that dogs are stressed by the noise quite a distance from the base. Planes that fly over Kaneohe Bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study. Recently, there has been increased sea turtle nesting activity on the offshore islands of Oahu (Kapapa, Manana, Moku Manu, Moku Nui and Moku'auia). There have also been many sightings of Hawaiian monk seals on these islands. Close to MCBH, there have been sightings of spinner dolphins close to the Sampan Channel and the restricted ocean area around MCBH. The EA does not address if and how the Navy will monitor the impact of noise and pollutants on these animals.

A full Environmental Impact Statement must be done to provide answers to all of the community's questions and concerns.

Mahalo for your attention.

#### Response to Comment

Thank you for your comment.

See responses to comment #028.

## Appendix B – Responses to Public Comments

### Comment 094

#### Comment

**From:** [Jane Woods](#)  
**To:** [NEPAC-Recieve](#)  
**Subject:** [Non-DoD Source] Request for full Environmental Impact Assessment for Navy Proposal on Kaneohe Marine Corps Base  
**Date:** Friday, September 16, 2022 11:00:35 AM

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>  
>  
> I am writing this about my concern of proposed changes to Kaneohe Marine Corps Base to "home base a squadron of KC-130J aircraft and MQ Drones at MCBH". In addition, the MV-22/Osprey squadron will be moved closer to the bay in a new hangar closer to bayside, with no type of buffer to limit the amount of noise that I witness already day and night in their current hangar placement.  
>  
> What is proposed by the Navy, an Environmental Assessment, does not include the input of residents in the area that will directly be impacted by the increased level of noise.  
>  
> Input is needed from the people in communities that face the bay.  
>  
> I request that a full Environmental Impact Assessment Statement that requires public meetings be done instead.  
>  
> Thank you  
> Jane Woods  
> 44-132 Hako St Unit 3  
> Kaneohe, HI 96744

#### Response to Comment

Thank you for your comment.

Section 2.2.2 describes the alternatives development process for identifying hangar and parking locations for the proposed aircraft. Aircraft engine runups have occurred at the hangars and parking areas as well as on the taxiways and Runway 04/22 since the 1940s. It is not a reasonable alternative to construct entirely new parking and a taxiway parallel to Bravo ramp behind Hangars 1-4.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

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### Comment 095

#### Comment

**From:** [Eileen Hilton MD](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Comments on EA  
**Date:** Saturday, September 17, 2022 4:15:21 PM  
**Attachments:** EH comments re EA KC-130J and MQ-9 MCAS 2022.pdf

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Attached please find my comments on the draft EA proposing stationing of new aircraft at MCBH  
Thank you for requesting community input.  
Eileen Hilton  
Kaneohe resident

#### Response to Comment

Thank you for your comment. See responses to comment #028.

See responses to comment #028.

Appendix B – Responses to Public Comments

Comment 095 (continued)

Comment

Sept 17, 2022  
EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor- Hickam  
HI 96860-3134

It is disappointing that the Navy requested an EA and is pursuing a Finding of No Significant Impact "FONSI" for the stationing of a squadron of KC-130 J and MQ-9 Reaper drones at MCAS. In the EA, they actually state that there would be a significant historical impact. How then can they request for a FONSI which means *NO SIGNIFICANT IMPACT*.

The document is misleading and infers that the new hangar is needed to house the new aircraft when, in fact, it will house MV22s. This will affect the community significantly as there will be no buffer between the waterfront apron and the community from the very loud MV22s.

- **Noise:** The adverse effect of noise on health is well documented yet the EA does not sufficiently examine aircraft operational noise both on the ground and in the air.
  - **Flights.** The EA states that there will be 8280 new aircraft operations, most likely in a pattern similar to C-17s. There is no measurement or modeling of actual and cumulative operations over the affected areas. C17 touch and gos are present now and will be continuing when the new aircraft come in. The 67% increase in operations does not suggest a finding of *no significant impact*.
  - The EA implies the misleading argument suggesting an overall noise decrease by the absence of CH 53s. Firstly the Ospreys flew a completely different flight path. Secondly, actual measurements of noise emitted by the MV-22 compared to CH-53 demonstrated that the MV-22 was louder by about 30 decibels (8X the noise level perceived by the human ear).
  - **Ground:** In the EA it is stated that hangar 103 will be demolished and replaced by a **Type II hangar which will house MV22s**. The MV 22s current hangar will house the incoming KC 130-Js. The placement of these aircraft on the waterfront apron will worsen the noise of taxiing and engine maintenance for Kaneohe Bay residents. On ground noise measurements in the communities most

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Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 095 (continued)**

**Comment**

affected have not been done clearly precluding a decision of *no significant impact*.

- **Health:** Despite a dramatic increase in number of aircraft, flight activity and construction the EA implies that there will be *no significant impact* on air quality. The EA has the KC-130-J aircraft and subsequently MV-22s on the ground exhausts facing the coastal community and not offshore again claiming *less than significant impact*. Really, there will be no significant increase in soot on all surfaces of our home or aircraft engine pollutants (CO<sub>2</sub>, NO<sub>x</sub>, SOX, HC, and CO) into our lungs? This limited and poorly detailed EA does not provide confidence in a finding of *no significant impact*.
- **Environment:** This EA only assessed the "region of influence" which includes only the base and immediate surrounding water. An evaluation of the impacts on species that may occur in other affected areas is needed including endangered species of birds, mammals and reptiles inhabiting areas under flight paths and not included in the analysis.

In conclusion, this EA does not provide the community with enough information to support a finding of *no significant impact*. In fact, it actually makes a case for a significant impact to anyone who takes the time to read it carefully. A full EIS should be done and provide answers to the questions and concerns outlined above. We are hopeful that our environment and the mission of the Navy and Marines will be reconciled.

Sincerely,



Eileen Hilton  
Kaneohe Bay Drive.  
Kaneohe

**Response to Comment**

**Appendix B – Responses to Public Comments**

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**Comment 096**

**Comment**

**From:** [Leonard Rossoff](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Revised comments on EA pertaining to EA Drones & KC-130js  
**Date:** Saturday, September 17, 2022 4:08:10 PM  
**Attachments:** LR comments EA.pdf

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See attached revision of comments on EA.

--  
Regards,  
Len Rossoff  
808-593-9104  
917-297-0518

**Response to Comment**

Thank you for your comment. See responses to comment #028.

See responses to comment #028.

## Appendix B – Responses to Public Comments

### Comment 096 (continued)

#### Comment

1

September 17, 2022  
EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor- Hickam  
HI 96860-3134

#### **Amended based on further review of the EA**

This letter pertains to the recent EA supporting the stationing of the squadron of KC-130 Js and MQ-9 Reaper drones at MCBH. I am disappointed that the Navy has opted for a less comprehensive Environmental Assessment (EA) instead of an Environmental Impact Assessment Statement (EIA/EIS). Conducting an EA precludes community hearings leaving the community only the option to send a comment on the report within a 30 day window ending Sept 7th 2022. There are many potential impacts including community, environmental and historical that would require the more robust EIS but I will concentrate on noise and health concerns.

**Noise:** I must emphasize that noise is not just a nuisance as it also increases the risk of health issues such as diabetes, cardiovascular disease and psychological issues. Nighttime noise impacts everyone's sleep, particularly the keiki who's learning will be most harmed.

The EA did not sufficiently examine aircraft operational noise which has two major components, specifically aircraft in the air and on the ground :

- In the air: Impact on adjacent communities is hard to assess as no KC 130-J or drone flight patterns are described. The EA states that there will be 8280 new aircraft operations, a 67% increase from current, and most likely in a flight pattern similar to C-17s (not specified in EA). There is no noise modeling or actual measurements to indicate the noise impact of these additional operations which will be in addition to the current C-17 flights. The increased traffic will have very detrimental effects on Kaneohe and Coconut island and other areas now sensitive to C-17 noise. Additionally, it is misleading to argue that there would be an overall noise decrease by the absence of CH 53s as these flew a completely different flight path. Furthermore actual measurements of noise emitted by the MV-22 compared to CH-53 demonstrated that the MV-22 was louder by about 30 decibels or about eight times the noise level to the human ear.
- On the ground. In the EA it is stated that hangar 103 will be demolished and replaced by a **Type II hangar which will house MV22s, a hybrid helicopter/**

#### Response to Comment

Appendix B – Responses to Public Comments

Comment 096 (continued)

Comment

2

plane . The MV 22s current hangar will house the incoming KC 130-Js. For Kane'ohe residents near the bay the noise on the ground from this move will be worse than the noise we suffered until the CH53 helicopters left. During the construction period, figure 2-4 shows where the KC-130Js and some MV22s will be parked. Every time they start, taxi, or run their engines for any reason there will be much more noise in the community than if they were on the opposite northeast side of the hangars. After the full move of the MV22s, the noise will be even worse for those communities near the bay. This issue is not addressed in the EA. No on ground noise measurements in the communities most affected have been done.

**Health:** In addition to the noise pollution there are health concerns. The EA implies that there will be *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft. However, again without specific information about the direction, and duration of flights this is hard to ascertain. The current plan, as described in the EA has the KC-130-J aircraft and subsequently MV-222 on the ground with their exhausts facing the coastal community and not offshore where their impact would be less severe. Pragmatically, all of those who live on the bay, recognize the increase in the amount of soot on all surfaces of our home. In addition to the soot and particulate matter other aircraft engine pollutants include carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Sulfur oxides (SO<sub>x</sub>), unburnt hydrocarbons (HC), and carbon monoxide (CO). Our exposure to these again is determined by the number of aircraft, their positioning on the ground, as well as frequency and duration of engine runs not detailed in this very limited EA.

In conclusion, this EA does not provide the community with nearly enough information to support a finding of *no significant impact*. A full EIS should be done and provide answers to the questions and concerns outlined above.

Sincerely,



L.J. Rossoff MD  
44-317B Kaneohe Bay Drive  
Kaneohe, HI 96744

Response to Comment

## Appendix B – Responses to Public Comments

### Comment 097

#### Comment

**From:** [Morgan Rowley](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [Morgan Rowley](#); [Melissa Rowley](#)  
**Subject:** [Non-DoD Source] Comments to the Marine Corps Draft Environmental Assessment to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircraft) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated...  
**Date:** Saturday, September 17, 2022 6:00:27 PM  
**Attachments:** [Comments to the Marine Corps Draft Environmental Assessment to home base a Marine Corps HQ.docx](#)

Attached are my comments on Marine Corps Draft Environmental Assessment to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircraft) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated 15 aircraft) at MCB Hawaii Kaneohe Bay.

Please acknowledge receipt.

Thank you,  
William M. Rowley

#### Response to Comment

Thank you for your comment.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

KC-130J aircraft are long range refueling aircraft, and their training would occur away from MCB Kaneohe Bay. KC-130J training occurs in established airspace within the U.S. and is coordinated with other VMGR units for mutual benefit. The KC-130J and MQ-9 aircraft are key enablers to military exercises and participate in planned detachments for training and support to locations throughout the Indo-Pacific region such as Japan, Australia, and the Philippines. Locally, MQ-9 training would occur within existing Special Use Area restricted airspace on the island of Oahu, at the U.S. Navy training range (Pacific Missile Range Facility Barking Sands) on the island of Kauai, and at the U.S. Army Pohakuloa Training Area on the island of Hawaii under existing environmental analysis and FAA airspace designation.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

## Appendix B – Responses to Public Comments

### Comment 097 (continued)

#### Comment

Comments to the Marine Corps Draft Environmental Assessment to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircraft) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated 15 aircraft) at MCB Hawaii Kaneohe Bay.

I am William Rowley and am commenting on Marine Corps Draft Environmental Assessment to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircraft) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated 15 aircraft) at MCB Hawaii Kaneohe Bay. I am a retired Marine, served 4 years aboard MCBH and I am a resident of Hawaii. I still maintain a personal connection to MCBH and believe it is a special place that needs to be smartly managed into the future. This Draft EA is NOT sufficient for the breadth and depth of this project. It is disconnected from the reality of this complex project. Overall it is a completely inadequate document that does not define the actions and thus cannot adequately address the impacts.

In the Purpose and Need Statement the Draft EA states “The need for home basing and operations of the MQ-9 and KC-130J squadrons is to extend the capability, versatility, and range of Hawaii-based Marine Corps and other forces through additional refueler, transport, intelligence, surveillance, and reconnaissance capabilities, in support of USINDOPACOM.” This statement includes the operations of these two types of aircraft. The draft EA does not define these operations in any meaningful way. For example, the UAV MQ-9 Reaper is a platform capable of carrying armament to include Hellfire missiles and various guided Bombs. Surely this is not going to be a pure ISR platform as the Draft EA states. The Commandant stated “small, distributed lethal teams that can employ organic ISR, loitering munitions, and weapons like the Javelin and Carl Gustav [recoilless rifle] are much more lethal than larger formations that are using traditional force structures and concepts.” Reading the Commandant’s own words, it is only reasonable to assert that operations of MQ-9 Reapers will include carrying a variety of lethal weapons since it is the perfect “loitering munitions” asset in any contested environment or to be used in hunter-killer schemes in the Pacific Theater. For example will the MQ-9 Reaper and/or KC-130J train at Pohakuloa Training Area on Hawaii Island? The operations of these aircraft are a significant action that must be analyzed. Likewise the operations of the KC-130J is not adequately addressed. For example they will most assuredly conduct operations from expeditionary shore-based sites, conduct combat assault transport, conduct air refueling, provide aviation-delivered ground refueling, provide aviation delivered battlefield illumination, and conduct Close Air Support with “Harvest Hawk” which are Hellfire missiles. I assert that the Marine Corps does not just intend to base these aircraft here without operating which means training. Therefore the Marine Corps needs to go back to the drawing board to define the proposed action because in its current form it is not adequate to properly assess the impacts.

Alternatives analysis: NEPA is a procedural statute. And when the Marine Corps does not follow basic procedural requirements, including conducting a substantive alternatives analysis or appropriately scoping the environmental review, then it has violated the law. An alternative to modify existing Hangars to meet, for example 103, or even 105 to support aircraft was not

#### Response to Comment

The Marine Corps requires enough land for the necessary support facilities and infrastructure to support the proposed aircraft squadrons. As explained at Section 2.2.1.3, there is insufficient developable land at USCG Air Station Barbers Point to support new hangars and supporting infrastructure for the two squadrons. It does not have adequate hangars even for its existing HC-130J aircraft, nor the space to construct new hangars. The amount of space required to construct new hangars and supporting infrastructure for two new squadrons is approximately 32 acres. The DoD coordinated with HDOT to discuss the availability of suitable land for the proposed action. While the current operating agreement shows 106 acres of Navy property adjacent to the airfield (Naval Facilities Engineering Systems Command [NAVFAC], 2021), only a small, disaggregated portion of that acreage is possibly developable. This collection of disparate parcels is insufficient to accommodate the minimum footprint for the hangar, apron, and supporting facilities.

In addition, USCG Barbers Point does not satisfy Criterion 3 because FAA restrictions forbid unmanned aircraft operations of any type in the vicinity of Honolulu International Airport.

Hangar 103 was built in the 1940s to support seaplanes but were not designed for modern aircraft. Current hangars are sized and configured to accommodate the hangar and maintenance requirements associated with some modern aircraft. The Type II hangar now proposed as a replacement for Hangar 103 can accommodate larger modern aircraft (e.g., the proposed KC-130Js), as well as support their maintenance requirements.

## Appendix B – Responses to Public Comments

### Comment 097 (continued)

#### Comment

analyzed. I assert that Barbers Point could be utilized for KC-130J operations as it is being utilized for Coast Guard C-130s now. The Marine Corps opines that Barbers Point “does not have adequate hangars even for its existing HC-130J aircraft, nor the space to construct new hangars” and the Navy evidently owns 106 acres of property adjacent to the airfield and that “only a small disaggregated portion of that acreage is possibly developable. This collection of disparate parcels is insufficient to accommodate the minimum footprint for the hangar, apron, and supporting facilities.” Please elaborate why. Doesn’t it make sense that the Marine Corps consider more seriously analyzing land use at Barbers Point since same model aircraft are already being utilized there? This is a more efficient use of tax dollars. It is 2022 and a Joint Environment. Additionally, this alternative analysis without directly stating, assumes that the MQ-9 Reapers and the KC-130Js need to be co-located.

West Field is an area that has been under developed for years on MCBH. There is sufficient room to support either KC-130J operations or MQ-9 Reaper operations. MCBH is the only base in the world that I have been to that has an actual road across the middle of the runway which I am sure violates many rules which the base has to constantly address through waivers or some other method. This road is a glaring safety issue and an accident waiting to happen to civilians and Marines, both on the ground and operating aircraft. I have personally sat in traffic many times waiting for aircraft to land, take off or do touch and goes and felt unsafe. What if an aircraft had a landing gear malfunction? I was a sitting duck if, for example, a wheel came off. The Draft EA has the audacity to state that a tunnel is “unreasonably expensive at an estimated cost of more than \$200 million.” What a tone deaf and crass statement to be made in an official document. I ask how much is an F-35 worth, let alone a life? The Marine Corps proposes to demolish a Historic Hanger and build another in its place for how much, probably close to 200 million, but cannot fix a glaring safety issue that has been allowed to continue to exist in plain sight. It is repulsive to use this as an excuse in an alternative analysis.

Document states “average Class A mishap rates for the C-130 aircraft are 0.55 Class A mishaps per 100,000 hours (U.S. Air Force, 2022a, b).” Site relevant Marine Corps mishap rates for type model aircraft. Unfortunately Marine Corps has higher mishaps than the Air Force. Navy Safety Center has these data. Another glaring mistake that asks is this document even valid?

The Alternative analysis leads to a predetermined outcome of basing all the MQ-9 Reapers and the KC-130Js at MCBH. MCBH has numerous buildings that violate Airfield Codes, does not have required security fencing, and even has a road that crosses the only active runway. These numerous and glaring deficiencies that are allowed to continue defies logic. The alternative analysis only has validity if all the underlying assumptions throughout the report are accurate, which they are not. In future Drafts please provide a more rigorous alternative analysis.

Operational Impacts Noise. Did the Marine Corps specifically analyze MV-22 operations from Bravo Ramp in the vicinity of Hangar 103? I use to live on Ikiiki Street in Kaneohe and can personally attest that the downwind approach of aircraft is louder than 65db. It would drown out conversation and one could not hear the television in the house. C-17s were the loudest, but C-130s were very loud also. The report states that “no residential areas would be exposed

#### Response to Comment

Section 2.2.2 presents the constraints associated with West Field. Development for KC-130J facilities is constrained by explosive safety quantity distance arcs, a magnetic quiet zone around the compass calibration pad, taxiway obstacle-free areas, and flood hazards. In addition, West Field’s proximity to the runway and other airfield surfaces results in an inability to place a suitably sized hangar and apron at this site. Also, construction at West Field is infeasible because it would require frequent and extended closure of the runway over a period of many years, unacceptably impacting the base’s mission. To accommodate the proposed action’s increased mission traffic while ensuring operational availability of the runway, any hangar development north of the Mokapu Road crossing would require construction of an underground tunnel beneath the runway at the current Mokapu Road crossing. This is infeasible because construction of such a tunnel would require frequent and extended closure of the runway, unacceptably impacting the base’s mission; the high-water table in the area; the high potential to impact subsurface archaeological resources; and would be unreasonably expensive.

The assumptions underlying the alternatives development are explained in Section 2.2.2 of the EA and are based upon a multi-disciplinary planning effort conducted for the proposed action. The planning process considered currently developed areas along the flightline as well as the partially developed areas of West Field, north of the western end of the runway; Green Field, east of the Transient Ramp on the southern side of the runway; and Pali Kilo across from Green Field on the north side of the runway. For reasons outlined in Section 2.2.2 of the EA, none of these locations away from Bravo Ramp are viable options for the proposed facilities. In addition, there are substantial constraints with extending Charlie Ramp to the northeast (away from Bravo Ramp), including archaeological sites and elevation increases that substantially increase the amount of earth-moving activities necessary for construction.

## Appendix B – Responses to Public Comments

### Comment 097 (continued)

#### Comment

to noise above 65 DNL as a result of the proposed action. Although the proposed action would introduce a minor increase in aircraft operations and average noise levels above baseline conditions, the Marine Corps conducted noise modeling that includes aircraft operations associated with the deactivated helicopter squadron for comparison purposes (MCB Hawaii, 2022d).” The Draft EA does poor job of explaining it DNL.

The FAA uses the Day-Night Average Sound Level (DNL) metric to meet legal requirements in assessing how aircraft might affect noise levels at various locations surrounding airports. DNL accounts for the noise intensity, duration, frequency, and time of occurrence for flights above a particular location over an average day.

The Government accounting Office conducted an analysis that showed that because DNL combines the effects of several components of noise into a single metric, it does not provide a clear picture of the flight activity or associated noise levels at a given location. For example, 100 flights per day can yield the same DNL as one flight per day at a higher decibel level, due to the averaging effect of FAA’s metric. GAO’s analysis and other research demonstrate the limitations of relying solely on DNL to identify potential noise problems. Since no single metric can convey different noise effects, using additional metrics—such as changes in number of flights overhead—in designing proposed flight paths could help MCBH identify and address potential noise concerns.

GAO is recommending that FAA (1) identify supplemental noise metrics for use in noise impact analysis for PBN implementation; (2) incorporate additional communication tools, such as supplemental noise metrics, into outreach; and (3) provide information on what the public can expect from FAA in its post-implementation outreach. FAA concurred with the recommendations. The Marine Corps should do no less when trying to quantify and address noise to its residents and neighboring public. Additionally, comparing helicopter traffic to C-130 and MQ-9 Reapers is misleading as they have completely different flight profiles. Please clarify why the Marine Corps should not adapt GAO recommendations for best practices to identify and communicate noise to the public.

KC-130J Aircraft Direct Refueling System is not adequately defined and is just glossed over. As written it assumes that only KC-130J aircraft will be “Hot Pitted.” Surely other type series aircraft will utilize this refueling system. The Draft EA does not define how the Aircraft Direct Refueling System is set up. Does it require Above Ground Storage of Fuel on the 4 acre site? Most hot pits do require tanks adjacent to pump fuel into the aircraft at the required rate. What else? Jet blast safety, ignition safeties, for example. Hot pitting is inherently more dangerous than regular refueling and has special firefighting requirements that are not addressed. Night operations require specialized lighting that has not been addressed. It certainly will require ground disturbance that will cause archeology concerns that the EA needs to address. The site will add 4 acres to the impermeable surface on the Mokupo Peninsula, which will lead to more run off. In 2020, EPA and Hawai’i DOH conducted an audit of MCBH’s compliance with its NPDES permit and found they exceeded discharge limits and failed to

#### Response to Comment

MQ-9 aircraft operations safety data are included in the analysis of public health and safety. Pilot training, redundant communications systems, programmed failsafe mechanisms, and the operating area of the proposed aircraft all help ensure safe operations of the MQ-9.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

## Appendix B – Responses to Public Comments

### Comment 097 (continued)

#### Comment

submit all discharge monitoring data required by the permit. The lack of required data and numerous effluent exceedances demonstrates that the Marine Corps is failing to carry out the NPDES-required systems and training to detect unauthorized discharges from its stormwater system. Consequently, an incomplete and lackadaisical definition and description of this proposed action cannot lead to any type of honest identification of potential impacts and thus their assessment. Nothing about SPCC (Spill Prevention Control and Countermeasure Plan), and FRP (Facility Response Plan). These are expensive and necessary items that need to be included with this part of the project. This section must be rewritten in order to address NEPA requirements and this action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The proposed wash rack which “would be designed and operated in accordance with LID protocols such as the use of an oil/water separator to handle the rinse water before it is discharged into the sewer system to control and reduce runoff before it enters piped and lined channels for off-site discharge.” Again, the EA does not adequately define what the wash rack is, how much of what it consumes, or how it works. Currently, MCBH cannot control what it is discharging out its sewer as identified by its Notice of Violation by the Department of Health earlier this summer. Therefore the Marine Corps needs to explain explicitly this proposed action. The sewer outfall is 2 miles off shore in 110 feet of water so any misstep could be catastrophic. Please address system operation, controls, meaningful maintenance requirements, updates of SPCC (Spill Prevention Control and Countermeasure Plan), and FRP (Facility Response Plan). This action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

EA states “Monk seals and sea turtles hauled out on beaches at MCB Hawaii Kaneohe Bay typically show no evidence of startle reaction or behavior changes during aircraft overflights (L. Bookless, personal communication, 7 July 2022), and it is uncommon for monk seals and sea turtles to be hauled out on the same location of a beach throughout the year, so repeated exposure to individuals over short periods (days) is unlikely.” No qualifications exist for L. Bookless. Is L. Bookless a Qualified Biologist that can make determinations? EA must provide suitable studies that address Monk Seal and Sea Turtle behavior during haul out, nesting, and any other activity observed on MCBH. One person’s observation who is an employee of the Marine Corps is patently not sufficient. Monk seals are critically endangered. The EA has not sufficiently defined the proposed action and therefore cannot determine the degree to which the action may impact an endangered or threatened species or its habitat. This has been determined to be critical under the Endangered Species Act of 1973. The analysis only has validity if all the underlying assumptions throughout are accurate, which they are not, they are completely void of any legitimacy. Please clarify documentation.

Impacts on archaeological resources are possible during ground disturbance associated with construction. The potential for encountering disturbed human remains in sand fill exists for all construction projects on Mokapu Peninsula. When archaeological resources (especially

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 097 (continued)

#### Comment

remains) are uncovered, what is the base doing? Are remains and resources adequately curated per 36CFR?

The proposed action will locate the KC-130J squadron in Hangar 6886 and demolish and reconstruct Hangar 103 as the replacement hangar for the MV-22 squadron. However, Hangar 6886 was just constructed in 2020 to house a *must have* second MV-22 squadron. The Marine Corps proposes to modify a hangar that is just 2 years old for KC-130Js. This is neither good planning nor efficient use of resources. The MV-22 EIS proposed the need for this second MV-22 hangar to be adjacent to the first one. The Marine Corps needs to explain in detail its alternative analysis to avoid and minimize adverse effects to historic properties. Can the Marine Corps adaptively reuse Hangar 103? Does the base have a master plan? If so how is it utilized in future planning and was it ever publicly reviewed and commented on, for example through the NEPA process? Please clarify.

The EA states “less than significant impacts to historic resources. Impacts to these resources would be reduced through incorporation of mitigation measures developed in the NHPA Section 106 and Section 110 process.” Demolition of Hangar 103 and other historic buildings is an adverse impact. Saying that mitigation measures would reduce the impacts to less than significant is a confusing statement that needs further expansion into what the Marine Corps means or is trying to accomplish. Please clarify.

The Area Potential Affect contains unique characteristics such as proximity to historic or cultural resources, wetlands, and ecologically critical areas. The Marine Corps is required to avoid, minimize, or mitigate any adverse effects to historic properties. What mitigation measures can mean lead to “no substantial adverse change in the physical environment” (meaning of less than significant) when they propose to demolish Hangar 103, other historic buildings, and repave? Please clarify

The Marine Corps’ proposal is an adverse effect on a National Historic Landmark (NHL). As such where has the Marine Corps implemented planning and actions as may be necessary to minimize harm to this Landmark. Additionally Proposed mitigations are all hidden in a Memorandum of Agreement that has not had any public input or notification. Due to the gravity of the potential adverse effects to historic resources to include a NHL this decision must be made at an Agency to Agency level. Please clarify how and why this is not an EIS.

The Marine Corps is required to make an informed decision and this document does not provide the information for the Marine Corps to make an informed decision. If the Marine Corps is to make a decision to mitigate adverse effects this decision needs to be captured in a Record of Decision by the Secretary of the Navy minimally, especially since it involves adverse effects to an NHL. Remember an NHL has national historic significance, and as such cannot be delegated to a Colonel that happens to be a Base Commanding Officer. This proposed action will have adverse effects to historic properties and will construct major facilities that cause unnecessary harms and admittedly by the Marine Corps some type of mitigations—potentially requiring hundreds of millions or billions of dollars in remediation later.

#### Response to Comment

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

**Comment 097 (continued)**

**Comment**

(see above)

**Response to Comment**

Although fixed wing and rotary-wing/tilt-rotor aircraft are operationally and acoustically different, flight tracks and noise profiles for all aircraft are well understood. Noise modeling accounts for these acoustic and operational differences to enable meaningful comparisons between the platforms. The baseline for aircraft operations that was incorporated into the noise modeling reflects existing conditions. As shown at Table 2-2, “existing conditions” reflect the departure of the AH-1W and CH-53E helicopters.

Section 2.1.1.3 was updated with additional details about the Aircraft Direct Refueling System. This includes more details on proposed usage (by KC-130J and other aircraft), firefighting requirements, and measures to prevent and contain potential fuel spills.

Comment 097 (continued)

Comment

(see above)

Response to Comment

MCB Hawaii is in the process of working to resolve the Notice of Violation with the U.S. Environmental Protection Agency and the Hawaii Department of Health. MCB Hawaii takes its responsibilities seriously and will take all needed corrective action.

Designated fueling and wash rack locations are designed to include oil water separators (OWS). These OWS are directly connected to the wastewater system, isolating the areas from the Storm Water system. Following oil separation and storage in OWS tanks, water separated out is sent through the WRF. These sites and OWS are subject to regular inspection and maintenance.

MCB Hawaii has entered into a Federal Facilities Compliance Agreement (FFCA) with the EPA, designed to aid in achieving Storm Water Program management improvements across all aspects of the program. Contracts are being executed to correct deficiencies and enhance the program. A new Storm Water Management Plan is currently under review. The Best Management Plan Manual specific to MCB Hawaii is also under review. Part of the FFCA includes evaluating and implementing post construction Low Impact Development (LID) BMP installation projects.

The outfall is shared with the City of Kailua Wastewater Treatment Facility. MCB Hawaii contributes about 10% of the total output from the outfall, which extends about 1,500 meters from shore. The outfall releases water through ports in the last few hundred feet of the pipe, creating a mixing zone 110 feet down. MCB Hawaii has committed to adding a disinfectant process to the effluent to be constructed in the next 4-5 years.

**Comment 097 (continued)**

**Comment**

(see above)

**Response to Comment**

The proposed action includes installation and use of spill prevention and containment systems and compliance with storm water management procedures, which were part of the water resources impact analysis. MCB Hawaii has an SPCC plan that covers existing and future activities on base, such as the proposed action.

MCB Hawaii is working directly with the EPA and the HDOH to improve our environmental compliance and enhance our protection of human health and the environment. Due to the complex nature of the environment, lack of personnel resources, and aging infrastructure, MCB Hawaii faces evolving challenges. Through dedication to improvement, dedication of financial resources, and with the coordination and cooperation of our regulatory partners, continual improvement is being made in all areas. Support of the Marine Corps' National Defense mission may be provided while still protecting human health and the environment.

The EA contains sufficient information to conduct a thorough impact analysis of the project footprint and operation of the wash rack, including the water resources impact analysis in Section 3.3 of the EA.

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

**Comment 097 (continued)**

**Comment**

(see above)

**Response to Comment**

The analysis of biological resource impacts relied upon several sources, including base biologists, literature research, coordination with subject matter experts, and Section 7 ESA consultation with the USFWS.

Details of the proposed action are described in Section 2.2.1 and 2.2.3 of the EA. This includes the construction footprint, construction timing, and operations sufficient for a complete impact analysis.

All personnel, equipment, facilities, and aircraft associated with the proposed action are described in Chapter 2 of the EA and analyzed in Chapter 3 of the EA.

The likelihood of discovering previously unknown archaeological deposits in the APE is low. Much of the subsurface project disturbance would occur on reclaimed land approximately 20–30 meters offshore from the original coastline. While the potential for disturbance to intact archaeological resources is low, redeposited and disturbed cultural materials (including iwi kupuna) may still be encountered. Should such deposits be encountered, the ICRMP and the requirements of NAGPRA identify appropriate processes for managing such discoveries.

In accordance with responsibilities under NAGPRA, MCB Hawaii is currently designing a burial structure in consultation with Native Hawaii Organizations for iwi kupuna. As potential mitigation for the proposed action, MCB Hawaii is pursuing a development of a curation facility that meets the 36 CFR 79 standards.

Section 2.2.2 describes why the proposed action can only occur in the proposed configuration. The proposed C-40 project is independent of the proposed home basing action and is addressed in Chapter 4, Cumulative Impacts.

**Comment 097 (continued)**

**Comment**

(see above)

**Response to Comment**

Hangar 103 cannot be adaptively re-used for the proposed action because the KC-130J and MV-22 aircraft require a Type II hangar that is larger than Hangar 103.

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

Comment 097 (continued)

Comment

(see above)

Response to Comment

Hangars in Hangar Row were built in the 1940s to support seaplanes and other aircraft of the time, but they were not designed for modern aircraft. MCB Hawaii undertook planning and actions to minimize harm to the NHL in accordance with Section 110, including the development of the Draft EA and early and regular consultation with SHPD and consulting parties. In particular, these planning actions included incorporation of cultural SMEs into the planning process, conducting a series of Section 106 consultation meetings with consulting parties, requesting public input during the consultation process, and coordinating potential mitigation measures. The Marine Corps identified potential mitigation measures, shared them collaboratively with consulting parties, and updated them per the consulting parties' input.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 098: Windward Coalition

#### Comment

**From:** [windwardcoalition@gmail.com](mailto:windwardcoalition@gmail.com)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Letter from the Windward Coalition - Environmental Assessment MCBH 2022  
**Date:** Sunday, September 18, 2022 10:29:29 AM  
**Attachments:** WC letter- draft EA MCBH 2022.pdf

Please see attached letter from the Windward Coalition regarding NEPA draft Environmental Assessment, Homebasing of the MQ-9 Marine Aerial Squadron and KC-130J Marine Aerial Refueler Transport Squadron, Marine Corps Base Hawaii Kaneohe Bay.

Mahalo,  
Terri Needels,  
President, Windward Coalition

#### Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The noise modeling included MV-22 ground activities. Since the public Draft EA, these were modified, and the results were updated to address comments on these activities. However, this did not result in a notable change; specifically, the 65 dBA contour did not expand to encompass residential areas off base.

## Appendix B – Responses to Public Comments

### Comment 098: Windward Coalition (continued)

#### Comment



September 17, 2022  
EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Aloha,

The Windward Coalition is a non-profit and non-partisan organization dedicated to improving the quality of life for members of the windward communities including those in our military Ohana. We appreciate our Marine neighbors who have and continue to defend our republic and are also willing to engage in frank discussions with the community concerning the impact of their activities.

We have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC130J Marine refueler transport squadron at Marine Corp Base Hawaii. Also outlined in the EA is a very problematic planned repositioning of the MV-22s on the base. We have a number of specific concerns with this document that are outlined below.

1. We previously expressed and maintain a preference for an Environmental Impact Assessment Statement (EIA/EIS) rather than the Environmental Assessment (EA) as it would allow the community to comment in more detail about potential concerns. The EA does not provide sufficient information for adequate analysis and comment.

2. The majority of the complaints about MCBH to our Coalition concern noise. The adverse effects on personal interactions, sleep, learning and health are well documented in the scientific literature.

**Flight operations.** Assuming that the KC130-Js will fly a similar path as the C-17s and add thousands of annual flights to those already occurring, the increase in flights will definitely stress the already suffering communities in and around Kaneohe. The flight patterns for the KC130-Js and the drones are not described in the EA nor is there any noise modeling or measurements in the affected communities outside the base. The only area assessed was the "region of influence" as depicted in the noise contours in figure 3.2 which we feel is badly flawed. Among other issues, it completely ignores the effects of low flying fixed-wing aircraft approaching runway 4/22 over He'eia, Ali'i Bluffs,

1

#### Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

There is no demonstrated causative connection between intermittent exposure to aviation noise and non-auditory health effects in local communities. Numerous epidemiological studies and meta-analyses have been conducted on the long-term health impacts of exposure to noise, finding that noise can cause annoyance, annoyance can cause stress, and prolonged stress is known to be a contributor to some health disorders. Beyond this general conditional premise, there is no evidence that aircraft noise is a significant contributor to health disorders. Moreover, individual health is greatly influenced by a variety of factors such as genetics and lifestyle issues such as smoking, diet, and exercise. These factors have a much greater impact on an individual's overall health than intermittent exposure to aircraft noise.

## Appendix B – Responses to Public Comments

### Comment 098: Windward Coalition (continued)

#### Comment

All'i Shores, the Hawai'i Institute of Marine Biology and King Intermediate School. The modeled area only includes the base and some surrounding water. In order to fully understand the environmental impact on windward communities, it is critical to identify flight paths and carry out sound measurements.

**Ground operations.** Furthermore, the EA describes most if not all of the KC130-J squadron parked on tarmac as situated with their exhausts pointed toward communities onshore (fig 2.4). Additionally, the planned relocation of the MV-22s also puts them closer to the community. The plan in the EA includes demolishing and rebuilding of a new hanger 103. Instead of using it for the new aircraft, they will move MV-22s into hanger 103, currently located in the same class of hangar 1103R which is further away from their civilian neighbors. Scientific surveys, with actual measurements and not modeling, of the frequency of noise emitted by the MV-22 and CH-53 helicopters (U.S. Marine Corps Futenma Air Station) revealed the Osprey aircraft's noise was louder than the CH-53 by about 30 decibels. This 30-decibel difference translates to about eight times the noise level to the human ear. Clearly, we can only logically conclude that ground noise will be increased and directed towards the on-shore communities every time the aircraft engines start and run for any reason, such as taxiing, maintenance etc. Again, there does not appear to be any assessment of potential noise impact on the surrounding community in the EA.

3. The health concerns consequent to both the noise and other pollutants of the stated 8280 new aircraft operations are more difficult to appreciate by lay people but are likely even more consequential. Simply put, the busier an "airport" the greater the health impacts on the surrounding community with documented increases in morbidity and mortality. Additionally, the low-frequency noise of the MV-22s can cause headaches and other illnesses. Hence the EA's statement of *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft is unconvincing.

4. Other environmental impacts of these new aircraft are unclear from the EA. The only area assessed was the "region of influence" as depicted in the noise contours in figure 3.2. We stress this only includes the base and water immediately surrounding it. An evaluation of the impacts on species that may occur in other areas is needed. For instance, effects on endangered species of birds, mammals and reptiles that may inhabit areas under flight paths were not included in the analysis. The Hawaii Marine Animal Response / Hawaii Marine Mammal Alliance with NOAA and the U.S. Fish & Wildlife Service have documented sea turtle nesting activity on the offshore islands of Oahu (Kipapa, Manana, Moku Manu, Moku Nui, and Moku'auia). There have been many sightings of Hawaiian monk seals on these islands as well as sea turtle sightings in the area. There also have been sightings of spinner dolphins very close to MCBH close to the Sampan Channel and nearly inside the restricted ocean area around MCBH. The EA does not address how the Navy has and will monitor the impact on these animals.

2

#### Response to Comment

KC-130J aircraft are long range refueling aircraft, and their training would occur away from MCB Kaneohe Bay. KC-130J training occurs in established airspace within the U.S. and is coordinated with other VMGR units for mutual benefit. The KC-130J and MQ-9 aircraft are key enablers to military exercises and participate in planned detachments for training and support to locations throughout the Indo-Pacific region such as Japan, Australia, and the Philippines. Locally, MQ-9 training would occur within existing Special Use Area restricted airspace on the island of Oahu, at the U.S. Navy training range (Pacific Missile Range Facility Barking Sands) on the island of Kauai, and at the U.S. Army Pohakuloa Training Area on the island of Hawaii under existing environmental analysis and FAA airspace designation.

The region of influence is defined to clearly identify the area where potential impacts may occur. The region of influence for biological resources includes the project area as well as the regions near the project area boundaries that may experience noise, visual, other physical, or indirect impacts. The region of influence for vegetation consists of only the project area since direct and indirect effects would be limited to that area. The region of influence for wildlife is larger because of the noise footprint associated with current and proposed aircraft operations. The impact analysis of the proposed action on wildlife is presented in Section 3.5.2 of the EA.

Monitoring is documented in the 2017 Integrated Natural Resources Management Plan (INRMP). Additional monitoring is not required for the proposed action. MCB Hawaii currently monitors various plant and wildlife species, although a specific monitoring program does not exist for the Hawaiian monk seal and green sea turtle. However, MCB Hawaii educates beachgoers to report monk seal and green sea turtle haul-outs to Hawaii Marine Animal Response (HMAR) which will send out available volunteers. If MCB Hawaii lifeguards see a seal or sea turtle hauled out, they will set out signs warning people to stay back from that area.

## Appendix B – Responses to Public Comments

### Comment 098: Windward Coalition (continued)

#### Comment

There will be 6 new drones per the EA. How is the drone controlled in flight? What frequencies are used to control the drone in flight? What are the potential or actual impacts of these radio communications to humans or protected marine species? Have these potential or actual impacts been evaluated or tested, and if so, what are the results of those tests? If they have not been evaluated or tested, shouldn't they be? We know marine animals such as monk seals, dolphins and turtles experience their environments in ways that may be different to humans.

Additional concerns voiced by our members include: fume-based oil films/sheen may possibly affect aquatic life; hydrocarbons released in the engine exhaust may be ingested by surface-feeding birds and fish; and fumes from the aircraft carried upwards by the trades into the mountains may contribute to polluting the Koolau watershed. More information is needed to make an assessment regarding these possible impacts.

5. We share the concern of the State Historic Preservation Division (SHPD) that there will be an adverse effect on historic properties resulting from the proposed construction. The buildings involved are an important reminder of the first moments our nation was attacked, leading to World War II. Minutes before the attack on Pearl Harbor on December 7, 1941, the Japanese bombed the naval air station at Kaneohe Bay, destroying nearly all of the station's patrol planes and killing 18 sailors. The first Japanese aircraft were shot down at Kaneohe. In 1987, Naval Air Station Kaneohe Bay was listed as a National Historic Landmark and historic district.

Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five are eligible for inclusion in the National Register of Historic Places. The project for the homebase of the MQ-9 and KC-130J proposes to demolish Hangar 3. Both Hangars 3 and 4 are of historic significance. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. We support the HHF in their strong opposition to this demolition of any of these and we are in favor of alternatives available and known to the Navy.

In conclusion, this EA does not provide the community with enough information to support a finding of *no significant impact*. A full EIS should be done to provide answers to the full range of community questions and concerns.

Mahalo,



Terri Needels  
President, Windward Coalition

3

#### Response to Comment

All types of aircraft use the electromagnetic spectrum for a variety of functions essential for flight safety – radio communications, transponder/IFF, radar (weather, ground-mapping, air-to-air communications, etc. Military aircraft use this electromagnetic spectrum. Radio communications conducted for proposed KC-130J and MQ-9 operations are similar to those used for civilian, commercial, and military aircraft activities at all locations in the U.S., and have not been found to have the potential to adversely affect wildlife species at civilian or military airfields across the country, including Marine Corps installations throughout the country that support aircraft operations. Electromagnetic frequency use for the proposed aircraft squadrons would be similar to and consistent with aircraft operations that presently occur at MCB Hawaii Kaneohe Bay. All electromagnetic spectrum bands for current and proposed aircraft operations are within limits from federal agencies such as FAA and FCC. No interference with civilian and emergency services frequencies would occur, and the power levels and frequencies would not affect public health and safety or wildlife as they are consistent with those used at civilian, commercial, and military airfields. Safety elements associated with data linkage infrastructure and proposed aircraft activities are addressed in Section 3.6 of the EA.

Pre-approval is not required to implement the conservation measures identified in Section 2.3 of the EA. They are inherently part of the proposed action, not mitigation measures specifically identified as part of the NEPA process.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu's National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

**Appendix B – Responses to Public Comments**

**Comment 098: Windward Coalition (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps works with SHPD and consulting parties to minimize effects to historic resources while achieving its military mission. Our historic properties are important to the Marine Corps, the community, and our consulting parties. As such, MCB Hawaii maintains a proactive cultural resources management program which includes public outreach and education regarding the important history of the base and its associated historic properties.

The Marine Corps implemented an extensive planning effort to avoid, minimize, and mitigate potential effects to historic resources. This included input from MCB Hawaii planning personnel, MCB Hawaii cultural resources personnel, and other SMEs to determine ways to implement the proposed action while minimizing impacts to historic resources including the NHL and the Historic District. Where it was possible to accomplish the mission while still preserving historic resources, such as the decision to base MQ-9s in Hangar 102, the Marine Corps prioritized the retention of these historic resources.

During the Section 106 consultation process and as documented in Section 3.4, the Marine Corps found the proposed action has an adverse effect to both the Aviation HD and the NHL. Through the continuing consultation process, the Marine Corps added greater detail to that initial finding. To address these unavoidable effects, the Marine Corps developed mitigation measures in coordination with the consulting parties through the NHPA Section 106 process. Proposed mitigations were identified in the Draft MOA shared with the consulting parties as part of the Section 106 process. Final proposed mitigations are included in the Final EA and will be included in the MOA signed by the Marine Corps, the SHPD, and the Advisory Council on Historic Preservation (ACHP).

Comment 098: Windward Coalition (continued)

Comment

(see above)

Response to Comment

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 099: Malu 'Aina Center For Non-violent Education & Action Comment

**From:** [Jim Albertini](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] testimony in opposition to basing MQ 9 Reapers and C-130s at Kaneohe  
**Date:** Monday, September 19, 2022 3:05:06 PM

Aloha NFPAC-Receive@navy.mil

Testimony in opposition to basing MQ 9 Assassin Reapers and C-130s at Kaneohe

I taught at St. Ann's school in Kaneohe during the early 1970s and remember the horrors of fighter/bomber jets taking off and flying near our school on their way to practice bombing on Kaho'olawe. I would look at my students and think if we were Vietnamese and heard the roar of those jets, we would be running for holes to hide in from the bombing. Those frequent interruptions for us by Kaneohe based fighter jets was an inconvenience but for Vietnamese it was a life and death situation.

I opposed the US war in Vietnam, and bombing of Kaho'olawe, and I oppose the basing of Killer drones and other military forces in Hawaii. Hawaii is an independent neutral nation illegally occupied by the US. FUNDAMENTALLY, KILLER ASSASSIN DRONES AND OTHER MILITARY MACHINES violate the cultural basis of aloha in Hawaii. There is NO aloha in Assassin drones and in the illegal US overthrow of Hawaii in 1893 and the continuing illegal occupation ever since.

I say No to US drones, C-130 aircraft and all Military presence in Hawaii. End the illegal occupation of Hawaii Now! It's time for the US to Quit Hawaii.

Jim Albertini

President of Malu Aina. Sept. 19, 2022

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Jim Albertini Malu 'Aina Center For Non-violent Education & Action P.O. Box 489 Ola'a (Kurtistown) Hawaii  
96760  
Phone 808-966-7622 Email ja@malu-aina.org Visit us on the web at www.malu-aina.org

### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

Comment 100

Comment

**From:** [John Bond](#)  
**To:** [NFPAC-Recative](#); [Gregory.T.wahl.civ@mail.mil](#); [jbagihara@hif.com](#); [egaines@bricoenvironmental.com](#); [usaohj.oao.comel@us.army.mil](#); [jisa.m.graham52.civ@mail.mil](#); [jba7.comstrat@usmc.mil](#)  
**Subject:** [Non-DoD Source] Requires Emergency Action: Loss of Joint Base PH-HK, Airport Runway, K-Bay Air Base, PMRF  
**Date:** Monday, September 19, 2022 2:50:28 AM  
**Attachments:** SLR Testimony.pdf

The US military on Oahu faces significant real loss of bases on Oahu within 5 years. NOAA SLR clearly shows what is going to happen when the major Antarctic, Arctic and Greenland glaciers fall into the sea. 5-10 foot SLR possible within six months by 2027. Major irreversible climate tipping points have been reached that will cause massive SLR requiring full evacuations and relocations.

China could decide to strike the US during this chaotic SLR disaster period. The entire world's coastlines will be going through a disastrous SLR period that China may try to take advantage of. The US military needs to immediately plan alternative bases.

Response to Comment

Thank you for your comment.

The projected greenhouse gas (GHG) emissions associated with construction and operations activities are addressed in the EA in Section 3.2.2.2. That analysis concluded that the annual average GHG increase over the 5-year construction period would be less than 0.002% of the 2020 GHG projection. For operations, statewide GHG projections indicate Hawaii is on target to meet its statewide GHG emissions limit after 2020. The estimated GHG increase attributable to operations is a 0.0005% increase in CO2 as compared to 2030 GHG projections, which would have little impact on Hawaii's ability to meet its GHG goals.

## Appendix B – Responses to Public Comments

### Comment 100 (continued)

#### Comment

SLR Testimony – 10 feet of Sea Level Rise coming much, much sooner than most people know.

Hawaii City, State and US Military need to start alternative plans immediately. Oahu will lose most of its tourism industry and all of its beaches. The military will lose nearly all of its key Pacific airbases on Oahu. Our Hawaii Congressional people need to get in gear immediately. However all are afraid to say anything publicly because they haven't received any input yet from their big campaign donors who will advocate for spending billions on sea walls that will never work in the Hawaiian Islands like they do in Holland. Hawaii will lose all of its beaches providing little reason for tourists to vacation here.

As usual, Hawaii is oblivious and asleep to the fast approaching reality of Sea Level Rise, still clinging to 3.2 feet SLR. Even at 3 feet SLR all Hawaii beaches are gone and nearby homes and hotels will be flooded. The NOAA map is the easiest to use and is much more accurate in details from 3 feet up to 10 feet, which is the expected SLR after huge glaciers collapse in Antarctica, the Arctic and Greenland. This isn't 50 or even 30 years away, its as soon as 5 years away according to the Climate Tipping Point experts. The current Hawaii GIS – PaclOOS SLR maps are way behind and in fact are completely off line now. Typical head in the sand Hawaii, doesn't want to slow down the rail money pit disaster or discourage realtors selling ocean front property. In Hawaii it is all about lobbyist money payoffs to corrupt elected City and State officials to keep the deals going and the concrete flowing until it gets so bad they can no longer lie about huge glaciers crashing into the ocean, massive heat waves and storms. None of this is now reversible for at least the next 100 years. It is BAKED IN.

It is very important to know that when looking at the NOAA map at 3,5,7, 10 feet SLR that the sea rise not directly affecting a property doesn't mean it won't be highly water saturated marshland as well as subject to storm waves and king tides. Add in big waves from storms and the massive damage will go inland much further than the shown waterlines. Forget about "new beach front property." Building concrete dikes will NOT WORK like they do in Holland. Holland has dense clay soil while Hawaiian islands have very water porous karst limestone ancient reef or volcanic basalt. The ocean will go under any concrete walls, accumulating with storm rainfall to multiply the groundwater rise inland.

NOAA has the only detailed SLR map that accurately shows what 10 feet of Sea Level Rise will look like in Hawaii. Even at 3 feet, Hawaii loses all of its beaches and Waikiki has already begun massive flooding. <https://coast.noaa.gov/slr/#/layer/slr/10/-17591937.391338427/2466948.4538597255/11/satellite/none/0.8/2050/interHigh/midAccretion>

Six feet SLR will doom much of Oahu shoreline communities, Waikiki, Ewa Beach, Kailua, Kaneohe, HNL State airport, Marine Corps base Kaneohe. However most of the WW-II outer island paved runways will still be usable. Oahu will still have a usable airport at Kalaeloa, former Naval Air Station Barbers Point. Plans need to be immediately made to make this Oahu's new airport. The Hickam and Kaneohe air bases will also have to use Kalaeloa – former NAS Barbers Point because Wheeler airfield has little room for expansion. Bellows AFB could still be usable if restored. Dillingham air field will be under water.

NOAA is already anticipating a 10 FT SLR because they, NASA, real ocean science organizations all know that a large sea level rise is coming soon. They know this will be a huge shock to many people who still don't accept science research or pretend it is beyond their lifetimes. IT ISN'T. Most people will see real SLR in the next five years. Glaciers are all beginning to melt, fall apart and break up in the Antarctic, Arctic and Greenland. And many other factors that will also increase SLR. This is all UPSTOPPABLE and it is TOO LATE to reverse anything. The entire global warming process is BAKED IN. Time is NOW for emergency planning.

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 100 (continued)

#### Comment

Pacific Islands shorelines will be totally wiped out with many wanting to come to overcrowded Oahu while many Oahu residents will be moving to the west coast mainland, central mountain states or Canada. There are no Hawaii plans to handle massive emergency SLR migrations. Hawaii Governor Ige won't say anything as he hopes to hand this disaster off to Gov. Green, the new governor. Gov. Green can also blame Ige for not taking earlier action. The construction unions have Green in their pocket so when the bad news is finally realized he will likely declare disaster plans to build Holland type dikes which will be completely ineffective but a profitable way to pour more concrete all over Oahu. Massive wind and solar farms, electric vehicles will have no effect. It is TOO LATE to make any difference. Science deniers and everyone else will likely buy lots of guns and the civil emergency will be even worse. There are no emergency plans. Hawaii showed it was hugely incompetent during Covid.

Hawaii as usual will be expecting massive Federal money to pay for everything, however this time every city, harbor, community and military base in the US will also be screaming for Federal money and there simply won't be enough to go around as everyone in the US, and world, fight for SLR flood relief.

The State of Hawaii has absolutely NO EMERGENCY PLANS for the Antarctic Doomsday Glacier collapse. Hawaii plans for tsunamis and hurricanes but is totally oblivious and asleep about scientific documented rapid SLR. Oahu and the State have "climate change" bureaucracies to get Federal grants for videos, PowerPoint and brochures but they have no actual emergency plans for rapid sea level rise. Highway, airport and harbor departments are all without emergency SLR plans. The City currently plans ridiculously inadequate SLR construction setbacks (BILL 41-22) that will be overrun by rapid SLR that will begin happening by 2027 if not sooner.

What Will Earth Look Like When These 6 Tipping Points Hit? (That are being hit NOW)

<https://www.youtube.com/watch?v=MBKZWKeKYqE>

Professor Tim Lenton, Director of the Global Systems Institute and Chair in Climate Change and Earth System Science at the University of Exeter, UK.

How much could the Thwaites Glacier raise sea level? - About 5-10 feet  
How soon? Possibly within 5 years science experts predict. See the video below.

Is Oahu planning for any of this - NO - \$\$\$ Billions more for HART rail that will be abandoned as coastlines are destroyed and under water. Because of powerful unions and contractor payoffs politicians pretend it won't ever happen. Oahu politicians are afraid to tell the public the truth.

Thwaites in Antarctica could cause sea levels to rise about 5 - 10 feet, the expert scientists say. In December, researchers at the University of Colorado Boulder predicted that Thwaites will last only a few more years before it collapses.

Massive rise in sea level up to 10 feet, is already BAKED IN - cannot be stopped. There will not be any Hawaii State emergency planning however billions more in rail concrete will be poured while everything under it is flooded. This is because of the corrupt politics of Hawaii that want to milk the public for every dollar they can get for as long as possible. When no longer able to hide the truth they will fly off to their mainland estates and leave Hawaii residents to deal with the huge SLR disaster.

John Bond, Kanehili Cultural Hui

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 100 (continued)

#### Comment

Honolulu City Council BILL 41 (22) Shoreline Setback

Proposed Revisions to the Shoreline Setback Current shoreline setback: + 40 ft from the regulatory shoreline + 60 ft after a subdivision action Proposed shoreline setback: 60 ft for properties in the Primary Urban Center .... Blah, blah. The TRUTH IS that there will be SLR up to 5-10 feet as soon as five years from now. Hawaii beaches will be destroyed even with 3 feet SLR. Tourist business GONE. The City and County does not follow CURRENT SLR SCIENCE and instead relies on ancient 2017 3.2 SLR projection data that City and State base their ridiculously outdated assumptions on to benefit unions, developers and real estate sales. This is also the case in Florida – massive science denial, anti-science government.

Sea level rise prompts city to plan future oceanfront developments more inland  
<https://www.hawaiinewsnow.com/2022/09/03/rising-sea-levels-prompts-city-plan-future-oceanfront-developments-more-inland/>

Most SLR scientists who really know what is actually happening think that the public should be freaking out already, especially on coastlines, because SLR is going to continue to get worse every year with massive heat, drought, huge storms and glacier collapse. In Hawaii, official awareness is still in the Dark Ages due to its corrupt, anti-science politics.

The Doomsday Glacier Is Collapsing...Who Is Most at Risk?  
<https://www.pbs.org/video/the-doomsday-glacier-is-collapsingwho-is-most-at-risk-drtta3/>

This Is the Safest Place to Live as the Climate Changes  
<https://www.pbs.org/video/this-is-the-safest-place-to-live-as-the-climate-changes-qzczzo/>

Testimony by John Bond, FTA HART Rail PA Consulting Party  
BILL 75 (2015), CD1 TRANSIT-ORIENTED DEVELOPMENT (I have submitted this testimony since 2012)  
This bill totally ignores that climate change poses immediate and long-term threats. It is very important to also recognize that the City is developing Transit Oriented Development in projected Sea Level Rise, Tsunami Zones and Hurricane Storm Surge Flood Areas according to City, State and Federal FEMA maps. This will be a waste of Billions of dollars after disaster strikes and is fraudulent government malfeasance.  
[http://honolulu.granicus.com/MetaViewer.php?view\\_id=3&clip\\_id=518&meta\\_id=24175](http://honolulu.granicus.com/MetaViewer.php?view_id=3&clip_id=518&meta_id=24175)

Corruption in Paradise: Government Watchdogs Look the Other Way – Only DOJ-FBI enforces laws.  
<https://youtu.be/omS-Ofj1g3o?t=216>

Apr 24, 2016 Honolulu HART Rail Disaster Video - A Case Of Extremely Bad Planning  
[https://www.youtube.com/watch?v=krqXsrN2n\\_M](https://www.youtube.com/watch?v=krqXsrN2n_M)

Jun 26, 2016 Honolulu RAIL Lied For FTA Federal Grant? May 2016 HART Board meeting  
<https://www.youtube.com/watch?v=6H2QPwg8wcs>

Testimony shows overwhelming opposition to huge rail waste – but corrupt politicians don't care  
[https://honolulu.granicus.com/MetaViewer.php?view\\_id=3&clip\\_id=1607&meta\\_id=195376](https://honolulu.granicus.com/MetaViewer.php?view_id=3&clip_id=1607&meta_id=195376)

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 100 (continued)

#### Comment

David Shapiro: Our public spending has more spin than Las Vegas slots

<https://www.staradvertiser.com/2022/09/18/hawaii-news/volcanic-ash/david-shapiro-our-public-spending-has-more-spin-than-las-vegas-slots/>

Money has context only in relation to what it buys, and big numbers thrown at us — especially by government — often come with so much spin the context is hopelessly obscured. A couple of examples: The Legislature, flush with federal relief money, gave the Department of Hawaiian Home Lands \$600 million to cut its waiting list, spouting superlatives like “historic” and “game-changing.” Hawaiian Homes’ latest plan would use the funds to open about 3,000 house lots, an average of some \$200,000 each.

This reduces the waitlist of nearly 29,000 by barely a tenth. Significant, but hardly game-changing, and there’s no clear path for the state to serve the other 90% as people on the list continue to die. As state legislators hyped this spending, the city tried to soft-sell a similar outlay to move utility lines under Dillingham Boulevard to make way for rail.

The Honolulu Authority for Rapid Transportation awarded Nan Inc. \$500 million to do the utility work, the same amount as the Hawaiian Homes money when you include \$100 million already paid to Nan from a previous contract for the same work. With HART there was no chest-thumping about “historic.” Sensitive to public displeasure on massive overruns, the spin was to downplay one of rail’s biggest contracts with talk about how surprisingly low it supposedly was.

Same large amount of funds, different spin. You’d have thought it was HART’s sofa cushion money. Context comes from acknowledging the lost opportunity from spending money one way instead of another and then seeing whether it still makes sense. Rail was shortened to a terminus at Ala Moana Center instead of the University of Hawaii because the \$5.2 billion cost to Ala Moana was deemed the limit of what our tax base could support given other city and state needs.

Now the projected cost is \$10 billion, and it’ll stop short of Ala Moana in Kakaako; to get to Ala Moana would cost \$12 billion. The limits of our tax base haven’t changed. For argument’s sake, let’s say the original \$5.2 billion cost would have been worth a 20-mile commuter line from Kapolei to Ala Moana.

The big lost opportunity is what we could have done with the subsequent \$6 billion in overruns attributable to lies and incompetence. An obvious possibility is that \$6 billion could have cleared the entire Hawaiian Homes waiting list. This would have not only fulfilled a neglected 100-year-old promise and opened land for putting 30,000 Native Hawaiians into homes. Its domino effect would have freed a like number of homes on the general market, lowering prices by lessening scarcity and making a major dent in affordable housing and homelessness. This in turn would have freed money for other pressing challenges such as public safety and climate change mitigation.

Some will say it’s not that simple, but in basic ways it is. Instead of spin on big expenditures, we should demand honest opportunity assessments that spell out what we get and what we sacrifice in return.  
——— Reach David Shapiro at [volcanicash@gmail.com](mailto:volcanicash@gmail.com).

#### Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 101**

**Comment**

**From:** [pete.doktor](#)  
**To:** [NFAC-Recieve](#)  
**Subject:** [Non-DoD Source] Public testimony, ref: draft EIS on Drones at Kane' ohe MCAS  
**Date:** Monday, September 19, 2022 12:37:23 PM  
**Attachments:** [testimony Kaneohe MCAS drones.docx](#)

To Whom It May Concern:

Please include my public comment for the draft EIS regarding chrones.

Please do not publicly display my home address; it is for purposes of authenticating my residence on O'ahu.

A statement is attached; however, in case there are any issues with it, it has been posted below.

Thank You,

Pete Doktor

testimony is attached and as follows:



EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa DrSte 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Ref: Comments for draft Environmental Assessment for Assassin Drones at Kane' ohe Marine Base, O'ahu

Aloha To All Whom This Concerns:

The following are public comment on the proposed stationing of more assassin drones at Kane' ohe Marine Corps Air Station as a military veteran (91A, Combat Medic) from a military family including a Marine flight engineer father with 11 air medals over 27 years of military service spanning WWII to Vietnam.

In general, I resent the expansion and use of murderous, unaccountable military firepower that is abused extra-territorially in a manner that seems to defy any Codes of Conduct that I upheld when serving. Among my concerns includes:

Lack of any attention to the unintended consequences of assassinations by drones, let alone the gross ethical depravity of terrorizing civilian populations not engaged in war against the USA that manifests the surging incidents of military suicides and PTSD that result from engaging in such immoral violence;

As a former resident and descendant of Okinawa, Ryūkyū Islands, I am

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

**Appendix B – Responses to Public Comments**

**Comment 101 (continued)**

**Comment**

concerned about the noise pollution that has detrimental impacts on surrounding civilian populations, that the military mission disregards as “collateral damages.” Specifically, we have experienced excessive noise disruption in Kane’ohe, Kailua and in Moloka’i Island as it is;

Other pollution concerns include emission sources in operation at Kane’ohe MCAS including fuel combustion, which has not been disclosed how much additional pollution drones will generate;

Given the ease by the DoD to maintain golf courses on Kane’ohe Marine Air Station over indigenous remains, I do not trust or believe the EIS conclusion of less than significant impacts on cultural resources: it already is, yet the DoD systematically violates concerns by the aboriginal population and locals;

Given the shameful track record by the Dept. of Navy as seen by the Red Hill underground reserve fuel tank leaks and fecal contamination at Kane’ohe MCAS, I do not believe that drones will “not result in significant cumulative water quality impacts within the region of influence,” but contribute to existing violations. Specifically, I am concerned about residual fuel and PFOS presence in the water utilized in frequent, routine washing of aircraft including drones;

Given Hawai’i’s status as the endangered species capitol of this hemisphere, I am concerned with additional impacts on endemic species by drones, adding to the current threat.

In summary, I do not see the DoD in Hawai’i as a defender, but rather an offender of public health and safety. Abroad, DoD global proliferation has not increased national security, but rather threatens our security and credibility through failed military interventions across multiple decades. Assassin drones will only exacerbate international tensions and destabilize international relations through the use of extraterritorial weapons like drones. This is less so an opinion, but an honest assessment of our decreasing security after decades of military interventions that have made the US public less safe, whether due to blowback by drones, or the continued poisoning of our finite natural resources. The US Constitution explicitly outlines the primacy of civilian command of its armed forces: please respect the will of the people, not politics.

E Malama Pono: Do The Right Thing,



**Response to Comment**

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 101 (continued)

#### Comment

[REDACTED]

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa DrSte 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Ref: Comments for draft Environmental Assessment for Assassin Drones at Kane`ohe Marine Base, O`ahu

Aloha To All Whom This Concerns:

The following are public comment on the proposed stationing of more assassin drones at Kane`ohe Marine Corps Air Station as a military veteran (91A, Combat Medic) from a military family including a Marine flight engineer father with 11 air medals over 27 years of military service spanning WWII to Vietnam.

In general, I resent the expansion and use of murderous, unaccountable military firepower that is abused extra-territorially in a manner that seems to defy any Codes of Conduct that I upheld when serving. Among my concerns includes:

- 1) Lack of any attention to the unintended consequences of assassinations by drones, let alone the gross ethical depravity of terrorizing civilian populations not engaged in war against the USA that manifests the surging incidents of military suicides and PTSD that result from engaging in such immoral violence;
- 2) As a former resident and descendant of Okinawa, Ryūkyū Islands, I am concerned about the noise pollution that has detrimental impacts on surrounding civilian populations, that the military mission disregards as "collateral damages." Specifically, we have experienced excessive noise disruption in Kane`ohe, Kailua and in Moloka`i Island as it is;
- 3) Other pollution concerns include emission sources in operation at Kane`ohe MCAS including fuel combustion, which has not been disclosed how much additional pollution drones will generate;
- 4) Given the ease by the DoD to maintain golf courses on Kane`ohe Marine Air Station over indigenous remains, I do not trust or believe the EIS conclusion of less than significant impacts on cultural resources: it already is, yet the DoD systematically violates concerns by the aboriginal population and locals;
- 5) Given the shameful track record by the Dept. of Navy as seen by the Red Hill underground reserve fuel tank leaks and fecal contamination at Kane`ohe MCAS, I do not believe that drones will "not result in significant cumulative water quality impacts within the region of influence," but contribute to existing violations. Specifically, I am concerned about residual fuel and PFOS presence in the water utilized in frequent, routine washing of aircraft including drones;
- 6) Given Hawai`i's status as the endangered species capitol of this hemisphere, I am concerned with additional impacts on endemic species by drones, adding to the current threat.

In summary, I do not see the DoD in Hawai`i as a defender, but rather an offender of public health and safety. Abroad, DoD global proliferation has not increased national security, but rather threatens our security and credibility through failed military interventions across multiple decades. Assassin drones will only acerbate international tensions and destabilize international relations through the use of extraterritorial weapons like drones. This is less so an opinion, but an honest assessment of our decreasing security after decades of military interventions that have made the US public less safe, whether due to blowback by drones, or the continued poisoning of our finite natural resources. The US Constitution explicitly outlines the primacy of civilian command of its armed forces: please respect the will of the people, not politics.

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu's National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

Comment 101 (continued)

Comment

E Mālama Pono: Do The Right Thing.



Response to Comment

The EA contains sufficient information to conduct a thorough impact analysis of the project footprint and operation of the wash rack, including the water resources impact analysis in Section 3.3 of the EA.

There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

The proposed action includes installation and use of spill prevention and containment systems and compliance with storm water management procedures, which were part of the water resources impact analysis. MCB Hawaii has an SPCC plan that covers existing and future activities on base, such as the proposed action.

MCB Hawaii is working directly with the EPA and the HDOH to improve our environmental compliance and enhance our protection of human health and the environment. Due to the complex nature of the environment, lack of personnel resources, and aging infrastructure, MCB Hawaii faces evolving challenges. Through dedication to improvement, dedication of financial resources, and with the coordination and cooperation of our regulatory partners, continual improvement is being made in all areas. Support of the Marine Corps' National Defense mission may be provided while still protecting human health and the environment.

Potential impacts of MQ-9 on wildlife and vegetation, including endemic species, are found in Section 3.5.2.

**Appendix B – Responses to Public Comments**

**Comment 102**

**Comment**

**From:** [Kiele Gonzalez](#)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] I strongly oppose basing MQ-9 & KC-130 at Kane'ohe Bay  
**Date:** Monday, September 19, 2022 10:33:33 AM

To whom it may concern,

I am in strong opposition of basing the MQ-9 and KC-130J at Kane'ohe Bay. Mōkapu is a sacred place—it says so right in its name (Mō/moku + kapu), and in the traditions of our kūpuna. There are iwi kupuna in the area who have had enough disturbances over the years since you have taken over this 'āina.

As a resident of He'eia, which is the ahupua'a in which part of your base resides, I am tired of the regular noise and air pollution your planes create every time they fly overhead. And when they fly, they do circles over and over again, wasting fuel and tax dollars. We don't need anymore aircraft disturbing the peace and polluting our lungs.

As for the refueling station, we already have fuel leaking into the aquifer at Kapūkaki (Red Hill). What assurances can you give that your refueling tank won't leak fuel into our ocean and freshwater aquifer? I understand you already have a history of polluting our water supply, which 20% of O'ahu households depend on.

As for the 676 troops who will require 676 homes, we don't have 676 homes for our own indigenous Hawaiian people, let alone kama'āina families. You're going to remove more homes from the market and drive real estate prices even higher. It's already unaffordable to live here, and many Hawaiians are having to transplant to other states from the only home their 'ohana has known since the time of Papa and Wākea, hundreds upon hundreds of years ago.

Our 'āina, kai, air, and people have been put through enough. Please don't bring anymore destruction, pollution, and hardship to Hawai'i.

Mahalo for your consideration.

Na'u,  
Keiko Kiele Gonzalez  
He'eia, O'ahu

**Response to Comment**

Thank you for your comment.

The likelihood of discovering previously unknown archaeological deposits in the APE is low. Much of the subsurface project disturbance would occur on reclaimed land approximately 20–30 meters offshore from the original coastline. While the potential for disturbance to intact archaeological resources is low, redeposited and disturbed cultural materials (including iwi kupuna) may still be encountered. Should such deposits be encountered, the ICRMP and the requirements of NAGPRA identify appropriate processes for managing such discoveries.

In accordance with responsibilities under NAGPRA, MCB Hawaii is currently designing a burial structure in consultation with Native Hawaii Organizations for iwi kupuna. As potential mitigation for the proposed action, MCB Hawaii is pursuing a development of a curation facility that meets 36 CFR 79 standards.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Comment 102 (continued)**

**Comment**

(see above)

**Response to Comment**

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Comment 102 (continued)

Comment

(see above)

Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

**Comment 102 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

**Comment 102 (continued)**

**Comment**

(see above)

**Response to Comment**

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

## Appendix B – Responses to Public Comments

### Comment 103: Whistleblower & Source Protection Program (WHISPeR)

#### Comment

**From:** [Kathleen McClellan](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] Public Comment Submission – Draft EA for Home Basing MQ-9s and C-130s at MCBH  
**Date:** Monday, September 19, 2022 5:01:46 AM  
**Attachments:** WHISPeR Comment EA Home Basing Hawaii 9.19.22.pdf

To Whom it May Concern:

Please see the attached comment on the Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay Oahu, Hawaii.

Thank you,  
Kathleen McClellan  
Deputy Director  
Whistleblower & Source Protection Program (WHISPeR)  
ExposeFacts  
(301) 351-3582  
[Kathleen@exposefacts.org](mailto:Kathleen@exposefacts.org)

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Potential impacts of the proposed action to public health and safety are addressed in Section 3.6 of the EA.

**Appendix B – Responses to Public Comments**

**Comment 103: Whistleblower & Source Protection Program (WHISPeR) (continued)**

**Comment**

**Response to Comment**

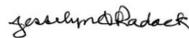
documented their experiences in the aftermath of serving in the drone program. About the film, [one reviewer wrote](#): “The juxtaposition of the appallingly gung-ho attitude of the drone operatives, re-enacted from a transcript of the event, and raw footage of the dead bodies (some children) returning to their anguished friends and family, is heartbreaking and enraging.” Former service members testified before the [European Parliament](#) and German Bundestag about the expansion of the use of armed drones. One former service member described to NY Times Magazine [the lasting effects of moral injury, PTSD, and anxiety](#) he suffered after leaving the drone program as well as the threats and harassment he endured after speaking out.

Former service member [Daniel Hale](#) was featured the documentary [National Bird](#) where he disclosed how the U.S. deceives the public about the targeting, effectiveness and casualties of the drone program, consistently exaggerating the accuracy of drone strikes and under-reporting the civilian carnage. In 2019, Hale was indicted under the Espionage Act for allegedly being the source for a celebrated investigative reporting series in *The Intercept* entitled “[The Drone Papers](#),” which exposed significant government abuses in the drone program, information clearly in the public interest. Hale is currently serving a 45-month prison sentence after pleading guilty to violating one count of the Espionage Act. In August 2021, Representative Ilhan Omar [called on President Biden](#) to pardon Hale.

As the years have passed, much of what [former service members](#) warned about starting in 2012 has come to fruition. Following an accidental drone strike in August 2021 during the fall of the Afghanistan government, the *New York Times* published a Pulitzer Prize-winning [series of articles](#) chronicling the immense toll the drone war has had on soldiers and civilians and the drastically under-reported civilian casualties. As a result, President Biden [limited](#) drone strikes away from war zones, tightened targeting rules, and strengthened civilian safeguards while Congress works to legislatively overhaul America’s drone strike policy.

We hope the Marine Corps will consider the voices of these veterans and civil servants, and the potential negative impact on public health and safety that hosting and facilitating the U.S. drone program could have for the local community.

Respectfully Submitted,



Jesselyn Radack, Esq.  
Director  
Whistleblower and Source Protection Program  
(WHISPeR)  
ExposeFacts  
1717 K Street NW Suite 900  
Washington, D.C. 20006  
[jess@exposefacts.org](mailto:jess@exposefacts.org)



Kathleen McClellan, Esq.  
Deputy Director  
Whistleblower and Source Protection Program  
(WHISPeR)  
ExposeFacts  
1717 K Street NW Suite 900  
Washington, D.C. 20006  
[Kathleen@exposefacts.org](mailto:Kathleen@exposefacts.org)

## Appendix B – Responses to Public Comments

### Comment 104

#### Comment

**From:** [Moira McGrain](#)  
**To:** [NFPAC-Recieve](#)  
**Subject:** [Non-DoD Source] EA/EIS for MCBH  
**Date:** Monday, September 19, 2022 10:31:26 AM

Aloha,

My name is Moira McGrain and I live at 44-137 Puuohalai Place, with a direct view of MCBH across Kaneohe Bay.

Please do not proceed with the proposed changes at MCBH as outlined in the **MCB Hawaii Home Basing EA, Draft**, without first completing a **full Environmental Impact Statement**. I am very concerned about the relocation of the MV-22 Ospreys to the bayside facing us. This change of location with regard to noise from the MV-22 Ospreys is not addressed in the current EA. The MV-22 Ospreys currently run their engines and prepare for take off in an area that is away from the bay, and we hear these aircraft only when landing and taking off for brief amounts of time.

However, if the MV-22 Ospreys were to be moved to the area of current Hangar 103, then there will likely be a huge impact to our lives. They are louder than the CH-53s that were in that area up until last year. Previously, the sound from the CH-53's carried across the water and disturbed us in our daily living, resting, and (not) sleeping time in our neighborhoods and on the water. The MV-22 Ospreys are even louder than the CH-53s and will have an even greater impact on those of us living and working in the neighborhoods surrounding MCBH.

Please address the impact of the proposed re-location of the MV-22's before proceeding, if you want to be a good neighbor. Your EA comes across as disingenuous and downright sneaky in not addressing the MV-22 Osprey noise issue, and it prompts me to look more closely at the entire draft report for other possible issues you might be trying to push through without public scrutiny. Please do better, and please acknowledge receipt of this email.

Mahalo,

Moira McGrain

P.S. I'd also like to know more about the fuel storage plan for the KC-130J tanker squadron, given the current debacle at Red Hill.

CC:  
Esther Kia'aina, Honolulu City Council District 3  
Rick Blangiardi, Mayor of Honolulu  
Patrick Pihana Branco, State Representative  
Jarrett Keohokalole, State Senator  
Josh Green, Lt. Governor  
David Ige, Governor  
Kai Kahale, US Representative  
Mazie Hirono, US Senator  
Brian Schatz, US Senator  
Kamala D. Harris, Vice President

#### Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 104 (continued)

Comment

Joseph R. Biden, President

Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 104 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

## Appendix B – Responses to Public Comments

### Comment 105: Kaneohe Neighborhood Board

#### Comment

**From:** [moradke@gmail.com](mailto:moradke@gmail.com)  
**To:** [NFPAC-Receive](#)  
**Cc:** "[Johnson, Spencer](#)"; [Adriel Lam](#); [Alli Shores](#); [Chair - SD10](#); [cylonone@aol.com](#); [dkcants@gmail.com](#); [erfaagaia@gmail.com](#); [jthu2@hotmail.com](#); [Samson Malani](#); [SD11](#); [SD3](#); [SD4](#); [SD6](#); [SD9](#); [sparkyboy777@msn.com](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Kaneohe Neighborhood Board Environmental Assessment (EA) Input  
**Date:** Monday, September 19, 2022 8:56:53 PM  
**Attachments:** [2022\\_SEP\\_KNB\\_MCBH\\_EA\\_Board\\_Comments.docx](#)

The Kaneohe Neighborhood Board #30 is submitting it's comments on the proposed home basing EA.

These comments were approved at the September 19, 2022 special board meeting with a 14-0-0 vote.

The board sincerely appreciates the extension granted to submit comments.

With Aloha,

#### **Mo Radke**

Chair, Kane'o'he NB #30

[moradke@gmail.com](mailto:moradke@gmail.com)

<http://www1.honolulu.gov/nco/nb30/index.htm>

(808) 386-3500

"The best plans and strategies depend a lot on the bounce"



JOIN US ONLINE FOR

- \* Kaneohe NB **Regular Board Meeting** - Monthly - Third Thursday - 7 pm
- \* Kaneohe NB **Agenda Planning Meeting** - Monthly - First Monday - 7 pm

#### **MEMORANDUM FROM THE BOARD**

THIS MEMORANDUM IS SUBMITTED PURSUANT TO THE CALL FOR COMMENTS OF THE ENVIRONMENTAL ASSESSMENT FOR HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE BAY OAHU, HAWAII

After reviewing the Environmental Assessment (EA), the Kaneohe Neighborhood Board determines this EA developed by Naval Facilities Command is inadequate to identify and mitigate a myriad of community concerns.

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

The Marine Corps requires enough land for the necessary support facilities and infrastructure to support the proposed aircraft squadrons. As explained at Section 2.2.1.3, there is insufficient developable land at USCG Air Station Barbers Point to support new hangars and supporting infrastructure for the two squadrons. It does not have adequate hangars even for its existing HC-130J aircraft, nor the space to construct new hangars. The amount of space required to construct new hangars and supporting infrastructure for two new squadrons is approximately 32 acres. The DoD coordinated with HDOT to discuss the availability of suitable land for the proposed action. While the current operating agreement shows 106 acres of Navy property adjacent to the airfield (Naval Facilities Engineering Systems Command [NAVFAC], 2021), only a small, disaggregated portion of that acreage is possibly developable. This collection of disparate parcels is insufficient to accommodate the minimum footprint for the hangar, apron, and supporting facilities.

In addition, USCG Barbers Point does not satisfy Criterion 3 because FAA restrictions forbid unmanned aircraft operations of any type in the vicinity of Honolulu International Airport.

## Appendix B – Responses to Public Comments

### Comment 105: Kaneohe Neighborhood Board (continued)

#### Comment

The Kaneohe Neighborhood Board supports and concurs with the comments already approved and submitted by the Kailua Neighborhood Board's P\_Z\_E Committee and Historic Hawaii Foundation's September 3, 2022 Input Letter and the following additional comments:

- The EA dismisses outright any use of the alternate facilities. An example of this is to provide a security fence and sentry option around the still-existing, former Patrol and Reconnaissance aircraft hangers to base the KC-130J aircraft at Kalealoa and UMV's at MCAS Kaneohe. An effort that would significantly lessen the noise and activity signature in greater Kaneohe.
- The EA feebly addresses additional noise and attempts to mitigate it through removal of other assets in a simple mathematical, "this minus that equals this" or, removal of a helicopter aircraft and addition of an aircraft with four turboprop engines.
- To date, there has been no sound modeling done that effectively measures the echo chamber that is the Koolau range and its amphitheater shape. This type of modeling was requested during the assessment for the MV-22 home-basing, and again, is not found to be a relevant factor. We believe that it is extremely relevant.
- There is no data relating to the KC-130J, Rolls Royce engine test cell decibel levels or duration when conducting high-speed testing.
- No data about on-ramp, high-speed engine testing decibel levels or duration.

The Kaneohe Neighborhood Board respects, supports, and is thankful for the service to our nation by our military ohana. The Kaneohe Neighborhood Board, representing over 30,000 residents, has the humble expectation that the planners for the home-basing of the MQ-9 Marine UAV Squadron and the KC-130J Squadron will seek appropriate mitigation for the significant increase in aircraft noise and activity. Finally, the Kaneohe Neighborhood Board requests an Environmental Impact Statement be completed in lieu of this Environmental Assessment.

Submitted by: Mo Radke, Chair



*Adopted by the Kaneohe Neighborhood Board No. 30 by ROLL CALL VOTE at its Thursday, September 19, 2022 Regular Meeting, 14-0-0 (Aye: 13 Nay: 0 Abstain: 0)*

#### Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

The noise model accounts for topography, including the location, size, and configuration of the Koolau mountain range. The noise analysis has been updated to clarify it takes the Koolau mountain range into account.

## Appendix B – Responses to Public Comments

### Comment 105: Kaneohe Neighborhood Board (continued)

#### Comment



KANEOHE NEIGHBORHOOD BOARD NO. 30

NEIGHBORHOOD COMMISSION • 925 DILLINGHAM BOULEVARD SUITE 160 • HONOLULU, HAWAII, 96817  
PHONE (808) 768-3705 • FAX (808) 768-3711 • INTERNET: <http://www.honolulu.gov>

#### MEMORANDUM FROM THE BOARD

THIS MEMORANDUM IS SUBMITTED PURSUANT TO THE CALL FOR COMMENTS OF THE ENVIRONMENTAL ASSESSMENT FOR HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE BAY OAHU, HAWAII

After reviewing the Environmental Assessment (EA), the Kaneohe Neighborhood Board determines this EA developed by Naval Facilities Command is inadequate to identify and mitigate a myriad of community concerns.

The Kaneohe Neighborhood Board supports and concurs with the comments already approved and submitted by the Kailua Neighborhood Board's PZ\_E Committee and Historic Hawaii Foundation's September 3, 2022 Input Letter and the following additional comments:

- The EA dismisses outright any use of the alternate facilities. An example of this is to provide a security fence and sentry option around the still-existing, former Patrol and Reconnaissance aircraft hangers to base the KC-130J aircraft at Kalealoa and UMWs at MCAS Kaneohe. An effort that would significantly lessen the noise and activity signature in greater Kaneohe.
- The EA feebly addresses additional noise and attempts to mitigate it through removal of other assets in a simple mathematical, "this minus that equals this" or, removal of a helicopter aircraft and addition of an aircraft with four turboprop engines.
- To date, there has been no sound modeling done that effectively measures the echo chamber that is the Koolau range and its amphitheater shape. This type of modeling was requested during the assessment for the MV-22 home-basing, and again, is not found to be a relevant factor. We believe that it is extremely relevant.
- There is no data relating to the KC-130J, Rolls Royce engine test cell decibel levels or duration when conducting high-speed testing.
- No data about on-ramp, high-speed engine testing decibel levels or duration.

The Kaneohe Neighborhood Board respects, supports, and is thankful for the service to our nation by our military ohana. The Kaneohe Neighborhood Board, representing over 30,000 residents, has the humble expectation that the planners for the home-basing of the MQ-9 Marine UAV Squadron and the KC-130J Squadron will seek appropriate mitigation for the significant increase in aircraft noise and activity. Finally, the Kaneohe Neighborhood Board requests an Environmental Impact Statement be completed in lieu of this Environmental Assessment.

#### Response to Comment

Thank you for your comment.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

**Appendix B – Responses to Public Comments**

**Comment 105: Kaneohe Neighborhood Board (continued)**

**Comment**



KANEOHE NEIGHBORHOOD BOARD NO. 30  
NEIGHBORHOOD COMMISSION • 925 DILLINGHAM BOULEVARD SUITE 160 • HONOLULU, HAWAII, 96817  
PHONE (808) 768-3705 • FAX (808) 768-3711 • INTERNET: <http://www.honolulu.gov>

Submitted by: Mo Radke, Chair

A handwritten signature in black ink, appearing to read 'Mo Radke'.

*Adopted by the Kaneohe Neighborhood Board No. 30 by ROLL CALL VOTE at its Thursday, September 19, 2022 Regular Meeting, 14-0-0 (Aye: 13 Nay: 0 Abstain: 0)*

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 106: City Council, City and County of Honolulu

#### Comment

**From:** [Ryan, Kimberly](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Councilmember Esther Kia'aina - Response to MCBH DEA  
**Date:** Monday, September 19, 2022 1:45:12 PM  
**Attachments:** [Kiaaina Response to MCBH EA 091322.pdf](#)

Aloha,

Please find the attached response from Councilmember Kia'aina regarding the Department of Defense, United States Marine Corps Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawai'i, Kane'ohe Bay O'ahu, Hawai'i (DEA).

The original letter will be mailed to your office.

Mahalo,

**Kimberly Ryan**  
Office Manager  
Councilmember Esther Kia'aina, District 3  
'Āhuimanu, He'eia, Ha'ikū, Kane'ohe, Maunawili  
Kailua, Olomana, Enchanted Lake & Waimānalo  
[kimberly.ryan@honolulu.gov](mailto:kimberly.ryan@honolulu.gov)  
Phone: (808) 768-5003  
[Councilmember Kia'aina's website](#)

#### Response to Comment

Thank you for your comment.

As provided for in applicable regulations, the Marine Corps conducted the Section 106 process concurrently with the NEPA process. The Marine Corps initiated discussions with consulting parties early in the project and they continued through a series of consultation meetings, presentation materials, and iterative development of the MOA. These consultation meetings will run concurrently through the end of the NEPA process.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

## Appendix B – Responses to Public Comments

### Comment 106: City Council, City and County of Honolulu (continued)

#### Comment



**Esther Kia'aina**  
VICE CHAIR  
HONOLULU CITY COUNCIL, DISTRICT 3  
TELEPHONE: (808) 768-5003  
EMAIL: [ekiaaina@honolulu.gov](mailto:ekiaaina@honolulu.gov)

September 13, 2022

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr, Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

To Whom it May Concern,

I am writing in response to the *Department of Defense, United States Marine Corps publication of a Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii'i, Kane'ohe Bay O'ahu, Hawaii'i* (DEA). While I appreciate the DOD's goal to enhance the airborne and intelligence capabilities of Marine Corps forces and ultimately support the United States Indo-Pacific Command, I have concerns that final mitigation for potential impacts to archaeological and cultural resources is not included in the DEA, that the proposed action will continue to adversely impact the City and County of Honolulu's housing crisis, and that the DEA may underestimate the proposed action's impacts of increased noise to nearby neighborhoods.

#### *Archaeological and Cultural Resources*

I urge the Department of Defense to complete the National Historic Preservation Act (NHPA) Section 106 process prior to completing the National Environmental Policy Act (NEPA) process. As the DEA notes, the Mōkapu Peninsula is well known for its rich archaeological and cultural resources; as many as 3,000 iwi kūpuna have been taken from Mōkapu over time, and there are many archaeological sites across the peninsula, including the 31 documented sites within the proposed Area of Potential Effects boundaries. The DEA itself acknowledges construction projects continue to uncover intact subsurface cultural deposits and that cultural deposits and iwi kūpuna may be uncovered as a part of this project. Moreover, June Cleghorn, senior cultural resources manager for the Marine Corps base on Mōkapu, admitted recently that finding new iwi "has occurred and continues to occur periodically."<sup>1</sup> While I appreciate that archaeological monitoring will serve to mitigate impacts, it has already been determined that adverse effects to historic properties is expected, and there is active discussion on a Memorandum of Agreement (MOA) to resolve adverse effects to historic properties as a part of the Section 106 process.

<sup>1</sup> The Stolen Bones of Hawai'i, SFGATE, June 5, 2022. Last accessed 09/01/22 at <https://www.sfgate.com/hawaii/article/Native-Hawaiian-graves-dug-up-Mokapu-Hawaii-17217662.php>.

#### Response to Comment

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 106: City Council, City and County of Honolulu (continued)

#### Comment

Accordingly, I urge a pause to the NEPA process so that the final mitigation plans that is being discussed in the anticipated MOA can be incorporated.

#### *Housing*

Despite a reduction in troops that would result from an unrelated deactivation of existing helicopter squadrons and divestment of RQ-21 aircraft at MCBH, I am concerned by the DEA's conclusion that "[n]o additional housing would be needed for the proposed action." The DEA describes that the proposed action would result in an increase of approximately 676 personnel and their dependents and notes that it is anticipated that the squadron personnel and dependents would be housed in on-base housing and off base in the community. While this may be consistent with existing housing practices for military personnel at MCBH, I would encourage the Department of Defense to mitigate impacts to the housing supply in a community with a well-documented housing crisis by incorporating additional on base housing options and adopting policies to incentivize and encourage personnel to stay in on-base housing. While the base itself may experience a reduction in personnel as a result of deactivation and divestment of other unrelated activities, arguably, if using a no-action alternative as a baseline, the reduction in troops may have otherwise had positive impacts on the area's housing supply.

#### *Noise*

Although the DEA notes that the proposed action would result in no perceptible change to humans or wildlife because there would be no growth of the noise contours in populated areas off base, no residential areas would be exposed to noise above 65 DNL, and because the net change would be a decrease in noise as measured against historic aircraft operations, I anticipate nearby neighborhoods to continue to express noise-related concerns if the proposed project is implemented. The people of Kāne'ohe and Kailua have been complaining about noise from operations at MCBH for well over a decade, these complaints were heightened over the last two years, and the DEA is not clear with regards to planned flight paths and noise measurements over these residential communities. The Kailua Neighborhood Board noted these concerns in a motion they adopted on September 1, 2022. Moreover, in comparing the "existing aircraft noise" with the anticipated noise from the proposed action, the DEA uses calendar year 2019 for existing conditions, "to avoid any anomalies from COVID-19 pandemic-related operational levels." As such, the existing conditions do not include the current noise levels after the helicopter squadrons were deactivated earlier this year, and the DEA suggests that the addition of the KC-130J and MQ-9 squadrons to Kāne'ohe would result in only a slight growth in the contours throughout the airfield when compared to the No-Action Alternative. However, the proposal for new squadrons would result in a significant increase in noise if using actual existing conditions as the no-action alternative baseline, as the reduced noise from the recent deactivation and divestment of other squadrons and the most recent attempts by the DOD to address noise complaints may have otherwise had positive noise impacts to nearby residents.

In conclusion, I urge the Department of Defense to consider completing the NHPA Section 106 process prior to completing the NEPA process and incorporating a more accurate and robust mitigation for anticipated adverse effects to historic properties, providing sufficient on-base housing for the proposed personnel, and considering the existing noise conditions to measure the

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Appendix B – Responses to Public Comments**

**Comment 106: City Council, City and County of Honolulu (continued)**

**Comment**

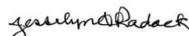
documented their experiences in the aftermath of serving in the drone program. About the film, [one reviewer wrote](#): “The juxtaposition of the appallingly gung-ho attitude of the drone operatives, re-enacted from a transcript of the event, and raw footage of the dead bodies (some children) returning to their anguished friends and family, is heartbreaking and enraging.” Former service members testified before the [European Parliament](#) and German Bundestag about the expansion of the use of armed drones. One former service member described to NY Times Magazine [the lasting effects of moral injury, PTSD, and anxiety](#) he suffered after leaving the drone program as well as the threats and harassment he endured after speaking out.

Former service member [Daniel Hale](#) was featured the documentary [National Bird](#) where he disclosed how the U.S. deceives the public about the targeting, effectiveness and casualties of the drone program, consistently exaggerating the accuracy of drone strikes and under-reporting the civilian carnage. In 2019, Hale was indicted under the Espionage Act for allegedly being the source for a celebrated investigative reporting series in [The Intercept](#) entitled “[The Drone Papers](#),” which exposed significant government abuses in the drone program, information clearly in the public interest. Hale is currently serving a 45-month prison sentence after pleading guilty to violating one count of the Espionage Act. In August 2021, Representative Ilhan Omar [called on President Biden](#) to pardon Hale.

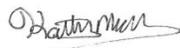
As the years have passed, much of what [former service members](#) warned about starting in 2012 has come to fruition. Following an accidental drone strike in August 2021 during the fall of the Afghanistan government, the [New York Times](#) published a Pulitzer Prize-winning [series of articles](#) chronicling the immense toll the drone war has had on soldiers and civilians and the drastically under-reported civilian casualties. As a result, President Biden [limited](#) drone strikes away from war zones, tightened targeting rules, and strengthened civilian safeguards while Congress works to legislatively overhaul America’s drone strike policy.

We hope the Marine Corps will consider the voices of these veterans and civil servants, and the potential negative impact on public health and safety that hosting and facilitating the U.S. drone program could have for the local community.

Respectfully Submitted,



Jesselyn Radack, Esq.  
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Whistleblower and Source Protection Program  
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Kathleen McClellan, Esq.  
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**Response to Comment**

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 106: City Council, City and County of Honolulu (continued)

Comment

(see above)

Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

Although fixed wing and rotary-wing/tilt-rotor aircraft are operationally and acoustically different, flight tracks and noise profiles for all aircraft are well understood. Noise modeling accounts for these acoustic and operational differences to enable meaningful comparisons between the platforms. The baseline for aircraft operations that was incorporated into the noise modeling reflects existing conditions. As shown at Table 2-2, “existing conditions” reflect the departure of the AH-1W and CH-53E helicopters.

## Appendix B – Responses to Public Comments

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### Comment 107

#### Comment

**From:** [Laura Sabine](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Support of Windward Coalition  
**Date:** Monday, September 19, 2022 1:09:32 PM  
**Attachments:** [WC letter- EA MCBH 2022.pdf](#)

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Greetings,

I wanted to write to you in support of the attached letter that you have received from the Windward Coalition.

I agree with their assessment of the situation and their recommendations.

I do hope that you all take these suggestions seriously and provide us with more information before making these critical decisions that will affect our neighborhoods and our environment.

Laura Sabine  
425-941-7925  
Kaneohe resident

*"Be who God meant you to be, and you will set the world on FIRE. "*  
*St. Catherine of Siena*

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

See also responses to comment #098.

Appendix B – Responses to Public Comments

Comment 107 (continued)

Comment



September 17, 2022  
EV21 Project Mgr  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Aloha,

The Windward Coalition is a non-profit and non-partisan organization dedicated to improving the quality of life for members of the windward communities including those in our military Ohana. We appreciate our Marine neighbors who have and continue to defend our republic and are also willing to engage in frank discussions with the community concerning the impact of their activities.

We have reviewed the recent Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC130J Marine refueler transport squadron at Marine Corp Base Hawaii. Also outlined in the EA is a very problematic planned repositioning of the MV-22s on the base. We have a number of specific concerns with this document that are outlined below.

1. We previously expressed and maintain a preference for an Environmental Impact Assessment Statement (EIA/EIS) rather than the Environmental Assessment (EA) as it would allow the community to comment in more detail about potential concerns. The EA does not provide sufficient information for adequate analysis and comment.

2. The majority of the complaints about MCBH to our Coalition concern noise. The adverse effects on personal interactions, sleep, learning and health are well documented in the scientific literature.

**Flight operations.** Assuming that the KC130-Js will fly a similar path as the C-17s and add thousands of annual flights to those already occurring, the increase in flights will definitely stress the already suffering communities in and around Kaneohe. The flight patterns for the KC130-Js and the drones are not described in the EA nor is there any noise modeling or measurements in the affected communities outside the base. The only area assessed was the "region of influence" as depicted in the noise contours in figure 3.2 which we feel is badly flawed. Among other issues, it completely ignores the effects of low flying fixed-wing aircraft approaching runway 4/22 over He'eia, Ali'i Bluffs,

1

Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 107 (continued)**

**Comment**

Alli'i Shores, the Hawai'i Institute of Marine Biology and King Intermediate School. The modeled area only includes the base and some surrounding water. In order to fully understand the environmental impact on windward communities, it is critical to identify flight paths and carry out sound measurements.

**Ground operations.** Furthermore, the EA describes most if not all of the KC130-J squadron parked on tarmac as situated with their exhausts pointed toward communities onshore (fig 2.4). Additionally, the planned relocation of the MV-22s also puts them closer to the community. The plan in the EA includes demolishing and rebuilding of a new hanger 103. Instead of using it for the new aircraft, they will move MV-22s into hanger 103, currently located in the same class of hangar 1103R which is further away from their civilian neighbors. Scientific surveys, with actual measurements and not modeling, of the frequency of noise emitted by the MV-22 and CH-53 helicopters (U.S. Marine Corps Futenma Air Station) revealed the Osprey aircraft's noise was louder than the CH-53 by about 30 decibels. This 30-decibel difference translates to about eight times the noise level to the human ear. Clearly, we can only logically conclude that ground noise will be increased and directed towards the on-shore communities every time the aircraft engines start and run for any reason, such as taxiing, maintenance etc. Again, there does not appear to be any assessment of potential noise impact on the surrounding community in the EA.

3. The health concerns consequent to both the noise and other pollutants of the stated 8280 new aircraft operations are more difficult to appreciate by lay people but are likely even more consequential. Simply put, the busier an "airport" the greater the health impacts on the surrounding community with documented increases in morbidity and mortality. Additionally, the low-frequency noise of the MV-22s can cause headaches and other illnesses. Hence the EA's statement of *less than significant* impacts on air quality both from the additional construction and operational activities of the aircraft is unconvincing.

4. Other environmental impacts of these new aircraft are unclear from the EA. The only area assessed was the "region of influence" as depicted in the noise contours in figure 3.2. We stress this only includes the base and water immediately surrounding it. An evaluation of the impacts on species that may occur in other areas is needed. For instance, effects on endangered species of birds, mammals and reptiles that may inhabit areas under flight paths were not included in the analysis. The Hawaii Marine Animal Response / Hawaii Marine Mammal Alliance with NOAA and the U.S. Fish & Wildlife Service have documented sea turtle nesting activity on the offshore islands of Oahu (Kipapa, Manana, Moku Manu, Moku Nui, and Moku'auia). There have been many sightings of Hawaiian monk seals on these islands as well as sea turtle sightings in the area. There also have been sightings of spinner dolphins very close to MCBH close to the Sampan Channel and nearly inside the restricted ocean area around MCBH. The EA does not address how the Navy has and will monitor the impact on these animals.

**Response to Comment**

**Appendix B – Responses to Public Comments**

**Comment 107 (continued)**

Comment

There will be 6 new drones per the EA. How is the drone controlled in flight? What frequencies are used to control the drone in flight? What are the potential or actual impacts of these radio communications to humans or protected marine species? Have these potential or actual impacts been evaluated or tested, and if so, what are the results of those tests? If they have not been evaluated or tested, shouldn't they be? We know marine animals such as monk seals, dolphins and turtles experience their environments in ways that may be different to humans.

Additional concerns voiced by our members include: fume-based oil films/sheen may possibly affect aquatic life; hydrocarbons released in the engine exhaust may be ingested by surface-feeding birds and fish; and fumes from the aircraft carried upwards by the trades into the mountains may contribute to polluting the Koolau watershed. More information is needed to make an assessment regarding these possible impacts.

5. We share the concern of the State Historic Preservation Division (SHPD) that there will be an adverse effect on historic properties resulting from the proposed construction. The buildings involved are an important reminder of the first moments our nation was attacked, leading to World War II. Minutes before the attack on Pearl Harbor on December 7, 1941, the Japanese bombed the naval air station at Kaneohe Bay, destroying nearly all of the station's patrol planes and killing 18 sailors. The first Japanese aircraft were shot down at Kaneohe. In 1987, Naval Air Station Kaneohe Bay was listed as a National Historic Landmark and historic district.

Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five are eligible for inclusion in the National Register of Historic Places. The project for the homebase of the MQ-9 and KC-130J proposes to demolish Hangar 3. Both Hangars 3 and 4 are of historic significance. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. We support the HHF in their strong opposition to this demolition of any of these and we are in favor of alternatives available and known to the Navy.

In conclusion, this EA does not provide the community with enough information to support a finding of *no significant impact*. A full EIS should be done to provide answers to the full range of community questions and concerns.

Mahalo,



Terri Needels  
President, Windward Coalition

Response to Comment

**Appendix B – Responses to Public Comments**

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**Comment 108**

**Comment**

**From:** [Kimbal Thompson](#)  
**To:** [NFPAC-Receive](#)  
**Cc:** [Kimbal Thompson](#)  
**Subject:** [Non-DoD Source] MCBH Draft EA Testimony  
**Date:** Monday, September 19, 2022 11:26:40 AM  
**Attachments:** [MCBH DEA LTR .pdf](#)

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Please find attached Comment Letter.

Mahalo,

Arthur Kimbal Thompson, AIA, TF, NCARB, LEED A.P.  
AKTA LTD  
46-160 Nahiku Street Kaneohe, Hawaii 96744  
808.779.5267  
[kimbal@akta-ltd.com](mailto:kimbal@akta-ltd.com)

**Response to Comment**

Thank you for your comment.

## Appendix B – Responses to Public Comments

### Comment 108 (continued)

#### Comment

04.September 2022

46-160 Nahiku Street  
Kaneohe, Hawaii 96744

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr  
Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

SUBJECT: Draft ENVIRONMENTAL ASSESSMENT for HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE BAY OAHU, HAWAII, August 2022

Aloha,

As a 25-year resident of the Alii Shores neighborhood of Kaneohe and generally, a proponent of MCBH, Kaneohe we take issue with several statements regarding noise, and the frequency thereof, of this Draft EIS. The Fig. 3.1 dba DNL contours do not accurately show actual flight operations.

We are located just across Kaneohe Bay from the major runway entrance. If approaches were true to the statement: "most of the noise areas exposed to the 65 dBA DNL and greater occur on base or over the water," the word "most" is misleading. Current activities from the daily takeoffs and landings of the C-17s usually occur all weekday mornings, around noon and evening news times, at minimum. It is not unusual for these approaches to occur inland over our neighborhood, or in sometimes, directly over our house. Such has been true for other MCBH, Hawaii aircraft.

Table 2-3 indicates an increase of 8,280 aircraft operations, a daily average increase of 23 operations. While most MV-22 and MH-60 operations are on the northwest sector of the base (occasional night operations of MV-22's cause us awakenings), yet the proposed MQ-9 and KC-130J will use the runway approach. While the draft EIS does not include the specific engine noise from each of the two proposed aircraft, the drone flight pattern has occurred from the south direction over our neighborhood in approach to the runway and is heard. Four KC-130J Rolls-Royce AE 100D3 turboprop engines are noisy.

As stated in the draft, the two new squadrons represent an increase of aircraft operations above existing conditions. We disagree that the "proposed action would introduce a minor increase in aircraft operations and average noise levels, the net change would be a decrease in noise." The statement "when considered with historic fluctuations of aircraft operations at the installation in years prior to the deactivations in 2022," is irrelevant. The proposed action will certainly bring an increase in the detrimental effects of noise.

Should the construction of operational facilities have already occurred as a condition precedent to drone operations from MCB, Kaneohe, this is an oversight of past EIS for related facilities. Base operations must provide better enforcement of flight patterns including safety concerns and noise considerations over residential area (See 3.6.2.1 Environmental Consequences) or revert to 3.6.2.1 No-Action Alternative.

Sincerely,



ARTHUR K. THOMPSON

#### Response to Comment

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 108 (continued)

Comment

(see above)

Response to Comment

The noise analysis was updated with additional details about proposed KC-130J and MQ-9 aircraft operations and how they are factored into the noise analysis. The noise analysis shows that all areas exposed to 65 dBA DNL and greater occur on base or over the water except for the northern edge of Coconut Island.

Although fixed wing and rotary-wing/tilt-rotor aircraft are operationally and acoustically different, flight tracks and noise profiles for all aircraft are well understood. Noise modeling accounts for these acoustic and operational differences to enable meaningful comparisons between the platforms. The baseline for aircraft operations that was incorporated into the noise modeling reflects existing conditions. As shown at Table 2-2, “existing conditions” reflect the departure of the AH-1W and CH-53E helicopters.

The Marine Corps takes its role as a good neighbor seriously and understands the need to minimize aircraft noise in communities surrounding MCB Hawaii Kaneohe Bay. From providing the community with advance notice of busy air operations such as RIMPAC and air shows, to adjusting engine testing maintenance hours to reduce impact to the community, we make every effort, consistent with our primary mission to ensure safe operations and effective training, to minimize noise and incompatibility. Local course rules direct aircraft to avoid residential areas generally, as well as avoid direct overflight of Coconut Island on departure from Runway 22. On arrival to Runway 04/22, smaller and more maneuverable aircraft are able to adopt nonstandard approach patterns to avoid Coconut Island, which lies directly in the approach path to that runway. Larger and heavier aircraft, such as the C-130 and heavy transients, are less maneuverable, and may overfly the island to ensure safe arrival at the air station.

## Appendix B – Responses to Public Comments

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### Comment 109

#### Comment

**From:** [Don Wilson](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [Non-DoD Source] MCBH HOME BASING EA COMMENTS  
**Date:** Monday, September 19, 2022 3:29:51 PM  
**Attachments:** [MCBH EA comments.docx](#)

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Chief of Staff MCBH Wadsworth,

Please accept these comments in the spirit in which they are offered: to support MCBH permanent basing of MQ-9 and C-130 aircraft to enhance MARFORPAC assets.

If you have any questions/concerns, please contact me at (808) 475-1394, or [wilsond049@hawaii.rr.com](mailto:wilsond049@hawaii.rr.com)

In context, I am a former CO, PMRF, Barking Sands, Kauai – amongst other things.

Very respectfully,

Don Wilson

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

**Comment 110: Malu 'Aina Center For Non-violent Education & Action**  
**Comment**

**From:** [Jim Albertini](#)  
**To:** [NFPAC-Receive](mailto:NFPAC-Receive)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] testimony in opposition to basing MQ 9 Assassin Reapers and C-130s at Kaneohe  
**Date:** Tuesday, September 20, 2022 8:14:19 PM

NFPAC-Receive@navy.mil

Aloha,

testimony in opposition to basing MQ 9 Assassin Reapers and C-130s at Kaneohe

I taught at St. Ann's school in Kaneohe during the early 1970s and remember the horrors of fighter/bomber jets taking off and flying near our school on their way to practice bombing on Kaho'olawe. I would look at my students and think if we were Vietnamese and heard the roar of those jets, we would be running for holes to hide in from the bombing. Those frequent interruptions for us by Kaneohe based fighter jets was an inconvenience but for Vietnamese it was a life and death situation.

I opposed the US war in Vietnam and I oppose the basing of Killer drones and other military forces in Hawaii. Hawaii is an independent neutral nation illegally occupied by the US. FUNDAMENTALLY, KILLER ASSASSIN DRONES AND OTHER MILITARY MACHINES fundamentally violate the cultural basis of aloha in Hawaii. There is NO aloha in Assassin drones.

I say No to US drones, C-130 aircraft and all Military presence in Hawaii. End the illegal occupation of Hawaii Now! It's time for the US to Quit Hawaii

--  
Jim Albertini Malu 'Aina Center For Non-violent Education & Action P.O. Box 489 Ola'a (Kurtistown) Hawaii'i 96760  
Phone 808-966-7622 Email [ja@malu-aina.org](mailto:ja@malu-aina.org) Visit us on the web at [www.malu-aina.org](http://www.malu-aina.org)

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Appendix B – Responses to Public Comments**

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**Comment 111**

**Comment**

**From:** [carterf02@hawaii.rr.com](mailto:carterf02@hawaii.rr.com)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Comments on EA for Project EV21  
**Date:** Tuesday, September 20, 2022 8:09:23 PM  
**Attachments:** Comments on EA for Project EV21.docx

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Please review attached document providing my comments on subject project.

Regards,  
Frederick W. Carter IV

**Response to Comment**

Thank you for your comment.

See responses to comment #028.

## Appendix B – Responses to Public Comments

### Comment 111 (continued)

#### Comment

20 Sept 2022

To:

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Drive Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

Dear Sir/Ma'am

My name is Frederick William Carter IV and I reside at 118 Aikapa Place, Kailua HI 96734. My home is adjacent to the Marine Corps Base Hawaii and I have lived here for the past 39 years. I am writing regarding the Environmental Assessment for basing of a MQ-9 Marine unmanned aerial vehicle squadron and KC-130J Marine refueler transport squadron at Marine Corp Base Hawaii. I have concerns that include:

**Noise.** The EA only assesses the noise of new aircraft in the "region of influence" in and around the base and some surrounding water. The noise evaluation should be extended to include the surrounding communities.

I have attended several meetings through the years with the Marine Corps representatives at public forms to discuss noise, including their introduction of the Osprey's to the base. Many issues were raised regarding noise and Osprey operations but nothing has ever been done to limit the noise in the surrounding areas.

The noise generated by the current aircraft disrupts my family's quality of life. The noise interferes with conversations, listening to TV or music, and the noise disrupts our sleep as well. The addition of thousands of additional flights annually can only make this worse. Even when the planes are on the ground the engine noise is often loud and prolonged. Adding 15 large four engine aircraft can only worsen this situation.

The EA includes demolishing the historical Hangar 103 (Hangar 2 of World War II fame) and is rebuild a new hanger 103 and relocate the Ospreys from their current hanger (mid runway) to the new hangar **closer to the coastal community**. I currently deal with numerous overflights of the Ospreys from the current location, that I believe is based near the helicopters area close to the community. Moving the group that is mid runway will greatly increase my noise level. The increased noise especially during maintenance activities which may go on for hours. Actual measurements of noise from an Osprey is 8

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 111 (continued)

#### Comment

times more than the large noisy CH53E helicopters that recently left the base.

**Health.** Research demonstrates that noise is not just a nuisance but a health concern as well. Those who live near flight paths have noted the constant need to clean soot off the windows and other surfaces of the home. We also know that we are not only breathing in soot but other airplane engine pollutants detrimental to our health. The addition of the 8280 new aircraft operations can only worsen this problem. The environmental protections should be followed by all with no exceptions. I currently am wearing hearing aids as a result of exposure to loud noise in the past. I had a desk job for most of my career and I can't help but wonder if the aircraft noise I have dealt with for 39 years has contributed to this.

**Environment.** The EA only assesses the environmental impacts of these new aircraft in the "region of influence" in and around the base and some surrounding water. For example, it is clear that people and animals are stressed by the noise quite a distance from the base. Planes that fly over the bay are very likely adding to the overall pollution of the bay which is already stressed and contaminated. The possible impact of pollution, exhaust soot and fumes on the coral, fish, birds, marine life and water quality should be addressed in the study.

**Historic preservation.** There will be an adverse effect on historic properties resulting from the proposed construction with the destruction of Hangar 103 (Hangar 2 in WWII). Hangars 1-4 were constructed in 1941; Hangar 5 was built in 1943 and all five of them are eligible for the National Register of Historic Places. They are anchor buildings in the Aviation Historic District and part of the setting of the Naval Air Station Kaneohe National Historic Landmark. [The buildings involved are an important reminder of the first moments our nation was attacked during WWII.](#)

We support the HHF in their strong opposition to this demolition of any of these structures and are in favor of alternatives available and known to the Navy.

**Conclusion** - The EA does not provide the community with enough information to support a finding of no significant impact. A full EIS should be done to provide answers to the community's questions and concerns.

Respectively,

Frederick William Carter IV

#### Response to Comment

## Appendix B – Responses to Public Comments

### Comment 112

#### Comment

**From:** [Pat Filbert](#)  
**To:** [NEPAC-Receive](#)  
**Cc:** [Koolaupoko Hawaiian Civic Club](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] Comments for MCBH Kaneohe Environmental Assessment for MQ-9/KC-130J Basing  
**Date:** Tuesday, September 20, 2022 5:17:36 PM

Aloha EV21 Project Manager,

My name is Pat Filbert and I am a Member of the Ko'olaupoko Hawaiian Civic Club based in Kaneohe. The Club notified us about the ability to comment on the Draft Environmental Assessment (EA) developed to address staging a squadron each of MQ-9 UAS and KC-130J aerial refuel/transport aircraft at Marine Corps Base Hawaii-Kaneohe Bay.

My comments focus on three areas: effects of hazard material on the area, military aspects, cultural awareness for incoming personnel and their families.

#### **Effects of Hazardous Materials on the Area**

- Does the KC-130J wash rack runoff reclamation plan ensure waste POL doesn't get into the land or wash into the ocean? How is the plan conducted?
- For runway resurfacing and repainting, along with other building and area demolition, will hazardous material (dust, liquid, solids) be contained for transport? If so, how? Where will these items be disposed of/transported to and how will they be stored?
- The potential for asbestos and other hazardous insulation materials used in building construction in the 1930s and 1940s is a potential. How will this material be contained during demolition and transport so it doesn't affect/runoff into the bays or Nuupia Ponds via drain systems or from Bravo Ramp areas? How will air pollution aspects be addressed for these materials? Where will it be transported to and how will it be stored?
- Will the above items be included in the Storm Water Pollution Prevention Plan? If so, when will this plan be published as project efforts appear to be starting in the next 6-8 months?

#### **Military Aspects**

- MQ-9
  - When will an erosion control plan for emplacing a GDT on Keawanui Hill be published? How will the plan mitigate increased erosion in storm and heavy rain events?
  - The draft EA notes no disturbance of historical sites in Pali Kilo/Keawanui Hill for the construction and emplacement of the MQ-9A GDT; however, the draft EA notes a 35x35 foot area is to be cleared/flattened to emplace the GDT. This appears to conflict with the "no effect" aspects and requires quantification of

#### Response to Comment

Thank you for your comment.

The EA contains sufficient information to conduct a thorough impact analysis of the project footprint and operation of the wash rack, including the water resources impact analysis in Section 3.3 of the EA.

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

The water resource impact analysis addressed operations of the proposed Aircraft Direct Refueling System and wash rack. Additional details about these project components, including compliance with spill prevention/response and storm water procedures, were added in the Final EA to provide additional clarification, but this did not change the impact analysis conclusions.

## Appendix B – Responses to Public Comments

### Comment 112 (continued)

#### Comment

- possible effects.
- o Understand the MQ-9s to be stationed at the base are the MQ-9A ER (extended range) aircraft? If so, these aircraft have the capability to carry external fuel stores as part of the aircraft's payload. Will environmental aspects of an accidentally dropped fuel pod into the ocean or during landing on the runway be addressed and if so, in what plan?
  - o Communications is mentioned as a squadron mission, is this airborne voice/data retransmission by the MQ-9A aircraft? If so, will operating frequencies interfere with the civilian and emergency services radio frequency spectrum? Further, the MQ-9A ER has Ku-band SATCOM capability, which is briefly mentioned as a capability in the draft EA, will satellite links be part of the aircraft's basing and will an associated facility have to be constructed (no such facility is mentioned)?
  - o For sensing/intelligence, surveillance, and reconnaissance missions will areas in the Ko'olaupoko area (particularly Kaneohe, Kailua, He'eia) be designated as no collection areas to address potential civilian concerns over unintended sensing, data collection, and potential for complaints from civilian and commercial areas? How will the local cities be informed this is not something that will occur?
  - o The MQ-9 is capable of carrying several weapons: Hellfire missiles, GBU-12 and -39 weapons, and carries a laser range finder/laser designator
    - Will weapons storage be added on base? If so, where and will this require additional personnel?
    - Will designated no lasing areas be established to protect civilian ground and sea traffic and commercial and privately owned properties around the base and throughout the Ko'olaupoko area?
  - o Will ground based sense and avoid radar systems be installed on base to assist with MQ-9A sense and avoid of military and civilian aircraft? If so, where?
  - o Will there be airspace restrictions imposed with the addition of this aircraft given its maximum altitude is near 50,000 feet MSL?
  - o Are there plans for a separate launch and recovery element unit to operate separate from the GCS element?
- KC-130J
    - o The draft assessment noted 15 aircraft in the squadron, with full growth occurring between 2023-2027; however, this article (<https://seapowermagazine.org/marine-corps-to-increase-kc-130j-force-in-pacific-to-enhance-mobility-of-marine-littoral-regiment/>) identifies the squadron's potential to grow, by 2026, to 17 aircraft. Has this been factored into the design and construction phases?
    - o Have potential clean-up plans been developed, along with an environmental effects study, of accidental fuel spills from one or more KC-130Js on the ground that may drain into the bays or Nuupia Pond area? Additionally, is there a

#### Response to Comment

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

The EA includes an air quality analysis in Section 3.2. All emissions would be below Prevention of Significant Deterioration thresholds and would not affect the state of Hawaii and the island of Oahu's National Ambient Air Quality Standards attainment status. Aircraft emissions would not have impacts to ground level receptors when emitted above 3,000 feet altitude per EPA. Given the distance from aircraft engine exhaust to ground level receptors, very short duration (measured in seconds) for a fly over, and the number of flight operations on a daily basis, the proposed KC-130J and MQ-9 flight operations would have less than significant adverse health effects.

Use of hazardous materials is part of regular base maintenance and operations activities. The proposed action involves construction activities, and aircraft squadron maintenance and operations activities consistent and compatible with those currently conducted at the base. All hazardous materials and waste are handled and disposed of in accordance with established base practices and applicable regulations. This includes use of oil water separators at appropriate locations, separation of petroleum or hazardous materials from the storm water system, adherence to hazardous materials and waste management procedures, avoiding use of known chemicals of concern from airfield emergency response processes, and implementation of a Spill Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline.

## Appendix B – Responses to Public Comments

### Comment 112 (continued)

#### Comment

mitigation plan for accidental aerial and/or landing/take-off fuel spills during training and operations over the bays and ocean? If so, is this part of military personnel training and/or is the public able to be informed of what the plan is?

- o Will any of the KC-120Js be configured to operate the Harvest HAWK multi-sensor imagery weapons system? If so, will no collection areas be designated to address potential civilian concerns over unintended sensing and inadvertent data collection of civilian and commercial areas?
- o Will any of the KC-130Js be configured to carry Hellfire, AGM-175/Griffin, or GBU-44/Viper Strike weapons? If so, will additional facilities be constructed to store them?

#### **Cultural awareness for incoming personnel and their families**

- o Understanding the cultural and historical aspects of Mokapu peninsula, the area of Pali Kilo, and potential for Monk Seals and Turtles should be added to training of incoming personnel. Recently there have been incidents in other areas of Oahu where humans interacted with these species resulting in injury to the humans and stress and potential life threatening effects to the species (woman attacked and bitten by a Monk seal for accidentally getting in the way of the mother and a pup; humans taking selfies with seals and getting well within the mandated 50 foot standoff areas) and turtles (humans attempting to "ride" turtles by sitting on them for photos)
- o What is the plan to inform inbound personnel of these aspects; specifically, what to do and not do and who to call to report sightings and other personnel doing the wrong things?

Lastly, are additional Consultation Meetings planned for the neighboring areas and/or civic and local government entities?

Mahalo for your consideration of my inputs and I look forward to your response.

Pat Filbert  
(702) 738-0231

#### Response to Comment

The EA describes the GDT as a trailer and antenna with stabilizing cables tied to surface-mounted blocks which will not affect subsurface archaeological sites such as those on or near Keawanui Hill.

The potential for accidental fuel spills exists for any recreational, commercial, or military aircraft. There is no unique risk of fuel spills created by the new squadrons, including the potential loss of fuel or a fuel pod from an aircraft. Specific procedures for preventing and containing potential spills at the airfield are identified and analyzed in the EA.

Fuel activities are not part of the proposed action for the airfield environment at MCB Hawaii Kaneohe Bay. Fuel jettison events are caused by emergency situations when the aircraft is too heavy to safely land at their current weight. This can occur for any type of aircraft, whether civilian, commercial, or military. According to ICAO Doc 4444 PANS-ATM, rules are in place for specific separation minima to be used in respect to other known traffic in case of fuel jettisoning. This is the standard aviation protocol for all civilian and military aircraft when operating. If an emergency event occurs, flight crew attempts to jettison fuel at or above an altitude that will allow evaporation or dissipation before the fuel reaches the ground. In addition, proposed KC-130J refueling operations would not occur over the Hawaiian Islands and would be at altitudes where small amounts of fuel, were they to be released when aircraft disengage from fuel drogue, would evaporate before reaching the surface. These refueling activities currently occur and are addressed in other NEPA documents such as the Final Environmental EIS/OEIS for Hawaii-Southern California Training and Testing.

Comment 112 (continued)

Comment

(see above)

Response to Comment

All types of aircraft use the electromagnetic spectrum for a variety of functions essential for flight safety – radio communications, transponder/IFF, radar (weather, ground-mapping, air-to-air communications, etc. Military aircraft use this electromagnetic spectrum. Radio communications conducted for proposed KC-130J and MQ-9 operations are similar to those used for civilian, commercial, and military aircraft activities at all locations in the U.S., and have not been found to have the potential to adversely affect wildlife species at civilian or military airfields across the country, including Marine Corps installations throughout the country that support aircraft operations. Electromagnetic frequency use for the proposed aircraft squadrons would be similar to and consistent with aircraft operations that presently occur at MCB Hawaii Kaneohe Bay. All electromagnetic spectrum bands for current and proposed aircraft operations are within limits from federal agencies such as FAA and FCC. No interference with civilian and emergency services frequencies would occur, and the power levels and frequencies would not affect public health and safety or wildlife as they are consistent with those used at civilian, commercial, and military airfields. Safety elements associated with data linkage infrastructure and proposed aircraft activities are addressed in Section 3.6 of the EA.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

Comment 112 (continued)

Comment

(see above)

Response to Comment

KC-130J aircraft are long range refueling aircraft, and their training would occur away from MCB Kaneohe Bay. KC-130J training occurs in established airspace within the U.S. and is coordinated with other VMGR units for mutual benefit. The KC-130J and MQ-9 aircraft are key enablers to military exercises and participate in planned detachments for training and support to locations throughout the Indo-Pacific region such as Japan, Australia, and the Philippines. Locally, MQ-9 training would occur within existing Special Use Area restricted airspace on the island of Oahu, at the U.S. Navy training range (Pacific Missile Range Facility Barking Sands) on the island of Kauai, and at the U.S. Army Pohakuloa Training Area on the island of Hawaii under existing environmental analysis and FAA airspace designation.

Support facilities for MQ-9 aircraft would include two ground data terminals (GDTs). The two GDTs provide system and power redundancies to ensure positive control of the MQ-9 aircraft by the pilot. One GDT would be installed on top of Keawanui Hill (requiring the removal of vegetation within a 30-by-30-foot area) and one near Hangar 105 on existing pavement.

The proposed action does not require any modifications to existing airspace or designation of new airspace.

All personnel, equipment, facilities, and aircraft associated with the proposed action are described in Chapter 2 of the EA and analyzed in Chapter 3 of the EA.

**Comment 112 (continued)**

**Comment**

(see above)

**Response to Comment**

The proposed action includes installation and use of spill prevention and containment systems and compliance with storm water management procedures, which were part of the water resources impact analysis. MCB Hawaii has an SPCC plan that covers existing and future activities on base, such as the proposed action.

MCB Hawaii is working directly with the EPA and the HDOH to improve our environmental compliance and enhance our protection of human health and the environment. Due to the complex nature of the environment, lack of personnel resources, and aging infrastructure, MCB Hawaii faces evolving challenges. Through dedication to improvement, dedication of financial resources, and with the coordination and cooperation of our regulatory partners, continual improvement is being made in all areas. Support of the Marine Corps' National Defense mission may be provided while still protecting human health and the environment.

Education procedures are described in Section 2.3, Conservation Measures, and are part of the impact analysis for special-status species (Section 3.5.2.3).

The Marine Corps completed the Section 106 process with consulting parties. This included Section 106 meetings from January to November 2022. In addition, the home basing EA is regularly discussed at neighborhood board meetings in local communities such as Kailua, Kaneohe, and Kahalu'u. These community outreach efforts involve various personnel from MCB Hawaii the Community Plains and Liaison Officer and representatives of the Commanding Officer.

## Appendix B – Responses to Public Comments

### Comment 113

#### Comment

**From:** [Makana Carmern](#)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] Public comment on DRAFT ENVIRONMENTAL ASSESSMENT FOR HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON  
**Date:** Tuesday, September 20, 2022 10:15:29 PM

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To Whom It May Concern:

The main flaws with existing EA is the misunderstanding of impacts to culture, air, land and sea, by failing to account for the added personnel (largely and often imported/ foreign to Hawai'i) and increased presence of military infrastructure that work systemically in tandem to further displace and disrupt native and generational populations, decrease availability and feasibility of housing, increase cost of living by exacerbating an already stressed local economy with competitors funded by a massive welfare program (US Federal DOD and military socioeconomic programs for its members), and further erase the historical precedent of "friendliness to other nations" by the extant and illegally occupied Kingdom of Hawai'i.

Further, and most relevantly, the false and manufactured "China threat" in actuality places all of Hawai'i in further danger. US "Defense" infrastructure is code for "handouts to weapons manufacturers and subcontractors" and is both useless for protecting Hawai'i (reference the false ballistic missile alert and the lack of any defense or even shelter for civilians) as well as increases the threat of war and destruction to Hawai'i and her people and sacred places by other nations who see the US empire as the actual threat to stability in the Pacific region.

We don't want and certainly don't need a drone base or refueling station. Your "science" is mere compartmentalization of the broader and truer picture of the never ending, adverse impact of the US military to Hawai'i.

Makana Reeves

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

**Appendix B – Responses to Public Comments**

**Comment 114: Kahalu'u Neighborhood Board #29**

**Comment**

**From:** [Ka'ano'i W](#)  
**To:** [NEPAC-Receive](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] KNB #29 - Draft EA for Home Basing MQ-9s and C-130s at MCB  
**Date:** Tuesday, September 20, 2022 11:30:52 AM  
**Attachments:** KNB #29 Cover Letter.docx.pdf  
KNB.MCBH Draft EA.docx.pdf

September 20, 2022

EV21 Project Mgr.  
MCB Hawai'i Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr., Ste. 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

RE: Kahalu'u Neighborhood Board #29 Board Resolution, *Regarding MCBH Draft EA*

Aloha,

In the Kahalu'u Neighborhood Board #29 (KNB) September 14, 2022 regular meeting, KNB unanimously passed and approved the attached resolution titled, "*Regarding MCBH Draft EA.*" This resolution urges the following actions by the Marine Corps Base Hawai'i:

*"THEREFORE, BE IT RESOLVED, that the Kahalu'u Neighborhood Board #29 feels that MCB Hawai'i Draft EA adequately addresses most potential impacts but urges the MCB Hawai'i to modify the EA in two ways: first, since there will be fewer total personnel, increase the ratio of on-base housing to relieve housing shortages in the community; and second, assess the potential impacts to drinking water, given the current water shortage on O'ahu."*

Please review the board resolution in its entirety, which is attached, and contact me ([kaanoiwalk@gmail.com](mailto:kaanoiwalk@gmail.com)) with any questions.

Me ka ha'aha'a,



Ka'ano'i Walk, Chair  
Kahalu'u Neighborhood Board #29

**Response to Comment**

Thank you for your comment.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

**Appendix B – Responses to Public Comments**

**Comment 114: Kahalu‘u Neighborhood Board #29 (continued)**

**Comment**



KAHALU'U NEIGHBORHOOD BOARD NO. 29  
*(Hele pia Kea, Ahumahu, Kahaolu, Waiahe, Ka'alaia, Waiāhole, Waikāne, Haku'u, Kualoa)*  
Neighborhood Commission Office • 925 Dillingham Boulevard, Suite 160 • Honolulu, Hawaii 96817  
PHONE (808) 768-3710 • FAX (808) 768-3711 • INTERNET: <http://www.honolulu.gov/hco>

*"LET US NOT EVER HAVE AN UNHAPPY MINORITY; RATHER, LET US BUILD A COMMUNITY CONSENSUS."*

**Kahalu‘u Neighborhood Board #29 Resolution  
Regarding MCBH Draft EA**

**September 14, 2022**

**Whereas**, Marine Corps Base (MCB) Hawai‘i is proposing to home base a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated 6 aircrafts) and a KC-130J Aerial Refueler Transport Squadron (with an anticipated 15 aircrafts) at MCB Hawai‘i Kāne‘ohe Bay; and

**Whereas**, the *"purpose of the proposed action is to enhance the airborne and intelligence capabilities of Marine Corps forces through the integration of multi-mission aerial refueler and transport capability and persistent intelligence, surveillance, and reconnaissance unmanned aerial systems, thereby enhancing the Marine Corps' ability to transport Hawai'i-based Marines and provide them real-time situational awareness to support the United States (U.S.) Indo-Pacific Command (USINDOPACOM). The need for home basing and operations of the MQ-9 and KC-130J squadrons is to extend the capability, versatility, and range of Hawai'i-based Marine Corps and other forces through additional refueler, transport, intelligence, surveillance, and reconnaissance capabilities, in support of USINDOPACOM"*; and

**Whereas**, MCB Hawai‘i is part of the windward community and their operations have potential to create potential environmental issues affecting the surrounding community, particularly related to aircraft operations, off-base housing and drinking water; and

**Whereas**, the Draft EA for the proposed action outlines potential "less than significant impacts" to environmental issues and proposes mitigation measures for noise, air quality, water resources, cultural resources, biological resources, public health and safety; and transportation; and

**Whereas**, regarding aircraft operations, while the proposed action operations are an increase from existing conditions, they are less than total annual aircraft operations that were occurring just prior to the 2022 deactivation of the two helicopter squadrons and RQ-21 divestment. *"Thus, aircraft operations following implementation of the proposed action would be approximately 11 percent less than what was occurring at MCB Hawai'i before May 2022"*; and

Oahu's Neighborhood Board system – Established 1973

**Response to Comment**

**Appendix B – Responses to Public Comments**

**Comment 114: Kahalu‘u Neighborhood Board #29 (continued)**

**Comment**

Whereas, regarding housing, personnel levels would add 676 active-duty personnel, plus dependents, which is 165 fewer personnel before 2022. It is anticipated that the ratio of on-base to off-base housing remains consistent; and

Whereas, impacts to drinking water was not assessed as there are no potable water wells on the peninsula; and

THEREFORE, BE IT RESOLVED, that the Kahalu‘u Neighborhood Board #29 feels that MCB Hawai‘i Draft EA adequately addresses most potential impacts but urges the MCB Hawai‘i to modify the EA in two ways: first, since there will be fewer total personnel, increase the ratio of on-base housing to relieve housing shortages in the community; and second, assess the potential impacts to drinking water, given the current water shortage on O‘ahu.

*The Kahalu'u Neighborhood Board #29 PASSED this resolution  
by UNANIMOUS vote  
at its Wednesday, September 14, 2022 Regular Meeting*

Submitted by:  
Ka'ano'i Walk, Chair



**Response to Comment**

## Appendix B – Responses to Public Comments

### Comment 115

#### Comment

**From:** [Luke Wassermann](#)  
**To:** [NFPAC-Recieve](#)  
**Cc:** [Rep. Scott Z. Matayoshi](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] comments on environmental assessment  
**Date:** Tuesday, September 20, 2022 8:38:26 PM

To whom it may concern:

This comment comes to you from a resident of Kaneohe. My credentials include a doctoral-level education in psychoacoustics and hearing loss rehabilitation (AKA a Doctor of Audiology degree).

Regarding the draft EA for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron:

The conclusion that "this minor increase in [noise] contours would not result in a perceptible change to humans or wildlife" is based on a misrepresentation of how noise creates a nuisance to humans, and inadequate assessment of noise levels in the community.

First of all, using an A-weighted measurement of sound as the basis for determining environmental impacts in Hawaii is understandable but problematic. It's understandable because the A-weighted scale is by far the most widely used in industrial and governmental applications. The draft EA correctly describes the DNL as a government standard, but this is the case because A-weighting is useful for determining safe time-weighted average exposures to broadband noise in order to prevent noise-induced hearing loss, and for determining the extent to which a continuous noise at a particular A-weighted decibel level is likely to interfere with speech intelligibility. Both of these items are of major concern to industry and government, and may be of concern to military personnel stationed at MCBH, within the higher level contours where hearing loss and speech intelligibility might be relevant. However, these concerns are not among the important concerns with regards to environmental and public health impact of the proposed project.

There are multiple problems with using A-weighting to estimate the environmental impact in the community around MCHB. We must remember that the primary effect of "A-weighting" sound measurements is to de-emphasize the low frequency content of noise. Many of the human residents of Kaneohe affected by aircraft noise will be at home, indoors, when exposed to the proposed noise. Low frequency sound has longer wavelengths which are difficult to attenuate. The lower the frequency, the more that sound will be able to penetrate the poorly insulated doors, windows, and walls commonly found in Hawaii and be audible to residents inside their homes. Low-frequency sound waves are also much better at diffracting around obstacles such as the natural topographical features found throughout Kaneohe. Noise contours based on A-weighting create unrealistic depictions of small land areas of "noticeable noise." For example, I live in a mauka area of Kaneohe well outside the lowest noise contour on the map, and I can routinely notice noise produced by military helicopters from MCBH in the evening hours, inside my double-wall bedroom with the double-paned windows fully closed. Finally, although low-frequency noise does cause less noise-induced hearing loss (which is why it is fine to de-emphasize it for hearing conservation measurements), there is no evidence that low-frequency noise causes less annoyance, nuisance, anxiety, or any of the other negative health impacts that have been linked to aircraft noise in the scientific literature.

When A-weighting is used to measure public health impacts of aircraft noise, negative impacts

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

## Appendix B – Responses to Public Comments

### Comment 115 (continued)

#### Comment

are found at much lower day-night average sound levels (DNLs) than those depicted on the contour maps shown in the draft EA (the lowest level contour is 65 dBA). The World Health Organization understands this principle, which is why it strongly recommends a DNL of 45 dBA or less in residential areas in its latest report (<https://www.who.int/europe/publications/i/item/9789289053563>). Until the Navy or Marine Corps measures A-weighted contours as low as 45 dB, then the draft EA is inadequate because it does not address many of the potential health impacts on the surrounding community. Furthermore, because the existing contours are of limited utility in estimating audibility and nuisance of aircraft noise, it is faulty logic to conclude that a minor increase in the existing contours would not be perceptible to humans. Not only will it be readily perceptible, it will likely cause negative health impacts in the community. The WHO report cites recent evidence that day-night average sound levels at 55 dBA cause 25% of adults to be highly sleep-disturbed, and causes developmental delays of reading skills and oral comprehension in children. Even at 45 dBA, 10% of people report being "highly annoyed." Other studies cited in a recent systematic review ([http://www.icben.org/2021/ICBEN%202021%20Papers/full\\_paper\\_27791.pdf](http://www.icben.org/2021/ICBEN%202021%20Papers/full_paper_27791.pdf)) have linked aircraft noise well below 65 dBA to increased risk for hypertension, depression, and anxiety.

The draft EA states that "the 65 dBA DNL contour is used for planning purposes as it is considered compatible for all land use developments." The final EA needs to consider the above arguments that I have presented, and clarify that land use development compatibility does not mean that a particular measure is appropriate for assessing environmental impacts.

Sincerely,

Luke Wassermann  
45-795 Pookela St  
Kaneohe, HI 96744

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

**Appendix B – Responses to Public Comments**

**Comment 116**

**Comment**

**From:** [Pastor @ CCU](mailto:pastor@ccu)  
**To:** [NFPAC-Recative](mailto:NFPAC-Recative)  
**Subject:** [Non-DoD Source] Construction at MCB Kaneohe Bay  
**Date:** Wednesday, September 21, 2022 3:42:09 PM

Aloha,

Mahalo for the opportunity to provide comments on the draft Environmental Assessment of the proposed construction at Mōkapu (U.S. Marine Corps Base at Kaneohe Bay). I oppose the proposed basing of unmanned aerial vehicle squadrons and marine aerial refueler transport squadron because the MCB has proven to be poor stewards of the land and water. There have been multiple cases of contamination of the soil by pesticides as well as fecal bacteria being dumped into the surrounding bay.

It is negligent and inappropriate to consider this construction as “is expected to affect cultural resources.” (DEA 3.4.2) It is harmful to further desecrate sacred heiaus and burial sites that exist at Mōkapu. Additionally the proposed weapons to be housed at Mōkapu are dangerous as 90% of these U.S. Reaper drones have killed innocent civilians thus far.

Mahalo,

Rev. Britani Alexander (she/her)  
Interim Minister, Christ Church Uniting  
[pastor@ccukaiua.org](mailto:pastor@ccukaiua.org)  
office: (808) 262-6911  
cell: (808) 271-7052  
Work Week: Wed - Sun

**Response to Comment**

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

Existing archaeological resources are described in Section 3.4.1.2. Impacts are described in Section 3.4.2.2. Although the potential for disturbance to intact archaeological resources is low, the analysis includes processes for inadvertent discovery of iwi.

Comment 116 (continued)

Comment

(see above)

Response to Comment

The likelihood of discovering previously unknown archaeological deposits in the APE is low. Much of the subsurface project disturbance would occur on reclaimed land approximately 20–30 meters offshore from the original coastline. While the potential for disturbance to intact archaeological resources is low, redeposited and disturbed cultural materials (including iwi kupuna) may still be encountered. Should such deposits be encountered, the ICRMP and the requirements of NAGPRA identify appropriate processes for managing such discoveries.

In accordance with responsibilities under NAGPRA, MCB Hawaii is currently designing a burial structure in consultation with Native Hawaii Organizations for iwi kupuna. As potential mitigation for the proposed action, MCB Hawaii is pursuing a development of a curation facility that meets 36 CFR 79 standards.

The MQ-9 mission is to provide persistent intelligence, surveillance, and reconnaissance to provide real-time situation awareness to military commanders in the Pacific theater. No strike capability or domestic intelligence collection is proposed as a part of this action. In accordance with DODD 5240.1, there are strict regulations that govern the collection of any information, intelligence, or signature (including data) on U.S. persons within the United States.

The mission of the KC-130J is aerial refueling and transport. While versions of these aircraft can be configured to carry munitions, neither aircraft will be equipped with munitions as part of this basing action, and no munitions usage or storage are part of the proposed action.

## Appendix B – Responses to Public Comments

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### Comment 117: Sierra Club

#### Comment

**From:** [Adele Balderston](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Sierra Club O'ahu Group Comments on the Draft EA for Home Basing MQ-9s and C-130s at MCBH  
**Date:** Wednesday, September 21, 2022 12:32:08 AM  
**Attachments:** SOCG MCBH EA Comments.pdf

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Dear EV21/MCB Hawaii Home Basing EA Project Manager,

Attached, please find comments on behalf of the Sierra Club O'ahu Group regarding the proposed actions.

Best regards,

**Adele Balderston (she/her)** J.D. Candidate, Class of 2026  
University of Hawai'i at Mānoa | William S. Richardson School of Law  
(917) 892-9631 | [abalders@hawaii.edu](mailto:abalders@hawaii.edu)

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 117: Sierra Club (continued)

#### Comment



DEPARTMENT OF DEFENSE, UNITED STATES MARINE CORPS  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND, PACIFIC

**COMMENTS on the Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii (MCBH) Kaneohe Bay, O'ahu, Hawai'i**

Tuesday, September 20, 2022

Dear EV21/MCB Hawaii Home Basing EA Project Manager:

On behalf of our 8,000 members and supporters, the Sierra Club of Hawai'i O'ahu Group thanks you for extending the opportunity to comment on the proposed action. Respectfully, **we oppose** home basing of any Unmanned Aerial Vehicle Squadron and associated Aerial Refueler Transport Squadron at Kaneohe Bay and **favor the NO ACTION ALTERNATIVE**.

The draft EA was released prior to the August 11, 2022, announcement by the U.S. Environmental Protection Agency (EPA) that, by failing to comply with the reporting, monitoring, and training requirements of its National Pollutant Discharge Elimination System (NPDES) permit from the Hawai'i Department of Health (DOH), **the MCBH stormwater program is currently operating in violation of the Clean Water Act.**<sup>1</sup> Until MCBH fulfills the terms of its Federal Facility Compliance Agreement by "addressing significant deficiencies related to its stormwater program," all EA statements regarding the stormwater program must be considered inaccurate.

We also request additional analysis regarding the impacts of **Joint All Domain Command and Control concept, or "JADC2,"** in which the Marines squadron of MQ-9 Reaper Drones will play a key role. Because the JADC2 operates on electromagnetic frequencies, bandwidth and electromagnetic frequency concerns should also be included in the EA. How will civilian bandwidth be affected? What are the sources of electromagnetic frequencies for any given scenario, especially those that will be used and practiced in Hawaii? Please cite studies on the impacts of these frequencies on Hawai'i's birds, insects and other biodiverse wildlife. What method of wireless communication will be used to transmit underwater, to submarines? If these

<sup>1</sup> <https://www.epa.gov/newsreleases/under-epa-agreement-marine-corps-base-hawaii-make-improvements-after-stormwater>

#### Response to Comment

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

The Final EA was revised to clarify that the proposed action would be located within a tsunami evacuation zone but would not increase tsunami risk to personnel because the action is consistent and compatible with current uses at the base. Results of geotechnical investigations for the project would be used in the project design to reduce hazards to the proposed infrastructure from erosion and subsidence.

## Appendix B – Responses to Public Comments

### Comment 117: Sierra Club (continued)

#### Comment

communications networks will impact cetaceans, corals, turtles or other endangered sea creatures, please cite studies.

The EA is also incomplete without an exhaustive examination of the MQ-9's widely diverse functions, as the MQ-9 fulfills one of the most important roles in the operation – hovering overhead for endless lengths of time, and gathering and processing data around the clock while passing along target-quality data to every other fire-able weapon in the system. This is no “normal” aircraft, and its impacts should not be assessed as such. A proper EA must include assessment the social, political, environmental and cultural impacts in the context of its symbiotic relationship with the other weapons in its networked system, and across the spectrum of possible mission and war-game permutations that the system is called to perform.

For example, during RIMPAC 2022, one MQ-9 supported 63 missions, which included 25 maritime operation missions, seven personnel recovery missions, six opposition forces missions, and six intelligence, surveillance and reconnaissance missions, an amphibious assault scenario, war-at-sea and surface exercises, and sinking a decommissioned warship. They also loaded and launched 16 Hellfire missiles.

An adequate EA must conduct studies on the environmental, social and cultural impacts of each and every exercise that the MQ-9 supports, as well as those that it is anticipated to support in future technological generations. What are each of the projected permutations of missions that the MQ-9 will serve? What additional hardware and software is anticipated in the realization of each of these projected missions? What are the cultural, social and environmental impacts of these projected missions? Please provide models of systems and missions that are anticipated to emerge from operation of the MQ-9, and elaborate on the *vulnerabilities and risks* inherent to AI-driven JADC2 as they involve the MQ-9's symbiotic relationships with all other weapons with which it is networked.

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Without any additional details regarding how MCBH plans to comply with its existing NPDES permit, we also question the veracity of the following statements:

#### **Table S-1 Summary of Potential Impacts**

“Less than significant impacts to groundwater, surface water, wetlands, and floodplains.”

#### Response to Comment

All types of aircraft use the electromagnetic spectrum for a variety of functions essential for flight safety – radio communications, transponder/IFF, radar (weather, ground-mapping, air-to-air communications, etc. Military aircraft use this electromagnetic spectrum. Radio communications conducted for proposed KC-130J and MQ-9 operations are similar to those used for civilian, commercial, and military aircraft activities at all locations in the U.S., and have not been found to have the potential to adversely affect wildlife species at civilian or military airfields across the country, including Marine Corps installations throughout the country that support aircraft operations. Electromagnetic frequency use for the proposed aircraft squadrons would be similar to and consistent with aircraft operations that presently occur at MCB Hawaii Kaneohe Bay. All electromagnetic spectrum bands for current and proposed aircraft operations are within limits from federal agencies such as FAA and FCC. No interference with civilian and emergency services frequencies would occur, and the power levels and frequencies would not affect public health and safety or wildlife as they are consistent with those used at civilian, commercial, and military airfields. Safety elements associated with data linkage infrastructure and proposed aircraft activities are addressed in Section 3.6 of the EA.

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

## Appendix B – Responses to Public Comments

### Comment 117: Sierra Club (continued)

#### Comment

##### 3.3.2.2 Alternative 1

##### **Construction Impacts**

"Construction of these two projects would not disturb marine waters, groundwater, surface waters, or wetlands.

"Use of the adjacent Construction Staging Area would be managed with appropriate conservation measures to reduce any temporary risk of increases in runoff and pollution."

"Application of conservation measures described in Section 2.3, along with the additional NPDES permit conditions and LID site design features, minimize runoff and prevent or minimize the pollutants and sediment conveyed by surface runoff, ensuring that adverse impacts to wetlands and surface waters are less than significant."

##### **Operational Impacts**

"Following construction, all storm water runoff from operations would be managed by existing on-site storm drainage infrastructure."

"...all new facilities would be constructed with LID elements and appropriate conservation measures to maintain storm water discharge to pre-development hydrologic conditions and the storm water pollution control measures would comply with the installation NPDES MS4 permit. As such, this small increase in impervious surface consisting of activities presently found on MCAS Kaneohe Bay, results in less than significant increases in the amount and type of storm water flow going into Kaneohe Bay from current conditions."

##### 3.5.2 Environmental Consequences

##### 3.5.2.2 Alternative 1

##### *Construction - Water*

"With regards to water quality, construction activities would comply with NPDES permit requirements under the existing Storm Water Management Plan thereby minimizing impacts to water quality in the region of influence."

"Given the absence of new water attractions and preservation of existing water resources and water quality during construction, Alternative 1 construction would have less than significant impacts to water resources used by birds and other wildlife."

##### *Operation Impacts - Water*

"Alternative 1 operations would have less than significant impacts to water resources used by birds and mammalian species."

#### Response to Comment

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

**Appendix B – Responses to Public Comments**

**Comment 117: Sierra Club (continued)**

**Comment**

**Table 3-10 Summary of Potential Impacts**

"Less than significant impacts to groundwater, surface water, wetlands, and floodplains."

**4.4 Cumulative Impact Analysis**

**Water Resources**

"All projects would include appropriate storm water quality and LID features similar to the proposed action to reduce the potential for off-site transport of pollutants. While additional increases in impervious surfaces is expected, the location of future projects within the highly developed base would result in only minor increases in storm water runoff, which would be managed in accordance with the SWPPP for industrial activities, as required by the NPDES General Permit Waste Discharge Requirements for Discharges of Storm Water Associated with the Industrial General Permit. No jurisdictional wetlands within the region of influence would be impacted. Therefore, implementation of the proposed action would not result in significant cumulative water quality impacts within the region of influence."

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We look forward to seeing a revised EA with additional clarification regarding the discrepancies and omissions we have indicated herein.

Respectfully,

**Sierra Club, O'ahu Group**

**Response to Comment**

## Appendix B – Responses to Public Comments

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### Comment 118

#### Comment

**From:** [Paul's Email](#)  
**To:** [NFPAC-Receive](#)  
**Subject:** [Non-DoD Source] Expansion of MCB  
**Date:** Wednesday, September 21, 2022 3:25:10 PM

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Aloha,  
As an archaeologist with research experience on Mokapu Peninsula, I am opposed to the expansion of the base, as well as to the use of drones for future use.  
Sincerely, Paul Brennan, Ph.D.

Sent from my iPad

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

### Comment 119

#### Comment

**From:** [Danielle Espiritu](#)  
**To:** [NFPAC-Recative](#)  
**Subject:** [Non-DoD Source] Comments on "MCB Home Basing EA"  
**Date:** Wednesday, September 21, 2022 2:58:46 AM

Aloha,

Mahalo for the opportunity to provide comments on the draft Environmental Assessment of the proposed construction at Mōkapu (U.S. Marine Corps Base at Kaneohe Bay). I oppose the proposed basing of unmanned aerial vehicle squadrons and marine aerial refueler transport squadron because the MCB has proven to be poor stewards of the land and water. There have been multiple cases of contamination of the soil by pesticides as well as fecal bacteria being dumped into the surrounding bay.

It is negligent and inappropriate to consider this construction as "is expected to affect cultural resources." (DEA 3.4.2) It is harmful to further desecrate sacred heiau and burial sites that exist at Mōkapu. Additionally the proposed weapons to be housed at Mōkapu are dangerous as 90% of these U.S. Reaper drones have killed innocent civilians thus far.

I also oppose bringing over 650 additional military personnel along with their families to O'ahu. This will further exacerbate both our water and housing crises. We as an island are needing to reduce our water consumption by 10%. Therefore, it is not prudent to bring additional members during this time.

Mahalo,

Danielle Espiritu

#### Response to Comment

Thank you for your comment.

Existing archaeological resources are described in Section 3.4.1.2. Impacts are described in Section 3.4.2.2. Although the potential for disturbance to intact archaeological resources is low, the analysis includes processes for inadvertent discovery of iwi.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Although the proposed action involves an increase in personnel, the recently completed deactivation and divestment actions combined with the proposed action are anticipated to result in a net reduction of approximately 165 personnel (and their dependents) at the base below levels supported by MCB Hawaii Kaneohe Bay and the surrounding community over the last decade. Consequently, on-base housing and school capacity would be sufficient to accommodate the new personnel. It is anticipated that the ratio of on-base to off-base housing would remain consistent. Given the overall reduction in personnel, the proposed action would result in negligible changes, if any, to populations outside the base, with similarly negligible corresponding impacts to employment or industry characteristics; demand for schools, housing, and recreational facilities; and changes to the demographic, economic, or fiscal conditions of Kailua, Kaneohe, or the County of Honolulu.

## Appendix B – Responses to Public Comments

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### Comment 120

#### Comment

**From:** [anne@nrbh@hawaii.rr.com](mailto:anne@nrbh@hawaii.rr.com)  
**To:** [NEPAC-Reactive](#)  
**Subject:** [Non-DoD Source] drone weapons  
**Date:** Wednesday, September 21, 2022 1:05:49 PM

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Dear Navy,

Please do not bring the squadron of MQ-9 reaper drones to Kaneohe, Hawaii. Don't use them at all. Artificial Intelligence is fatally flawed in that there is no opportunity for human ethics, conscience, compassion, judgment and reasoning to weigh into a decision to act (or not act). Isn't it enough that you are poisoning our water at Red Hill? We are now convinced the Navy cares not one iota for the people of Hawaii.

Mahalo for your attention.

Anne Miller

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## Appendix B – Responses to Public Comments

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### Comment 121

#### Comment

**From:** [Louise South](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Expansion at Kaneohe Marine Corps Base  
**Date:** Wednesday, September 21, 2022 10:19:06 AM

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Aloha kakou,  
Please look with discerning eyes at this expansion, particularly to how it will affect the water in this area. Please safeguard this, our precious land, and those of us who live here for generations.

Sincerely,  
Louise South  
(808)249-4065

Sent from my iPhone

#### Response to Comment

Thank you for your comment.

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

**Appendix B – Responses to Public Comments**

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**Comment 122**

**Comment**

**From:** [Kim A. Tomev](#)  
**To:** [NEPAC-Receive](#)  
**Cc:** [ehiltonmd@gmail.com](#); [dsurf@hawaii.rr.com](#); [moradke@gmail.com](#)  
**Subject:** [Non-DoD Source] Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Squadron and KC-130J Marine Aerial Refueler Transport at Marine Corps Base Hawaii Kaneohe Oahu, Hawaii  
**Date:** Wednesday, September 21, 2022 1:26:45 PM  
**Attachments:** [9.20.22\\_EA Comment Letter.pdf](#)

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Attached please find my comment letter to the Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Squadron and KC-130J Marine Aerial Refueler Transport at Marine Corps Base Hawaii Kaneohe Oahu, Hawaii

**Response to Comment**

Thank you for your comment.

## Appendix B – Responses to Public Comments

### Comment 122 (continued)

#### Comment

Kim A. Tomey  
45-551 Awapapa Place  
Kāne'ohe, Hawaii 96744  
[kimtomey@aol.com](mailto:kimtomey@aol.com)

Sept. 20, 2022  
Via email  
NFPAC-Receive@navy.mil

RE: *Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Squadron and KC-130J Marine Aerial Refueler Transport at Marine Corps Base Hawaii Kaneohe Oahu, Hawaii*

I would like to offer the following comments regarding the *Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Squadron and KC-130J Marine Aerial Refueler and Transport at Marine Corps Base Hawaii Kaneohe Bay Oahu, Hawaii* dated August 2022 (the "EA"). The MQ-9 and KC-130J are sometimes referred to herein as the "Reaper Drone" and the "Super Hercules," respectively, and Marine Corps Base Hawaii is sometimes referred to as "MCBH" or the "Base."

I am an Oahu native, a long-time resident of Kāne'ohe, and a member of the Executive Board of the Windward Coalition. I want to acknowledge MCBH's community outreach efforts and its valuable contribution to Kāne'ohe's cultural diversity, economy and recreational opportunities. The Marines are an integral and respected member of the windward community. I also want to express my sincere gratitude to our men and women in uniform for keeping our country safe.

My comments are intended in the spirit with which they were solicited by the EA and should not be construed as critical of the Navy, the Marines or the military in general. Rather, like the EA itself, their purpose is to facilitate an understanding of the potential impacts that the basing of the Reaper Drone and Super Hercules squadrons (the "Proposed Action") will have on noise, air quality, water resources, cultural resources, biological resources, public health and safety and transportation. For the reasons set forth below, I have concluded that the EA simply does not provide enough accurate information to permit a Finding of No Significant Impact. **Therefore, in my opinion, an Environmental Impact Statement ("EIS") is necessary.** An EIS need not be a death knell for the Proposed Action but a starting point for future collaboration between MCBH and the windward community.

Of particular concern to me is the EA's incomplete noise model which, in turn, distorts its assessment of all the environmental resources reviewed. **The noise model is faulty in that it does not represent a complete map of all the noise generated by MCBH's aircraft operations.** Only noise produced on Runway 4, and possibly one helipad near Green Field, appear to be mapped. Additional flaws in the noise model include its failure to address the acoustical impacts of the geography surrounding MCBH (including the amphitheater-like Kō'olau and the waters of Kāne'ohe Bay itself) as well as the omission of any *meaningful* metrics for the measurement of sound that makes sense to the general public.

The EA states:

Noise is unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment. Noise may be intermittent or continuous, steady or impulsive. It may also be stationary or transient. Stationary sources are normally related to specific land uses, e.g., an amusement park or industrial plant. *Transient* noise sources move through the environment, either along relatively established paths (e.g., highways, railroads, and aircraft flight tracks around airports)

1 | Page

#### Response to Comment

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

The average noise contours showed in Figures 3-1 and 3-2 do not reflect the geographic area of aircraft operations included in the noise modeling effort. Noise modeling for the EA includes all aircraft operations for all existing and proposed aircraft types in the vicinity of MCB Hawaii Kaneohe Bay. There is a higher concentration of aircraft operations near the airfield because it is the primary runway for the air station, so average noise levels there are higher than elsewhere. However, all sources (including runups at Bravo Ramp, taxiing aircraft, and other operations) were considered in the model.

The noise model accounts for topography, including the location, size, and configuration of the Koolau mountain range. The noise analysis has been updated to clarify it takes the Koolau mountain range into account.

## Appendix B – Responses to Public Comments

### Comment 122 (continued)

#### Comment

EA p. 45. The EA further states, "The predominant noise sources in the project area and region of influence are the aircraft using MCB Hawaii Kaneohe Bay airfield. This includes aircraft flying to and from the runway, taxiing between the runway and the Bravo and Charlie ramps, and use of the helicopter pads and West Field facilities." EA p.46.

Having established that the flight operations at MCBH are in the nature of both stationary transient noises, and that the "predominant noise sources" include "aircraft flying to and from the runway" and helicopter pads, the EA proceeds to apply only the stationary noise model *ignoring aircraft flight paths outside Mokapu Peninsula and omitting helicopter activities from its noise impacts analysis.*<sup>1</sup>



Figure 3-1. Existing Aircraft Noise Contours at MCB Hawaii Kaneohe Bay

As revealed by the noise contour lines above, the EA noise model for current noise centers entirely on operations along Runway 4 and radiates from there in 5 dB increments. See EA Figure 3-1 p. 47. The same is true of the anticipated noise model for the Proposed Action, Figure 3-2. In confining its noise analysis to Runway 4, the EA omits major operational noises that impact an area extending over 20 miles from He'eia in the northwest to Waimanalo in the southeast (the "Windward Impact Area"). The numerous noise complaints from residents of He'eia to Lilipuna, Kane'ohe Bay Drive, Aikahi and Kaimalino attest to the fact that noise from the Base affects a much wider geographical range than depicted by the EA's noise contours map.

Within the Windward Impact Area, is a zone of particularly heightened sound impacts (The "Heightened Impact Zone" or "HI Zone"). On the following page is a map of the Windward Impact Area and the HI Zone with the noise contours from EA Figure 3-2 super-imposed.<sup>2</sup>

<sup>1</sup> Although the EA does not propose to add rotary wing aircraft to the Base inventory, helicopter activity still contributes to the overall noise in the Windward Impact Area and should not be arbitrarily excluded.

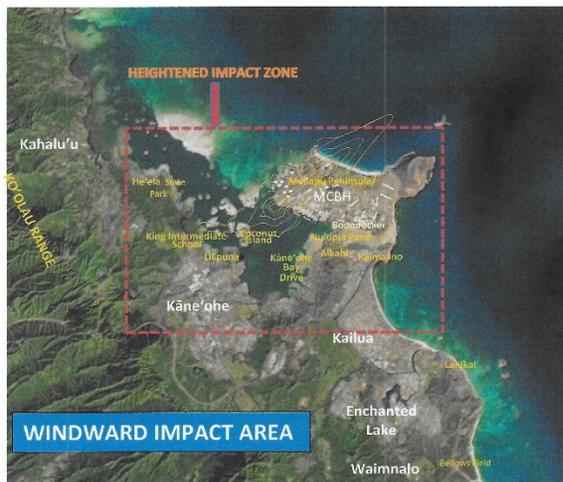
<sup>2</sup> The black dotted outline of Mokapu Peninsula and contours of Runway 4 taken from Figure 3-2 were carefully aligned with their counterparts in the map of the Windward Impact Area to avoid any distortion.

#### Response to Comment

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology "slight increase" means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

Comment 122 (continued)

Comment



Conspicuous by its absence from the noise contours maps is any evidence of maintenance noise mapping which should appear, among other locations, in the Bravo Ramp area where extensive engine run-ups take place. Similarly, with the possible exception of one helipad near the Green Field area, noise mapping of helicopter pads and operations is absent. According to the June 2016 *Final Air Installation Compatible Use Zones (AICUZ) Study Update, Marine Corps Base Hawaii, Kaneohe Bay* (the "AICUZ"), there are thirteen helicopter landing areas on the Base including Landing Zones and Drop Zones. See, AICUZ p.35. If rotary wing aircraft noises were included in the EA's noise maps, Boondocker, the helipad northwest of Westfield and the helipad east of hanger 101, to name only three of those locations, would present very discernable areas of heightened noise impacts. The EA noise contour lines do not include those areas.

Additionally, the noise maps omit air flight path noise from helicopters traveling to and between the Base and Bellows Field (and other locations) and circling Kāne'ohe Bay during sea rescue training. They also exclude flight paths from inbound fixed wing aircraft. *Given the reach of flight and maintenance activities, it is unreasonable to pretend that all of MCBH's operational noises emanate from taxiing, takeoffs and landings along Runway 4.*

Residential neighborhoods within the Windward Impact Area suffer from a variety of aircraft noises including (but not limited to), takeoffs, landings and landing approaches by fixed wing aircraft (He'eia, Aili Shores and Bluffs, King Intermediate School, Lilipuna and Coconut Island), fence line flights and overflights by rotary winged aircraft (Kaimalino, Aikahi, and Kāne'ohe Bay Drive), helicopter noise from simulated sea rescue exercises and aircraft maintenance noise in the form of seemingly unending engine run-ups, often late at night

Response to Comment

The analysis in the EA is not limited to a stationary noise model, but instead accounts for aircraft settings, speed, distance, and altitude, as well as anticipated flight locations. The noise model accounts for the sound levels associated with each aircraft type to accurately characterize average noise levels for existing conditions and the proposed action. Thus, the noise model accounts for the fact that existing MV-22 aircraft currently at the installation are louder than existing CH-53 aircraft or the proposed MQ-9 and KC-130J aircraft.

Table 2-3 (Proposed Aircraft Operations) and the noise analysis (Section 3.1) was updated with additional descriptions of current and proposed aircraft activities for various aircraft types, including helicopters and MV-22s currently stationed at MCB Hawaii Kaneohe Bay. The additional descriptions include the definition of aircraft operations, more detail on approximate flight paths and altitudes, frequency of operations in each time period, a breakdown of aircraft operations by time of day, aircraft maintenance activities, and a presentation of average noise levels at various points in communities surrounding MCB Hawaii Kaneohe Bay. Adding these data inputs, such as maintenance activity of the MV-22 at Bravo Ramp, did not change the noise exposure contours.

Comment 122 (continued)

Comment

(Kāneʻohe Bay Drive, eastern Kāneʻohe Bay rim), and rotary wing aircraft noises associated with training activity (Waimanalo). None of these activities are noise modeled in this EA. Accordingly, what impacts, if any, these operations have on the Windward Impact Area is unknown. However, the following impacts are almost certain: noise over the HI Zone, particularly coastal neighborhoods northwest of Kāneʻohe, will dramatically increase from increased fixed-wing aircraft takeoffs, landings, and landing approaches; re-orienting hangar doors and re-locating the MV-22s to Hanger 103 will direct measurably greater noise towards Kāneʻohe, particularly Kāneʻohe Bay Drive; and stationing KC-130J aircraft along Bravo Ramp will increase run-up and taxiing activity substantially escalating noise impacts along the rim of Kāneʻohe Bay.

The EA maintains the proposed increase in the number of aircraft operations from 28,758 to 37,038 annually is less than significant because it is “less than the 41,512 total annual aircraft operations that were occurring just prior to the 2022 deactivation of the two helicopter squadrons and RQ-21<sup>3</sup> divestment.” EA p. 28, and see Table 2-3 p. 29. This apples-to-oranges comparison ignores the difference between helicopter and fixed wing aircraft operations which differentially affect certain areas of the HI Zone. In this case, the decrease in aircraft operations is almost entirely due to the proposed reduction in rotary wing aircraft while the increase is due entirely to the proposed addition of the Reaper Drone and Super Hercules, both fixed wing aircraft. As a result, the operational impacts will be concentrated over Kāneʻohe’s northwestern coastal neighborhoods an area already fraught with complaints.

Fixed wing transport and patrol aircraft (e.g., C-17s, C-40s, P-8As and now, KC130Js) landing at MCBH approach the Koʻolau from the north and northeast. *In theory*, before reaching the coastline, pilots execute a hard port-side turn so as to orient the aircraft northeastward into the wind as they gradually descend towards the Base. But many pilots are more concerned with the mechanics of landing their aircraft than they are about avoiding the residential coastline. The wide turning radius required by such U-turns results in aircraft penetrating the shoreline in the general area of Heʻeia and then exiting over Aliʻi Bluffs, Aliʻi Shores, King Intermediate School, Liliupuna and/or Coconut Island. Reports from King Intermediate School indicate that the noise of landing aircraft is so loud that all classroom speech is obliterated.

Research proves that aircraft noise levels negatively impact learning. See, e.g., Eagan et al. [Relation between aircraft noise reduction in schools and standardized test scores](https://www.icben.org/2008/PDFs/Eagan_et_al.pdf). (2008) [www.icben.org/2008/PDFs/Eagan\\_et\\_al.pdf](https://www.icben.org/2008/PDFs/Eagan_et_al.pdf). Given this reality, it is difficult to imagine how the increase in flight operations over Kāneʻohe’s largest middle school could be anything less than significant.

The EA reveals the recent home basing of two P-8A Poseidon Maritime Surveillance Aircraft and two Boeing C-40 Clippers and their combined 550 annual operations.<sup>4</sup> See, EA Table 2-3 at 29 replicated in relevant part on next page). Whether accomplished via a Categorical Exclusion or other legitimate means, the lack of prior notice regarding the addition of these aircraft creates the appearance of being a surreptitious end-run around the Record of Decision on the *Final Supplemental Environmental Impact Statement for the Introduction of P-8A Multi-Mission Maritime Aircraft into the U.S. Navy Fleet* (Navy April 2014) which rejected

<sup>3</sup> The RQ-21 Blackjack drone is not listed in Table 2-3. Therefore, we must assume that it does not contribute to existing aircraft operations.

<sup>4</sup> These aircraft were not listed in MCBH’s 2012 EIS wherein it described “Aircraft Stationed at MCAS Kaneohe Bay (2009).” See, *Final Environmental Impact Statement for the Basing of MV-22 and H-1A Aircraft in Support of III MEF Elements in Hawaii*, Table 1-2 at 65. Nor were the C-40s disclosed as anything other than “transient” aircraft in the AICUZ. See, AICUZ pp. 45, 52 & 54. As for the P-8As, MCBH proposed to add them in 2016. AICUZ p. 11. However, community opposition led to the P-8As being stationed at Naval Air Station Whidbey Island.

Response to Comment

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

Historical context was included for comparative purposes in Section 3.1 (Noise) of the EA but was not the sole factor in assessing the significance of noise impacts. Noise modeling considers a variety of factors, such as noise characteristics of individual aircraft types (including helicopters and fixed-wing aircraft), the location and type of ground-based aircraft engine noise, flight tracks, altitude, power settings, and the number of aircraft operations. The conclusion of the noise analysis is that no residential areas would be exposed to noise above 65 dBA DNL because of the proposed action, and therefore there is a less than significant noise impact. A comparison to historic aircraft operations (prior to May 2022) is provided only as a reference point to explain that the level of noise resulting from the proposed action would be an overall decrease in noise as compared to what the public experienced from the installation prior to May 2022. This is due the historically higher number of operations and aircraft types that are louder than the proposed MQ-9 and KC-130J aircraft.

**Appendix B – Responses to Public Comments**

**Comment 122 (continued)**

**Comment**

MCBH for home basing of the P-8A. Regardless, categorizing the P-8As and C-40s as “existing” aircraft operations is misleading to the extent it implies the aircraft have been historically present and that their environmental impact has passed muster. Since that is not the case, the P-8As and C-40s and their combined 550 flight operations should be included in the Proposed Action for purposes of the current environmental review.

Table 2-3 Proposed Aircraft Operations at MCB Hawaii Kaneohe Bay

Existing (Based)	Existing	Change	Total
MV-22	14,234	0	14,234
MH-60	7,360	0	7,360
P-8A	284	0	284
C-40	266	0	266

The EA also envisions a significant increase in aircraft operations along Bravo Ramp, located along the southern shore of Mokapu Peninsula adjacent to Kāne’ohe Bay. This increased use is indicated by the intended movement of the current squadron of MV-22 Ospreys from Inland Hangar 6886 to bay front Hangar 103. See, e.g., EA Figure 2-1 p. 22. Though not definitively stated, the EA clearly implies that hangars 101-104 will be modified by re-orienting their bay doors towards Bravo Ramp for easier taxiway egress and ingress. EA p. 23 (“orientation of their bay doors away from the main taxiways makes them inefficient for current operations.”) By removing existing barrier walls, the new orientation will also increase the transmission of aircraft noise towards Kāne’ohe’s residents.

Additionally, it appears that Bravo Ramp will be used for parking the Super Hercules. See, EA Figure 2-4 p. 35. With their tails aimed directly at Kāne’ohe, every time these large turbo-prop aircraft start their engines for any reason, more noise and jet fuel exhaust (composed of carbon dioxide, oxides of sulfur and nitrogen, unburned fuel, soot and metal particulates) will be released directly towards the Kāne’ohe community, particularly residents of Kāne’ohe Bay Drive. And, with the relocation of the MV-22 Osprey to Hangar 103, the noise footprint from Runway 4 will reach further south towards Kāne’ohe since it is unlikely that the Ospreys will want to access Runway 4 by either Taxiway E or F (both located more than halfway down the runway) as they do now. Instead, Osprey pilots will more likely takeoff from the threshold of Runway 4, blasting their noise directly toward Coconut Island and western Kāne’ohe without any structures in between to redirect or muffle the sound.

Residents fronting Kāne’ohe Bay to the southeast will be in for an unpleasant increase in engine run-up noise. It is not unusual for that particularly irritating noise to grind on for hours, not only after dark but often after midnight when the glassy waters of Kāne’ohe Bay amplify sound. In 2018, MCBH estimated that 70% of the Marine Light/Attack Helicopter Squadron’s maintenance run-ups would take place on the southeastern end of Bravo Ramp between the hours of 2200 and 0700. See, AICUZ Table 3-4 p. 73 entitled “MCB Baseline Annual Engine Maintenance Run-up Events.” The AICUZ also included a more complete noise contour map that modeled Bravo Ramp’s maintenance noise (see, the “Bravo Ramp Bulge” in AICUZ Figure ES-1 p. 13 and replicated on the following page), along with a map detailing the maintenance area locations, and multiple detailed flight maps. Unfortunately, these more robust and informational maps were not included in this EA.

The failure to include helicopter operations, run-up noises and flight paths in its noise model skews the EA’s analysis of impacts on other environmental resources, particularly biological resources. Chapter 3 of the EA on Affected Environment and Environmental Consequences, coins the phrase “region of influence,” stating, “Each section in this chapter defines a region of influence for each resource [air quality, water resources, cultural resources, biological resources, public health and safety, and transportation].” EA p. 43.

**Response to Comment**

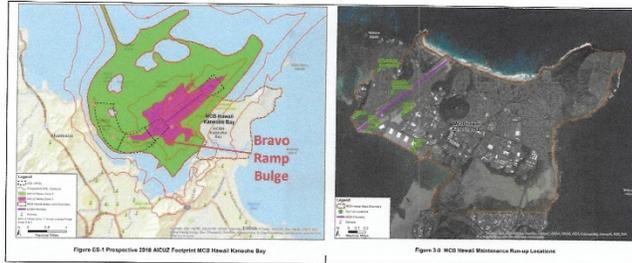
Although fixed wing and rotary-wing/tilt-rotor aircraft are operationally and acoustically different, flight tracks and noise profiles for all aircraft are well understood. Noise modeling accounts for these acoustic and operational differences to enable meaningful comparisons between the platforms. The baseline for aircraft operations that was incorporated into the noise modeling reflects existing conditions. As shown at Table 2-2, “existing conditions” reflect the departure of the AH-1W and CH-53E helicopters.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

Appendix B – Responses to Public Comments

Comment 122 (continued)

Comment



AICUZ Figure ES-1 p. 13 and Figures 3-1 to 3-8 pp. 55-69.

With respect to biological resources, the region of influence is defined as:

[T]he project area as well as the regions near the project area boundaries that may experience noise, visual, other physical, or indirect impacts. The region of influence for vegetation consists of only the project area since direct and indirect effects would be limited to that area. **The region of influence for wildlife is larger because of the noise footprint associated with current and proposed aircraft operations.**<sup>5</sup>

EA p. 77 (emphasis added). Despite explaining the larger noise footprint for wildlife impacts, the EA's impact analyses of the Green Sea Turtle, Monk Seal, Monarch Butterfly, Hawaiian Hoary Bat and the Hawaiian Short-Eared Owl are almost entirely limited to the four corners of Mokapu Peninsula.

- **Green Sea Turtle.** "The green turtle (*Chelonia mydas*) is listed as threatened under the Endangered Species Act [and Hawaii Revised Statutes (Chapter 195D) and Hawaii Administrative Rules (13-124)] and is found throughout the main Hawaiian Islands. Historically, green sea turtles were abundant and nested throughout the entire Hawaiian Archipelago."<sup>6</sup> These non-aggressive creatures inhabit all of Kāne'ohe Bay and have been known to migrate there in the hundreds. Nesting turtles have been documented along the Fort Hase and North Beach Shorelines of the Base. EA p. 83. Yet **the EA provides no evidence of any scientific study on the impacts of noise or water pollution<sup>7</sup> on this wildlife species.** Instead, the EA offers only anecdotal evidence described in the EA as a "personal communication" from L. Bookless (who is senior natural resources manager at Marine Corps Base Hawaii). EA p. 89. The communication itself is not attached nor linked in the EA to permit review of its scientific nature and credibility. In sum, the impact analysis on these turtles is thin at best and consists largely of conclusory statements like the following: "As described in [non-existing] Section 3.1.3.2,<sup>7</sup> the change in operational noise over marine waters of Kaneohe Bay would be minimal (2–3 dB), so the minor increase in over-water acreage for any potential noise impacts to marine

<sup>5</sup> Hawaii Marine Animal Response, Hawaii's Sea Turtles. (2020). [Hawaii's Sea Turtles - Hawaii Marine Animal Response \(h-mar.org\)](https://www.marine.org/en-us/hawaii/sea-turtles)

<sup>6</sup> **Sewage spills originating from the Base into the ocean waters north of Mokapu Peninsula should not be overlooked as an environmental impact as they have happened with enough volume and frequency to constitute a potential risk to marine life.** There have been at least four reported sewage leaks in the past eight years: Feb. 2022, Oct. 2021, Aug. 2017 and Oct. 2014.

<sup>7</sup> This must be a typo as there is no Section 3.1.3.2.

Response to Comment

## Appendix B – Responses to Public Comments

### Comment 122 (continued)

#### Comment

species would be less than significant." The meagre and conclusory nature of this review merits an in-depth look by way of an EIS.

- Monk Seal. The activities of this endangered species stretch far beyond the occasional haul-outs on Mokapu's beaches. The Monk Seal frequents the waters in and around the Windward Impact Area. Yet the EA only addresses impacts on landed seals at Mokapu Peninsula ignoring the rest of the Windward Impact Area. And, as with its treatment of the noise impacts on Green Sea Turtles, the EA provides nothing in the way of scientific evidence yet concludes that the environmental impact will be minimal. Due to its endangered nature, a more thorough EIS review should be conducted.

- Monarch Butterfly. Here again, the EA limits its impacts analysis on butterflies appearing on Mokapu Peninsula. While the Monarch Butterfly may not occupy the Peninsula itself, they can be found within the Windward Impact Area. A more in-depth environmental review is warranted due to their endangered classification.

- Hawaiian Hoary Bat. "The endangered Hawaiian hoary bat ('ope'ape'a, *Lasiurus cinereus semotus*) is present in the region of influence, but it has not been documented within the project area." EA p. 82. The EA acknowledges the presence of the Hawaiian Hoary Bat in the general Kāne'ohe area and that these mammals are sensitive to noise. EA p. 88. Yet, it provides zero analysis of noise impacts on bats living in the "region of influence." Interestingly, the Voigt study cited by the EA focuses on the fact that these animals tend to hunt in the troposphere<sup>8</sup> where conservation measures are lacking (and aircraft fly). The EA's peculiar admission that aircraft noise has already "discouraged" (EA p. 88) these animals from occupying the Peninsula hardly makes for a winning argument for ignoring those bats existing in the Windward Impact Area.

Finally, two other defects in the EA warrant some mention. The first is the EA's failure to consider the acoustical impacts of Kāne'ohe's geography. Without marginalizing the sound amplification concerns of Kāne'ohe residents living near the Ko'olau, in my personal experience, the most significant acoustical impact is created by the waters of Kāne'ohe Bay itself. And Kāne'ohe residents who live on or near the bay's rim suffer it the most. Water cools the air above its surface, which then slows down the sound waves near the surface. Kurtus, Ron, *Sound Seems Amplified Over Water*, (2022).<sup>9</sup> The result is refraction or bending of the sound waves, such that more sound reaches the hearer. *Ibid*. If the water is calm, sound waves skimming the surface of the water can add to the amplification effect. *Ibid*. The waters of eastern Kāne'ohe Bay are almost invariably calm, even glassy, after dark when aircraft engine run-ups frequently occur. **Kāne'ohe Bay Drive residents along the shoreline more than a mile from the Base have reported hearing normal conversation taking place on Bravo Ramp.** The effect of nighttime run-up noise under such conditions can only be imagined since, again neither this EA or any published study by the Navy has ever measured it; yet one more reason why an EIS is necessary.

Second, although the Day-Night Average Sound Level ("DNL") is widely accepted by sound experts and engineers and it is the aircraft noise metric preferred by the military, even with the introduction of the Advanced Acoustical Model ("AAM"),<sup>10</sup> **DNL is a useless metric for describing aircraft noise to the average citizen.**

<sup>8</sup> The troposphere "extends from the earth's surface to the bottom of the stratosphere at about 7 miles (11 kilometers) high." Meriam Webster Dictionary (2022), <https://www.merriam-webster.com/dictionary/troposphere>.

<sup>9</sup> [Sound Seems Amplified Over Water by Ron Kurtus - Physics Lessons: School for Champions \(school-for-champions.com\)](https://www.school-for-champions.com/physics/sound-seems-amplified-over-water-by-ron-kurtus-physics-lessons-school-for-champions.com)

<sup>10</sup> Although the DoD has stated that it intends to adopt the AAM, it is unclear whether it has yet formally done so.

#### Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 122 (continued)**

**Comment**

While the DNL noise descriptor is the most commonly used tool for analyzing noise generated at an air installation and is used as the metric for AICUZ study purposes, the DOD has been developing additional metrics (and analysis techniques) particularly in assessing noise exposure from a noise flight event. These supplemental metrics and analysis tools provide additional noise exposure information such as Sound Exposure Level (SEL) and Maximum Sound Level (Lmax) and they can provide a direct comparison of the relative intrusiveness among single noise events of different intensities and durations of aircraft overflights.

ACUIZ p. 84. Accordingly, there is no reason why alternate metrics such as the AAM, SEL or Lmax could not also have been provided by the EA especially if its goals include clarity and transparency. Unless the purpose is to discourage citizen review, the EA's sole reliance on the DNL noise model is an unreasonable means of informing the public. It's a bit like trying to quantify and average the smells in a garbage dump.

Skepticism among some members of the windward community runs high. Some are speculating that the Proposed Action may be about more than simply bringing in a couple of aircraft squadrons. Residents have heard hints about something called "Project 2001" that would involve the use of the Categorical Exclusion to bring in a new squadron of C-40s. People query whether the EA is really just an excuse to build the necessary infrastructure to qualify for a Categorical Exclusion in the future and not something that is necessary for adding aircraft to the Base inventory. Perhaps this is another reason why an EIS should be undertaken: to answer that question and many others. Since the EIS process requires community scoping meetings, representatives from the Base will be able to more clearly explain the scope of the Proposed Action and plans for mitigating any environmental impacts. Furthermore, face-to-face communication fosters trust and builds bridges between the community and the Base.

I understand the zeal of our military in crafting the EA. But we cannot lose sight of the fact that Kāne'ohe is a genuinely unique treasure beloved by its residents. Without some tangible undertaking to address community noise concerns, e.g. re-positioning of ramps and hangars, or installation of effective sound barriers, or even actual noise testing, the cycle of community opposition to new Base operations is destined to continue.

Respectfully,

  
Kim A. Tomey  
45-551 Awapapa Place  
Kāne'ohe, HI 96844  
kimtomey@aol.com

cc: Mo Radke, Kāne'ohe Neighborhood Board  
Terri Needels, Windward Coalition  
Eileen Hilton, Windward Coalition

**Response to Comment**

## Appendix B – Responses to Public Comments

### Comment 123

#### Comment

**From:** [rdj@hawaii.cr.com](mailto:rdj@hawaii.cr.com)  
**To:** [NFPAC-Reactive](#)  
**Subject:** [Non-DoD Source] WE OPPOSE Military Aircraft - NOISE is UNBEARABLE! ... FULL EIS NEEDED!  
**Date:** Wednesday, September 21, 2022 1:05:01 AM

To Military Commander, STATE Leaders ~  
A full E.I.S. is Mandatory at this time!

Our families of Windward Oahu have lived on these islands PRIOR TO the existence of ANY Military presence within our Homelands!!

We DO NOT Support plans to bring in new aircraft and DEMAND REMOVAL of current aircraft! The NOISE is unbearable and has been driving our Community INSANE for decades!!

#### THE AIRCRAFT NOISE:

- \* Drowns out breakfast, lunch & dinner conversation!!
- \* Prevents Parent-Child conversation during Homework!!
- \* Destroys any conversation !
- \* Eliminates naptime for SENIORS and CHILDREN !
- \* Keeps us ALL from falling asleep !!
- \* WAKENS US from our sleep !!

#### THE AIRCRAFT NOISE IS DESTROYING THE HEALTH AND WELL-BEING OF OUR FAMILIES !

We are unable to peacefully exist in this place we've called "Home" SINCE BEFORE you moved your personnel and operations onshore. This is no longer sustainable!

Furthermore, WATER IS OUR LIFE!

And with any aircraft presence, CHEMICALS (ie., degreasers) will be poured into our Island's soil and precious aquifer ... and it's RED HILL all over again!!

WE REFUSE TO FACE ANOTHER ENVIRONMENTAL CATASTROPHY IN OUR HOMELAND!!

A COMPLETE E.I.S. IS NECESSARY before moving forward with the proposed plan.

Mahalo,  
Kailua 'ohana at large

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century, through a variety of mission and aircraft changes. As military aviation changes and evolves, noise impact to the local community also changes. We conduct community outreach about noise impacts to the local community, which includes participation in neighborhood board meetings. We appreciate the longstanding support of the community and make every effort to implement operational restrictions to reduce noise impacts to be a good neighbor. Our ability to adjust operations is limited by the need to accomplish the military aviation mission, and aircraft noise is perceptible in the local community. The proposed action does not increase the DNL noise contour over the surrounding residential areas, which are below 65 dBA DNL (see Figure 3-2). Most people are exposed to daily sound levels of 50 to 55 DNL or higher, and studies demonstrate that approximately 87% of the population are not annoyed by outdoor sound levels below 65 dBA DNL (FICUN, 1980). Therefore, the 65-dBA DNL contour is used to help determine compatibility of military aircraft operations with local land use.

**Comment 123 (continued)**

**Comment**

(see above)

**Response to Comment**

Aircraft operations can be heard in the local community and cause short-term disruptions to daily activities. Noise complaints do not correlate to noise impacts but are dependent on a multitude of other factors. An extensive amount of research has been conducted regarding noise effects including general annoyance, disruption, speech interference, sleep disturbance, noise-induced hearing impairment, nonauditory health effects, performance effects, noise effects on children, effects on domestic animals and wildlife, and effects on property values, structures, terrain, and archaeological sites. The primary effect of aircraft noise on exposed communities is annoyance, defined by USEPA as any negative subjective reaction on the part of an individual or group. There is a consistent relationship between DNL (the noise metric used in the impact analysis) and the level of community annoyance (Federal Interagency Committee on Noise 1992). The FAA has adopted 65 dBA DNL as the relevant threshold for potential land use incompatibility. Anything less than 65 dBA DNL is considered compatible with all residential land uses, including consideration of health effects outlined above. This metric has been proven accurate in a variety of community settings and is used for aircraft operations noise analyses nationwide. The terminology “slight increase” means that the change in average noise levels would not be noticeable to the general public. Regarding the referenced GAO report discussing the limitations of the 65-dBA DNL contour, supplemental noise metrics have limited value in showing the impact of noise on local communities. The 65-dBA DNL contour is not exceeded anywhere off base except for the northern edge of Coconut Island. Section 3.1 was expanded to provide more details about these conclusions.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

**Comment 123 (continued)**

**Comment**

(see above)

**Response to Comment**

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

Storm water design details are not available until the design phase of the project. The water quality analysis assumes integration of sufficient project design, erosion control features, storm water design, and compliance with storm water management procedures to avoid the potential for adverse water quality impacts to nearby waters. Project design features will address the changes in amount, type, and location of impervious surfaces associated with the proposed action. This may include dedicated valving, meters, control valves, and instrumentation at the proposed Aircraft Direct Refueling System location, designed to capture and contain any potential fuel spills or leaks, thereby preventing any potential spill from entering the storm water system. In addition, Low Impact Development (LID) techniques such as bioretention, vegetated swales, and vegetated filter strips would be installed to meet Clean Water Act (CWA) permit requirements for the management of storm water. In accordance with UFC 3-460-01, spill prevention and containment systems would be installed.

**Comment 123 (continued)**

**Comment**

(see above)

**Response to Comment**

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 124

#### Comment

**From:** [Kristen Young](#)  
**To:** [NFPAC-Recieve](#)  
**Subject:** [Non-DoD Source] Comment on home basing KC-130J and MQ-9 aircraft at Kaneohe MCB  
**Date:** Wednesday, September 21, 2022 2:47:10 PM

Aloha,

My name is Kristen Young and I was born and raised on the island of O'ahu, 20% of which is occupied by the U.S. military. Recently I've witnessed some of the adverse impacts that the military's presence has had on our island: water contamination originating from the Red Hill fuel storage facility, unauthorized wastewater discharge from the Kaneohe MCB. While horrifying, it is not a surprise that the presence of *armed forces* comes with harm and risk to the surrounding environment and people.

I read some of the Draft EA. It was unclear to me what the MQ-9 actually does. According to US Military News, the [MQ-9 Reaper is the most dangerous military drone on Earth](#), I have grave concerns about such equipment being housed on our tiny islands, especially by an institution that has not demonstrated proper care of their facilities. Though the proposed actions supposedly "would be confined to MCB Hawaii Kaneohe Bay," we cannot pretend that the rest of the island is somehow separate and that there won't be ripple effects in the environment and community.

The summary of potential impacts states that there will be "less than significant impacts" to noise, air quality, resources (water, cultural, biological), public health and safety, and transportation. While this vagueness can seem harmless, I cannot believe that such equipment/facilities will have a "less than significant" impact on its surroundings. The "less than significant impacts" of the copious military installations and facilities on the islands and around the world add up.

I cannot, in good conscience, support the home basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and the KC-130J Marine Aerial Refueler Transport Squadron at the Marine Corps Base in Kaneohe Bay, O'ahu, Hawaii. I do not expect my comments will change anything, nor do I expect the military to understand that valuing and protecting the environment is the most important means of ensuring safety and security, but I do appreciate this opportunity to share my concerns on this matter.

Thank you,

Kristen Young  
Honolulu resident

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay takes its responsibilities as good stewards of the environment very seriously and is committed to ensuring that all individuals who live or work near Marine Corps installations are protected from environmental contaminants. Comprehensive environmental instructions detailing procedures to meet federal, state, and local requirements, including the safe handling of hazardous materials, govern our activities on the installations. We conduct routine training and drills to prepare for natural disasters and emergencies.

The Marine Corps understands the heightened emphasis on managing water resources (surface water, ground water, wetlands, and nearshore waters) and preventing contamination. The Marine Corps is committed to the storm water design and compliance with spill prevention, spill containment/cleanup, and conservation measures procedures documented in the EA.

Spill prevention and countermeasures are in place to minimize the potential for fuel contamination on site and in Kaneohe Bay. MCB Hawaii has staff and resources dedicated to support spill prevention and response, including 24-hour per day spill response professionals. This includes regular training for staff to meet these important requirements and responsibilities. In addition, MCB Hawaii recently completed an Integrated Contingency Plan that integrates site-specific Pollution Prevention Plans for all industrial sites including activities along the flightline. This will be updated to include the proposed action.

Comment 124 (continued)

Comment

(see above)

Response to Comment

There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

The EA presents an objective, unbiased assessment of existing conditions, direct and indirect impacts, and cumulative impacts.

An EA is prepared to assess impacts and determine whether there is a significant impact and, therefore, the need for an EIS. Just like an EIS, an EA includes a full analysis of impacts and presents the Marine Corps with a disclosure of potential impacts to make a fully informed decision. Also like an EIS, Chapter 2 of the EA focuses on project components and alternatives that meet the purpose and need for the proposed action; other projects that have independent utility and have the possibility to contribute cumulatively to the impacts of the proposed action are addressed in Chapter 4, Cumulative Impacts. As identified in the EA, the application of mitigation and best management practices results in no significant impacts for all resources. Publication of the Draft EA for public comment allows the public to provide input on the proposed action and the analysis presented in the EA.

## Appendix B – Responses to Public Comments

### Comment 125

#### Comment



Esther Kia'aina  
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September 13, 2022

EV21 Project Mgr.  
MCB Hawaii Home Basing EA  
Naval Facilities Engineering Systems Command, Pacific  
258 Makalapa Dr, Ste 100  
Joint Base Pearl Harbor-Hickam, HI 96860-3134

To Whom it May Concern,

I am writing in response to the *Department of Defense, United States Marine Corps publication of a Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii'i, Kane'ohē Bay O'ahu, Hawaii'i* (DEA). While I appreciate the DOD's goal to enhance the airborne and intelligence capabilities of Marine Corps forces and ultimately support the United States Indo-Pacific Command, I have concerns that final mitigation for potential impacts to archaeological and cultural resources is not included in the DEA, that the proposed action will continue to adversely impact the City and County of Honolulu's housing crisis, and that the DEA may underestimate the proposed action's impacts of increased noise to nearby neighborhoods.

#### *Archaeological and Cultural Resources*

I urge the Department of Defense to complete the National Historic Preservation Act (NHPA) Section 106 process prior to completing the National Environmental Policy Act (NEPA) process. As the DEA notes, the Mōkapu Peninsula is well known for its rich archaeological and cultural resources; as many as 3,000 iwi kūpuna have been taken from Mōkapu over time, and there are many archaeological sites across the peninsula, including the 31 documented sites within the proposed Area of Potential Effects boundaries. The DEA itself acknowledges construction projects continue to uncover intact subsurface cultural deposits and that cultural deposits and iwi kūpuna may be uncovered as a part of this project. Moreover, June Cleghorn, senior cultural resources manager for the Marine Corps base on Mōkapu, admitted recently that finding new iwi "has occurred and continues to occur periodically."<sup>1</sup> While I appreciate that archaeological monitoring will serve to mitigate impacts, it has already been determined that adverse effects to historic properties is expected, and there is active discussion on a Memorandum of Agreement (MOA) to resolve adverse effects to historic properties as a part of the Section 106 process.

<sup>1</sup> The Stolen Bones of Hawaii'i, SFGATE, June 5, 2022. Last accessed 09/01/22 at <https://www.sfgate.com/hawaii/article/Native-Hawaiian-graves-dug-up-Mokapu-Hawaii-17217662.php>.

#### Response to Comment

Thank you for your comment.

See responses to comment #106.

## Appendix B – Responses to Public Comments

### Comment 125 (continued)

#### Comment

Accordingly, I urge a pause to the NEPA process so that the final mitigation plans that is being discussed in the anticipated MOA can be incorporated.

#### *Housing*

Despite a reduction in troops that would result from an unrelated deactivation of existing helicopter squadrons and divestment of RQ-21 aircraft at MCBH, I am concerned by the DEA's conclusion that "[n]o additional housing would be needed for the proposed action." The DEA describes that the proposed action would result in an increase of approximately 676 personnel and their dependents and notes that it is anticipated that the squadron personnel and dependents would be housed in on-base housing and off base in the community. While this may be consistent with existing housing practices for military personnel at MCBH, I would encourage the Department of Defense to mitigate impacts to the housing supply in a community with a well-documented housing crisis by incorporating additional on base housing options and adopting policies to incentivize and encourage personnel to stay in on-base housing. While the base itself may experience a reduction in personnel as a result of deactivation and divestment of other unrelated activities, arguably, if using a no-action alternative as a baseline, the reduction in troops may have otherwise had positive impacts on the area's housing supply.

#### *Noise*

Although the DEA notes that the proposed action would result in no perceptible change to humans or wildlife because there would be no growth of the noise contours in populated areas off base, no residential areas would be exposed to noise above 65 DNL, and because the net change would be a decrease in noise as measured against historic aircraft operations, I anticipate nearby neighborhoods to continue to express noise-related concerns if the proposed project is implemented. The people of Kāne'ohe and Kailua have been complaining about noise from operations at MCBH for well over a decade, these complaints were heightened over the last two years, and the DEA is not clear with regards to planned flight paths and noise measurements over these residential communities. The Kailua Neighborhood Board noted these concerns in a motion they adopted on September 1, 2022. Moreover, in comparing the "existing aircraft noise" with the anticipated noise from the proposed action, the DEA uses calendar year 2019 for existing conditions, "to avoid any anomalies from COVID-19 pandemic-related operational levels." As such, the existing conditions do not include the current noise levels after the helicopter squadrons were deactivated earlier this year, and the DEA suggests that the addition of the KC-130J and MQ-9 squadrons to Kāne'ohe would result in only a slight growth in the contours throughout the airfield when compared to the No-Action Alternative. However, the proposal for new squadrons would result in a significant increase in noise if using actual existing conditions as the no-action alternative baseline, as the reduced noise from the recent deactivation and divestment of other squadrons and the most recent attempts by the DOD to address noise complaints may have otherwise had positive noise impacts to nearby residents.

In conclusion, I urge the Department of Defense to consider completing the NHPA Section 106 process prior to completing the NEPA process and incorporating a more accurate and robust mitigation for anticipated adverse effects to historic properties, providing sufficient on-base housing for the proposed personnel, and considering the existing noise conditions to measure the

#### Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 125 (continued)**

**Comment**

noise impacts from the proposed action. I would also encourage review of the Kailua Neighborhood Board's detailed concerns included in its September 1, 2022 motion.

I appreciate your consideration of my concerns.

Sincerely,



Esther Kia'aina  
Honolulu City Council, Vice Chair

**Response to Comment**

## Appendix B – Responses to Public Comments

### Comment 126: Board of Water Supply, City and County of Honolulu

#### Comment

#### BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843  
www.boardofwatersupply.com



September 19, 2022

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair  
KAPUA SPROAT, Vice Chair  
RAY C. SOON  
MAX J. SWORD

NA'ALEHU ANTHONY  
JADE T. BUTAY, Ex-Officio  
DAWN B. SZEWCZYK, P.E., Ex-Officio

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer *EW*

EV21 Project Manager  
Naval Facilities Engineering Systems Command, Pacific  
248 Makalapa Drive, Suite 100  
Joint Base Pearl Harbor-Hickam, Hawaii 96860-3134

Dear EV21 Project Manager:

Subject: Your Letter Dated August 1, 2022 Requesting Comments on the Draft Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay off Mokapu Drive, Tax Map Key: 4-4-008: 001

Thank you for the opportunity to comment on the proposed aircraft squadron home basing project. The Board of Water Supply (BWS) has the following comments:

1. BWS cannot confirm the adequacy of the existing water system to accommodate the proposed development at Kaneohe Marine Corps Base Hawaii (KMCBH) at this time. There is no water demand information about existing or proposed water use in the document.
2. BWS provides potable water for the entire base for domestic, commercial, industrial, irrigation demands and fire protection. Water resources from the Windward Oahu water system are limited and affected by climate change induced drought and regulatory reductions by the State Commission on Water Resource Management (CWRM). See attached BWS letter dated November 22, 2021 to KMCBH and the CWRM Order of June 18, 2021. In response to the resource and regulatory limitations, BWS plans to construct a new pumping station utilizing an existing exploratory well at the Hawaii State Hospital to expand source capacity that would directly benefit KMCBH and the Windward community.
3. The BWS Punaluu index monitoring well is currently in an Alert Low Groundwater Condition due to low rainfall and high-water demand in the Windward water system. A water level trend graph of the Punaluu index well is provided below:

#### Response to Comment

Thank you for your comment.

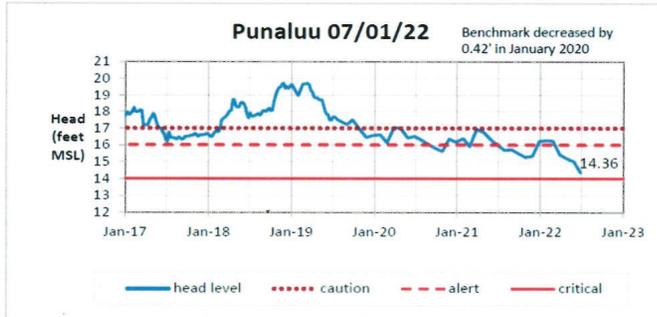
There would be less than significant impacts to drinking water because there are no potable water wells on the base, MCB Hawaii coordinates with the City and County of Honolulu Board of Water Supply regarding drinking water use, and the proposed action would not substantially change water demand on base. Given the minimal increase in impervious surfaces -- less than 5 acres -- the proposed action can be accommodated by current wastewater systems and would not result in any changes to the base wastewater management systems or infrastructure. MCB Hawaii is coordinating with the Board of Water Supply regarding the water usage associated with the proposed action.

**Appendix B – Responses to Public Comments**

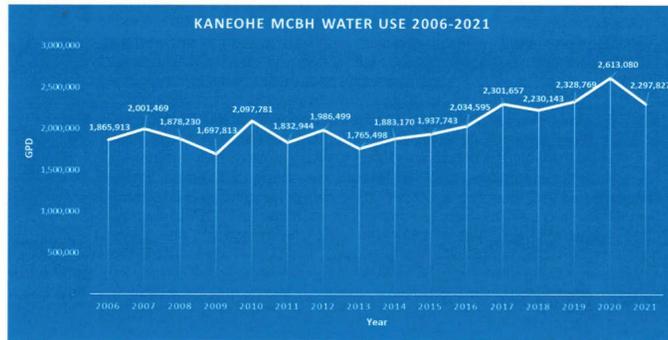
**Comment 126: Board of Water Supply, City and County of Honolulu (continued)**

**Comment**

EV21 Project Manager  
 September 19, 2022  
 Page 2



4. KMCBH average water demand has increased since 2016 from approximately 1.9 million gallons per day (mgd) to 2.3 mgd in 2021 likely due, in large part, to the expansion of irrigation, on-base housing, non-residential development and unmetered water loss in the KMCBH water system. During the summer months, the KMCBH water demand approaches 2.8 mgd which significantly stresses BWS water sources and systems. An annual average water demand trend graph is provided below:



**Response to Comment**

**Appendix B – Responses to Public Comments**

**Comment 126: Board of Water Supply, City and County of Honolulu (continued)**

**Comment**

**Response to Comment**

EV21 Project Manager  
September 19, 2022  
Page 3

5. We understand that the Klipper golf course is being irrigated with potable water until the Department of Health's requirements for resuming R-2 recycled water can be met in February 2023. While we expect potable water use to decrease with the resumption of recycled water use, there is still expansion of development that has and will result in growth in water demand at KMCBH.
6. BWS does not have a development review mechanism to assess growth at KMCBH because the military does not submit building permit applications to the City and County of Honolulu. All BWS customers enter into a water service agreement as a condition of water service and therefore must adhere to BWS Rules and Regulations including the payment of water rates and charges, and impact fees for development expansions.
7. BWS Rules and Regulations Section 1-102 Water System Facilities Charges, (WSFC) is the impact fee for resource development, transmission and storage. WSFC recovers the costs of water system infrastructure capacity to accommodate growth. The impact fee is a one-time charge levied as a condition of building permit approvals. However, because the military does not submit building permits, BWS has no record of KMCBH being assessed or paying any WSFC, except for the State Mokapu Elementary School expansion.
8. KMCBH/Naval Facilities Engineering Systems Command (NAVFAC) are required to pay BWS for outstanding WSFC for the additional water demand increase above 1.9 mgd in 2016. We recommend the following actions:
  - a. Investigate and provide documentation on developments and on-base improvements that have occurred after January 2016. The report should address the number of additional residential dwelling units, and additional water fixture units for non-residential developments and irrigation systems and other sources of increased water demands.
  - b. Once the investigation report is submitted for BWS' review, comment and acceptance, KMCBH/NAVFAC and BWS will enter into a payment agreement, and BWS will submit an invoice and KMCBH/NAVFAC will submit payment for previously unpaid WSFC, in accordance with BWS Rules and Regulations Section 1-102 WSFC and Hawaii Revised Statutes Chapter 657-1. The payment agreement will also outline a process for the review and payment of WSFC for new KMCBH developments going forward.

**Appendix B – Responses to Public Comments**

**Comment 126: Board of Water Supply, City and County of Honolulu (continued)**

**Comment**

EV21 Project Manager  
September 19, 2022  
Page 4

- c. To reduce the impact of additional water demand on Windward water resources and water systems and to reduce water bills and WSFC payments, KMCBH is required to implement water conservation measures, such as efficient WaterSense labeled water fixtures, conversion to drought tolerant landscaping, leak detection and repair to reduce water loss, etc. KMCBH/NAVFAC should consider upgrading the R-2 recycled water treatment plant to R-1 recycled water supply suitable for irrigation of all large, landscaped areas with a concurrent expansion of the recycled water distribution system.

If you have any questions, please contact Barry Usagawa, Water Resources Division at (808) 748-5900.

Very truly yours,

  
ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

Attachments

**Response to Comment**

Appendix B – Responses to Public Comments

Comment 126: Board of Water Supply, City and County of Honolulu (continued)

Comment

Response to Comment

DAVID Y. JOE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P.O. BOX 621  
HONOLULU, HAWAII 96809

June 18, 2021

SUZANNE D. CASE  
CHAIRPERSON

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MICHAEL G. BUCK  
ELIZABETH A. CHAM, M.D.  
NIEL J. HANNAHIS  
WAYNE K. KATAYAMA  
PAUL J. MEYER

M. KALEO MANUEL,  
SECRETARY/CLERK

Ref: PAIFS.5666.3

Ernest Y.W. Lau, P.E.  
Manager and Chief Engineer  
Honolulu Board of Water Supply  
630 S. Beretania Street  
Honolulu, HI 96843-0001

Aloha Mr. Lau:

NOTICE OF COMMISSION ACTION  
Order to Honolulu Board of Water Supply to Bulkhead  
Ha'ikū Tunnel (Well No. 2450-001) at the 10-foot Thick Dike 1,200 feet  
From the Portal Entrance and Reduce Their Withdrawal to 0.3 million gallons per day  
He'eia Hydrologic Unit, Ko'olaupoko, O'ahu

This letter serves as your notice of action taken by the Commission on Water Resource Management (Commission) on the subject matter. On June 15, 2021, by a 7-0 vote (1 vote for approval with reservations), the Commission approved the following Order:

He'eia Stream supported one of the most agriculturally productive areas on O'ahu. The Ha'ikū Tunnel, dug at an elevation of 550 feet, depleted the groundwater storage of high-elevation dike compartments which supplied baseflow to He'eia Stream. In 1971, the USGS recommended that bulkheading at a 10-foot thick dike compartment at approximately 1,200 feet from the tunnel entrance is the preferred method to restore the storage function of the aquifer. Tunnels with high recession constants (*b*), such as the Ha'ikū Tunnel, drain faster than tunnels with lower recession constants, and would therefore benefit more from bulkheading. An existing bulkhead installed and valved at 600 feet from the portal provides some small storage. The substantial ecological and cultural values supported by He'eia Stream, including habitat for native amphidromous species, restored native riparian environment, a healthy estuarine and near-shore ecosystem, recreational and aesthetic values, as well as the productivity of the He'eia fishpond and wetland to support a biocultural food production system, merits restoration of He'eia Stream to pre-tunnel baseflow. In order to protect these instream uses staff recommends that Honolulu Board of Water Supply (HBWS) bulkhead the 10-foot thick dike compartment at approximately 1,200 feet from the tunnel entrance and valve separately from the bulkhead at 600 feet from the tunnel entrance. Such action would increase spring flow in Ha'ikū while providing a more reliable source of water supply for HBWS. This solution is expected to increase the natural capacity of

## Appendix B – Responses to Public Comments

### Comment 126: Board of Water Supply, City and County of Honolulu (continued)

#### Comment

Ernest Y.W. Lau, P.E.  
June 18, 2021  
Page 2

the high-elevation groundwater system to store and discharge water to streams and springs in the moku of Ko'olaupoko.

As an interim measure, until the Ha'ikū tunnel is fully bulkheaded, Commission staff recommends that HBWS reduce their withdrawal from the Ha'ikū tunnel to 0.3 million gallons per day (mgd) by August 15, 2021. When the bulkheading process commences, the Ha'ikū tunnel will not be a viable source for HBWS, and therefore the entirety of the tunnel flow will be discharged into the stream.

In order to improve transparency among stakeholders, staff recommends that HBWS provides the daily amount of water withdrawn from each well source (Ha'ikū Tunnel, Ha'ikū well, and Ioleka'a well) at monthly intervals.

Following the bulkheading of the tunnel, staff will evaluate the resultant effects on stream baseflow and may amend the interim IFS or amend the HBWS water use permit as needed.

#### IMPLEMENTATION

- Within two years, HBWS will complete their feasibility study and preliminary engineering design for the proposed bulkhead.
- HBWS will communicate with the Commission and continue to coordinate with Kamehameha Schools, Department of Hawaiian Home Lands (DHHL), Papahana Kuaola, Hawai'i Community Development Authority (HCDA), National Estuarine Research Reserve (NERR), and Kāko'o 'Ōiwi water users on a quarterly basis.
- Upon completion of the feasibility study and engineering design, HBWS will have three years to complete the final design and construction of the bulkhead.
- Following the installation of the bulkhead, staff will work with HBWS, Kamehameha Schools, DHHL, Papahana Kuaola, HCDA, NERR, and Kāko'o 'Ōiwi to evaluate the implications for baseflow in Ha'ikū Stream and determine the feasibility of establishing a numeric instream flow standard.
- If HBWS determines that bulkheading is not a feasible solution upon completion of the feasibility study, staff will recommend an amendment to the interim IFS or amend the HBWS water use permit as needed.

#### MONITORING

- Streamflow monitoring shall be maintained by HBWS coordinating with USGS.
- At monthly intervals, HBWS will provide monitoring of daily flow withdrawn from the Ha'ikū Tunnel, Ha'ikū well, and Ioleka'a well.
- Periodic biological surveys shall be conducted, subject to available funding, to monitor the response of stream biota by all interested parties.
- All claimants shall cooperate with staff in conducting appropriate investigations and studies, particularly with regard to granting access to stream channels and private property related to such investigations, subject to the provisions of the State Water Code, Chapter 174C, HRS.

#### Response to Comment

**Appendix B – Responses to Public Comments**

**Comment 126: Board of Water Supply, City and County of Honolulu (continued)**

**Comment**

Ernest Y.W. Lau, P.E.  
June 18, 2021  
Page 3

EVALUATION

- One to two years following the completion of the bulkheading, staff shall report to the Commission on an evaluation of baseflow conditions in He'eia and nearby streams and make recommendations to amend instream flow standards at that time.

Staff will report to the Commission, at its September 2021 meeting, on the progress of:

1. HBWS reduction to 0.3 mgd from Ha'ikū Tunnel;
2. HBWS reduction from Ha'ikū Tunnel to flow in He'eia Stream;
3. Assessment of bulkhead feasibility and preliminary engineering report; and
4. Potential development of alternative water sources, including the State Hospital Well.

If you have any questions, please contact Ayrton Strauch at (808) 587-0265, or [ayron.m.strauch@hawaii.gov](mailto:ayron.m.strauch@hawaii.gov).

Ola i ka wai,



M. KALEO MANUEL  
Deputy Director

**Response to Comment**

Appendix B – Responses to Public Comments

Comment 126: Board of Water Supply, City and County of Honolulu (continued)

Comment

Response to Comment

**BOARD OF WATER SUPPLY**

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843  
www.boardofwatersupply.com



November 22, 2021

RICK BLANGIARDI, MAYOR

BRYAN P. ANDAYA, Chair  
KAPUA SPROAT, Vice Chair  
RAY C. SOON  
MAX J. SWORD  
NA'ALEHU ANTHONY

JADE T. BUTAY, Ex-Officio  
ROGER BARCOCK, Jr., Ex-Officio

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer

Commanding Officer  
Marine Corps Base Hawaii  
Box 63002  
Kaneohe Bay, Hawaii 96863-3002

Dear Commanding Officer:

Subject: State Commission on Water Resource Management Order of June 18, 2021 to Reduce Board of Water Supply Haiku Tunnel Production to 0.3 mgd in Setting Interim Instream Flow Standards for Heeia Stream, Oahu, Hawaii

This letter is to inform you that the State Commission on Water Resource Management (Commission) issued an Order of June 18, 2021 (attached), which requires the Board of Water Supply (BWS) to reduce Haiku Tunnel Production from 1.34 million gallons per day (mgd) to 0.3 mgd by August 15, 2021. The purpose of this reduction is to restore water into Heeia Stream. The required reduction is significant and could impact our ability to provide water service particularly during the summer months when groundwater levels are lower and water demand increases. The BWS is required to comply with this Order, or it would be subject to potential regulatory action.

Kaneohe Marine Corps Base Hawaii (KMCBH) as of October 2021 uses approximately 2.8 mgd of potable water for domestic and irrigation uses. In light of this situation, the BWS hereby informs you that it will be necessary for KMCBH to investigate and implement water conservation measures, conversion to drought tolerant landscaping and alternative R-1 recycled water supply development to reduce potable water use. These actions are necessary pursuant to BWS Rules and Regulations, Section 1-101 Availability of Water and Section 1-112 Use of Nonpotable Water Required for Large Landscaped Areas.

Freshwater security to a major military base supporting US Asia-Pacific operations is an essential component of military readiness and national security. KMCBH is on a coastal peninsula and does not have access to freshwater supplies and therefore relies on municipal water supply transferred from sources as far as 12 miles away. BWS has an integrated water system and a comprehensive master plan and capital improvement program, however, Windward Oahu water resources are subject to drought, especially with climate change and Commission regulatory action reducing available water supply.

KMCBH is the largest single water user in Windward Oahu with a water demand of 2.8 mgd. In the summer and fall of 2020 during a moderate drought, KMCBH increased water demand to 3 mgd along with other non-military users which contributed to the depletion of groundwater supply to critical low groundwater levels. Only through an aggressive water conservation action throughout Windward Oahu and East Honolulu, were Windward water resources able to be sustained without detrimental impact to water sources or customers, which would have otherwise created a water shortage situation affecting public health, safety, and military readiness.

**Appendix B – Responses to Public Comments**

**Comment 126: Board of Water Supply, City and County of Honolulu (continued)**

**Comment**

**Response to Comment**

Commanding Officer  
Nov. 22, 2021  
Page 2

KMCBH can currently utilize approximately 200,000 gallons per day of secondary disinfected R-2 recycled water for the irrigation of the Kaneohe Klipper golf course. However, there are large, landscaped areas that are still irrigated with freshwater. Secondary effluent reuse is of lower quality and cannot be used for spray irrigation in common non-residential and residential areas of the base. Tertiary disinfected R-1 recycled water is of the highest quality approved for spray irrigation of all landscape irrigation applications.

Expanded reuse on KMCBH from secondary to tertiary R-1 recycled water and the installation of distribution pipelines would reduce reliance on limited Windward Oahu water resources which are susceptible to increasingly severe drought due to climate change. A reduction of the KMCBH discharge of treated wastewater effluent into the Pacific Ocean offshore of Kaneohe Bay would have significant environmental and ocean resource benefits. Not fully reusing wastewater effluent is under-utilizing an important water resource.

Congressional infrastructure funding could be available for the planning, permitting, design and construction of a R-1 recycled water system and we encourage KMCBH to pursue these funding opportunities.

Please provide written confirmation of receipt of this letter and planned responsive actions.

If you have any questions, please contact me at 748-5061.

Very truly yours,



ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

**Attachment**

cc: ✓ Senator Mazie Hirono  
Senator Brian Schatz  
Representative Ed Case  
Representative Kai Kahele  
Suzanne Case, State Commission on Water Resource Management  
Joanna Seto, State Department of Health

cc: **Manager**  
**ESO**  
**WSO**  
**Customer Care**  
**Capital Projects**  
**WR**

Appendix B – Responses to Public Comments

Comment 126: Board of Water Supply, City and County of Honolulu (continued)

Comment

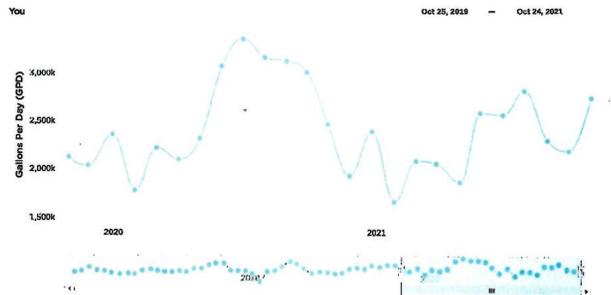
Response to Comment

WaterSmart Program Logout

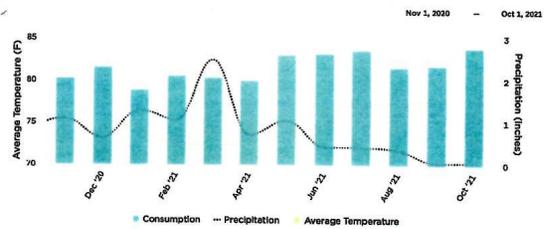
Home **Track** Take Action

SERVICE ADDRESS: 600 Mokapu Rd, Kailua HI 96734  
 ACCOUNT NUMB: 4829003785

Overview



Your Seasonal Use



**Seasonal use and Irrigation**  
 You use **more water** in the summer than in the winter; most likely due to irrigation.

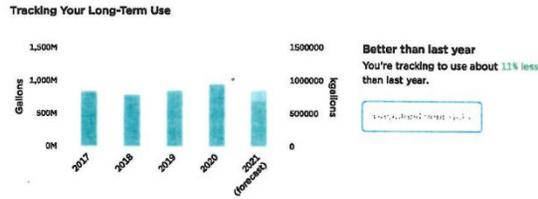
Comparing Your Use: Last 24 Months

Appendix B – Responses to Public Comments

Comment 126: Board of Water Supply, City and County of Honolulu (continued)

Comment

Response to Comment



[View this chart in a larger window](#)  
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## Appendix B – Responses to Public Comments

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### Comment 127

#### Comment

**From:** [Donna Sullivan](#)  
**To:** [NEPAC-Recative](#)  
**Subject:** [Non-DoD Source] Support of Windward Coalition  
**Date:** Thursday, September 22, 2022, 11:29:39 AM

---

Aloha,

I wanted to write to you in support of the letter that you have received from the Windward Coalition.

I agree with their assessment of the situation and their recommendations.

I do hope that you all take these suggestions seriously and provide us with more information before making these critical decisions that will affect our neighborhoods and our environment.

Donna Sullivan  
Kaneohe Resident

Sent from my iPhone

#### Response to Comment

Thank you for your comment.

MCB Hawaii Kaneohe Bay (formerly Naval Air Station Kaneohe Bay) has been a part of the local community for over a century and has been through a variety of mission and aircraft changes. We prioritize being good partners with the local community and respect the diversity of opinion regarding national priorities.

## **Appendix C**

### **National Historic Preservation Act Section 106 Consultation**

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MEMORANDUM OF AGREEMENT  
AMONG  
MARINE CORPS BASE HAWAII,  
THE HAWAII STATE HISTORIC PRESERVATION OFFICER,  
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION  
REGARDING  
HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL VEHICLE SQUADRON AND  
KC-130J MARINE AERIAL REFUELER TRANSPORT SQUADRON  
AT  
MARINE CORPS BASE HAWAII KANEOHE BAY

WHEREAS, the 2018 National Defense Strategy has redirected the United States (U.S.) Marine Corps' (henceforth Marine Corps) mission focus to the Indo-Pacific area of responsibility requiring substantial adjustments to how the Marine Corps is organized, trained, and equipped to support emerging joint, naval, and Marine Corps operational requirements; and

WHEREAS, Marine Corps Base Hawaii (MCBH) has proposed to home base a MQ-9 Marine Unmanned Aerial Vehicle Squadron (with an anticipated six [6] aircraft) and a KC-130J Marine Aerial Refueler Transport Squadron (with an anticipated fifteen [15] aircraft), including personnel and supporting infrastructure as well as aircraft, at MCBH Kaneohe Bay, Oahu, Hawaii, and this action will require building demolition and construction of new facilities and infrastructure; and

WHEREAS, the Undertaking is comprised of thirteen (13) projects ranging from demolition to construction and rehabilitation (hereinafter referred to as Construction Projects), each of which is shown and described in detail in **Exhibit 1 - Home Basing MOA Construction Projects Numbered 1-13**; and

WHEREAS, this action constitutes an undertaking (hereinafter the Undertaking) under Section 106 of the National Historic Preservation Act (NHPA) (54 U.S. Code [USC] 306108), and its implementing regulations at 36 Code of Federal Regulations (CFR) Part 800; and

WHEREAS, MCBH has defined the Undertaking's area of potential effects (APE) as the National Register of Historic Places (NRHP) eligible (NRE) Naval Air Station (NAS) Kaneohe Aviation District (hereinafter NRE Aviation Historic District), which includes historic Hangars 102 and 103, Buildings 159, 160, 161, 183, and 184; the Kaneohe Naval Air Station National Historic Landmark (NHL) district (hereinafter Kaneohe NAS NHL), which includes historic Hangar 101, five (5) seaplane ramps, and adjacent seaplane parking area (now known as Bravo Ramp); Charlie Ramp; Transient Ramp; the NRE Mōkapu House Lots Archaeological District at Pali Kilo (hereinafter NRE Pali Kilo Archaeological Historic District); portions of the West Field area to the north of the Runway 4/22; and areas adjoining the NRE Aviation Historic District to the east of 1<sup>st</sup> Street that do not comprise a historic property as shown on the map in **Exhibit 2 – APE and Historic Properties, and Exhibit 10 – Historic Properties List**; and

WHEREAS, in consultation with the Hawai'i State Historic Preservation Officer (SHPO), **Exhibits 2, 3 (NRE Archaeological Sites), and 10** together show all the historic properties within the APE that have been identified as eligible for listing in the NRHP, including those treated as eligible while pending formal concurrence on determinations of eligibility based on nomination forms scheduled for submittal to the SHPO in January 2023; and

WHEREAS, MCBH evaluated alternative project locations providing a military-controlled airfield, minimum airfield infrastructure requirements, access to established operating and training areas, airspace capable of supporting MQ-9 and KC-130J aircraft, and long-term sustainment and maintenance for continued operations of MQ-9 and KC-130J aircraft, including MCBH Kaneohe Bay locations Pali Kilo, West Field, and Green Field and Hangars 104 and 105, and other military-controlled airfields at Joint Base Pearl Harbor Hickam, U.S. Coast Guard Air Station Barbers Point, Dillingham Military Reservation, and Wheeler Army Airfield, and only MCBH Kaneohe Bay meets the project mission and needs; and

WHEREAS, MCBH has considered the rehabilitation of the historic Hangar 103 and found reuse was not feasible for the planned aircraft; and

WHEREAS, pursuant to 36 CFR Part 800, MCBH in consultation with the SHPO and consulting parties has determined that the Undertaking will result in an adverse effect to the integrity of the design, setting, materials, workmanship, feeling, and association of the NRE Aviation Historic District due to the demolition of six (6) historic buildings including Hangar 103 and Buildings 159, 160, 161, 183, and 184, and new construction within the NRE Aviation Historic District, including construction of the new Type II hangar and supporting infrastructure; and

WHEREAS, pursuant to 36 CFR Part 800, MCBH, in consultation with the SHPO and consulting parties, has determined that the Undertaking will result in an adverse effect to the integrity of the design, setting, materials, workmanship, feeling, and association of the Kaneohe NAS NHL due to the demolition of Hangar 103 and construction of the new Type II hangar and supporting infrastructure, and to the historic materials by removal of strafing marks, bomb craters, and features of Bravo Ramp; and

WHEREAS, the U.S. Army Corps of Engineers, Honolulu District conducted an underwater visual site survey for MCBH including measurements, photographs and video, structural description, and geotechnical borings of the five (5) concrete seaplane ramps to document their condition and operability, noting further investigation would be needed to determine their structural capacity based on the future loading requirements. Additionally, MCBH periodically cleans and removes the algae from the ramps as needed. MCBH recognizes that the seaplane ramps, as contributing resources of the Kaneohe NAS NHL, meet the highest level of national significance and therefore warrant a level of preservation and care commensurate with this designation, and the Undertaking will not affect the seaplane ramps; and

WHEREAS, the APE includes NRE archaeological sites 50-80-11-4453, 4933, and 5829 which are within the historic NRE Aviation Historic District, and the NRE Pali Kilo Archaeological Historic District, which includes sixteen (16) subsurface and surface archaeological sites consisting of Traditional Hawaiian era sites and pre-World War II, and 18 non-military historic-era sites (50-80-11-0365, 367, 2883, 4610, 4611, 4612, 4614, 4617, 4618, 4619, 4620, 4621, 4622, 4625, 7722, 7723, 7724, and 7725) as shown on **Exhibit 3 – NRE Archaeological Sites and Exhibit 10 – Historic Properties List**; and

WHEREAS, there will be no ground disturbance beyond clearing and flattening of surface associated with the Undertaking within the NRE Mōkapu House Lots Archaeological Historic District at Pali Kilo, thus avoiding potential for impacts to archaeological deposits associated with the district that may lie below the surface; and

WHEREAS, the installation of aircraft tie-downs adjacent to Hangar 105 will be located within the existing Hangar 105 parking apron and will not penetrate below the parking apron base course, thus avoiding

potential for impacts to archaeological deposits associated with site 50-80-11-4453 that may lie below the existing base course; and

WHEREAS, Hangar 103 was constructed in the years prior to the start of World War II on filled lands built with crushed coral dredged from Kaneohe Bay, thus eliminating any potential for the proposed demolition of Hangar 103 to impact archaeological deposits, as shown in **Exhibit 4 - Historic Aerial Photo with Overlay of Filled Lands**; however, isolated human remains in secondary contexts may be present, due to the military's use of dune sands, for construction fill in the 1940's which were formerly used as a burial site by Native Hawaiians in pre-Contact times; and

WHEREAS, the NRE Aviation Historic District has been impacted over time by the previous demolition of fifteen (15) of the total fifty-seven (57) contributing buildings, structures, and objects that were originally nominated as the district, and MCBH recognizes the cumulative adverse effect to the NRE Aviation Historic District from this (demolition of six [6] contributing buildings) and other future undertakings; and

WHEREAS, pursuant to 36 CFR § 800.10(c), MCBH has notified the Secretary of the Interior (SOI) of the Undertaking through the National Park Service's (NPS), Interior Regions 8, 9, 10, and 12, and has invited the NPS to participate in this consultation and sign this Memorandum of Agreement (MOA) as a concurring party; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), MCBH has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effects determination, and the ACHP has chosen to participate in this consultation and to sign this MOA as a signatory; and

WHEREAS, pursuant to 36 CFR § 800.2(c)(2)(B)(ii), MCBH has consulted with Native Hawaiian Organizations (NHOs) that attach religious and cultural significance to historic properties on Mōkapu Peninsula regarding the effects of the Undertaking on historic properties and invited each of these NHOs listed on the concurring party signature page to sign this MOA as a concurring party; and

WHEREAS, MCBH has consulted with the National Trust for Historic Preservation, Historic Hawaii Foundation, and Mr. Morgan Rowley regarding the effects of the Undertaking on historic properties and invited each of them to sign this MOA as a concurring party; and

WHEREAS, MCBH has received input and coordinated with the Lieutenant (LT) John W. Finn Family Association regarding commemoration associated with where LT John W. Finn, first U.S. Serviceman to receive the Medal of Honor in World War II, stood at MCBH and fought back against attacking forces on December 7, 1941; and

WHEREAS, MCBH has notified the public and solicited their input in a manner that reflects the nature and complexity of the Undertaking and its effects on historic properties; and

NOW, THEREFORE, MCBH, the SHPO, and ACHP agree that the Undertaking shall be implemented in accordance with the following stipulations to account for the effects of the Undertaking on historic properties.

## STIPULATIONS

MCBH shall ensure the following measures are carried out as part of this Undertaking:

### I. PROFESSIONAL QUALIFICATIONS

- A. All work pursuant to this MOA pertaining to archaeological resources, including sites and objects, shall be carried out by, or under the direct in-person supervision of, a person or persons meeting the SOI's Professional Qualification Standards for archaeology (finalized and adopted in 1983 in Federal Register Volume 48, Number 190, pages 44716-44740; 36 CFR Part 61 or, as applicable, the proposed standards located in Federal Register Volume 62, Number 119, pages 33708-33723 [1997]) hereinafter referred to as a Qualified Archaeologist.
- B. All work pursuant to this MOA pertaining to the built environment including historic sites, buildings, and landscape features or new construction located within, or adjacent to the NRE Aviation Historic District, the Kaneohe NAS NHL, or the footprint of the original NAS Kaneohe, shall be carried out in accordance with the SOI's Standards for the Treatment of Historic Properties with guidelines for preserving, rehabilitating, restoring, and reconstructing historic buildings. This work shall be conducted by a Historic Architect meeting the SOI's Historic Preservation Professional Qualification Standards (finalized and adopted in 1983 in Federal Register Volume 48, Number 190, pages 44716-44740; 36 CFR Part 61 or, as applicable, the proposed standards located in Federal Register Volume 62, Number 119, pages 33708-33723 [1997]) hereinafter referred to as a Historic Architect. The Historic Architect shall have at least two (2) years' experience identifying, documenting, and preserving World War II era military architecture.
- C. All work pursuant to this MOA pertaining to historic resources that may be considered both archaeological and architectural shall be carried out jointly by a person or persons meeting the SOI's Professional Qualification Standards for Archaeology and Historic Architecture (finalized and adopted in 1983 in Federal Register Volume 48, Number 190, pages 44716-44740; 36 CFR Part 61 or as applicable the proposed standards located in Federal Register Volume 62, Number 119, pages 33708-33723 [1997]). The Qualified Professional who meets the Standards for Historic Architecture shall have at least two (2) years of experience identifying, documenting, and preserving World War II era military architecture.
- D. Unless otherwise noted in the stipulations below, all work pursuant to this MOA pertaining to documentation and interpretation materials including the Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER)/Historic American Landscape Survey (HALS), tour materials, story map, context studies, etc. shall be carried out by a Qualified Preservation Professional(s) meeting the SOI's Professional Qualifications Standards for History, Architectural History, or Historic Architect (finalized and adopted in 1983 in Federal Register Volume 48, Number 190, pages 44716-44740; 36 CFR Part 61 or as applicable the proposed standards located in Federal Register Volume 62, Number 119, pages 33708-33723 [1997]). The Qualified Professional(s) shall have at least two (2) years of experience identifying, documenting, and preserving World War II era military architecture, and, as applicable, shall have experience developing historic tours and interpretation publications (digital text-searchable and print) or have produced HABS/HAER/HALS documentation accepted by the NPS and National Archives.

## II. MEASURES TO AVOID, MINIMIZE, AND MITIGATE ADVERSE EFFECTS

### A. Documentation and Interpretation

All historic preservation related survey and planning documents, including but not limited to the Intensive Level Survey, Historic Context Reports, Feasibility Studies, Design Standards, and Management Plans completed by MCBH as mitigation for this Undertaking shall be used to inform and shall be referenced in future master plan documents to guide the preservation and treatment of historic properties aboard MCBH, and to maintain the NRHP eligibility and integrity of historic properties aboard MCBH and within the Kaneohe NAS NHL, the NRE Aviation Historic District, and the NRE Mōkapu House Lots Archaeological Historic District at Pali Kilo. All updates and changes to master plans, future master planning efforts, and the use of all historic preservation survey and planning documents shall be provided in MCBH's reporting to SHPO and consulting parties pursuant to this MOA.

1. Historic American Landscape Survey (HALS): Within two (2) years of executing this MOA and prior to the removal and/or demolition of any historic materials associated with the Kaneohe NAS NHL, Bravo Ramp and its features, and Hangar 103, MCBH shall complete HALS documentation, specifically the landscape features associated with the NAS Kaneohe Airfield, including hangars and support structures. Additionally, this documentation shall include Geographic Information System (GIS) mapping of the character-defining features of Bravo Ramp such as strafing marks, bomb craters, and ancillary features. The GIS data shall be documented using polygons, rather than GIS points, when the feature is greater than one (1) meter in size in any direction.
  - a. The HALS shall be carried out by a historian, architectural historian, or landscape architect who meets the professional requirements of Stipulation I.D. and has at least two (2) years' experience completing HALS documentation.
  - b. MCBH shall coordinate with the NPS Regional HABS/HAER/HALS Program Coordinator at the Regional Office to determine what level and format of recordation is required for the property.
  - c. Prior to submitting the draft document to the NPS Regional HABS/HAER/HALS Program Coordinator for review and comment, MCBH shall circulate the draft document to other consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the document to submit their comments to MCBH.
  - d. MCBH shall consider all input received from the consulting parties during the review period, and if MCBH is unable to incorporate specific consulting party input, MCBH shall update the consulting parties as part of Stipulation V, Reporting, including why specific input could not be incorporated.
  - e. MCBH shall send the completed HALS documentation to the NPS for review and acceptance.
  - f. MCBH shall distribute final documentation to consulting parties in digital text-searchable form.
  - g. MCBH shall distribute one (1) final print copy and one (1) final digital text-searchable copy of the documentation to the Hawai'i State Historic Preservation Division's Library.

2. Historic Context Study and Intensive Level Survey with Design Standards: Within two (2) years of executing this MOA, MCBH shall initiate a Historic Context Study and Intensive Level Survey Report with Design Standards (hereinafter HCS/ILS Report) for the Kaneohe NAS NHL and NRE Aviation Historic District. The HCS/ILS Report shall include consideration of the landscape features associated with historic NAS Kaneohe, as well as all sites, buildings, hangars, and support structures.
  - a. The HCS/ILS Report shall assess the existing boundaries and contributing resources to the Kaneohe NAS NHL.
  - b. The HCS/ILS Report shall assess the boundaries of the NRE Aviation Historic District.
  - c. The HCS/ILS Report shall include an assessment of buildings, sites, structures, and landscape features that are eligible for inclusion within the Kaneohe NAS NHL and that may be included within the revised Kaneohe NAS NHL Registration Form and shall identify a revised and/or expanded boundary (as appropriate) for the Kaneohe NAS NHL.
    - i. The field work portion of the HCS/ILS that includes Hangar 103, Buildings 159, 160, 161, 183, 184, and Bravo Ramp, which are subject to demolition and removal of historic materials by the military Construction Project to demolish Hangar 103 (Project #10 on Exhibit 1), shall be completed prior to any removal and/or demolition of these resources, features, or materials.
    - ii. The field work for the HCS/ILS (excepting Hangar 103, ancillary Buildings 159, 160, 161, 183, 184, and Bravo Ramp) may occur after the removal and/or demolition of these resources.
  - d. The HCS/ILS Report shall include an assessment of buildings, sites, structures, and landscape features that are eligible for inclusion within the NRE Aviation Historic District.
  - e. The purpose of this HCS/ILS Report is to expand on previous survey data collected by MCBH and reevaluate character-defining features found throughout the Kaneohe NAS NHL and NRE Aviation Historic District to update the existing documentation and assess the relationship of all remaining historic properties within the Undertaking's APE. The HCS/ILS Report shall also reevaluate all historic resources that may be included within the Kaneohe NAS NHL update and NRE Aviation Historic District to better understand their significance and relationships.
  - f. Once the Historic Context Study and Intensive Level Survey portion of the Report has been completed, MCBH shall develop the Design Standards to inform: (1) the preservation of existing historic properties; (2) the addition of new and/or non-conforming structures and buildings and structures within and adjacent to the Kaneohe NAS NHL to avoid, limit, or mitigate adverse effects.
  - g. The Design Standards shall include best practices and guidelines that are informed by and in keeping with SOI Standards for the Treatment of Historic Properties but shall be customized to the Kaneohe NAS NHL and NRE Aviation Historic District. The Design Standards shall include but are not limited to building height, set-backs, massing, materials, interior and exterior finishes, landscape features, graphics/signage, and adaptive re-use/reprogramming considerations.

- h. The Historic Context Study and Intensive Level Survey portion of the Report shall be completed by a Qualified Preservation Professional who meets the professional requirements of Stipulation I.D.
  - i. The Design Standards shall be completed by a Qualified Preservation Professional who meets the professional requirements of Stipulation I.B.
  - j. Within two (2) years of the award of contract for the HCS/ILS Report, MCBH shall present a draft of the HCS/ILS Report to consulting parties for review and comment. Consulting parties shall submit comments in writing within thirty (30) calendar days.
  - k. MCBH shall consider all input received from consulting parties during the review period for both the draft and revised final draft HCS/ILS Report, and if MCHB is unable to incorporate specific consulting party input, MCBH shall consult with all interested consulting parties and provide a justification for why specific input could not be addressed. The final decision shall be included as part of Stipulation V, Reporting.
  - l. The revised final draft of the HCS/ILS Report shall be submitted digitally in a text-searchable digital version to all consulting parties.
  - m. MCBH shall provide one (1) final printed copy and one (1) final text-searchable digital copy of the HCS/ILS Report to the Hawai'i State Historic Preservation Division Library.
  - n. MCBH shall utilize the HCS/ILS Report and its findings as a best management guidance document and incorporate the Historic Context Study and Intensive Level Survey with Design Standards within all future Master Plans for the MCBH Kaneohe Bay.
3. Pless Hall Reutilization Study Update: Within one (1) year of appropriation of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall initiate development of an update to the existing Reutilization Study for Pless Hall (Building 212). Pless Hall is a mess hall, galley, and bakery built in 1940 and was part of the initial 1939 NAS Kaneohe Bay base plan. It was in service at the time of the December 7, 1941, attack. The building features the distinctive regional International architectural style of the 1930s and was designed by the architecture firm Albert Kahn Inc. It was renamed Pless Hall in 1973 in honor of Major Stephen Pless.
- a. MCBH shall develop through consultation with consulting parties an updated version of the existing Pless Hall (Building 212) Reutilization Study (hereinafter PHR Study) to include a specific preservation course of action that is consistent with the SOI's Standards for the Treatment of Historic Properties with guidelines for preserving, rehabilitating, restoring, and reconstructing historic buildings.
  - b. The updated PHR Study shall be completed by a Qualified Preservation Professional who meets the professional qualification standards for historic architect as defined in Stipulation I.B.
  - c. The PHR Study shall include recommendations for space utilization based on the 2017 Historic Structures Report for Pless Hall (Building 212) which shall support adaptive reuse and rehabilitation of the historic building and be compatible with the NRE Aviation Historic District and the Kaneohe NAS NHL.

- d. MCBH is an active military installation and a future specific mission requirement for Pless Hall is unknown. This PHR Study shall guide the rehabilitation of this historic building when such requirement is determined in the future.
  - e. Within two (2) years of appropriation of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall circulate the draft PHR Study to consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the document to submit their comments to MCBH.
  - f. MCBH shall also circulate the pre-final PHR Study to consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the document to submit their comments to MCBH.
  - g. MCBH shall consider all input received from the consulting parties during the review period for both the draft and pre-final Study, and if MCBH is unable to incorporate specific consulting party input, MCBH shall consult with all interested consulting parties and provide a justification for why specific input could not be addressed. The final decision shall be included as part of Stipulation V, Reporting.
  - h. MCBH shall distribute the final PHR Study to consulting parties in digital text-searchable form.
  - i. MCBH shall distribute one (1) print copy and one (1) digital text-searchable copy of the final PHR Study to the Hawai'i State Historic Preservation Division Library.
  - j. MCBH shall utilize the PHR Study as a best management guidance document and incorporate the PHR Study and its findings within all future Master Plans for the MCBH Kaneohe Bay.
4. Outreach and Tour Plan: Within one (1) year of appropriation of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall initiate development of a public outreach and tour plan that includes proposed content of the tour and procedures on conducting tours of the NRE Aviation Historic District and the Kaneohe NAS NHL.
- a. Within two (2) years of appropriation of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall circulate the draft outreach and tour plan to consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the document to submit their comments to MCBH.
  - b. MCBH shall address all comments received within the thirty (30) day review period, and MCBH shall organize a site visit for consulting parties to review the proposed tour including, but not limited to, the geographic area, types of resources, types of interpretation, and the topic(s) of tour information.
  - c. MCBH shall distribute, in digital text-searchable form, the final public outreach and tour plan to consulting parties and begin implementation of the public outreach and tour plan.
  - d. The tour shall be available to the public within five (5) years of execution of this MOA and shall be conducted a minimum of twice (2 times) a year until this MOA is expired.

- e. The tour shall include a tribute to the cultural landscape of MCBH before and after the base was developed and shall highlight the diversity of people who have lived and worked on Mōkapu Peninsula.
5. Story Map: Within one (1) year of appropriation of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall execute a contract and initiate consultation with consulting parties for the development of a digital Story Map on the NRE Aviation Historic District and the Kaneohe NAS NHL. The scope of work shall include, but not be limited to, a historical overview and timeline, oral history, historic district features, photographs, maps, and references relating to NAS Kaneohe during World War II (1939-1945). The Story Map shall include specific reference to LT John W. Finn and how he engaged attacking forces on December 7, 1941.
  - a. MCBH shall circulate the draft Story Map within twelve (12) months after the contract is awarded to consulting parties for review and comment. Consulting parties shall have forty-five (45) calendar days from receipt of the draft to submit their comments to MCBH.
  - b. MCBH shall circulate the pre-final Story Map to consulting parties for review and comment within three (3) months from receipt of the consulting party comments. Consulting parties shall have forty-five (45) calendar days from receipt of the pre-final Story Map to submit their comments to MCBH.
  - c. MCBH shall consider all input received from the consulting parties during the review period for both the draft and pre-final Story Map, and if MCBH is unable to incorporate specific consulting party input, MCBH shall update the consulting parties as part of Stipulation V, Reporting, including why specific input could not be incorporated.
  - d. MCBH shall submit the final Story Map within six (6) months from receipt of the consulting party comments on the pre-final Story Map. MCBH shall host the Story Map on the Environmental Systems Research Institute public facing portion of the Marine Corps' GeoFidelis website. MCBH shall work with consulting parties to promote public awareness once the Story Map is live.
6. Videos: Within one (1) year of authorization of funds for the military Construction Project to replace Hangar 103 (project #10 in Exhibit 1), MCBH shall initiate development of two (2) videos, a thirty (30) minute version and a five (5) minute version, on the December 7, 1941, attack at NAS Kaneohe to promote the story of NAS Kaneohe to the public. The thirty (30) minute video shall focus on the story of the attack in detail, drawing information from the research conducted during the HALS Documentation, HCS/ILS Report, and Story Map. The five (5) minute video shall be a brief synopsis of the thirty (30) minute video to be used for promotional purposes in social media and press releases.
  - a. MCBH shall initiate development of the videos within six (6) months of completion of the digital Story Map. MCBH shall circulate the draft videos to consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the draft videos to submit their comments to MCBH.

- b. MCBH shall consider all input received from the consulting parties during the review period for draft videos, and if MCBH is unable to incorporate specific consulting party input, MCBH shall update the consulting parties as part of Stipulation V, Reporting, including reasoning why specific input could not be incorporated.
  - c. MCBH shall host the videos on a public website. MCBH shall work with consulting parties to promote public awareness once the videos are live.
  - d. MCBH shall offer the videos to the local Public Broadcasting Service and/or other local news stations.
  
7. Update Kaneohe Naval Air Station National Historic Landmark Registration Form: Within three (3) years after the date on which the HALS documentation has been completed and accepted by the NPS and National Archives, and the HCS/ILS Report has been completed, MCBH shall submit a draft revised Kaneohe NAS NHL Registration Form to the NPS NHL Program. The HALS documentation shall be completed before the removal and/or demolition of any historic materials associated with the Kaneohe NAS NHL, Bravo Ramp and its features, and Hangar 103. A draft of the revised Kaneohe NAS NHL Registration Form update shall be completed and distributed to consulting parties for review and comment prior to submission of the update to the NPS. The initiation of the update may occur after demolition of Hangar 103.
  - a. The Kaneohe NAS NHL Registration Form update shall be completed by a Qualified Preservation Professional who meets the professional requirements of Stipulation I.B. and who is an architectural historian or historic architect with a minimum of two (2) years' experience in preparing NHL nominations, as well as experience identifying and documenting World War II military structures and landscapes.
  - b. Within two (2) months after the HALS documentation is accepted by the NPS and the National Archives, and the HCS/ILS Report has been completed, MCBH shall submit a Letter of Inquiry to the NPS NHL Program for Regions 8, 9, 10, and 12.
  - c. MCBH shall use research and analysis gained through the Kaneohe NAS NHL HCS/ILS Report as well as any applicable HABS/HAER/HALS documentation and previous Cultural Landscape Reports to inform the development of this update.
  - d. MCBH shall circulate the revised Kaneohe NAS NHL Registration Form to consulting parties for review and comment. Consulting parties shall have thirty (30) calendar days from receipt of the document to submit their comments to MCBH.
  - e. MCBH shall consider all input received from the consulting parties during the review period, and if MCBH is unable to incorporate specific consulting party input, MCBH shall update the consulting parties as part of Stipulation V, Reporting, including reasoning why specific input could not be incorporated.
  - f. MCBH shall submit the revised draft updated Kaneohe NAS NHL Registration Form to the NPS NHL Program for review. After receiving comments from the NHL Program, MCBH shall revise the draft and continue to work with the NHL Program to finalize the update.



C. Design Review for New Type II Hangar Construction

1. The design of the new Type II Hangar shall be compatible with the Kaneohe NAS NHL and the NRE Aviation Historic District to the greatest extent practicable, noting that mission requirements limit design options. Particular attention in the initial concept design and later design review stages shall be given to the following significant features:
  - a. Horizontality: The general design of the building should emphasize horizontality in its form and fenestration. If incorporated, vertical massing should be limited to elements near the main hangar entrance.
  - b. Roof: The top edge of the buildings shall have a horizontal appearance on all sides to keep with the historic character of the historic district. Visible sloped roofs and sloped roof overhangs shall be minimized.
  - c. Windows shall be large, relatively simple openings, grouped into window "ribbons" if possible, and set into wall areas with no significant trims at the heads and jambs. Window glass shall not be reflective to the extent of appearing to be a mirror finish.
  - d. Exterior: The exterior surfaces and finish shall be smooth, flat material with a minimum of texture, reminiscent of the district's historic buildings. Smooth cement plaster or concrete or low-texture exterior finish systems are acceptable exterior materials. Joints in the finish system should maintain the horizontal nature of the overall building design if possible.
  - e. Color: The color of the new buildings shall match that of the existing historic facilities and follow the base standards. The use of accent colors should be limited to enhance the monolithic character of the buildings.
2. MCBH shall commemorate the place where LT John W. Finn fought back against attacking forces on December 7, 1941, by developing a bronze marker and an informative display in the new Type II Hangar. Additionally, MCBH shall consider dedicating the new Type II hangar to LT John W. Finn.
  - a. Specific details regarding the bronze marker shall be developed during the design review process. MCBH shall consult with the consulting parties during the design review process following Stipulation II.C.3.
  - b. Following the timeline for construction of the new Type II hangar, the bronze marker shall be installed on, or next to the new hangar as a permanent display, subject to input from the Finn Family Association.
  - c. MCBH shall work with the LT John W. Finn Family Association regarding the design of a display in the new hangar of his dress white uniform blouse from his 1942 Medal of Honor ceremony.
3. MCBH shall provide via electronic transfer the draft design of the new Type II hangar to consulting parties for review and comment at approximately the conceptual (35%), preliminary design (60%), and final (100%) design review stages or equivalent stages within the design process. Consulting parties shall have thirty (30) calendar days from receipt of the design documents for review and comment, and MCBH shall consider all comments received during each period. MCBH shall provide a written summary on the

how the comments were resolved within thirty (30) calendar days of the design review meeting for each design stage.

D. Archaeological Requirements

1. Pursuant to 36 CFR §800.4(b)(2), the identification of archaeological cultural resources shall be conducted under a phased process to conduct identification and evaluation efforts.
2. The Undertaking includes separate components referred to as Construction Projects. The boundary of each Construction Project is illustrated in **Exhibits 1, 2, and 3**.
3. Per the requirements of 36 CFR § 800.4(b)(2), during Section 106 consultation and development of this MOA, the likely presence of archaeological resources was evaluated for each Construction Project. **Exhibit 6 - Archaeological Requirements for Construction Projects** and shown on the maps in **Exhibits 7, 8, and 9 – Construction Projects with Previous Investigations** identifies which of the Construction Project locations shall, prior to the start of work, undergo phased identification in the form of archaeological testing as well as data recovery (if archaeological resources are encountered). **Exhibit 6** and shown on the maps in **Exhibits 7, 8, and 9** also identifies which Construction Project locations require archaeological monitoring during project implementation.
4. Certain Construction Projects shall require archaeological testing as an identification effort and/or archaeological monitoring. **Exhibit 5- Requirements for Archaeological Testing and Monitoring Plans (Including Data Recovery)** describes the elements that shall be required when these methods are conducted. Data recovery methodology will be included in both the testing and monitoring plans to be followed as necessary when archaeological materials are encountered.
5. Within two (2) years of the execution of this MOA and prior to the start of each Construction Project where archaeological testing or monitoring is required, MCBH shall develop master plans for the following documents for the SHPO's review and approval: (1) An Archaeological Inventory Survey (AIS) for Testing and Data Recovery (T/DR) Plan to Guide Phased Identification Efforts, and (2) An Archaeological Monitoring and Data Recovery (AM/DR) Plan to guide the mitigation effort.
  - a. MCBH shall use each plan as a "Master" plan to guide archaeological testing and archaeological monitoring as required at individual Construction Projects.
  - b. Prior to the start of each Construction Project where archaeological testing or monitoring is required, the MCBH Cultural Resource Manager (CRM) shall have the archaeological contractor develop and submit for CRM approval an Addendum for each specific Construction Project that would be attached to the AIS T/DR "Master" plan or AM/DR "Master" plan. The addendum will be prepared to address archaeological needs specific to each Construction Project.
  - c. The Addendum for each Construction Project shall include specific testing and monitoring methods to be used based on the location of the project and the type of ground disturbing work (length, width, and depth) to be conducted by each Construction Project as described in **Exhibit 5** and listed in **Exhibit 6**. The Addendum shall be attached to either the AIS T/DR or AM/DR Plan as appropriate for each Construction Project where archaeological work is required.
6. For each "Master" archaeological plan and project specific Addendum, SHPO shall have thirty (30) days to review and provide either written approval or written comments to guide revision of the document. The MCBH CRM or its Qualified Archaeologist shall revise

the document accordingly and resubmit the revised document to SHPO for another thirty (30) day review and approval. If the revised document does not adequately address the SHPO's concerns, consultation between the agencies shall be conducted to reach SHPO written approval.

7. No Construction Projects that require archaeological work shall commence prior to approval of the "Master" AIS T/DR and AM/DR Plans described above and required in this section. A final version of each Addendum will be submitted to the SHPO upon approval.
8. If previously unknown properties or changes in boundaries of known properties are discovered during testing and construction has not yet commenced, MCBH shall notify the consulting parties of the newly discovered property or unanticipated effects by electronic transfer. The notification shall include an initial assessment of NRHP eligibility, proposed plan to resolve any potential adverse effects, and an offer to meet with consulting parties to discuss the discovery and/or proposed plan.
  - a. If the proposed action to avoid, minimize, or mitigate effects to the finding does not adequately address the SHPO's concerns, consultation between the agencies shall be conducted to reach SHPO written approval.
  - b. If there is no response within thirty (30) days of receipt of the email notification that includes the initial eligibility assessment and proposed plan, MCBH shall assume concurrence and proceed with implementation of the proposed plan, including investigations by the Qualified Archaeologist or the Historic Architect as applicable.
  - c. MCBH shall provide the consulting parties with a final report of these actions when they are completed.
  - d. Any requests for access to the area of the discovery shall be subject to reasonable requirements for identification, escorts (if necessary), safety, and other administrative and security procedures.
9. As a best management practice, MCBH shall ensure that all ground disturbing activities associated with each Construction Project are monitored by a Qualified Archaeologist due to the potential for encountering dune sand containing human remains removed from its original context on the Mōkapu peninsula or within a site deposit.
10. All archaeological work associated with each Construction Project pursuant to this MOA will be reported on with an end-of-fieldwork letter report, a Draft Report, and a Final Report. All these reports will be reviewed and approved by the MCBH CRM, and the Final reports shall be forwarded to the SHPO for their library within one (1) year of the end of archaeological testing or monitoring for each Construction Project.
11. MCBH shall ensure that all materials collected during archaeological testing and monitoring are submitted to the MCBH CRM in accordance with the MCBH curation facility requirements for acceptance of archaeological materials, as described in the MCBH ICRMP Update (2021-2026), Attachment 2 of Standard Operating Procedure 5 (Submittal Requirements for Archaeological Collections).

#### E. Curation Facility for MCBH Collections

MCBH shall request funding for a curation facility that meets the requirements in 36 CFR Part 79, *Curation of Federally Owned or Administered Archeological Collections*, to house MCBH cultural resources collections. Upon receipt, MCBH shall acquire a facility that meets the requirements per 36 CFR Part 79. If funding is not secured for the curation facility within five (5) years of

execution of this MOA, the MOA terminates and MCBH shall consult under Section 106 with the SHPO and consulting parties for this Undertaking.

### III. PROJECT IMPLEMENTATION

- A. MCBH shall ensure that any future alterations in designs be reviewed by the MCBH CRM for consistency with previously consulted terms. MCBH CRM shall provide consulting parties with a thirty (30)-day review and comment period for any such alterations, and MCBH shall consider all comments received during this period. If such parties determine that the proposed alterations require amending this MOA, they shall proceed in accordance with Stipulation VII, Amendments.
- B. Any changes in scope and location of Construction Projects agreed upon under this MOA and as defined in Exhibit 1 shall be provided to consulting parties with a thirty (30)-day review and comment period. MCBH shall consider all comments received during this period. If such parties determine that the proposed changes require amending this MOA, they shall proceed in accordance with Stipulation VII, Amendments.

### IV. POST-REVIEW DISCOVERIES

MCBH shall notify consulting parties of any post-review discovery where a historic property may be potentially affected by this Undertaking, or portion thereof. Post-Review Discovery does not apply to cultural resources newly identified during the phased identification process of Construction Projects as defined in Exhibit 6. Post-Review Discovery applies only during archaeological monitoring for mitigation.

- A. If historic properties are discovered or unanticipated effects on historic properties found after executing this MOA, MCBH shall make reasonable efforts to avoid, minimize or mitigate adverse effects to such properties.
- B. If MCBH has approved the Undertaking and construction has commenced, MCBH shall determine actions to resolve adverse effects, and notify the consulting parties by email within forty-eight (48) hours of the discovery. The notification shall describe MCBH's assessment of NRHP eligibility of the property and proposed actions to resolve the adverse effects.
- C. Consulting parties shall respond within forty-eight (48) hours of the notification. MCBH shall take into account their recommendations regarding NRHP eligibility and proposed actions, and then carry out appropriate actions. MCBH shall provide consulting parties with an electronic text-searchable copy of the report of the actions when they are completed.
- D. MCBH may assume a newly discovered property to be eligible for listing in the NRHP for purposes of Section 106 in accordance with 36 CFR § 800.13(c). MCBH shall specify the NRHP criteria used to assume the property's eligibility so that information can be used in the resolution of adverse effects.
- E. If Native American Graves Protection and Repatriation Act (NAGPRA) cultural items -- including human remains, funerary objects, sacred objects, or objects of cultural patrimony -- are discovered within the APE by any action taken pursuant to this Undertaking, MCBH shall stop all ground-disturbing activities in the vicinity of the discovery and stabilize and protect the discovery. Treatment shall proceed under the authority of NAGPRA. MCBH shall notify the appropriate culturally affiliated claimant(s) and consult with these NHOs regarding the appropriate treatment and disposition of any NAGPRA cultural items in accordance with the NAGPRA (25 USC 3001 et seq., as appropriate) and its implementing regulations.

## V. REPORTING

- A. Each year, following the execution of this MOA until it expires under the terms set out in Stipulation IX, Duration, or is terminated pursuant to Stipulation X, Termination, MCBH shall provide all consulting parties to this MOA a Summary Report detailing work undertaken pursuant to its terms (period covering October 1 through September 30).
- B. The Summary Report shall include:
  - 1. The status of funding mitigation activities.
  - 2. The status of treatment and mitigation activities.
  - 3. The status of implementation of Construction Projects under this MOA.
  - 4. Any disputes or objections received in MCBH's efforts to carry out the terms of this MOA and how they were resolved.
  - 5. A brief description of what is and is not working for MCBH, with any suggested amendments to the MOA.
  - 6. A summary of the consultation requirements and status to date.
- C. MCBH shall hold an Annual Meeting to review and discuss the findings in the Summary Report. The Annual Meeting may be combined with another MCBH reporting meeting for convenience.

## VI. DISPUTE RESOLUTION

- A. Should any signatory or concurring party to this MOA or consulting party object at any time to any actions proposed or the way the terms of this MOA are implemented, MCBH shall notify and consult with the objector and all consulting parties to resolve the objection. If MCBH determines that such objection cannot be resolved, MCBH shall:
  - 1. Forward all documentation relevant to the dispute, including the MCBH's proposed resolution, to the ACHP. The ACHP shall provide MCBH with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, MCBH shall prepare a written response that considers any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties and provide them with a copy of this written response. MCBH shall then proceed according to its final decision.
  - 2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day period, MCBH may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, MCBH shall prepare a written response that considers any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them and the ACHP with a copy of such written response.
- B. MCBH's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

## VII. AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment shall be effective on the date a copy signed by all signatories is filed with the ACHP. In accordance with 36 CFR § 800.6(c), the signatories have sole authority to execute, amend, or terminate the agreement. An invited signatory that signs the agreement shall have the same rights regarding seeking

amendment or termination as other signatories. The refusal of any consulting party invited to concur does not invalidate this agreement.

#### VIII. ANTI-DEFICIENCY ACT

All requirements set forth in the MOA requiring expenditure of Marine Corps funds are expressly subject to the availability of appropriations and the requirements of the Anti-Deficiency Act (31 USC 1341). No obligation undertaken by the Marine Corps under the terms of this MOA shall require or be interpreted to require a commitment to expend funds not appropriated for a particular purpose. If the Marine Corps cannot perform any obligation set forth in this MOA because of unavailability of funds, that obligation must be renegotiated by the Marine Corps and the signatories.

#### IX. DURATION

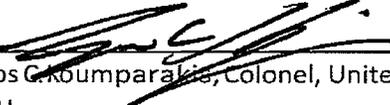
This MOA shall become effective upon execution by all signatories and shall remain in effect until all projects associated with the Undertaking are completed or ten (10) years from the date of execution (whichever occurs first) unless the MOA is terminated prior to that in accordance with Stipulation X. Prior to such time, MCBH may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VII.

#### X. TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation VII. If within thirty (30) days an amendment cannot be reached, any signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated, and prior to work continuing on the Undertaking, MCBH must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. MCBH shall notify the signatories as to the course of action it will pursue. If funding for any of the mitigation commitments outlined in this MOA is not secured within seven (7) years of execution of this MOA or within sufficient years for the mitigation commitment requirements, the MOA will terminate and MCBH shall consult with the SHPO.

EXECUTION of this MOA by MCBH, ACHP and the SHPO, and implementation of its terms, documents that MCBH has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES  
MARINE CORPS BASE HAWAII

By:  Date: 06 DEC 2022  
Speros G. Koumparakis, Colonel, United States Marine Corps COMMANDING OFFICER,  
MCBH

HAWAII STATE HISTORIC PRESERVATION OFFICER

By:  Date: 12.07.22  
Alan Downer, Ph.D., Deputy State Historic Preservation Officer

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By:  Date: December 14, 2022  
-John M. Fowler, Executive Director  
Reid Nelson, Executive Director, Acting

CONCURRING PARTIES

NATIONAL PARK SERVICE

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Frank W. Lands, Regional Director, Interior Regions 8,9, 10,12

HISTORIC HAWAII FOUNDATION

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Kiersten Faulkner, Executive Director

NATIONAL TRUST FOR HISTORIC PRESERVATION

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Elizabeth Merritt, Deputy General Counsel

OFFICE OF HAWAIIAN AFFAIRS (OHA)

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Chief Executive Officer or Ka Pouhana, OHA

OAHU ISLAND BURIAL COUNCIL (OIBC)

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Chair, OIBC

TEMPLE OF LONO

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Clive Cabral

PAOA/KEA/LONO 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Donna Ann Camvel

KEKUMANO 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Cy Harris

VICTOR KELI'IMAIIKA'I BOYD 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Na'u Kamali'i

KEOHOKALOLE 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Emalia Keohokalole

KO'OLAULOA HAWAIIAN CIVIC CLUB

By: \_\_\_\_\_ Date: \_\_\_\_\_  
President

OLDS 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Kaleleonalani Napoleon

DIAMOND 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_

Anuheia Diamond

KEKO'OLANI 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_

Terrilee Keko'olani Raymond

PRINCE KUHIO HAWAIIAN CIVIC CLUB

By: \_\_\_\_\_ Date: \_\_\_\_\_

President

ORTIZ 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_

Rick Ortiz

MORGAN ROWLEY

By: \_\_\_\_\_ Date: \_\_\_\_\_

Morgan Rowley

PAIK 'OHANA

By: \_\_\_\_\_ Date: \_\_\_\_\_

Kaleo Paik

**EXHIBIT 1 HOME BASING MOA  
CONSTRUCTION PROJECTS IN SUPPORT OF HOME BASING  
MQ-9 AND KC-130J AIRCRAFT SQUADRONS AT MCBH**

Construction Projects (based on EA Table 2-1)	Description (based on EA Table 2-6)
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**Exhibit 1: Home Basing MOA Construction Projects Numbered 1-13 Descriptions**

<ul style="list-style-type: none"> <li> MCB Hawaii Kaneohe Bay Boundary</li> <li> Installation Fence</li> <li> Airfield Pavement/Apron</li> <li> Airfield Road</li> </ul>	<ul style="list-style-type: none"> <li> Building</li> <li> Installation Road</li> <li> Parking Area</li> </ul>	<p><u>Proposed Action</u></p> <ul style="list-style-type: none"> <li> MQ-9 Ground Data Terminal (Notional Location)</li> <li> New Security Fence</li> <li> Construction</li> </ul>	<ul style="list-style-type: none"> <li> Demolition</li> <li> Renovation</li> <li> Apron/Ramp Improvement</li> <li> Construction Laydown and Staging Area</li> </ul>	
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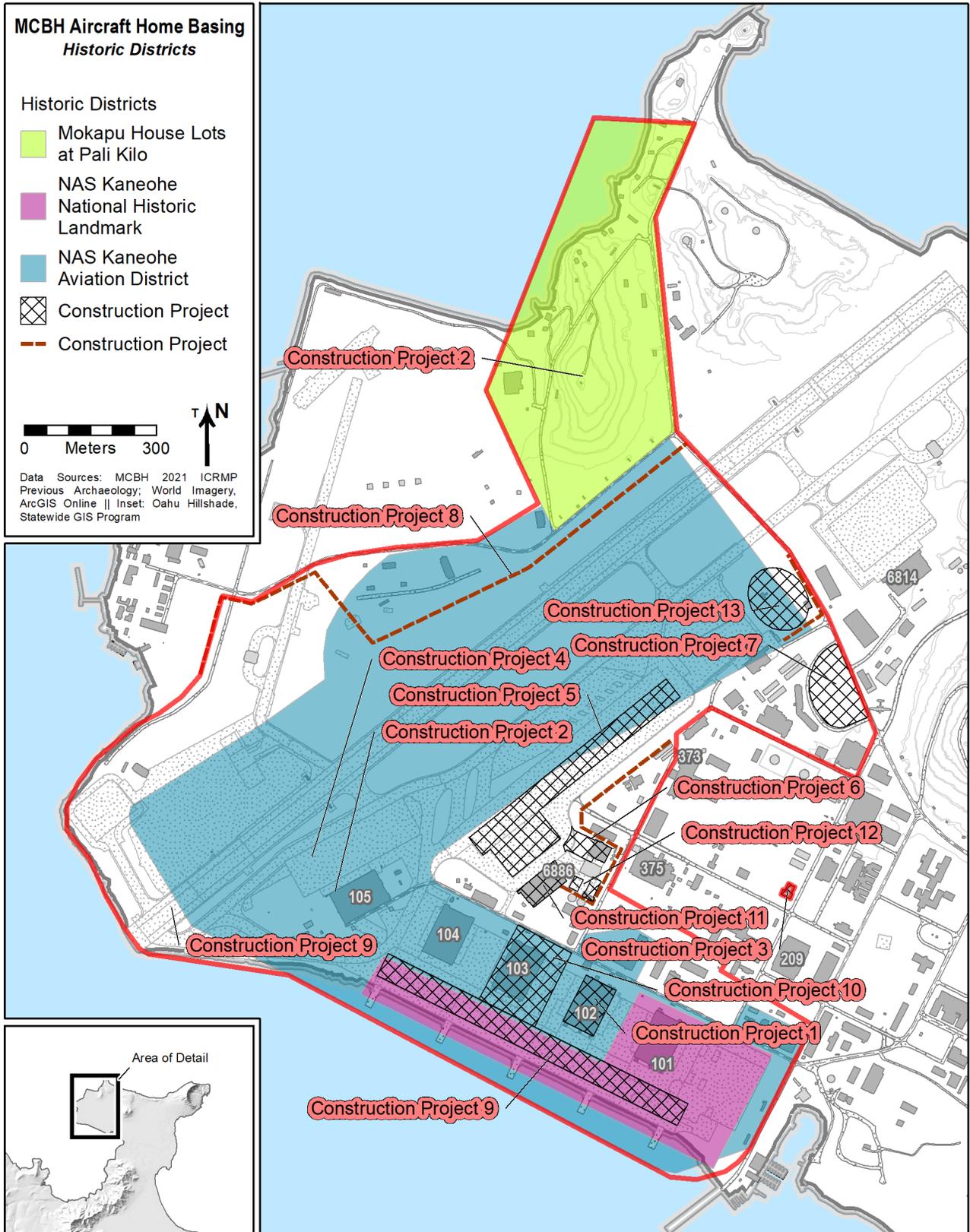
0 500 1,000 Feet

Sources: Esri, 2021; Hawaii Statewide GIS, 2021; MCBH, 2021

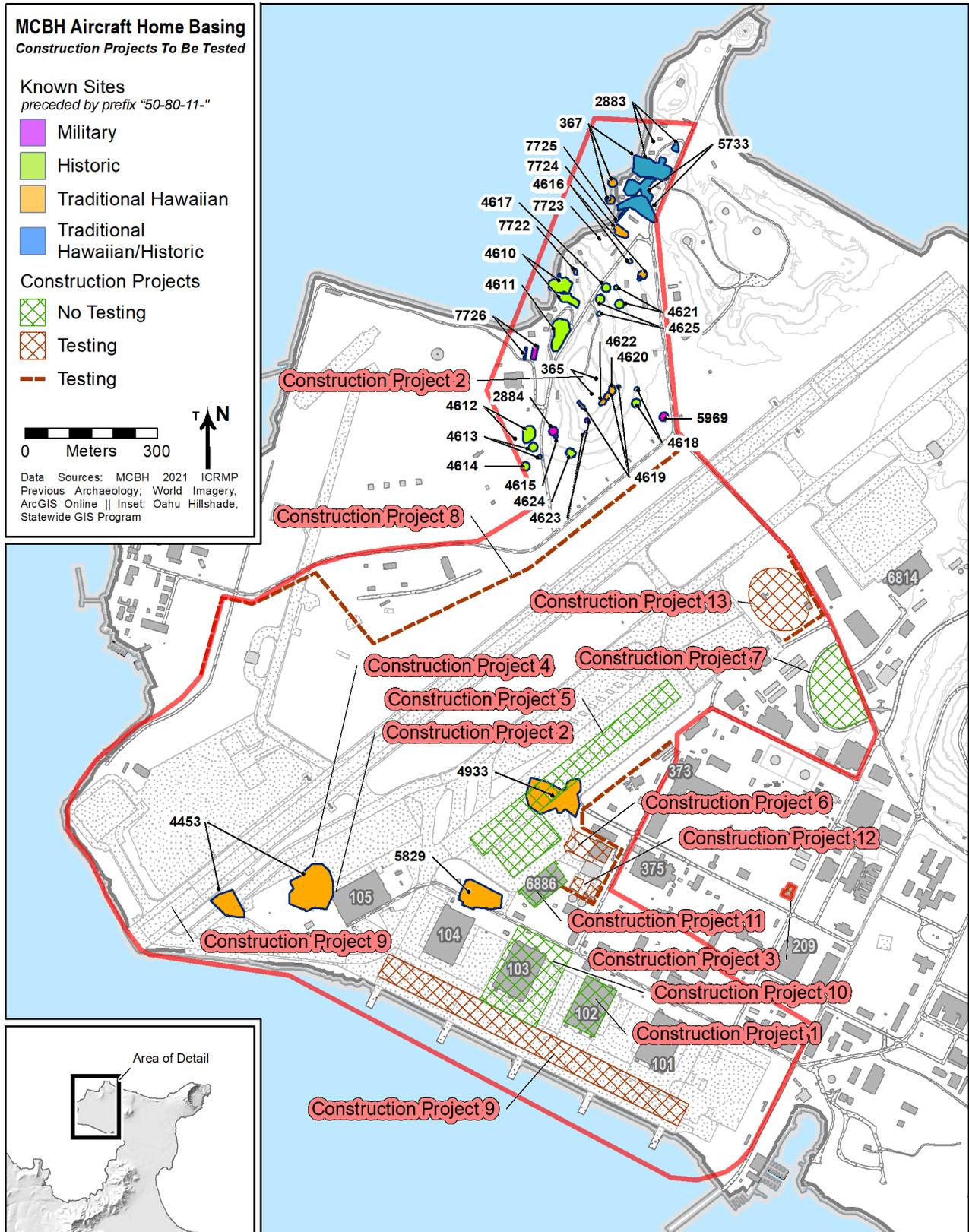
**EXHIBIT 1 HOME BASING MOA  
CONSTRUCTION PROJECT DESCRIPTIONS**

Construction Projects (based on EA Table 2-1)	Description (based on EA Table 2-6)
1. Hangar 102 Renovations for MQ-9 aircraft	Interior upgrades; electrical, mechanical and communication systems. Install two Ground Control Stations (GCS) with up to two Environmental Control Units (ECU) in/near Hangar 102. May require utilities/mechanical/fire/lightning protection work including upgrades to non-historic walls/doors. Includes ground disturbance greater than 6 inches in depth.
2. Infrastructure Improvements for MQ-9	Install Ground Data Terminals (GDT) at separate locations: GDT #1 adjacent to Hangar 105 on paved surface west of hangar. GDT #2 on Keawanui Hill, which is approximately 100 feet high, on northwest side of Runway 4/22. GDT is operated from a mobile container. No ground disturbance below 6 inches. Approximately 35x35 foot area to be cleared/flattened at GDT #2 location.
3. Building 4041/Install Training Simulator	Install flight training simulator to support MQ-9 and KC-130J squadrons. May require ground disturbance below 6 inches in depth for hook up of utilities/communications lines.
4. Apron Improvements for MQ-9 aircraft	Install tie-downs and striping west of Hangar 105. Ground disturbance will not exceed the existing base course.
5. Charlie Ramp Upgrades for KC-130J aircraft	Restriping of Charlie Ramp for C-130J aircraft west of Hangar 6886 and east of Taxiway A. No ground disturbance.
6. KC-130J Support Facilities (Wash Rack)	Construct Wash Rack for KC-130J east of Hangar 6886. Includes ground disturbance greater than 6 inches in depth.
7. Temporary Construction Staging Laydown Area at Crescent Circle	Establish temporary construction laydown area at the Crescent Circle area. No ground disturbance.
8. Airfield Security Fencing	Install security fencing on east and west sides of Runway 04/22; north side of KC-130J Aircraft Direct Refueling System at Green Field; and north and east sides of the Wash Rack and KC-130J Support Structures (east of Hangar 6886).
9. Bravo Ramp Upgrades for MV-22	Resurface, repave, and stripe Bravo Ramp on bayside of hangar row for use by MV-22 aircraft. Includes ground disturbance greater than 6 inches in depth.
10. Hangar 103 Replacement for MV-22	Demolition of Hangar 103, Buildings 159, 160, 161, 183, 184, and construction of new Type II Hangar for MV-22s. Includes ground disturbance greater than 6 inches in depth.
11. Hangar 6886 Renovations for KC-130J	Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use. No ground disturbance.
12. KC-130J Support Structures	Construction of new support facilities east of Hangar 6886 including Storage Facility and Propeller Maintenance Facility. Includes ground disturbance greater than 6 inches in depth.
13. KC-130J Aircraft Direct Refueling System	Construction of new refuel lane with an Aircraft Direct Refueling System at Green Field. Demolition of Buildings 4000 and 5068. Construction of concrete pavement, asphalt shoulders, striping, fuel lines from the existing fuel farm, and a drainage system with storm water detention capability.

**EXHIBIT 2 HOME BASING MOA  
HOME BASING CONSTRUCTION PROJECTS, APE (RED LINE), HISTORIC DISTRICTS**

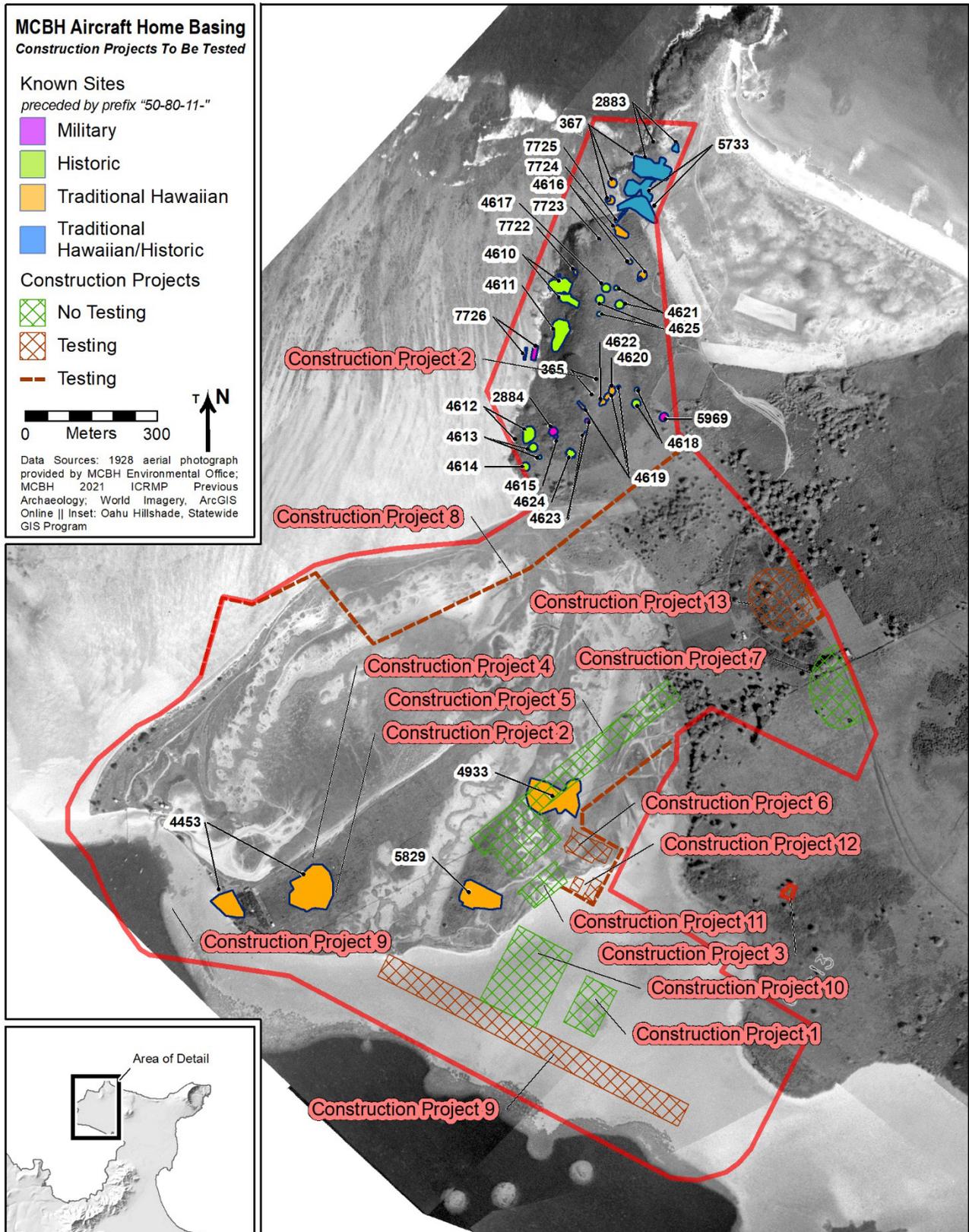


**EXHIBIT 3 HOME BASING MOA  
KNOWN ARCHAEOLOGICAL SITES, ARCHAEOLOGICAL TESTING PROJECTS**



**EXHIBIT 4 HOME BASING MOA  
KNOWN ARCHAEOLOGICAL SITES, ARCHAEOLOGICAL TESTING PROJECTS**

**HISTORIC AERIAL PHOTO (1928) IMAGE OVERLAYED WITH  
KNOWN ARCHAEOLOGICAL SITES & ARCHAEOLOGICAL TESTING PROJECTS**



**EXHIBIT 5 HOME BASING MOA  
REQUIREMENTS FOR ARCHAEOLOGICAL TESTING & MONITORING PLANS  
(INCLUDING DATA RECOVERY) & METHODOLOGY**

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**PHASED IDENTIFICATION: ARCHAEOLOGICAL SUBSURFACE TESTING METHODOLOGY**

1. Archaeological testing for identification will be conducted, at minimum, for the following Construction Projects: Construction Projects 6, 8, 9, 12, and 13.

Archaeological testing determination will be based on the following criteria:

- a. Construction Projects that include ground disturbance (e.g., some projects include only surface restriping, etc.), and
  - b. Estimated depth of project ground disturbance, and
  - c. Depth of cultural layer documented by previous studies, and
  - d. Depth of excavations that documented negative findings by previous studies, and
  - e. Proximity to known archaeological deposits/sites.
2. For the Home Basing Construction Projects where archaeological testing has been agreed to, the Navy will contract an archaeological consultant meeting the requirements of Stipulation I.A. of the MOA to conduct archaeological testing to determine the presence/absence and significance of potential buried cultural deposits within the area of potential effects (APE) and between the APE and the boundary of any known buried cultural resources. The testing effort must include documentation and evaluation of any subsurface components of the encountered resource. At a minimum, the level of effort should be sufficient to determine: [1] the horizontal and vertical dimensions of the site, [2] chronological placement, [3] site function, [4] artifact/ecofact density and variability, [5] presence/absence of subsurface features, and [6] research potential.
  3. For documenting the subsurface component of a site, standard manually excavated test units are required to evaluate the presence or absence of subsurface deposits based on overall site and/or locus size. A standard test unit is defined as a 1 meter by 1 meter unit, excavated in natural layers if possible or by arbitrary 10 centimeter levels to sterile soil or to a minimum depth of 1 meter. Although hand excavation (with shovel and trowel) is preferred, the use of machinery is acceptable when demonstrated that it is necessary (e.g. to remove pavement and the corresponding base course).
  4. If a subsurface component exists, the boundaries of the deposit should be established using shovel test pits (STPs), auger holes, and manual or mechanical trenching. STPs should not be used in place of test units. STPs should measure at least 30 centimeters wide by 70 centimeters deep and should be excavated by hand in arbitrary 10 centimeters levels to sterile soil or to a minimum depth of 50 centimeters. Augur holes can be used to establish the depth of the deposit and gather data for soil samples. Trenches can be used to expose features and establish depth of the deposit across the site.
  5. The stratigraphic profile of the site must be documented at least two meters wide and include sufficient data to determine the archaeological sequence of the site, as well as the order in which the deposits were laid down. All excavated soils must be passed through 1/8-inch mesh screen, unless gathered for specific analysis, such as flotation, or other methods prove more efficient based on site type or soil consistency. Other

**EXHIBIT 5 HOME BASING MOA  
REQUIREMENTS FOR ARCHAEOLOGICAL TESTING & MONITORING PLANS  
(INCLUDING DATA RECOVERY) & METHODOLOGY**

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screening methods include flotation (in which soil is sifted through a fine-mesh screen fastened over a special container filled with water), and water screening. These methods will be determined by the Marine Corps Base Hawaii (MCBH) Cultural Resources Manager (CRM), Navy Contracting Officer Representative, and the contractor and substantiated in the research design and data recovery program. Soil samples recovered during excavation can be used to indicate whether site disturbances were natural or man-made and determine the type of activity taking place on the site. Munsell Soil Color Charts shall be used in the field to assess the hue, value, and chroma of the soil for each excavated level, and can provide data relative to the geology of the site as well as the surrounding area.

6. Complete analysis of the material recovered during the testing program and completion of any appropriate specialty studies will be completed prior to submittal of the technical survey and evaluation report. This should include, for example, lithic tool analysis, lithic flake/debitage analysis, ceramic analysis, faunal analysis (including shellfish, animal bone and fish bone), fish otolith analysis, obsidian analysis, radiocarbon analysis, blood residue analysis, macro-botanical analysis, and palynological analysis, as appropriate. In order to adequately evaluate the significance of archaeological resources, it is necessary to identify the scientific potential of the resource (i.e., the data sets present) and the variability within artifact/ecofact classes. All recovered cultural materials should be prepared for curation at MCBH according to the curation standards in 36 Code of Federal Regulations (CFR) §79 (refer to guidance provided in Standard Operating Procedure [SOP] 5 in the MCBH Integrated Cultural Resources Management Plan [ICRMP] Update, 2021-2026).

**ARCHAEOLOGICAL SUBSURFACE DATA RECOVERY METHODOLOGY**

1. For the Home Basing Construction Projects, the MCBH CRM may determine that such projects in the vicinity of known archaeological sites or in areas of medium or high archaeological sensitivity require additional data recovery to ensure protection and preservation of information about the site. The CRM will ensure to make provisions for an archaeological contractor qualified per Stipulation I.A. of the MOA and to be contracted through the Navy.
2. A data recovery program may be required to provide substantive evidence to support a significance evaluation based on the subsurface testing (see above). Also, if identified buried cultural deposits are determined to be significant and will be destroyed by project development, data recovery will involve the systematic excavation of the features and artifacts contained within that part of the site that will be destroyed or adversely impacted.
3. The data recovery portion of each Archaeological Inventory Survey (AIS) for Testing and Data Recovery (T/DR) Plan and Archaeological Monitoring and Data Recovery (AM/DR) Plan (as defined in MOA Stipulation II.D.5.) should be based on a research design that must be reviewed and approved by the MCBH CRM and the State Historic Preservation Division (SHPD) Archaeology Branch (pursuant to MOA Stipulation II.D.6.). The research design should identify important research questions (see MCBH CRM for research priorities), link research topics to the data already known to be present in the site, delineate the methods that will be used in excavation (including the sample size to be excavated, which will vary with the nature and size

**EXHIBIT 5 HOME BASING MOA  
REQUIREMENTS FOR ARCHAEOLOGICAL TESTING & MONITORING PLANS  
(INCLUDING DATA RECOVERY) & METHODOLOGY**

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of the site), and explain procedures that will be used in the laboratory analysis and curation of recovered materials. It is at the stage of data recovery work plan development that specialized analyses should be proposed as data necessary to answer specific research questions. MCBH CRM and the SHPD Archaeology Branch will then determine if the proposed analyses are appropriate, during their review and approval of the plan.

4. All excavations will be backfilled with engineered fill and/or deposits excavated, followed by compaction.
5. Complete analysis of the material recovered during data recovery and completion of any appropriate specialty studies is expected prior to submittal of the technical data recovery report. This should include, for example, lithic tool analysis, lithic flake/debitage analysis, ceramic analysis, faunal analysis (including shellfish, animal bone and fish bone), fish otolith analysis, obsidian analysis, radiocarbon analysis, blood residue analysis, macro-botanical analysis, and palynological analysis, as appropriate. All recovered cultural materials should be prepared for curation at MCBH according to the curation standards in 36 CFR §79 (refer to guidance provided in SOP 5 in the MCBH ICRMP Update, 2021-2026).

**ARCHAEOLOGICAL MONITORING FOR CONSTRUCTION AND/OR GROUND-DISTURBING ACTIVITIES  
METHODOLOGY**

1. Archaeological monitoring will be conducted at Construction Projects: 1, 3, 6, 8-10, and 12-13, at minimum, as shown in Exhibit 6. Based on the results of the archaeological identification efforts it may later be determined that additional Construction Projects require archaeological monitoring. For the Home Basing Construction Projects where archaeological monitoring has been agreed to, the Navy will contract an archaeological consultant to conduct the archaeological monitoring.
2. An archaeological monitoring plan (the Master AM/DR Plan identified in MOA Stipulation II.D.5) will be prepared and submitted to SHPD for review and acceptance prior to the start of ground disturbing projects requiring archaeological monitoring. For each Construction Project that requires archaeological monitoring, prior to the start of ground disturbing activities, an addendum to the archaeological monitoring plan will be prepared and submitted for SHPD review and approval. The addendum will be prepared to address archaeological needs specific to each Construction Project.

The MCBH CRM will ensure to make provisions for an archaeological monitor meeting the professional requirements of Stipulation I.A. of this MOA on the Home Basing Construction Projects requiring archaeological monitoring, and will advise the Projects' contractors of the location, periodicity, and duration of required monitoring, and stipulate other measures that may be appropriate to address the potential discovery of archaeological materials or human remains.

3. Archaeological monitoring may be required as a Best Management Practice for Home Basing Construction Projects in areas at MCBH Kaneohe Bay where sand fill was used as a base material in building foundations and utility trenches. Such sand fill has been found to contain isolated human skeletal remains and cultural items (per Native American

**EXHIBIT 5 HOME BASING MOA  
REQUIREMENTS FOR ARCHAEOLOGICAL TESTING & MONITORING PLANS  
(INCLUDING DATA RECOVERY) & METHODOLOGY**

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Graves Protection and Repatriation Act [NAGPRA] definitions).

4. Prior to any ground-disturbing activities, the MCBH CRM will conduct a coordination meeting with the archaeological monitor and the Home Basing Construction Projects' contractors. The meeting will outline the duties and responsibilities of the archaeologist and the Projects' contractors and teams. The Conditions and Assumptions of SOP 5 in the MCBH ICRMP Update (2021-2026) will be discussed. All construction personnel are required to attend this meeting prior to starting on the project. The MCBH CRM can provide a record of attendance if requested.
5. Archaeological monitoring will consist of identification, evaluation, collection, recording, analysis, and reporting of archaeological remains during ground-disturbing activities. The data retrieved should be sufficient to characterize the nature of all major deposits and strata, regardless of the cultural content, and discuss their known extent through time and space. Monitoring actions will be detailed in the Master AM/DR Plan (defined in MOA Stipulation II.D.5.) to be submitted to and approved by the MCBH CRM and the SHPD Archaeology Branch prior to the start of Home Basing Construction Projects where archaeological monitoring has been agreed to.
6. All monitoring activities will be undertaken by a Qualified Archaeologist, as defined in the Secretary of the Interior's Historic Preservation Professional Qualification Standards and Stipulation I.D. of the MOA. The archaeologist will be familiar with the range of cultural resources likely to be found within the project area. If monitoring activities are to take place within a known contaminated site, the archaeologist will be Occupational Safety and Health Administration 40-hour trained. Arrangements for the services of a physical anthropologist (or other scientists, as appropriate) with a background in human osteology will be made prior to any ground disturbing activities.
7. At a minimum, one archaeological monitor will be present to monitor at each ground-disturbing activity occurring. The monitor will inspect the backdirt removed from construction areas, as well as the exposed soil profiles. If archaeological remains are encountered, the archaeological monitor will be authorized to halt ground disturbing operations in order to evaluate, assess, and determine what course of action should be taken for the protection of any identified cultural materials.
  - a. If the remains are determined to be not significant, the monitor will perform appropriate procedures, including plotting the location on the project topographic map, taking samples (as appropriate), preparing site maps, and photography.
  - b. If the remains are evaluated to be potentially significant, the monitor will notify the MCBH CRM and SHPD staff in order to formulate appropriate mitigation measures.
  - c. If the site contains human remains and/or grave or ceremonial object, the monitor will secure the site and follow SOP 4, *Inadvertent Discovery of Human Remains*, in MCBH ICRMP Update (2021-2026)

**EXHIBIT 5 HOME BASING MOA  
REQUIREMENTS FOR ARCHAEOLOGICAL TESTING & MONITORING PLANS  
(INCLUDING DATA RECOVERY) & METHODOLOGY**

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8. Documentation of exposed cultural materials will include: stratigraphic profiles of excavated areas containing cultural material; scaled photographs of such areas; record of the location or locations of intact cultural materials by Global Positioning System for inclusion in the MCBH cultural resources Geographic Information System. A sampling of stratigraphic profiles of excavated areas that do not contain cultural materials will be drawn from across the project area, in order to provide useful information regarding the lack of cultural materials in a given area.
9. With the exception of human remains and/or grave or ceremonial objects, cultural materials discovered during the conduct of monitoring activities will remain the property of MCBH and will be curated in accordance with current MCBH policy. Grave or ceremonial objects and/or human remains will be treated in accordance with SOP 6, *NAGPRA Inadvertent Discovery of Human Remains*, in MCBH ICRMP Update (2021-2026).
10. The MCBH CRM will review on-going or completed projects involving archaeological monitoring to ensure that appropriate historic preservation mitigation measures are being or were successfully undertaken.
11. At the end of ground disturbing activities for each Construction Project requiring archaeological monitoring, the monitor will prepare a report addressing any findings or subsequent mitigation resulting from the monitoring. The report requirements will be outlined in the Master AM/DR Plan (MOA Stipulation II.D.5.). The report will be submitted to the MCBH CRM for review and curation. All materials collected during the execution of the monitoring project will be submitted in a manner that is consistent with the MCBH Cultural Resources Program curation facility requirements. The archaeological monitoring reports shall be submitted to SHPD within one year of the end of ground disturbing activities for each Construction Project requiring archaeological monitoring.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
1. Hangar 102 Renovations for MQ-9 aircraft	<p>Interior upgrades; electrical, mechanical and communication systems.</p> <p>Install two Ground Control Stations (GCS) with up to two Environmental Control Units (ECU) in or adjacent to Hangar 102. May require utilities hook up. Includes ground disturbance greater than 6 inches in depth.</p>	Project APE is in the Naval Air Station (NAS) Kaneohe Aviation Historic District; Hangar 102 is a contributing element and primary visual anchor.	Project APE has no traditional Hawaiian subsurface archaeological deposits or sites because the land was built with coral rock dredged from Kaneohe Bay and is devoid of archaeology.	<u>No testing</u> due to location within area of filled lands built with coral dredged from Kaneohe Bay during initial base construction 1939-1940, which is devoid of archaeology.	<b>Monitoring</b> based on the potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period for use as cushioning under building foundations and in utility trenches... (Tomonari-Tuggle and Clark 2021: I-95).
2. Infrastructure Improvements for MQ-9	Install two Ground Data Terminals (GDT) at separate locations: GDT #1 adjacent to Hangar 105 on paved surface to the west of the	GDT #1 location is in the NAS Kaneohe Aviation Historic District.	GDT #2 location is in the Mokapu House Lots Archaeological Historic District at Pali Kilo. The district includes traditional Hawaiian and historic	<u>No testing</u> due to no ground disturbance.	<u>No monitoring</u> due to no ground disturbance.

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
	hangar. GDT #2 on Keawanui Hill, which is approximately 100 feet high, on northwest side of Mokapu peninsula. GDT is operated from a mobile container measuring approximately 40 feet long. No ground disturbance.		period sites. There are no contributing sites in the project APE.		
3. Building 4041	Install flight training simulator to support MQ-9 and KC-130J aircraft. May require ground disturbance below 6 inches for utilities and communication hook ups.	No historic buildings or districts present.	No subsurface archaeological historic properties including deposits or sites.	<u>No testing</u> because previous archaeological investigations adjacent to the project APE found no evidence of any deposits or sites (Schilz and Allen 1996a); and the project APE lacks proximity to known deposits or sites.	<b>Monitoring</b> based on potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period... (Tomonari-Tuggle and Clark 2021: I-95).

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
4. Apron Improvements for MQ-9 aircraft	Install tie-downs and striping west of Hangar 105. Ground disturbance will not exceed the existing base course.	Project APE is within the NAS Kaneohe Aviation Historic District.	Project APE is within or near Archaeological Site 4453, located west and south of Hangar 105.	<u>No testing</u> because depth of ground disturbance will not exceed the existing man-made base course that is devoid of archaeology.	<u>No monitoring</u> because depth of ground disturbance will not exceed the existing man-made base course that is devoid of Jaucas sand mined elsewhere on the peninsula during the historic period... (Tomonari-Tuggle and Clark 2021: I-95).
5. Charlie Ramp Upgrades for KC-130J aircraft	Restriping of Charlie Ramp for C-130J aircraft west of Hangar 6886 and east of Taxiway A. No ground disturbance.	Northern portion of the project APE extends into the Naval Air Station (NAS) Kaneohe Aviation Historic District.	Project APE overlaps subsurface historic property, Archaeological Site 4933.	<u>No testing</u> based on no ground disturbance.	<u>No monitoring</u> based on no ground disturbance.
6. KC-130J Support Facilities (Wash Rack)	Construct Wash Rack for KC-130J east of Hangar 6886. Includes ground disturbance greater than 6 inches in depth.	No historic buildings or districts present.	Outside but near subsurface historic properties, Archaeological Sites 5829 and 4933.	<b>Testing</b> based on depth of ground disturbance; the proximity to archaeological Sites 5829 and 4933; the lack of previous investigations in portion	<b>Monitoring</b> based on the potential for disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
				of the Wash Rack project APE.	on the peninsula during the historic period... (Tomonari-Tuggle and Clark 2021: I-95).
7. Temporary Construction Staging Laydown Area at Crescent Circle	Establish temporary construction laydown area at the Crescent Circle area. No ground disturbance.	No historic buildings or districts present.	No subsurface archaeological historic properties including deposits or sites.	<b>No testing</b> due to no ground disturbance.	<b>No monitoring</b> due to no ground disturbance.
8. Airfield Security Fencing	Install security fencing on east and west sides of Runway 04/22; north side of KC-130J Aircraft Direct Refueling System at Green Field; and north and east sides of the Wash Rack and KC-130J Support Structures (east of Hangar 6886).	Portion of fencing project APE is in the NAS Kaneohe Aviation Historic District.	Portion of fencing APE is near Archaeological Sites 5829 and 4933.	<b>Testing</b> based on depth of ground disturbance; the proximity to subsurface archaeological Sites 5829 and 4933; and the lack of previous archaeological investigations in portion of the Wash Rack project APE.	<b>Monitoring</b> based on the potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period for use as cushioning under building foundations and in utility trenches... (Tomonari-Tuggle and Clark 2021: I-95).

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
9. Bravo Ramp Upgrades for MV-22	Resurface, repave, and stripe Bravo Ramp on bayside of hangar row for use by MV-22 aircraft. Includes ground disturbance greater than 6 inches in depth.	Kaneohe Naval Air Station National Historic Landmark (NHL) District; former seaplane ramp and parking area are contributing features.	The project APE does not contain any traditional Hawaiian archaeological deposits or sites because the ground was built with coral dredged from Kaneohe Bay and is devoid of archaeology. However, there is potential for subsurface historic period archaeology associated with the Dec. 7 <sup>th</sup> 1941 attack.	<b>Testing</b> based on depth of ground disturbance; proximity to the NHL where there is potential for unknown subsurface historic period features associated with the Dec. 7 <sup>th</sup> 1941 attack.	<b>Monitoring</b> based on the potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period for use as cushioning under building foundations and in utility trenches... (Tomonari-Tuggle and Clark 2021: I-95).
10. Hangar 103 Replacement for MV-22	Demolition of Hangar 103, Buildings 159, 160, 161, 183, 184, and construction of Type II Hangar for MV-22s. Includes ground disturbance	NAS Kaneohe Aviation Historic District. Hangar 103 is a contributing element built circa 1941.	The project APE does not contain any traditional Hawaiian archaeological deposits or sites because the land was built with coral	<b>No testing</b> due to location within filled lands devoid of archaeology.	<b>Monitoring</b> based on potential for presence of disarticulated, secondarily-deposited human skeletal remains in Jaucas sand mined elsewhere on the

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
	greater than 6 inches in depth.		dredged from Kaneohe Bay devoid of archaeology.		peninsula in the historic period.
11. Hangar 6886 Renovations for KC-130J	Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use. No ground disturbance.	No historic buildings or districts present.	Outside but near subsurface archaeological historic properties, Sites 5829 and 4933.	<b>No testing</b> due to no ground disturbance.	<b>No monitoring</b> due to no ground disturbance.
12. KC-130J Support Structures	Construction of new support facilities east of Hangar 6886 including Storage Facility and Propeller Maintenance Facility. Includes ground disturbance greater than 6 inches in depth.	No historic buildings or districts present.	Outside but near subsurface historic properties including archaeological Sites 5829 and 4933. The project APE appears to straddle original shoreline and filled lands built with coral dredged from Kaneohe Bay that is devoid of archaeology.	<b>Testing</b> due to depth of project ground disturbance deeper than six inches and proximity to known subsurface historic properties including archaeological deposits and sites.	<b>Monitoring</b> based on the potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period for use as cushioning under building foundations and in utility trenches... (Tomonari-Tuggle and Clark 2021: I-95).

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

**EXHIBIT 6 HOME BASING MOA  
ARCHAEOLOGICAL METHODS REQUIRED FOR CONSTRUCTION PROJECTS**

Construction Projects (based on EA Table 2-1)	Description/Location (based on EA Table 2-6)	Historic Buildings/Districts in the Project APE	Subsurface Archaeological Historic Properties in the Project APE	Archaeological Testing Required/Justification.	Archaeological Monitoring Required/Justification
13. KC-130J Aircraft Direct Refueling System	Construction of new refuel lane with an Aircraft Direct Refueling System at Green Field. Demolition of Buildings 4000 and 5068. Construction of concrete pavement, asphalt shoulders, striping, fuel lines from the existing fuel farm, and a drainage system with storm water detention capability.	NAS Kaneohe Aviation Historic District.	No subsurface archaeological historic properties including deposits or sites.	<b>Testing</b> due to estimated depth of project ground disturbance deeper than 6 inches; and absence of previous archaeological investigations in the project APE.	<b>Monitoring</b> based on the potential to encounter disarticulated, secondarily-deposited human skeletal remains brought in with Jaucas sand mined elsewhere on the peninsula during the historic period for use as cushioning under building foundations and in utility trenches... (Tomonari-Tuggle and Clark 2021: I-95).

Note: Exhibit 6 Table is based on EA Table 2-1 and locations are based on EA Table 2-6 which together comprise MOA Exhibit #1. Testing is required in five project APEs: #6, #8, #9, #12, #13. Testing criteria and methodology are described in further detail in Home Basing Final MOA, Stipulation II.D.

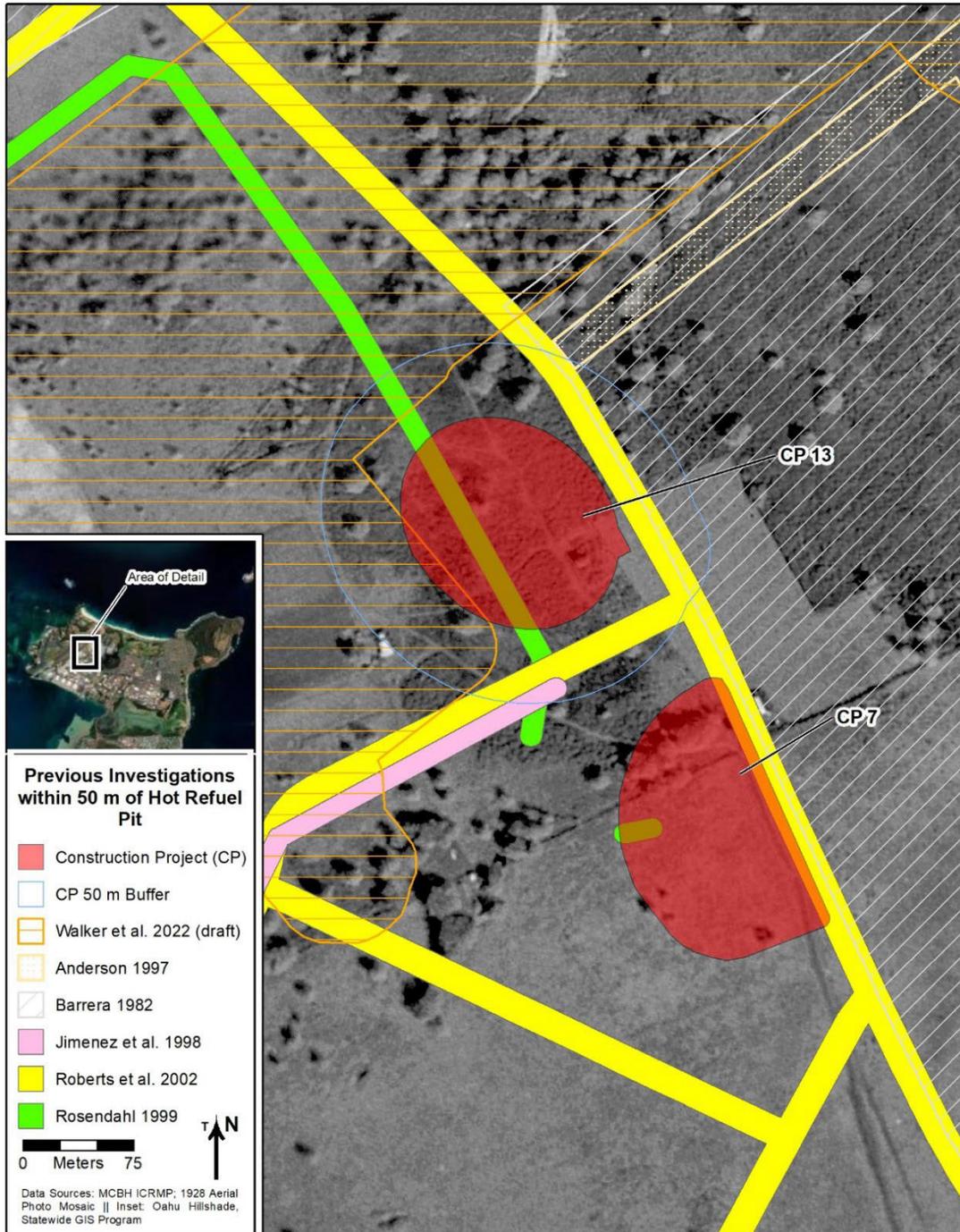
**EXHIBIT 7 HOME BASING MOA  
HOME BASING CONSTRUCTION PROJECTS WITH PREVIOUS INVESTIGATIONS**

**ARCHAEOLOGICAL TESTING PROPOSED FOR  
CONSTRUCTION ELEMENTS (CP) 13:**

CP 13: KC-130J Aircraft Direct Refueling System (ground disturbance)

**NO ARCHAEOLOGICAL TESTING PROPOSED  
FOR CP: 7**

CP 7: Temporary Construction Staging Laydown Area at Crescent Circle (no ground disturbance)



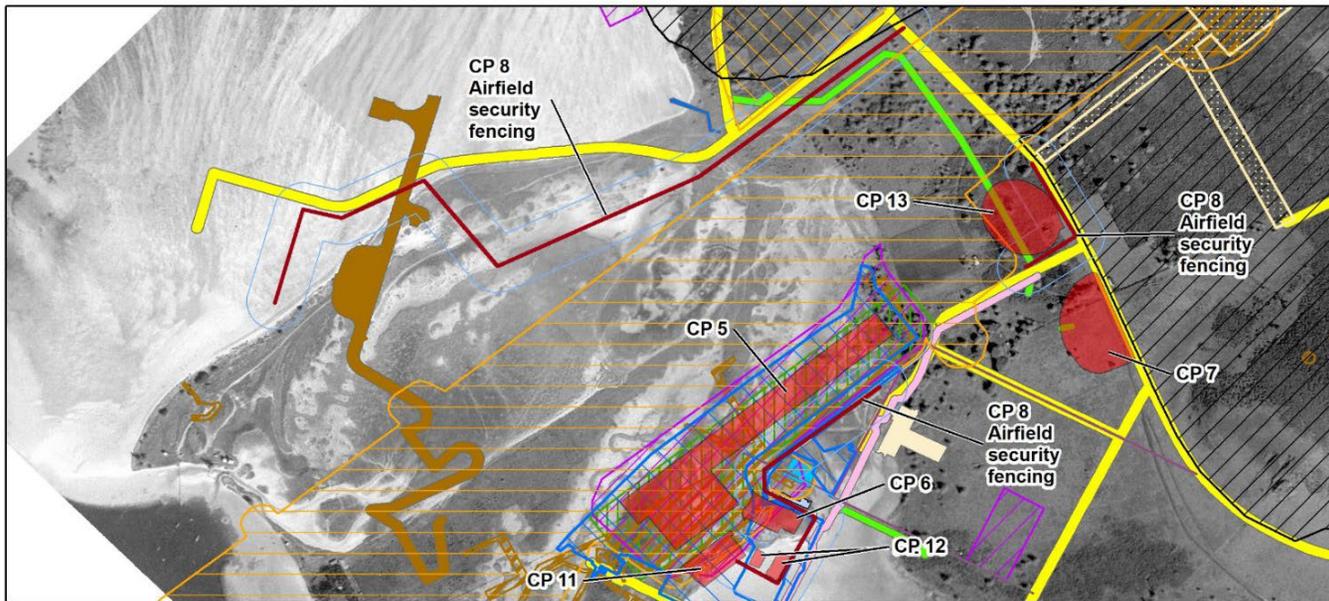
## EXHIBIT 8 HOME BASING MOA HOME BASING CONSTRUCTION PROJECTS WITH PREVIOUS INVESTIGATIONS

### ARCHAEOLOGICAL TESTING PROPOSED DUE TO GROUND DISTURBANCE FOR CP 6, 8, 12

CP 6: Construct Wash Rack for KC-130J east of Hangar 6886 (near subsurface historic properties)  
 CP 8: Airfield Security Fencing (proximity to subsurface archaeological Sites 5829 and 4933)  
 CP 12: Construction of new support facilities east of Hangar 6886 including Storage Facility and Propeller Maintenance Facility

### NO ARCHAEOLOGICAL TESTING PROPOSED FOR CP 5, 7, 11

CP 5: Restriping of Charlie Ramp for C-130J aircraft west of Hangar 6886 and east of Taxiway A (no ground disturbance)  
 CP 7: Temporary Construction Staging Laydown Area at Crescent Circle (no ground disturbance)  
 CP 11: Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use (no ground disturbance)



#### Previous Investigations within 50 m of Airfield Security Fencing

<span style="color: red;">■</span> Construction Project (CP)	<span style="color: blue;">■</span> Allen and Schilz 1996	<span style="border: 1px solid orange;">□</span> Drolet et al. 1996	<span style="color: brown;">■</span> Rieth 2007
<span style="color: red;">—</span> Security Fencing (CP 8)	<span style="color: lightblue;">■</span> Allen and Schilz 1997	<span style="border: 1px solid pink;">□</span> Jimenez et al. 1998	<span style="color: cyan;">■</span> Riford et al. 2004
<span style="border: 1px solid lightblue;">□</span> Fencing 50 m Buffer	<span style="border: 1px solid yellow;">□</span> Anderson 1997	<span style="border: 1px solid purple;">□</span> Kaschko 1996	<span style="color: yellow;">■</span> Roberts et al. 2002
<span style="border: 1px solid blue;">□</span> Fillmoehala et al. 2020	<span style="border: 1px solid black;">□</span> Barrera 1982	<span style="color: blue;">■</span> Lauer 2008	<span style="color: green;">■</span> Rosendahl 1999
<span style="border: 1px solid orange;">□</span> Walker et al. 2022 (draft)	<span style="border: 1px solid black;">□</span> Charvet-Pond and Rosendahl 1992	<span style="border: 1px solid brown;">□</span> Prishmont et al. 2001	<span style="color: magenta;">■</span> Schilz and Allen
	<span style="color: lightblue;">■</span> Dixon et al. 2002	<span style="border: 1px solid green;">□</span> Rechtman and Wolforth 2000	

0 Meters 300



Data Sources: MCBH ICRMP; 1928 Aerial Photo Mosaic | Inset: Oahu Hillshade, Statewide GIS Program



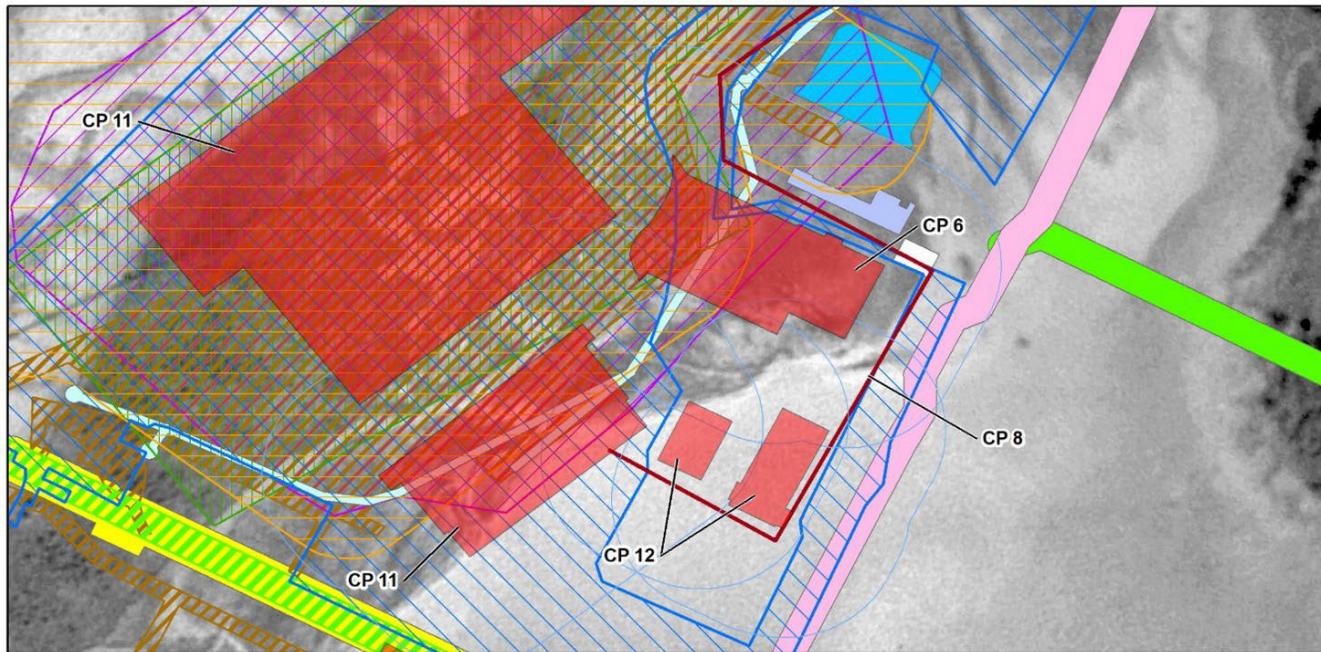
**EXHIBIT 9 HOME BASING MOA  
HOME BASING CONSTRUCTION PROJECTS WITH PREVIOUS INVESTIGATIONS**

**ARCHAEOLOGICAL TESTING PROPOSED DUE TO GROUND DISTURBANCE FOR CP 6, 8, 12**

CP 6: Construct Wash Rack for KC-130J east of Hangar 6886 (near subsurface historic properties)  
 CP 8: Airfield Security Fencing (proximity to subsurface archaeological Sites 5829 and 4933)  
 CP 12: Construction of new support facilities east of Hangar 6886 including Storage Facility and Propeller Maintenance Facility

**NO ARCHAEOLOGICAL TESTING PROPOSED FOR CP 11**

CP 11: Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use (no ground disturbance)



**Previous Investigations within 50 m of Hangar 6886 and three KC-130J Structures**

Construction Project (CP)	Walker et al. 2022 (draft)	Jimenez et al. 1998	Riford et al. 2004
CP 50 m Buffer	Allen and Schilz 1996	Kaschko 1996	Roberts et al. 2002
Security Fencing (CP 8)	Allen and Shilz 1997	Prishmont et al. 2001	Rosendahl 1999
Filimoejala et al. 2020	Dixon et al. 2002	Rechtman and Wolforth 2000	

0 Meters 75



Data Sources: MCBH ICRMP; 1928 Aerial Photo Mosaic || Inset: Oahu Hillshade, Statewide GIS Program



**EXHIBIT 10 MCBH HOME BASING MOA  
HISTORIC PROPERTIES (LIST) WITHIN HOME BASING APE**

<b>Historic Property (Facility/Site no.)</b>	<b>Name/Function</b>	<b>NRHP Listed/Eligible</b>	<b>NRHP Status (Significance Criterion)</b>	<b>Effect(s) from Home Basing Projects</b>	<b>Mitigation Measure(s) (MOA Stipulation)</b>	<b>SHPD Concurrence w/DOE**</b>
#1-5 (NHL) (n=5)	Seaplane Ramps	Listed (NRHP-L)	NHL	No historic properties affected (N/HP/AFF)		SHPD letter dtd 4/29/2011***; LOG: 2011.0878, DOC: 1104RS119
101 (NHL)	Aircraft Hangar	NHRP-L	NHL	N/HP/AFF		SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
102	Aircraft Hangar	Eligible Aviation Historic District Contributing Resource (NRHP-E/Av HD)	A/C	No adverse effects (NAE)	II.B.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
103	Aircraft Hangar	NRHP-E/Av HD	A/C	Adverse Effects (AE) / Construction Project (CP) 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
104	Aircraft Hangar	NRHP-E/Av HD	A/C	N/HP/AFF		SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
105	Aircraft Hangar	NRHP-E/Av HD	A/C	N/HP/AFF		SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
159 (adjacent H3)	Aircraft Spares Storage	NRHP-E/Av HD	A	AE / CP 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
160 (adjacent H3)	Aircraft Spares Storage	NRHP-E/Av HD	A	AE / CP 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119

**EXHIBIT 10 MCBH HOME BASING MOA  
HISTORIC PROPERTIES (LIST) WITHIN HOME BASING APE**

<b>Historic Property (Facility/Site no.)</b>	<b>Name/Function</b>	<b>NRHP Listed/Eligible</b>	<b>NRHP Status (Significance Criterion)</b>	<b>Effect(s) from Home Basing Projects</b>	<b>Mitigation Measure(s) (MOA Stipulation)</b>	<b>SHPD Concurrence w/DOE**</b>
161 (adjacent H3)	Aircraft Spares Storage	NRHP-E/Av HD	A	AE / CP 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
183 (adjacent H3)	Aircraft Spares Storage	NRHP-E/Av HD	A	AE / CP 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
184 (adjacent H3)	Aircraft Spares Storage	NRHP-E/Av HD	A	AE / CP 10	II.A.1.-8.; II.C.	SHPD letter dtd 4/29/2011; LOG: 2011.0878, DOC: 1104RS119
SIHP* Archaeological Site 50-80-11-4453	Subsurface cultural deposit with pit features, postmolds, shell midden, charcoal; intact burials	NRHP-E	D	N/HP/AFF CP 2 (GDT near H105) CP 4	II.D.	<b>Pending</b> MCBH January 2023 solicitation of SHPD concurrence in DOEs for MCBH archaeological sites; treated as NRHP-E even w/out SHPD concurrence as allowed at 36 CFR 800.4(c)(2)
50-80-11-4933	Subsurface cultural deposit with pits, postholes, firepits; bone arrow point	NRHP-E	D	N/HP/AFF CP 5 CP 6 CP 8 CP 12	II.D.	<b>Pending</b>
50-80-11-5829	Subsurface cultural deposit, burials; around Building 6470, north of Hangar 104	NRHP-E	D	N/HP/AFF	II.D.	<b>Pending</b>

**EXHIBIT 10 MCBH HOME BASING MOA  
HISTORIC PROPERTIES (LIST) WITHIN HOME BASING APE**

Historic Property (Facility/Site no.)	Name/Function	NRHP Listed/Eligible	NRHP Status (Significance Criterion)	Effect(s) from Home Basing Projects	Mitigation Measure(s) (MOA Stipulation)	SHPD Concurrence w/DOE**
50-80-11-0365	Heiau; on southern slope of Keawanui; location of St. Catherine's Catholic Church in 1840s; O'Day 2007 suggests that Sites 4619, 4620, 4622, and Temp Site 1 could define two sides of heiau	NRHP-E	D	N/HP/AFF CP 2 (GDT on Keawanui Hill--clearing ground surface only)		<b>Pending</b>
50-80-11-0367	Hina Stone; elongated waterworn boulder; one of three features including a fishing shrine with two uprights representing Kane and Kanaloa, a fish trap (Pa Ohua), and shrine with two stones representing Ku and Hina; damaged in 2009	NRHP-E	B, C, D	N/HP/AFF		<b>Pending</b>
50-80-11-2883	Subsurface cultural deposits from pre- and post-Contact periods and pre-WWII house sites; pre-Contact deposit possibly	NRHP-E	D	N/HP/AFF		<b>Pending</b>

**EXHIBIT 10 MCBH HOME BASING MOA  
HISTORIC PROPERTIES (LIST) WITHIN HOME BASING APE**

<b>Historic Property (Facility/Site no.)</b>	<b>Name/Function</b>	<b>NRHP Listed/Eligible</b>	<b>NRHP Status (Significance Criterion)</b>	<b>Effect(s) from Home Basing Projects</b>	<b>Mitigation Measure(s) (MOA Stipulation)</b>	<b>SHPD Concurrence w/DOE**</b>
	continuous with 5733					
50-80-11-4610	House terrace/complex	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4611	House site; pre- WWII	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4612	House site; pre- WWII to 1943	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4614	House site; pre- WWII	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4617	House site; pre- WWII	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4618	Building cluster; pre-WWII	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4619	Pavement w/ 2 waterworn uprights; on slope of Keawanui Hill	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4620	Enclosure; circular; on upper east facing slope of Keawanui Hill; may be part of Site 365 heiau	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4622	Rock and coral piles; may be part of Site 365 heiau	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-4625	House site; pre- WWII	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-7722	Subsurface cultural deposit	NRHP-E	D	N/HP/AFF		<b>Pending</b>

**EXHIBIT 10 MCBH HOME BASING MOA  
HISTORIC PROPERTIES (LIST) WITHIN HOME BASING APE**

<b>Historic Property (Facility/Site no.)</b>	<b>Name/Function</b>	<b>NRHP Listed/Eligible</b>	<b>NRHP Status (Significance Criterion)</b>	<b>Effect(s) from Home Basing Projects</b>	<b>Mitigation Measure(s) (MOA Stipulation)</b>	<b>SHPD Concurrence w/DOE**</b>
50-80-11-7723	Intact but disturbed human burial remains; sparse traditional Hawaiian artifacts	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-7724	Disturbed subsurface cultural deposit (including one human tooth)	NRHP-E	D	N/HP/AFF		<b>Pending</b>
50-80-11-7725	Retaining wall	NRHP-E	D	N/HP/AFF		<b>Pending</b>
4000	Metal storage shed constructed in 1986	NRHP-Ineligible (IE)				
5068	Aircraft Rescue storage shed constructed in 1991	NRHP-IE				
6886	Type II hangar constructed in 2017 for MV-22 squadron	NRHP-IE				

*Notes: \*State Inventory of Historic Places (SIHP); \*\*Determination of Eligibility (DOE); \*\*\* SHPD letter of concurrence in MCBH World War II-era Historic Building Inventory (2011)*



UNITED STATES MARINE CORPS  
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BOX 63002  
KANEHOE BAY, HAWAII 96863-3002

5090  
LFE/128-22  
October 19, 2022

Dr. Alan Downer  
State Historic Preservation Officer  
Officer Department of Land and Natural Resources  
Kakuhihewa Building, Room 555  
601 Kamokila Boulevard  
Kapolei, HI 96707

SUBJECT: Continuing Section 106 Consultation (Draft 1 Memorandum of Agreement): Proposed MCBH Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft Aboard Marine Corps Base Hawaii, Kaneohe Bay, District of Ko'olaupoko, Ahupua'a of He'eia, O'ahu, TMK 1-4-4-008:001.

Dr. Downer:

Marine Corps Base Hawaii (MCBH) is continuing consulting with your office in compliance with Section 106 of the National Historic Preservation Act regarding the proposed undertaking by the U.S. Marine Corps to implement the Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft at the Kaneohe Bay installation (hereinafter referred to as the MCBH Home Basing project). MCBH first initiated consultation on this undertaking with the submittal of the required documentation (LFE/001-22) dated January 7, 2022. In response to your written request for additional information (letter dated February 7, 2022; 2022PR00034/Doc:2202SH06), MCBH provided you with that information in a letter sent via email and HICRIS on August 31, 2022 (LFE/097-22; HICRIS Submission No. 2022PE00034.002). In response to your letter (dated July 14, 2022; Project No.: 2022PR00034 /Doc:2207SH05) and comments regarding the Home Basing Draft 1 Memorandum of Agreement (MOA), MCBH has provided below a response in **bold italics** for each of the requests/comments (in quotes) from your letter:

- 1) "MCBH also determined the proposed undertaking may potentially result in an *adverse effect* on other historic properties based on installing tie-downs west of Hangar 5, which is in the vicinity of NRHP-eligible Site 50-80-11-4453 archaeological deposits."

***MCBH has determined the installation of aircraft tie-downs adjacent to Hangar 105 will be located within the existing aircraft parking ramp and will not penetrate below the ramp's base course, thus avoiding potential impacts for archaeological deposits that may lie below the existing base course.***

- 2) "Additionally, the SHPO asked MCBH to provide a determination of eligibility for the four archaeological sites identified and an assessment of the project's potential impact to those sites. The SHPD maintains this request which needs to occur prior to finalizing the MOA."

***In the MCBH August 31, 2022 letter referenced above, our determination of eligibility for the four archaeological sites you questioned (Sites 4421, 5968, 5969, and 7723) was provided to you. Specifically we stated that, in accordance with 36 CFR 800.4(c)(2), MCBH has determined that Site 7723 is eligible for listing in the National Register of Historic Places (NRHP) and that Sites 4621, 5968, and 5969 are not NRHP eligible based on the information and analysis provided in that letter. We await your concurrence in this NRHP determination of eligibility.***

- 3) "The SHPD also requested MCBH please provide copies, or a summary of, responses received from the public and consulting parties to date."

***In the MCBH August 31, 2022 letter referenced above, MCBH provided you with copies of consulting party comments received as of that date. At the Home Basing Project Section 106 consultation meeting on September 29, 2022, MCBH provided hard copies of all cultural resources public comments to the MCBH Home Basing Environmental Assessment (EA) and we asked to upload those comments to your HICRIS system. MCBH has since uploaded these public comments to HICRIS and provided them to consulting parties via an email attachment.***

- 4) "Further, the SHPO opines there are a number of steps in the Section 106 process that are outstanding, which the MCBH needs to carry out prior to reaching a point in the Section 106 process in which a decision regarding effects to historic properties can be determined... Identification with context of the character-defining features of Bravo Ramp including strafing marks, bomb craters, and ancillary features."

***At the MCBH Section 106 consultation meeting held on September 29, 2022, MCBH committed to conducting a Historic Architectural Landscape Survey (HALS) report for the landscape associated with the Kaneohe Naval Air Station (NAS) National Historic Landmark (NHL) District, of which Bravo Ramp is a contributing resource. This commitment is included in the current MCBH Home Basing Draft MOA and will remain so in the Final MOA.***

- 5) "Archaeological inventory survey(s) in areas likely to host archaeological remains and/or human remains that will undergo ground disturbance to a depth that could impact archaeological resources and human remains during the undertaking should they be present. Further, should there be significant archaeological sites which will be adversely affected by the undertaking, the SHPO requests archaeological data recovery intensive excavation is conducted prior to the start of ground disturbing project work. This type of archaeological investigation conducted prior to the start of the project allows for better control of the investigation and methodology resulting in better data recovery and documentation than archaeological monitoring allows.

The first draft of the MOA only proposed archaeological monitoring as mitigation for any adverse impacts to archaeological resources. Further the draft MOA stipulates that any archaeological data identified after the MOA is executed would be treated as a post-review discovery as defined in 36 CFR 800.13. As SHPD has stated many times during consultation for this project and others at MCBH, archaeological monitoring during the project does not allow the archaeologist the best approach to archaeological methods of data recovery and often results

in less data and deficient documentation. If archaeology is conducted during the project and all findings are treated as a post-review discovery, the SHPD, the Native Hawaiian Organizations, and other consulting parties have very little opportunity to voice concerns and consult on the outcome of the finding."

***After discussions with you, your staff, and all consulting parties at the September 8 and 29, 2022 Section 106 consultation meetings, MCBH has committed to implementing a program of archaeological testing, including data recovery as appropriate, prior to execution of various agreed upon Home Basing Construction projects as noted in the current Draft MOA. Additionally, the Draft MOA also states that MCBH will provide archaeological monitoring for all Home Basing Construction projects' ground disturbing activities as a best management practice to reduce impacts to Native American Graves Protection and Repatriation Act (NAGPRA) cultural items, including Native Hawaiian human skeletal remains, that could be encountered in dune sand used as construction fill material during the 1940s, '50s, and '60s on Mokapu peninsula.***

- 6) "To aid planning efforts, the SHPD requests all information relating to the location of NAGPRA related items previously encountered in, or adjacent to, the APE. Please confirm that all archaeological and NAGPRA locational data within the APE has been presented in the MCBH's written consultation and in maps for this project."

***This information regarding NAGPRA cultural items and archaeological burial sites was provided to consulting parties at the Home Basing Section 106 meeting held on August 11, 2022. The various Section 106 consultation meeting materials (e.g. PowerPoint slides) and meeting summaries provided to consulting parties thus far will confirm that MCBH has presented "all archaeological and NAGPRA locational data within the APE..." for the Home Basing project.***

- 7) "At this time the SHPO opines the MOA was developed prematurely, as there are requirements of the Section 106 process that have not yet been met. At the request of MCBH, the SHPD provides the attached form (below) with its comments on the first draft; the SHPD review focused on the proposed stipulations within the draft MOA, therefore comments to the other sections of this document may be forthcoming."

***The aforementioned MCBH letters and the nine (9) Home Basing Section 106 consultation meetings conducted to date have allowed MCBH to meet the requirements of the Section 106 process, including the current effort to finalize and execute the Home Basing MOA.***

- 8) "The SHPO opines the proposed mitigation is not sufficient and additional efforts need to be considered. However, should any of the proposed mitigation be agreed upon, the MOA needs to be revised to impart explicit commitments regarding timelines to complete the mitigation prior to completion of the undertaking, party involvement, and clear descriptions of the anticipated final product."

***Additional mitigation measures, e.g. securing a curation facility that***

***meets requirements of 36 CFR Part 79 and updating the National Register forms for the Kaneohe NAS NHL District, and specific timelines for implementation for all proposed mitigation measures have been added to the Draft 3 and 4 versions of the MOA.***

In light of the information provided herein and uploaded to HICRIS, including consulting parties' and public comments, and at additional Section 106 meetings held over the past several months, we request your concurrence on our determinations of eligibility and finding of adverse effect for this undertaking (see 31 August 2022 submittal), Home Basing of MQ-9 and KC-130J Aircraft Squadrons aboard MCBH.

Should you or your staff have any questions or additional concerns, please contact the MCBH Cultural Resources Management staff, Ms. June Cleghorn at 257-7126 or via email at [june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil), or Dr. Wendy Wichman at 257-7134 or via email at [wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil).

Sincerely,

**HART.JEFFRY.** Digitally signed by  
**P.1242350568** HART.JEFFRY.P.1242350568  
Date: 2022.10.19 18:45:39  
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J. P. HART  
Major, U. S. Marine Corps  
Director, Environmental Compliance and  
Protection Division  
By direction of the Commanding Officer



UNITED STATES MARINE CORPS  
MARINE CORPS BASE HAWAII  
BOX 63002  
KANEHOE BAY, HAWAII 96863-3002

5090  
LFE/128-22  
October 19, 2022

Dr. Alan Downer  
State Historic Preservation Officer  
Officer Department of Land and Natural Resources  
Kakuhihewa Building, Room 555  
601 Kamokila Boulevard  
Kapolei, HI 96707

SUBJECT: Continuing Section 106 Consultation (Draft 1 Memorandum of Agreement): Proposed MCBH Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft Aboard Marine Corps Base Hawaii, Kaneohe Bay, District of Ko'olaupoko, Ahupua'a of He'eia, O'ahu, TMK 1-4-4-008:001.

Dr. Downer:

Marine Corps Base Hawaii (MCBH) is continuing consulting with your office in compliance with Section 106 of the National Historic Preservation Act regarding the proposed undertaking by the U.S. Marine Corps to implement the Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft at the Kaneohe Bay installation (hereinafter referred to as the MCBH Home Basing project). MCBH first initiated consultation on this undertaking with the submittal of the required documentation (LFE/001-22) dated January 7, 2022. In response to your written request for additional information (letter dated February 7, 2022; 2022PR00034/Doc:2202SH06), MCBH provided you with that information in a letter sent via email and HICRIS on August 31, 2022 (LFE/097-22; HICRIS Submission No. 2022PE00034.002). In response to your letter (dated July 14, 2022; Project No.: 2022PR00034 /Doc:2207SH05) and comments regarding the Home Basing Draft 1 Memorandum of Agreement (MOA), MCBH has provided below a response in **bold italics** for each of the requests/comments (in quotes) from your letter:

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***MCBH has determined the installation of aircraft tie-downs adjacent to Hangar 105 will be located within the existing aircraft parking ramp and will not penetrate below the ramp's base course, thus avoiding potential impacts for archaeological deposits that may lie below the existing base course.***

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***In the MCBH August 31, 2022 letter referenced above, our determination of eligibility for the four archaeological sites you questioned (Sites 4421, 5968, 5969, and 7723) was provided to you. Specifically we stated that, in accordance with 36 CFR 800.4(c)(2), MCBH has determined that Site 7723 is eligible for listing in the National Register of Historic Places (NRHP) and that Sites 4621, 5968, and 5969 are not NRHP eligible based on the information and analysis provided in that letter. We await your concurrence in this NRHP determination of eligibility.***

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***After discussions with you, your staff, and all consulting parties at the September 8 and 29, 2022 Section 106 consultation meetings, MCBH has committed to implementing a program of archaeological testing, including data recovery as appropriate, prior to execution of various agreed upon Home Basing Construction projects as noted in the current Draft MOA. Additionally, the Draft MOA also states that MCBH will provide archaeological monitoring for all Home Basing Construction projects' ground disturbing activities as a best management practice to reduce impacts to Native American Graves Protection and Repatriation Act (NAGPRA) cultural items, including Native Hawaiian human skeletal remains, that could be encountered in dune sand used as construction fill material during the 1940s, '50s, and '60s on Mokapu peninsula.***

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***This information regarding NAGPRA cultural items and archaeological burial sites was provided to consulting parties at the Home Basing Section 106 meeting held on August 11, 2022. The various Section 106 consultation meeting materials (e.g. PowerPoint slides) and meeting summaries provided to consulting parties thus far will confirm that MCBH has presented "all archaeological and NAGPRA locational data within the APE..." for the Home Basing project.***

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***The aforementioned MCBH letters and the nine (9) Home Basing Section 106 consultation meetings conducted to date have allowed MCBH to meet the requirements of the Section 106 process, including the current effort to finalize and execute the Home Basing MOA.***

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***Additional mitigation measures, e.g. securing a curation facility that***

***meets requirements of 36 CFR Part 79 and updating the National Register forms for the Kaneohe NAS NHL District, and specific timelines for implementation for all proposed mitigation measures have been added to the Draft 3 and 4 versions of the MOA.***

In light of the information provided herein and uploaded to HICRIS, including consulting parties' and public comments, and at additional Section 106 meetings held over the past several months, we request your concurrence on our determinations of eligibility and finding of adverse effect for this undertaking (see 31 August 2022 submittal), Home Basing of MQ-9 and KC-130J Aircraft Squadrons aboard MCBH.

Should you or your staff have any questions or additional concerns, please contact the MCBH Cultural Resources Management staff, Ms. June Cleghorn at 257-7126 or via email at [june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil), or Dr. Wendy Wichman at 257-7134 or via email at [wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil).

Sincerely,

**HART.JEFFRY.** Digitally signed by  
**P.1242350568** HART.JEFFRY.P.1242350568  
Date: 2022.10.19 18:45:39  
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J. P. HART  
Major, U. S. Marine Corps  
Director, Environmental Compliance and  
Protection Division  
By direction of the Commanding Officer



**UNITED STATES MARINE CORPS**  
**MARINE CORPS BASE HAWAII**  
**BOX 63002**  
**KANEHOE BAY, HAWAII 96863-3002**

5090  
 LFE/097-22  
 31 August 2022

Dr. Alan Downer  
 Deputy State Historic Preservation Officer  
 Department of Land and Natural Resources  
 Kakuihewa Building, Room 555  
 601 Kamokila Boulevard  
 Kapolei, HI 96707

Dear Dr. Downer:

**SUBJECT:** CONTINUING SECTION 106 CONSULTATION: Development of a Memorandum Of Agreement for Home Basing of MQ-9A and KC-130 Aircraft Squadrons Aboard Marine Corps Base Hawaii, District Of Ko'olaupoko, Ahupua'a Of He'eia, On The Island Of O'ahu, TMK 1-4-4-008:001.

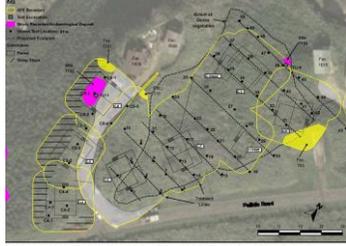
Marine Corps Base Hawaii (MCBH) is continuing consultation with your office in compliance with Section 106 of the National Historic Preservation Act (NHPA) regarding the above subject undertaking (hereinafter project). We received your written request for additional information (letter dated February 7, 2022; 2022PR00034/Doc:2202SH06) in response to our Section 106 initiation letter dated January 7, 2022 (LFE/001-22) and have provided the additional information herein.

**IDENTIFICATION OF HISTORIC PROPERTIES**

Your office requested a determination of eligibility for the four archaeological sites that were identified in our initiation letter as not evaluated, and an assessment of this project's potential impact to those sites (see enclosure 1 for archaeological site locations within or near this project's area of potential effect (APE) that was included in the Section 106 initiation letter referenced above).

Site No.50-80-11- /Reference	Description	Eligibility	Figure
Site 4621, Building Foundation (see Drolet et al. 1996).	Two parallel 5 m x 10 cm concrete walls running east to west on the northern slope of Keawanui Hill, 40 m east of Pali Kilo Road (Fig. 67). Constructed of cobbles faced with concrete. Remnants are 3 meters apart with soil between them. Both are considerably damaged. Based on lack of structural remains of building foundation, it is not clear what this type of feature represents.	Not eligible based on lack of integrity and significance. World War II or early 20 <sup>th</sup> Century-era feature can no longer convey its significance as a structure and does not retain the ability to yield important information about prehistory or history.	

<p>Site 5968, Rock Wall Remnant (recorded by Roberts et al. 2002, see Section 10)</p>	<p>Remnant retaining rock wall identified in trench excavations west of the flightline. It is constructed of undressed, basalt rocks (20-40 cm diameter) and mortar, similar to other early twentieth century house foundations and walls in the Pali Kilo area (Figure 20). Cross-section of the retaining wall was identified in the trench between MH77A and Building 1359, 3m west of Mokapu Road. Function of the wall is not clear. Historic maps (Lyons and Brown 1881-1882, Territory of Hawaii 1928 do not show historic structures at this location. Wall was likely associated with Mokapu Experimental Game Farm or early military construction.</p>	<p>Not eligible based on lack of integrity and significance. World War II or early 20<sup>th</sup> Century feature can no longer convey its significance as a structure and does not retain the ability to yield important information about prehistory or history.</p>	<p>Figure 20. Profile of Site 5968 Wall.</p>
<p>Site 5969, Building Remnant (recorded by Roberts et al. 2002, see Section 10).</p>	<p>Building remnant identified in trench excavations west of the flightline. It consists of a thick concrete World War II era foundation reinforced with metal rebar (Figure 21). The structure was completely buried underground and discovered in the wall profile of a trench stretching between Manholes 77-77A... The concrete structure is located 25m east of Building 708, a World War II era bunker. It is not clear whether or not the concrete foundation is connected to Building 708; however, the</p>	<p>Not eligible based on lack of integrity and significance. World War II or early 20<sup>th</sup> Century feature can no longer convey its significance as a structure and does not retain the ability to yield important information about prehistory or history.</p>	<p>Figure 21. Profile of Site 5969 Foundation.</p>

	<p>construction materials and techniques are consistent with other nearby World War II era structures.</p>		
<p>Site 7723, Pre-contact Deposit (recorded by Gosser et al. 2015, 53).</p>	<p>Site 7723 included a partially intact human burial approximately 27 cmbs, located near the northern boundary of APE-C (within the footprint of Cottage 13b). In addition to the HSR, sparse traditional artifacts were recovered from TU-6. Site 7723 is recommended as potentially eligible for inclusion on the NRHP under Criteria C and D, and as a contributing property of the Mokapu Houselots Archaeological District at Pali Kilo. Probable that the pre-Contact components of this site have their origins during the Late Pre-Contact period (Figure 23).</p>	<p>Eligible</p>	 <p>Figure 23 APE-C Showing Shovel Test Locations, Test Unit Locations, and Recorded Archaeological Deposits.</p>

In accordance with 36 CFR 800.4(c) (2), MCBH has determined that Site 7723 (see enclosure 2) is eligible for listing in the National Register of Historic Places (NRHP) and that Sites 4621 (enclosure 3), 5968 (enclosure 4), and 5969 (enclosure 4) are not NRHP eligible based on the information and analysis provided above. Furthermore, MCBH has determined that the project will have no effect on sites and historic properties listed above based on the lack of ground disturbing activities within/near these sites [compare enclosure 5 (Home Basing Project Elements) also included in the Section 106 initiation letter referenced above and enclosure 6 (Expanded Project Elements locations) first presented as slide #11 at the initial Home Basing Section 106 consultation meeting held on January 13, 2022, with enclosure 1 (Archaeological Site Locations)].

Your office also requested copies, or a summary, of responses received from the public and consulting parties to date. Please see enclosure 7 for written comments from Historic Hawaii Foundation (HHF), received via email on March 10, 2022 from Kiersten Faulkner. Other written comments received from HHF and other consulting parties have included comments to the Home Basing Draft #1 MOA, and MCBH provided those comments and MCBH responses in a comment response matrix emailed to all consulting parties on August 19, 2022.

Lastly, Section 106 consultation meeting summaries, which include consulting party comments discussed at these meetings, have been provided to all consulting parties for the following meeting dates in 2022: January 13, March 10, April 14, May 12, June 9, and July 14. The meeting summary for the August 11 Section 106 consultation meeting will be forwarded to all consulting parties before the next consultation meeting on Thursday September 8.

#### **DETERMINATION OF EFFECT**

Based on the additional information provided herein, MCBH requests your concurrence on our determination that the proposed undertaking will result in an adverse effect on historic properties in accordance with Section 106 Implementing Regulations at 36 CFR 800.5(a)(1) based on the following: 1) demolition of Hangar 103, which is eligible for the National Register as a contributing element of the Naval Air Station (NAS) Kaneohe Aviation Historic District; (2) construction of a replacement Type II hangar where Hangar 103 was located; (3) demolition of Facilities 159, 160 and 161, which are small Aircraft Spares Storage Buildings located adjacent to Hangar 3 and contributing resources to the NAS Kaneohe Historic Aviation District; (4) demolition of two small aircraft armament storage buildings located north of Hangar 103 built in 1942, Facilities 183 and 184, both of which are eligible for the National Register as contributing elements of the NAS Kaneohe Aviation Historic District; (5) repaving and resurfacing of the former seaplane parking area including Bravo Ramp, which is eligible as a contributing element of the Kaneohe Naval Air Station NHL District and the NAS Kaneohe Historic Aviation District; and (6) data recovery associated with archaeological testing of any eligible subsurface archaeological site or deposit in advance of ground disturbing activities associated with the project execution.

MCBH is forwarding copies of this letter to the consulting parties listed below, including Native Hawaiian Organizations (NHOs), and in accordance with the Section 106 Implementing Regulations at 36 CFR 800.6(a) will continue consulting with the SHPO and the consulting parties listed below to develop an MOA that will avoid, minimize or mitigate the adverse effects on historic properties. MCBH has notified the Advisory Council on Historic Preservation (ACHP) of this adverse effect finding, and the ACHP will participate in this consultation pursuant to Section 106 Implementing Regulations at 36 CFR 800.6(a)(1).

Lastly, MCBH also received written comments from your office to the Draft #1 Memorandum of Agreement (MOA) for this project via an emailed letter dated July 11, 2022 (Project No.:2022PR00034/Doc. No. 2207SH05). MCBH will respond to requests for additional information in your July 11, 2022 letter after the public comment period, for the *Environmental Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron*, ends on September 21, 2022.

Should you or your staff have any questions, please contact the MCBH Cultural Resources Management staff, Ms. June Cleghorn at 257-7126 or via email at [june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil), or Dr. Wendy Wichman at 257-7134 or via email at [wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil).

Sincerely,

HART.JEFFRY. Digitally signed by  
P.1242350568 HART.JEFFRY.P.1242350568  
Date: 2022.08.31 17:15:57  
-10'00'

J. P. HART  
Major, U. S. Marine Corps  
Director, Environmental Compliance and  
Protection Division  
By direction of the Commanding Officer

Enclosures:

1. Archaeological site locations within or near this project's area of potential effect (APE).
2. Location of Archaeological Site 7723, Figure 23 Gosser et al., 2015.
3. Archaeological Site 4621 plan view, Figure 67 Drolet et al., 1996.
4. Archaeological Sites 5968 & 5969, Figures 20-21 Roberts et al., 2002.
5. Home Basing Project Elements
6. Home Basing Expanded Project Elements
7. Copy of written comments from Historic Hawaii Foundation, received via email on March 10, 2022 from Kiersten Faulkner

Copy to (via email):

Oahu Island Burial Council (Chair, William Mills)  
Office of Hawaiian Affairs  
Ms. Anuheia Diamond, Diamond `Ohana  
Ms. Ah Lan Diamond, Diamond `Ohana  
Ms. Skye Razon-Olds, Olds `Ohana  
Ms. Emalia Keohokalole, Keohokalole `Ohana  
Ms. Na`u Kamali`i, Boyd `Ohana  
Ms. Donna Ann Camvel, Paoa Kea Lono `Ohana  
Mr. Cy Harris, Kekumano `Ohana  
Ms. Terrilee Napua Keko`olani Raymond, Keko`olani `Ohana  
Mr. Clive Cabral, Temple of Lono  
Ms. Kaleo Paik, Paik `Ohana  
Ms. Kiersten Faulkner, Historic Hawaii Foundation  
Ms. Elizabeth Merritt, National Trust for Historic Preservation

References:

- Drolet, Robert P., Patricia A. Drolet, and Allan J. Schilz.  
1996 *Archaeological Inventory Survey of Pali Kilo and Ulupa`u Crater  
Parcels, Marine Corps Base Hawaii Kaneohe Bay, O`ahu, Hawai`i.*  
Prepared for U.S. Department of the Navy, Naval Facilities  
Engineering Command, Pacific Division, Pearl Harbor, Hawai`i. Ogden  
Environmental and Energy Services Co., Inc., Honolulu.
- Gosser, Dennis C., Richard Nees, Stephan D. Clark, and Sara L. Collins.  
2015 *Archaeological Survey and Testing in Support of the Pali Kilo Beach  
Cottages Construction, Marine Corps Base, Hawaii, Kaneohe Bay, O`ahu,  
Hawai`i (TMK:[1]4-4-008:001).* Prepared for the Department of Navy,  
Naval Facilities Engineering Command, Pacific. Pacific Consulting  
Services, Inc., Honolulu.

Roberts, Alice K.S., Katharine S. Brown, and Eric W. West.

2002 *Archaeological Monitoring and Sampling for Outside Cable  
Rehabilitation (OSCAR) Project, Marine Corps Base Hawaii (MCBH-KB),  
Kaneohe Bay, Ko'olaupoko District, Island of O'ahu, Hawai'i.*  
Prepared for U.S. Army Corps of Engineers, Honolulu District, Fort  
Shafter. Garcia and Associates, Honolulu.



**Enclosure 1: Archaeological Sites Within and Near the APE**



Enclosure 2. Site 7723 location, Figure 23 Gosser et al., 2015.

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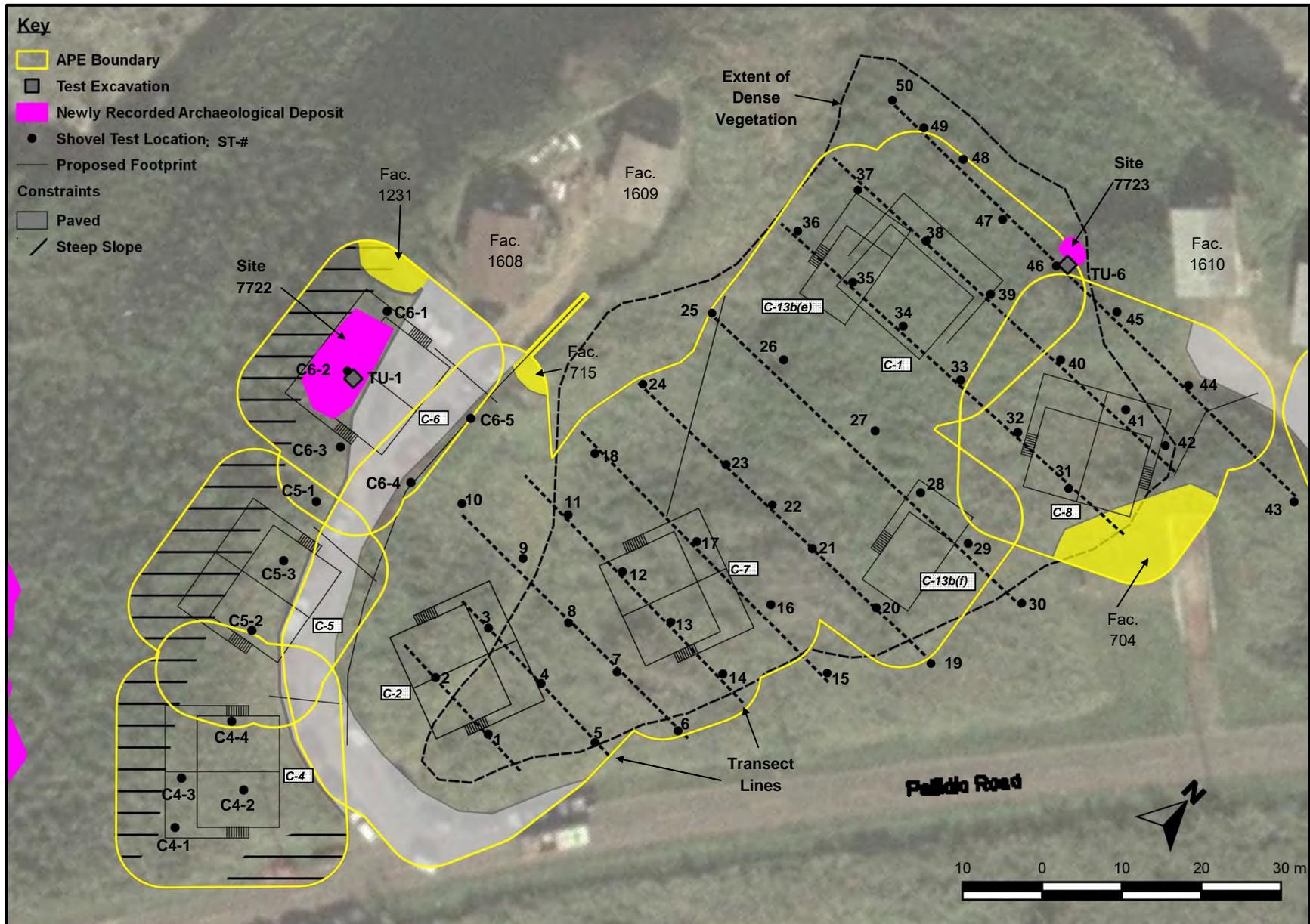
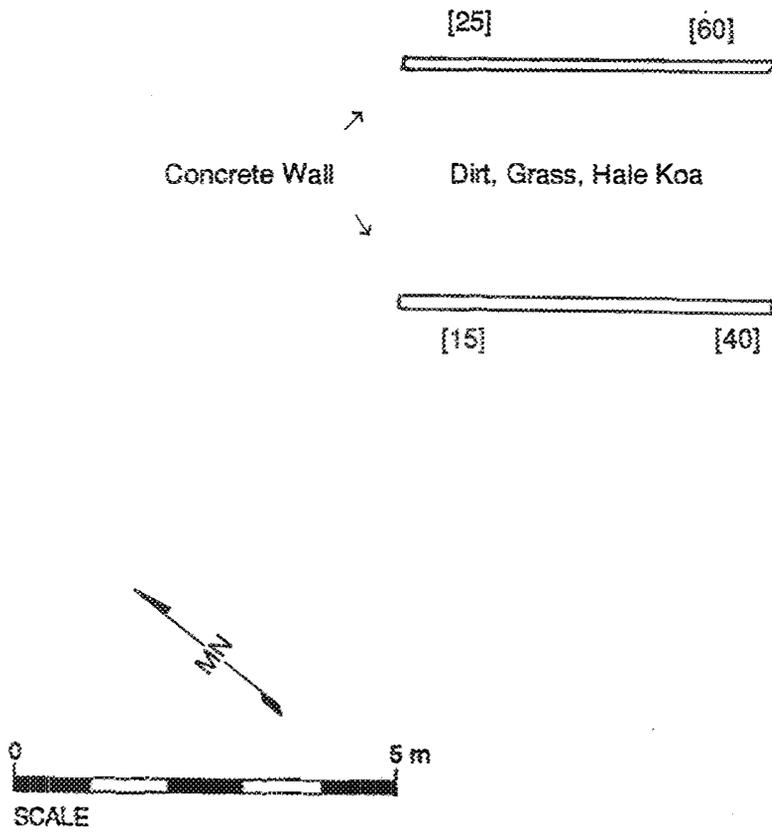


Figure 23. APE-C Showing Shovel Test Locations, Test Unit Locations, and Recorded Archaeological Deposits.

Enclosure 3. Plan view map of Site 4621 from Drolet et al. 1996.



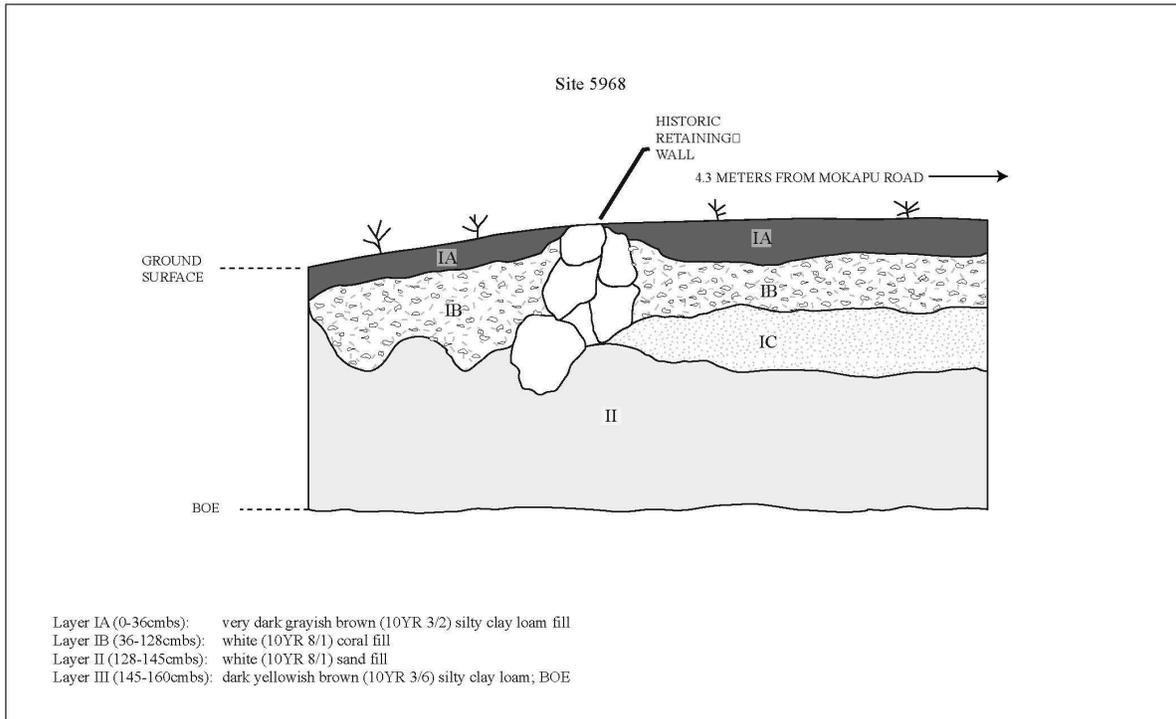


Figure 20. Profile of Site 5968 Wall.

0 50cm



Prepared by Garcia and Associates

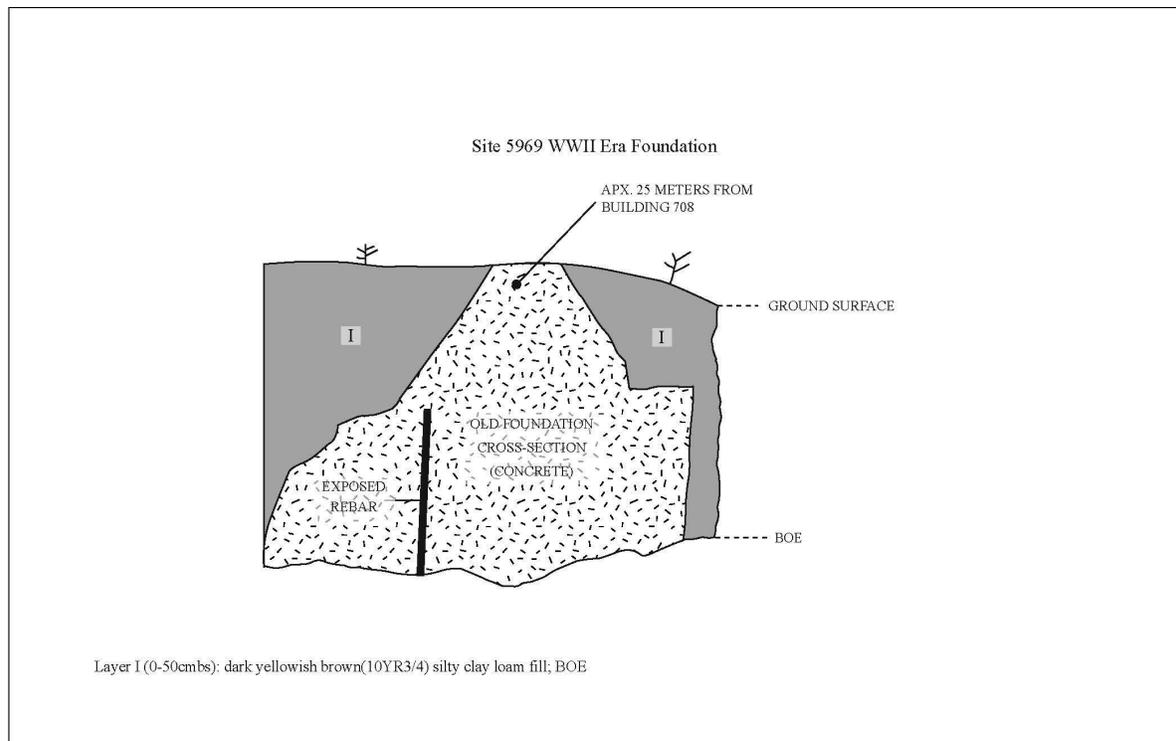
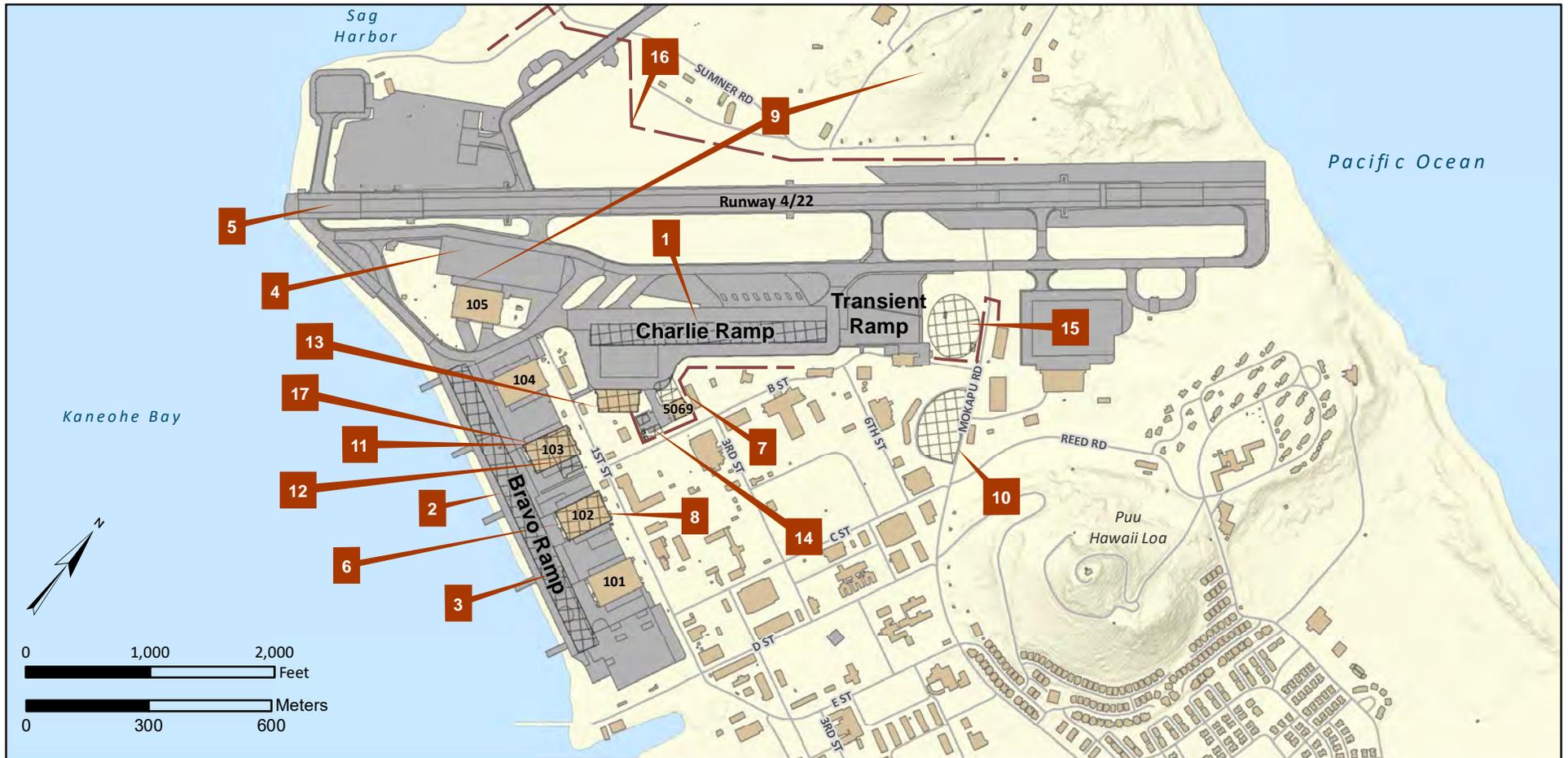


Figure 21. Profile of Site 5969 Foundation.

0 50cm



Prepared by Garcia and Associates



**Enclosure 5: Project Elements**

**Index**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>(1) Restripe Charlie Ramp</li> <li>(2) Resurface, repave, and stripe Bravo Ramp</li> <li>(3) Install tie-downs at Bravo Taxi Ramp and Bravo-1</li> <li>(4) Install tie-downs at and stripe end of Runway 4/22, west of Hangar 105</li> <li>(5) Replace taxiway asphalt</li> <li>(6) Modify Hangar 102 to accommodate MQ-9A:<br/>-Interior upgrades: electrical, mechanical and communication systems<br/>-Training simulator</li> <li>(7) Construct a KC-130J wash rack</li> <li>(8) Install two Ground Control Stations (GCSs) with Environmental Control Units (ECUs) at Hangar 102</li> <li>(9) Install two Ground Data Terminals (GDTs):<br/>-Keawanui Hill<br/>-Adjacent to Hangar 105</li> </ul> | <ul style="list-style-type: none"> <li>(10) Construct laydown and staging area at Crescent Circle</li> <li>(11) Demolish Hangar 103</li> <li>(12) Construct Type II Hangar 103 aircraft maintenance hangar for MV-22s</li> <li>(13) Reconfigure Hangar 6886 interior spaces from MV-22 to KC-130J use</li> <li>(14) Construct new support facilities adjacent to Hangar 6886:<br/>-Storage Facility<br/>-Propeller Maintenance Facility</li> <li>(15) Construct new Hot Refuel Pit and demolish Buildings 4000 and 5068</li> <li>(16) Construct new Security Fencing</li> <li>(17) Demolish Buildings 159, 160, and 161</li> </ul> |
|---|--|

**Legend**

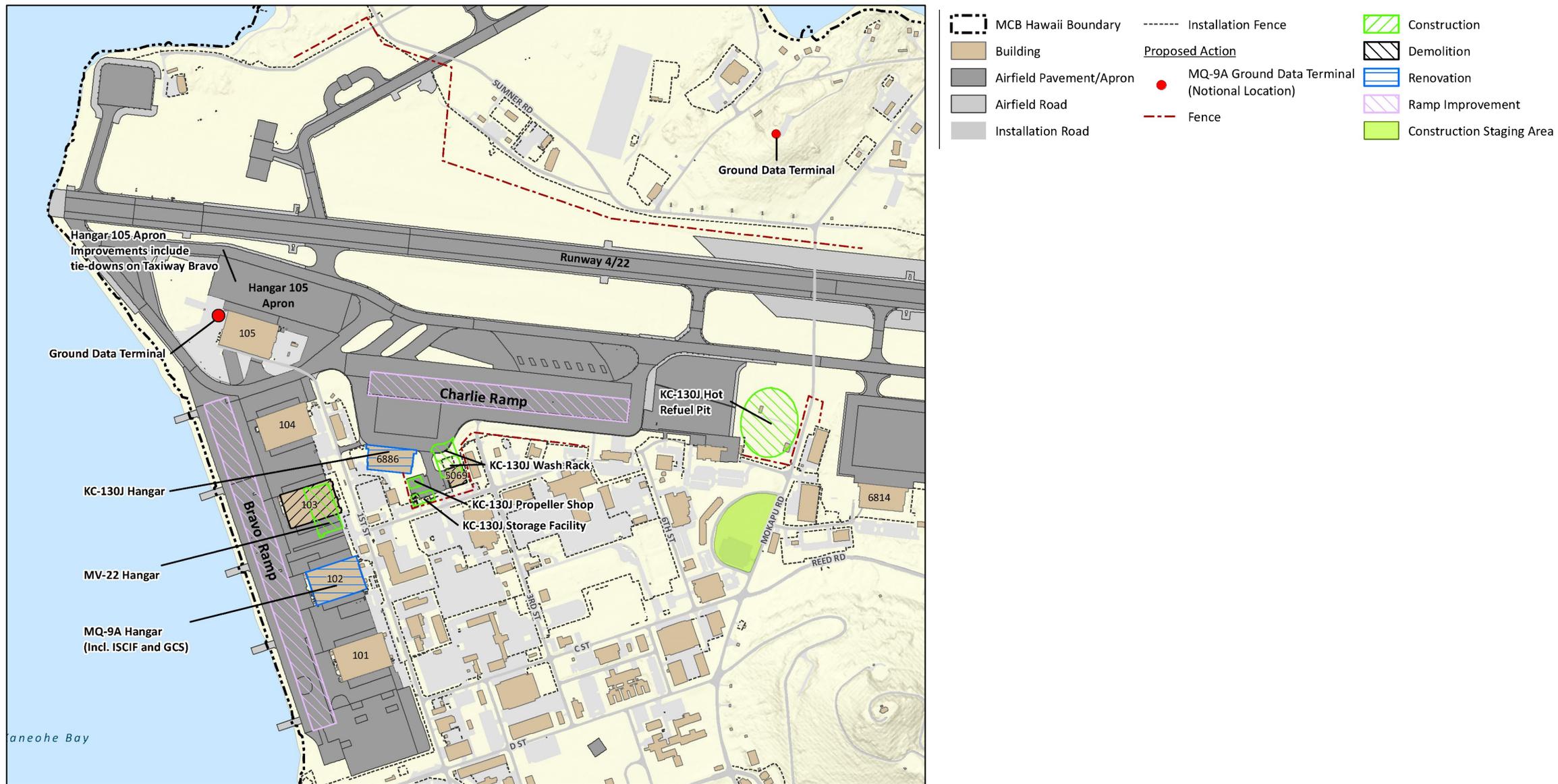
- Proposed Fencing
- Proposed Project Area
- Paved Area
- Building
- Road



Sources: Esri, 2021; Hawaii Statewide GIS, 2021; MCBH, 2021

# Enclosure 6. Home Basing Expanded Project Elements Locations

## EXPANDED PROJECT LOCATIONS



**Enclosure 7. Written comments from Kiersten Faulkner, Historic Hawaii Foundation.**

**From:** [Kiersten Faulkner](#)  
**To:** [Cleghorn CIV June N](#)  
**Cc:** "[Alan Downer \(alan.s.downer@hawaii.gov\)](#)"; "[Susan Lebo \(Susan.A.Lebo@hawaii.gov\)](#)"; "[Stephanie Hacker \(stephanie.hacker@hawaii.gov\)](#)"; "[Julia Flauaus \(julia.flauaus@hawaii.gov\)](#)"; "[Wichman CIV Wendy J](#)"; "[Betsy Merritt \(emerritt@savingplaces.org\)](#)"; "[Anne Nelson \(anelson@savingplaces.org\)](#)"; "[Elaine Jackson-Retondo \(Elaine Jackson-Retondo@nps.gov\)](#)"; [Kiersten Faulkner](#)  
**Subject:** [URL Verdict: Neutral][Non-DoD Source] MCBH Section 106 Consultation Meeting #2 Hangar Modernization: MCBH Home Basing MQ-9 and KC-130J Aircraft  
**Date:** Thursday, March 10, 2022 12:57:43 PM

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Aloha June,

I am following up per your request at today's MCBH Section 106 Consultation meeting for the proposed homebasing for the MQ-9 & KC 130J aircraft. As the MCBH presentation took 85 of the scheduled 90 minutes, with minimal time for questions or discussion, Historic Hawai'i Foundation requested that the next meeting agenda be dedicated to discussion, questions and conversation about the issues and concerns. I was concerned and alarmed that the overall consultation schedule proposes to move directly to drafting a Memorandum of Agreement, but there has been no actual discussion or consultation beyond basic questions for understanding the proposal. I appreciate your willingness to ensure adequate time for consultation and discussion. MCBH also asked that HHF and the other consulting parties provide our list of topics and issues that will form the framework for that conversation with a follow-up email for your reference and records.

To recap HHF's major issues:

1. HHF requested time for consultation and dialogue about the issues, as noted above.
2. We request assessment of feasibility of adaptive reuse for Hangar 103 for the KC130 squadron (the new planes) and not just the MV-22 squadron (the existing helicopters) which are proposed to be relocated from their purpose-built hangar to give that hangar to KC130. It is unclear to me whether or not Hangar 103 would fit the needs of the KC130 or not.
3. We request consideration of the MCBH Greenfield site as an alternative, for either the Homebase project or the Navy's P-2001 undertaking, or both. The MCBH information clearly shows that a new Type 2 hangar fits there; possibly also a Type 3 hangar; possibly both. This site is a viable alternative to avoid demolition of at least one and possibly two of the historic hangars. Both the Aviation District and the Greenfield sites would require demolition of existing buildings and construction of new infrastructure. However, the Greenfield would only impact non-historic resources and roads/surface parking lots. HHF feels strongly that a feasible alternative site that meets the purpose and need without inflicting damage to historic and cultural resources should be selected. It is inappropriate to screen it out of consideration. We appreciate MCBH's commitment to provide a conceptual site plan for discussion.
4. We request discussion about the excessive level of proposed cumulative effect on the district. This adverse effect is alarming and very problematic. MCBH needs to prepare and consider options to avoid and minimize these effects.

5. HHF is concerned that the MCBH concept of proposed mitigation is wholly insufficient. We believe that mitigation needs to be proportionate to the adverse effect; it should be appropriate, timely and beneficial. The project needs to include budget line items to support the mitigation and plan accordingly. We are concerned that MCBH's idea the scope, scale and type of mitigation would result in inadequate financial resources and therefore MCBH would reject ideas merely because of poor financial planning. In my discussions with the Hawai'i Deputy SHPO, he has recommended that major projects was significant adverse effects should plan for 1%-3% of the overall project budget for mitigation measures. I recommend that Dr. Alan Downer be invited into this discussion to expand on this guideline. But for now, MCBH should assume 2% of the project budget for mitigation measures, which can then be developed and detailed in the MOA.

I also noted that MCBH typically schedules its Annual Meeting with Preservation Partners/Consulting Parties in April/May. As covid restrictions ease and public health considerations are addressed, it may be possible to hold that meeting in person. That may be an opportunity for out-of-state attendees to come in person, as travel guidelines allow, with possible site visits. If that is an option, I would recommend a separate day for the project consultations so that doesn't impede or truncate the annual meeting agenda.

Please let me know if you have any questions. We look forward to continuing the consultation.

Thank you,

Kiersten

Kiersten Faulkner

Executive Director

Historic Hawai'i Foundation

680 Iwilei Rd. Ste. 690

Honolulu, HI 96817

Email: [Kiersten@historichawaii.org](mailto:Kiersten@historichawaii.org) <<mailto:Kiersten@historichawaii.org>>

Phone: 808-523-2900

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WEB: [www.historichawaii.org](http://www.historichawaii.org) <<http://www.historichawaii.org/>>

DAVID Y. IGE  
GOVERNOR OF  
HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

STATE HISTORIC PRESERVATION DIVISION  
KAKUHIHEWA BUILDING  
601 KAMOKILA BLVD., STE 555  
KAPOLEI, HI 96707

SUZANNE D. CASE  
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BOARD OF LAND AND NATURAL RESOURCES  
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AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
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CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

July 11, 2022

Major J. P. Hart, Director  
Environmental Compliance and Protection Department  
United States Marine Corps  
Marine Corps Base Hawai'i Box 63002  
Kaneohe Bay, Hawai'i 96863-3002  
Email: Jeffrey.Hart@usmc.mil  
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:  
Project No.: 2022PR00034  
Doc. No.: 2207SH05  
Archaeology  
Architecture  
History and Culture

Dear Major J. P. Hart:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –  
Draft 1 Memorandum of Agreement  
Proposed MCBH Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial  
Transport Refueling Aircraft Aboard Marine Corps Base Hawai'i  
He'eia Ahupua'a, Ko'olaupoko District, Island of O'ahu  
TMK: (1) 4-4-008:001**

The State Historic Preservation Division (SHPD) received a draft Memorandum of Agreement (MOA) titled, *Memorandum of Agreement (MOA) between Marine Corps Base Hawaii (MCBH) and the Hawaii State Historic Preservation Officer (SHPO) Regarding the Home Basing of the MQ-9 Unmanned Aerial Vehicle Squadron and KC-130J Aerial Refueler Transport Aircraft Squadron at Marine Corps Base Hawaii, Kaneohe Bay*, from the Marine Corps Base Hawai'i (MCBH) to continue the Section 106 consultation process and determine appropriate methods to avoid, minimize, and mitigate adverse effects to historic properties resulting from the MCBH Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft project at MCBH on the island of O'ahu. The SHPD received this submittal via email on July 4, 2022 (email Correspondence; June Cleghorn [MCBH] to SHPD) and via the SHPD HICRIS on July 11, 2022 (HICRIS Submission No. 2022PR00034.002).

The MCBH has determined the proposed project is a federal undertaking as defined in 36 CFR 800.16(y); the project is therefore subject to Section 106 of the National Historic Preservation Act. The MCBH initiated Section 106 consultation with the SHPO on January 7, 2022 (MCBH Ref. No. LFE/001-22; SHPD HICRIS Submission No. 2022PR00034.001). A Section 106 meeting for the proposed project was held among MCBH, SHPD, and consulting parties on January 13, 2022 and March 10, 2022.

MCBH's January 2022 letter stated the project is centered on the area around Hangars 2 and 3 (Facilities 102 and 103) and includes support areas at Pali Kilo, West Field, Charlie Ramp, Transient Ramp, and Crescent Circle (for construction laydown). The undertaking includes home basing a Marine Corps MQ-9A Extended Range Unmanned Aerial Vehicle (UAV) squadron (6 aircraft) and a KC-130J aircraft squadron (15-aircraft) at MCBH Kaneohe. Each squadron consists of personnel, aircraft, and supporting infrastructure. The MQ-9A squadron will conduct UAV training operations, and the KC-130J squadron will conduct aerial refueling.

The MCBH Home Basing project will house the MQ-9A squadron in Hangar 102 and house the KC-130J squadron in the hangar currently occupied by the MV-22 squadron (Facility 6886). It will include demolition of Hangar 3 (Facility 103) and of the ancillary Aircraft Spares Storage Buildings (Facilities 159, 160 and 161) adjacent to

Hangar 3. The project also includes construction of a new Type II hangar in the Hangar 3 footprint to house the MV-22 squadron.

The new Type II hangar will be a steel-frame construction with standing seam metal roofing, concrete filled metal deck floors, and a pile foundation. MCBH also proposes to demolish Facilities 4000 (G-3 Storage) constructed in 1986, and 5068 (Aircraft Rescue) built in 1991, located at the Hot Fuel Pit. A list of additional proposed actions is provided with MCBH's letter.

The area of potential effects (APE) for this project consists of the Kaneohe Naval Air Station National Historic Landmark District (NHL), the Naval Air Station (NAS) Kaneohe Historic Aviation District (Aviation District), Bravo Ramp, Charlie Ramp, Transient Ramp, the Mokapu House Lots Archaeological District at Pali Kilo, portions of the West Field area to the north of the runway, and areas that are adjacent to the Aviation District east of Charlie Ramp and Transient Ramp. The APE is approximately 508 acres.

The MCBH states there are approximately 65 architectural resources within the APE, as well as three historic districts. The historic districts are the Naval Air Station (NAS) Kaneohe Historic Aviation District, the Kaneohe Naval Air Station National Historic Landmark (NHL), and the Mokapu House Lots Archaeological District at Pali Kilo which have all been determined eligible listing in the National Register of Historic Places (NRHP) under Criteria A (American history) and C (architecture). Hangars 2 and 3 were built in 1941, and the three ancillary Aircraft Spares Storage buildings (Facilities 159,160, 161) were built in 1942. They are contributing resources to the NAS Kaneohe Historic Aviation District.

The MCBH has determined thirty-one identified archaeological sites fall at least partially within this project's APE. Twenty-six of these sites have been evaluated as eligible for listing in the NRHP. The remaining four sites have not been evaluated. The Mōkapu Burial Area (50-80-11-1017) is approximately 60 meters (m) to the east, and outside of, the APE and is listed in the NRHP. MCBH has determined the archaeological sites previously documented within the APE can be divided into three primary temporal categories: traditional Hawaiian, non-military historic, and military; most sites within the APE are traditional Hawaiian in association.

In its January letter the MCBH determined the proposed project will result in an *adverse effect* based on 1) demolition of Hangar 3, which is eligible for listing in the National Register as a contributing element of the NAS Kaneohe Historic Aviation District and 2) demolition of Facilities 159, 160 and 161, which are small Aircraft Spares Storage buildings located adjacent to Hangar 3 and are contributing resources to the NAS Kaneohe Historic Aviation District. MCBH also determined the proposed undertaking may potentially result in an *adverse effect* on other historic properties based on installing tie-downs west of Hangar 5, which is in the vicinity of the NHRP-eligible Site 50-80-11-4453 archaeological deposits.

In a letter dated February 7, 2022 (Project No. 2022PR00034, Doc. No. 2202SH06), the SHPO agreed with the basis for a determination of *adverse effect* but opined MCBH must still take into consideration comments received from the public and interested parties, which may result in the identification of additional historic properties and/or raise additional concerns regarding project impacts prior to the SHPO's concurrence and prior to the drafting of a Memorandum of Agreement to address the identified effects. Additionally, the SHPD asked MCBH to provide a determination of eligibility for the four archaeological sites identified and an assessment of the project's potential impact to those sites. **The SHPD maintains this request** which needs to occur prior to finalizing the MOA.

**The SHPD also requested** MCBH please provide copies, or a summary of, responses received from the public and consulting parties to date.

Further, **the SHPD opines** there are a number of steps in the Section 106 process that are outstanding, which the MCBH needs to carry out prior to reaching a point in the Section 106 process in which a decision regarding effects to historic properties can be determined. These include the information requested above as well as:

- 1) Identification with context of the character-defining features of Bravo Ramp including strafing marks, bomb craters, and ancillary features.
- 2) Archaeological inventory survey(s) in areas likely to host archaeological remains and/or human remains that will undergo ground disturbance to a depth that could impact archaeological resources and human remains during the

undertaking should they be present. Further should there be significant archaeological sites which will be adversely affected by the undertaking the SHPD requests archaeological data recovery intensive excavation is conducted prior to the start of ground disturbing project work. This type of archaeological investigation conducted prior to the start of the project allows for better control of the investigation and methodology resulting in better data recovery and documentation than archaeological monitoring allows.

The first draft of the MOA only proposes archaeological monitoring as mitigation for any adverse impacts to archaeological resources. Further the draft MOA stipulates that any archaeological data identified after the MOA is executed would be treated as a post-review discovery as defined in 36 CFR 800.13. As SHPD has stated many times during consultation for this project and others at MCBH, archaeological monitoring during the project does not allow the archaeologist the best approach to archaeological methods of data recovery and often results in less data and deficient documentation. If archaeology is conducted during the project and all findings are treated as a post-review discovery, the SHPD, Native Hawaiian Organizations, and other consulting parties have very little opportunity to voice concerns and consult on the outcome of the finding.

To aid in planning efforts, **the SHPD requests** all information relating to the location of NAGPRA related items previously encountered in, or adjacent to, the APE. Please confirm that all archaeological and NAGPRA locational data within the APE has been presented in the MCBH's written consultation and in maps for this project.

At this time the SHPO opines the MOA was developed prematurely, as there are requirements of the Section 106 process that have not yet been met. At the request of MCBH, the SHPD provides the attached form (below) with its comments on the first draft; the SHPD review focused on the proposed stipulations within the draft MOA, therefore comments to the other sections of this document may be forthcoming.

The SHPD opines the proposed mitigation is not sufficient and additional efforts need to be considered. However, should any of the proposed mitigation be agreed upon, the MOA needs to be revised to impart explicit commitments regarding timelines to complete the mitigation prior to completion of the undertaking, party involvement, and clear descriptions of the anticipated final product.

The SHPO looks forward to continuing Section 106 consultation for the proposed project.

**Please submit** the above to the SHPD HICRIS to Project No. 2022PR00034 using the Project Supplement option.

The MCBH is the office of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at [Stephanie.Hacker@hawaii.gov](mailto:Stephanie.Hacker@hawaii.gov) or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Aloha,

*Alan Downer*

Alan S. Downer, PhD  
Administrator, State Historic Preservation Division  
Deputy State Historic Preservation Officer

cc: Christopher Frantz, MCBH ([christopher.frantz@usmc.mil](mailto:christopher.frantz@usmc.mil))  
June Cleghorn, MCBH ([june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil))  
Wendy Wichman, MCBH ([wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil))

### REVIEW COMMENTS

**Project Title:** MEMORANDUM OF AGREEMENT (MOA) BETWEEN MARINE CORPS BASE HAWAII (MCBH) AND THE HAWAII STATE HISTORIC PRESERVATION OFFICER (SHPO) REGARDING THE HOME BASING OF THE MQ-9 UNMANNED AERIAL VEHICLE SQUADRON AND KC-130J AERIAL REFUELER TRANSPORT AIRCRAFT SQUADRON AT MARINE CORPS BASE HAWAII, KANEOHE BAY (July 2022)

No.	Page	Section	Line Description	Comment	Action
1.	Global			Our review is preliminary and focused mainly on the Stipulations at this time. Additional comments to the other sections of this document may be forthcoming.	
2.	1		22-27	Please clarify which historic properties are within the Naval Air Station (NAS) Kaneohe Aviation District	
3.	1-2		37-42	Are there archaeological sites which will be impacted and if so why are they not listed here?	
4.	3	I.	70-71	Remove or “under the direct supervision”	
5.	3	II.		<p>How does the proposed mitigation contribute to the loss of the character of the overall district? Suggest an update to the district.</p> <p>What is proposed as mitigation measures to avoid, minimize, and mitigate as presented is not adequate to serve the loss of features of the district. We would like MCBH to list and consult on all mitigation proposed to date such as:</p> <ul style="list-style-type: none"> <li>-Update and submit the Aviation district NRHP nomination.</li> <li>-Context study or design manual focused on the Albert Khan building with commitments to carry out.</li> <li>-A supplement to the historic building maintenance plan for the Khan Buildings with commitments to carry out.</li> <li>-Preserve or rehabilitate the Seaplane Ramp</li> <li>-Update and Implement the Study for Rehabilitation Treatment for Pless Hall, Building 212</li> <li>-Archaeological Data Recovery Prior to Project Implementation</li> </ul> <p>We also suggest:</p> <ul style="list-style-type: none"> <li>-Update the archaeological maps and cultural sensitivity maps based on the outcome of the ground disturbance from this undertaking.</li> <li>-Avoidance to the strafing marks at Bravo Ramp</li> </ul>	
6.	3	II.		While these commitments, as proposed, may not be adequate (this needs further review and discussion), if MCBH is to propose the actions in Section II.B then there needs to be explicit commitments regarding timelines (we would want construction prior to project completion), parties involvement, and expectations of the end product	
7.	3	II.A.1.		SHPD requests data recovery in areas which archaeological resources may be impacted ahead of the start of the project.	
8.	3	II.B.1	93	What kind of study?	

9.	3	II.B.1		<p>This action needs to be conducted ahead of this agreement document, as part of the identification efforts under the Section 106 process, rather than as mitigation.</p> <p>To mitigate the loss of the Bravo Ramp and its character defining features suggestions include: Rehabilitate/Restore, or Preserve the seaplane ramp. A short video (~10-15 minutes) geared towards the public telling the story of the December 7 attacks on MCBH that highlights the impacts to MCBH and which digitally portrays the aftermath including the strafing marks and other features on the Bravo Ramp .</p>	
10.	3	II.B.2.	96-98	<p>As mitigation to the lost character/demolitions within the district one suggestion was: rehabilitation and preservation of the Pless Hall prior to completion of the new Hangar. To provide parties with a copy of a study and to update that study as proposed, is not sufficient mitigation.</p> <p>Introduce Pless Hall, historical context and location prior to this first mention.</p>	
11.	3	II.B.3	99-100	<p>If it was decided that this proposed action is adequate and appropriate mitigation to the impact or loss of a historic property, <i>then</i> there should be commitments for implementation of the plan and steps in the MOA for how to reach consensus on what is adequate for the plan. This proposed plan requires explicit details as to how it will be carried out, by whom, and what the final product will look like.</p> <p>As part of the MOA development a scope of work for the plan must be provided which covers the geographic area to be covered, types of resources to be highlighted, the topic(s) of tour information, nature of the interpretive materials, the frequency and duration of tours, tour guide training program/qualifications, monitoring and reporting components, who has access to the tours, provisions for public access. Further must identify who at MCBH is responsible for meeting these commitments? Who determines whether the information is acceptable? How will the tours be advertised to reach the public?</p>	
12.	4	II.B.5.a.		<p>Revise to say the draft products must be accepted by SHPD, and MCBH will provide SHPD and the consulting parties the opportunity to make changes to what is proposed.</p>	
13.	4	II.C.		<p>Please add a section addressing the impacts to Hangar 102 to include its character defining features and how they will or will not be impacted, what commitments MCBH is making to preserve the character of this Hangar, and the entire scope of changes to 102, Include information regarding any strafing marks within or near 102.</p>	

14.	4	II.C.1.	113	Clarify that Hangar 103 is being demolished and that a new Hangar will be constructed in its place which MCBH is referring to as Hangar 103 as well, if that is the correct understanding.	
15.	4	II.C.1.	114	Minimize effects to what?	
16.	4	C.		Will consulting parties have the opportunity to change/revise the conceptual design? Please clarify whether there is an ability for consulting parties to alter the outcome of the design. As some parties understood this was a predetermined design, therefore what could be modified through this consultation?	

DAVID Y. IGE  
GOVERNOR OF  
HAWAII



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**

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ENGINEERING  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

February 7, 2022

Major J. P. Hart, Director  
Environmental Compliance and Protection Department  
United States Marine Corps  
Marine Corps Base Hawai'i Box 63002  
Kaneohe Bay, Hawai'i 96863-3002  
Email: Jeffrey.Hart@usmc.mil  
Electronic Transmittal Only, No Hard Copy to Follow

IN REPLY REFER TO:  
Project No.: 2022PR00034  
Doc. No.: 2202SH06  
Archaeology  
Architecture  
History and Culture

Dear Major J. P. Hart:

**SUBJECT: National Historic Preservation Act (NHPA) Section 106 Review –  
Initiation of Consultation and Request for Concurrence with the Effect Determination  
Proposed MCBH Home Basing of The MQ-9A Unmanned Air System and  
KC-130J Aerial Transport Refueling Aircraft Aboard Marine Corps Base Hawai'i  
Ref. No. LFE/001-22  
He'eia Ahupua'a, Ko'olaupoko District, Island of O'ahu  
TMK: (1) 4-4-008:001**

The State Historic Preservation Division (SHPD) received a letter dated, January 7, 2022 from the Marine Corps Base Hawai'i (MCBH) to initiate the Section 106 consultation process and to request the State Historic Preservation Officer's (SHPO's) concurrence with the effect determination for the MCBH Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft project at MCBH on the island of O'ahu. The SHPD received this submittal on January 7, 2022. A meeting was held between MCBH, SHPD, and consulting parties on January 13, 2022.

MCBH's letter states the project is centered on the area around Hangars 2 and 3 (Facilities 102 and 103) and includes support areas at Pali Kilo, West Field, Charlie Ramp, Transient Ramp, and Crescent Circle (for construction laydown). The undertaking includes home basing a Marine Corps MQ-9A Extended Range Unmanned Aerial Vehicle (UAV) squadron (6 aircraft) and a KC-130J aircraft squadron (15-aircraft) at MCBH Kaneohe. Each squadron consists of personnel, aircraft, and supporting infrastructure. The MQ-9A squadron will conduct UAV training operations, and the KC-130J squadron will conduct aerial refueling. The proposed action will enable the USMC to meet their Title X requirement to provide, train, and equip forces for the Combatant Commander through increasing the capability, versatility, and range of USMC forces in Hawai'i.

Further, the MCBH Home Basing project will house the MQ-9A squadron in Hangar 102 and house the KC-130J squadron in the hangar currently occupied by the MV-22 squadron (Facility 6886). It will include demolition of Hangar 3 (Facility 103) and ancillary Aircraft Spares Storage Buildings (Facilities 159, 160 and 161) adjacent to Hangar 3 and construction of a new Type II hangar on its footprint to house the MV-22 squadron. The new hangar will have a steel-frame construction with standing seam metal roofing, concrete filled metal deck floors, and a pile foundation. MCBH also proposes to demolish Facilities 4000 (G-3 Storage) constructed in 1986, and 5068 (Aircraft Rescue), built in 1991, located at the Hot Fuel Pit. A list of additional proposed actions is provided with MCBH's letter.

The MCBH has determined the proposed project is a federal undertaking as defined in 36 CFR 800.16(y) and is therefore subject to Section 106 of the National Historic Preservation Act.

The area of potential effects (APE) for this project consists of the Kaneohe Naval Air Station National Historic Landmark District (NHL), the Naval Air Station (NAS) Kaneohe Historic Aviation District (Aviation District), which includes the NHL, Bravo Ramp, Charlie Ramp, Transient Ramp, the Mokapu House Lots Archaeological District at Pali Kilo, portions of the West Field area to the north of the runway, and areas that are adjacent to the Aviation District east of Charlie Ramp and Transient Ramp. Based on information in SHPD's HICRIS system, the APE is approximately 508 acres.

The MCBH states there are approximately 65 architectural resources within the APE, as well as three historic districts which are the Naval Air Station (NAS) Kaneohe Historic Aviation District, the Kaneohe Naval Air Station National Historic Landmark (NHL), and the Mokapu House Lots Archaeological District at Pali Kilo all determined eligible for the National Register of Historic Places (NRHP) under Criteria A (American history) and C (architecture). Hangars 2 and 3 were built in 1941, and the three ancillary Aircraft Spares Storage buildings (Facilities 159,160, 161) were built in 1942. They are contributing resources to the NAS Kaneohe Historic Aviation District. Thirty-one archaeological sites fall at least partially within this project's APE. Twenty-six of these sites have been evaluated as eligible for listing in the NRHP. The remaining four sites have not been evaluated. The Mōkapu Burial Area (50-80-11- 1017) is approximately 60 meters (m) to the east, and outside of, the APE and is listed in the NRHP. MCBH has determined the archaeological sites previously documented within the APE can be divided into three primary temporal categories: traditional Hawaiian, non-military historic, and military; most sites within the APE are traditional Hawaiian in association.

The MCBH has determined the proposed project will result in an *adverse effect* based on 1) demolition of Hangar 3, which is eligible for the National Register as a contributing element of the NAS Kaneohe Historic Aviation District and 2) demolition of Facilities 159, 160 and 161, which are small Aircraft Spares Storage Buildings located adjacent to Hangar 3 and contributing resources to the NAS Kaneohe Historic Aviation District. MCBH also determined the proposed undertaking may potentially result in an *adverse effect* on historic properties based on installing tie-downs west of Hangar 5, which is in the vicinity of NHRP-eligible Site 4453 archaeological deposits. The SHPO agrees with the basis for a determination of *adverse effect* but opines MCBH must still take into consideration comments received from the public and interested parties, which may result in the identification of additional historic properties and/or raise additional concerns regarding project impacts prior to the SHPO's concurrence and drafting of a Memorandum of Agreement to address the identified effects.

**Please provide** a determination of availability for the four archaeological sites identified and an assessment of the projects potential impact to those sites. **Please also provide** copies, or a summary of, responses received from the public and consulting parties to date.

The SHPO looks forward to continuing Section 106 consultation for the proposed project.

The MCBH is the office of record for this undertaking. Please maintain a copy of this letter with your environmental review record for this undertaking.

Please contact Stephanie Hacker, Historic Preservation Archaeologist IV, at [Stephanie.Hacker@hawaii.gov](mailto:Stephanie.Hacker@hawaii.gov) or at (808) 692-8046 for matters regarding archaeological resources or this letter.

Aloha,

*Alan Downer*

Alan S. Downer, PhD  
Administrator, State Historic Preservation Division  
Deputy State Historic Preservation Officer

cc: Christopher Frantz, MCBH ([christopher.frantz@usmc.mil](mailto:christopher.frantz@usmc.mil))  
June Cleghorn, MCBH ([june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil))  
Wendy Wichman, MCBH ([wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil))



UNITED STATES MARINE CORPS  
MARINE CORPS BASE HAWAII  
BOX 63002  
KANEHOE BAY, HAWAII 96863-3002

5090  
LFE/001-22  
January 7, 2022

Dr. Alan Downer  
Deputy State Historic Preservation Officer  
Department of Land and Natural Resources  
Kakuhihewa Building, Room 555  
601 Kamokila Boulevard  
Kapolei, HI 96707

Dear Dr. Downer:

SUBJECT: SECTION 106 CONSULTATION (Architecture & Archaeology):  
Proposed MCBH Home Basing of The MQ-9A Unmanned Air System  
and KC-130J Aerial Transport Refueling Aircraft Aboard Marine  
Corps Base Hawaii, Kaneohe Bay, District Of Ko'olaupoko,  
Ahupua'a of He'eia, O'ahu, TMK 1-4-4-008:001.

Marine Corps Base Hawaii (MCBH) is consulting with your office in compliance with Section 106 of the National Historic Preservation Act (NHPA) regarding the proposed undertaking by the U.S. Marine Corps to implement the Home Basing of the MQ-9A Unmanned Air System and KC-130J Aerial Transport Refueling Aircraft at the Kaneohe Bay installation (hereinafter referred to as the MCBH Home Basing project). MCBH has determined that the proposed project is an undertaking as defined in 36 CFR §800.16(y). This letter initiates our Section 106 consultation for this undertaking.

**PROJECT DESCRIPTION**

The MCBH Home Basing project is located in the southwest portion of Mokapu Peninsula [enclosure 1]. The project is centered on the area around Hangars 2 and 3 (Facilities 102 and 103) and includes support areas at Pali Kilo, West Field, Charlie Ramp, Transient Ramp, and Crescent Circle (for construction laydown). The undertaking includes home basing a Marine Corps MQ-9A Extended Range Unmanned Aerial Vehicle (UAV) squadron (6 aircraft) and a KC-130J aircraft squadron (15-aircraft) at MCBH Kaneohe. Each squadron consists of personnel, aircraft, and supporting infrastructure. The MQ-9A squadron would conduct UAV training operations, and the KC-130J squadron would conduct aerial refueling. The proposed action would enable the USMC to meet their Title X requirement to provide, train, and equip forces for the Combatant Commander through increasing the capability, versatility, and range of USMC forces in Hawaii.

The MCBH Home Basing project will house the MQ-9A squadron in Hangar 102 and house the KC-130J squadron in the hangar currently occupied by the MV-22 squadron (Facility 6886). It would include demolition of Hangar 3 (Facility 103) and ancillary Aircraft Spares Storage Buildings (Facilities 159, 160 and 161) adjacent to Hangar 3 and construction of a new Type II hangar on its footprint to house the MV-22 squadron. The new hangar will have a steel-frame construction with standing seam metal roofing, concrete filled metal deck floors, and a pile foundation. MCBH also proposes to demolish Facilities 4000 (G-3 Storage) constructed in 1986, and 5068 (Aircraft Rescue), built in 1991, located at the Hot Fuel Pit.

The overall proposed scope of work includes:

- (1) Restripe Charlie Ramp.
- (2) Resurfacing/repaving, and striping of Bravo Ramp.
- (3) Installation of Tie-downs at Bravo Taxi Ramp and Bravo-1.
- (4) Installation of Tie-downs west of Hangar 5 and striping of pavement at the west end of Runway 4/22.
- (5) Replacing taxiway asphalt.
- (6) Hangar 102 modifications to accommodate MQ-9A.
  - (1) Interior upgrades: electrical, mechanical and communication systems.
  - (2) Training simulator.
  - (3) Interior Interim Sensitive Compartmentalized Information Facility (ISCIF).
- (7) Constructing a KC-130J wash rack.
- (8) Two Ground Control Stations (GCSs) with Environmental Control Units (ECUs).
  - (1) Hangar 102.
  - (2) Adjacent to Building 6002.
- (9) Two Ground Data Terminals (GDTs).
  - (1) Keawanui Hill.
  - (2) Adjacent to Hangar 105.
- (10) Construction laydown and staging area at Crescent Circle.
- (11) Demolish Hangar 103 (Hangar 3).
- (12) Construct Type II Hangar 103 aircraft maintenance hangar for MV-22s.
- (13) Reconfigure Hangar 6886 interior spaces from MV-22 to KC-130J use.
- (14) Construct new support facilities adjacent to Hangar 6886.
  - (1) Storage Facility.
  - (2) Propeller Maintenance Facility.
- (15) Construct new Hot Refuel Pit, includes demolition of Facilities 4000 and 5068.
- (16) Restricted area boundary perimeter security fencing.
- (17) Demolition of Facilities 159, 160, and 161 (Aircraft Spares Storage).

See enclosure 2 for a tabular accounting of the above projects and enclosure 3 for a map graphic showing the location of the project elements keyed to the table.

#### **AREA OF POTENTIAL EFFECTS**

The area of potential effects (APE) for this project consists of the Kaneohe Naval Air Station National Historic Landmark District (NHL), the Naval Air Station (NAS) Kaneohe Historic Aviation District (Aviation District), which includes the NHL, Bravo Ramp, Charlie Ramp, Transient Ramp, the Mokapu House Lots Archaeological District at Pali Kilo, portions of the West Field area to the north of the runway, and areas that are adjacent to the Aviation District east of Charlie Ramp and Transient Ramp [enclosure 4].

#### **IDENTIFICATION OF HISTORIC PROPERTIES**

Pursuant to the National Historic Preservation Act (NHPA), Section 106 Implementing Regulations at 36 CFR 800.4(b), qualified preservation professionals have carried out the identification of historic properties within this project's area of potential effects (APE) in accordance with the Secretary of the Interior's Standards and Guidelines for Identification.

## Architecture

There are approximately 65 architectural resources within the APE, as well as three (3) historic districts: the Naval Air Station (NAS) Kaneohe Historic Aviation District, the Kaneohe Naval Air Station National Historic Landmark (NHL), and the Mokapu House Lots Archaeological District at Pali Kilo that have been determined eligible for the National Register of Historic Places (NRHP) under Criteria A (American history) and C (architecture). The NHL possesses exceptional significance. A National Historic Landmark represents an outstanding aspect of American history and culture and is the highest level of designation bestowed on a historic property. Hangars 2 and 3 were built in 1941, and the three ancillary Aircraft Spares Storage buildings (Facilities 159,160, 161) were built in 1942. They are contributing resources to the NAS Kaneohe Historic Aviation District [see enclosure 5 for the table: Summary of Historic Properties within the APE].

## Archaeology

Archaeological evidence indicates people were present on Mōkapu Peninsula at least 500 to 800 years before Western Contact (Tomonari and Clark-Tuggle 2021:III-15). Thirty-one (31) archaeological sites fall at least partially within this project's APE. Twenty-six (26) of these sites (50-80-11-365, -367, -2883, -2884, -4453, -4610, -4611, -4612, -4613, -4614, -4615, -4616, -4617, -4618, -4619, -4620, -4622, -4623, -4624, -4625, -4933, -5733, -5829, -7722, -7724, and -7725) have been evaluated as eligible for listing on the National Register of Historic Places (NRHP). Site -7726 was evaluated as not eligible. The remaining four (4) sites (50-80-11-4621, -5968, -5969, and -7723) have not been evaluated. Additionally, the Mōkapu Burial Area (50-80-11-1017) is approximately 60 meters (m) to the east, and outside of, the APE and is listed on the NRHP. These archaeological resources are listed in the following table at enclosure 6: Summary of Archaeological Sites within the APE.

The archaeological sites previously documented within this project's APE can be divided into three primary temporal categories: traditional Hawaiian, non-military historic, and military. Most sites within the APE are traditional Hawaiian in association, including six (6) surface sites (50-80-11-365, -367, -4616, -4619, -4620, and -4622) and nine (9) subsurface sites (50-80-11-1017, -2883, -4453, -4933, -5733, -5829, -7722, -7723, and -7724). Eleven (11) sites (50-80-11-4610, -4611, -4612, -4613, -4614, -4617, -4618, -4624, -4625, -5968, and -7725) are associated with non-military historical activities. Finally, five (5) are WWII-era military sites (50-80-11-2884, -4615, -4623, -5969, and -7726). Known sites within 100 meters of proposed project elements are described in further detail below.

The potential for this project's ground-disturbing activities to create impacts to documented and undocumented archaeological sites within the APE varies significantly by area [specific archaeological site locations are shown at enclosure 7]. Large portions along the western and southern edges of the APE are entirely made up of imported fill material placed atop marine sediments during mid-20th-century land reclamation and have no sensitivity for archaeology remains. Parts of the APE within the former original extents (pre-land reclamation) of Mōkapu Peninsula range from low to high sensitivity for archaeological remains, with the highest sensitivity areas on and north of Pali Kilo and near the former estuary along the Kāne'ōhe Bay coast. In

the latter area, fill often overlies intact natural sediments, including archaeological deposits. In the northernmost portion of the APE, land modification has been less intensive, and both surface and subsurface archaeological remains are possible.

Site 50-80-11-0365 is the location of a former *heiau* and St. Catherine's Catholic Church on the southern slope of Keawanui Hill, near a proposed location for Project Element 9 (Ground Data Terminals). The precise location of the *heiau* is undetermined, but O'Day (2007) suggests that Sites -4619, -4620, and -4622 could define two sides of *heiau*; contributes to Mōkapu House Lots Archaeological District at Pali Kilo. The site has been evaluated as eligible for listing on the NRHP under Criterion D (Tomonari-Tuggle and Clark 2021). It is expected that the footprint of the Ground Data Terminal (GDT) will be small and have little to no effect on the surrounding sites.

Site 50-80-11-2884 is a complex of four WWII-era foundations located on the lower slope of Keawanui Hill, approximately 85 meters southwest of a proposed location of Project Element 9 (Ground Data Terminals). The site was originally identified by Tuggle and Hommon (1986). The foundations are likely the remains of houses or storage facilities. The site was recommended eligible for the NRHP under Criterion D (Drolet et al 1996). As Project Element 9 will not occur within the site boundaries, no potential impacts are anticipated.

Site 50-80-11-4453 is a subsurface traditional Hawaiian cultural deposit located west of Hangar 105, near or within the location of Project Element 4 (installation of tie-downs and striping). This site is known to have been used for traditional Hawaiian activities, and contains archaeological features and artifacts indicative of pre-Contact habitation and marine exploitation (Charvet-Pond and Rosendahl 1992b:ii). Site 04453 yielded the earliest radiocarbon date for human occupation on the peninsula, A.D. 1037-1309 (calibrated to 2 sigma; Tomonari-Tuggle and Clark 2021:II-15). Additionally, human remains have been previously documented in the site (Charvet-Pond and Rosendahl 1992b). The site was recommended eligible for the NRHP under Criterion D (Tomonari-Tuggle and Clark 2021). Previous documentation of the deposit indicates it underlies coral fill layers that extend 1+ meters below the present surface. The anticipated depth of ground disturbance associated with the installation of tie-downs is not expected to exceed 18 inches (46 cm). It is only expected that the project will affect the site if ground disturbance extends below the coral fill layers.

Sites 50-80-11-4619, -4620, and -4622 are a group of traditional Hawaiian features consisting of a pavement with 2 waterworn uprights, a circular enclosure, and rock and coral piles. The sites are located on the upper slope of Keawanui Hill within 10-25 meters of a proposed location for Project Element 9 (Ground Data Terminals). All three sites may be remnants of the former *heiau* that once stood at the top of the hill (O'Day 2007). The sites were recommended eligible for the NRHP under Criterion C (-4619) and D (-4619, -4620, -4622; Tomonari-Tuggle and Clark 2021). It is expected that the footprint of the Ground Data Terminal will be small and have little to no effect on the surrounding sites.

Site 50-80-11-4623 is a C-shaped structure with corrugated tin and glass bottles on the surface located downslope, approximately 60 meters south of a proposed location for Project Element 9 (Ground Data Terminals). The site was recommended eligible for the NRHP under Criterion D (Tomonari-Tuggle and

Clark 2021). As Project Element 9 will not occur within the boundaries of this site, no potential impacts are anticipated.

Site 50-80-11-4933 is a buried traditional Hawaiian occupation deposit located partially beneath Charlie Ramp where Project Element 1 (ramp restriping) will occur. The deposit formed atop a sand berm separating estuaries along the peninsula's pre-land reclamation southwest shoreline, and contains traditional Hawaiian features, artifacts, and cultural materials. Schilz and Allen (1996) initially identified the site, which consists of two stratified archaeological layers. These are charcoal-stained sands with faunal remains and artifacts. Radiocarbon dating suggests occupation occurred sometime during the late 17th century or later. Intact burials and isolated skeletal remains in disturbed contexts have been documented in the site. The site was recommended eligible for the NRHP under Criterion D (Tomonari-Tuggle and Clark 2021). The restriping of Charlie Ramp is not expected to involve ground disturbance.

#### **NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT (NAGPRA)**

If Native American Graves Protection and Repatriation Act (NAGPRA) cultural items including human remains are encountered during any ground disturbing activities associated with this undertaking, all work shall stop, the finds will be secured and protected, and treatment will proceed under the authority of NAGPRA. As a best management practice under NAGPRA, and as stated above, all ground disturbing activity will be monitored by a qualified archaeologist.

#### **PUBLIC INVOLVEMENT**

MCBH will make this information available to the public, in order to provide an opportunity to express their views on resolving adverse effects of the undertaking pursuant to Section 106 Implementing Regulations at 36 CFR 800.6(a)(4). We will consider such views in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, confidentiality concerns, and the relationship of the Federal involvement to the undertaking. Such notice will be made available to the public via the MCBH public website.

#### **DETERMINATION OF EFFECT**

MCBH has determined the proposed undertaking will result in adverse effects on historic properties in accordance with the Section 106 Implementing Regulations at 36 CFR 800.5(a)(1) based on the following: 1) demolition of Hangar 3, which is eligible for the National Register as a contributing element of the NAS Kaneohe Historic Aviation District; and (2) demolition of Facilities 159, 160 and 161, which are small Aircraft Spares Storage Buildings located adjacent to Hangar 3 and contributing resources to the NAS Kaneohe Historic Aviation District. MCBH also has determined the proposed undertaking may potentially result in an adverse effect on historic properties based on installing tie-downs west of Hangar 5, which is in the vicinity of NHRP-eligible Site 4453 archaeological deposits.

MCBH is forwarding copies of this letter to the consulting parties listed below, including Native Hawaiian Organizations (NHOs), and in accordance with Section 106 Implementing Regulations at 36 CFR 800.6(a) and will consult with

the SHPO and the consulting parties listed below to develop and evaluate alternatives or modifications to the undertaking that could avoid, minimize, or mitigate adverse effects on historic properties. MCBH will also notify the Advisory Council on Historic Preservation (ACHP) of this adverse effect finding to determine its participation in this consultation, pursuant to Section 106 Implementing Regulations at 36 CFR 800.6(a)(1).

**CONSULTATION MEETING**

MCBH will hold a virtual meeting [via Webex or teleconference] on Thursday, 13 January 2022, at 9:00 a.m. (HT) to discuss the project and the eventual development of a memorandum of agreement (MOA) to resolve the adverse effects described above. We will provide instructions for joining the call closer to the date of the meeting.

Should you or your staff have any questions, please contact the MCBH Cultural Resources Management staff, Ms. June Cleghorn at 257-7126 or via email at [june.cleghorn@usmc.mil](mailto:june.cleghorn@usmc.mil), or Dr. Wendy Wichman at 257-7134 or via email at [wendy.wichman@usmc.mil](mailto:wendy.wichman@usmc.mil).

Sincerely,

**HART.JEFFRY.P.1242350568**  
Digitally signed by  
HART.JEFFRY.P.1242350568  
Date: 2022.01.07 14:07:06  
-10'00'

J. P. HART  
Major, U. S. Marine Corps  
Director, Environmental Compliance and  
Protection Division  
By direction of the Commanding Officer

- Enclosures:
1. Map: Location map showing the general location of the Home Basing of the MQ-9A & KC-130J Squadrons project
  2. Table: Project Elements for the Home Basing of the MQ-9A & KC-130J Squadrons
  3. Map: Project Elements for the Home Basing of the MQ-9A & KC-130J Squadrons
  4. Map: Proposed APE for the Home Basing of the MQ-9A & KC-130J Squadrons
  5. Table: Summary of Historic Properties within the APE for the Home Basing of the MQ-9A & KC-130J Squadrons
  6. Table: Summary of Archaeological Sites within the APE for the Home Basing of the MQ-9A & KC-130J Squadrons
  7. Map: Archaeological Sites within and Near the APE for the Home Basing of the MQ-9A & KC-130J Squadrons

Copy to:

Elaine Jackson-Retondo, Preservation Partnerships & History, National Park Service  
Chair, Oahu Island Burial Council (via Regina Hilo, SHPD)  
Chair, Office of Hawaiian Affairs  
Ms. Anuheia Diamond, Diamond 'Ohana  
Ms. Skye Razon-Olds, Olds 'Ohana  
Ms. Emalia Keohokalole, Keohokalole ''Ohana  
Mr. Norman Llanos, Prince Kuhio Hawaiian CC  
Ms. Na`u Kamali`i, Boyd 'Ohana  
Ms. Donna Ann Camvel, Paoa Kea Lono 'Ohana  
Mr. Cy Harris, Kekumano 'Ohana  
Ms. Terrilee Napua Keko`olani Raymond, Keko`olani 'Ohana  
Ms. Cathleen Mattoon, Koolauloa Hawaiian Civic Club  
Mr. Clive Cabral, Temple of Lono  
Ms. Kaleo Paik, Paik 'Ohana  
Ms. Kiersten Faulkner, Historic Hawaii Foundation  
Ms. Elizabeth Merritt, National Trust for Historic Preservation

Architectural References:

AECOM

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**Enclosure 1: Project Area**

**Legend**

- Building
- Paved Area
- Road

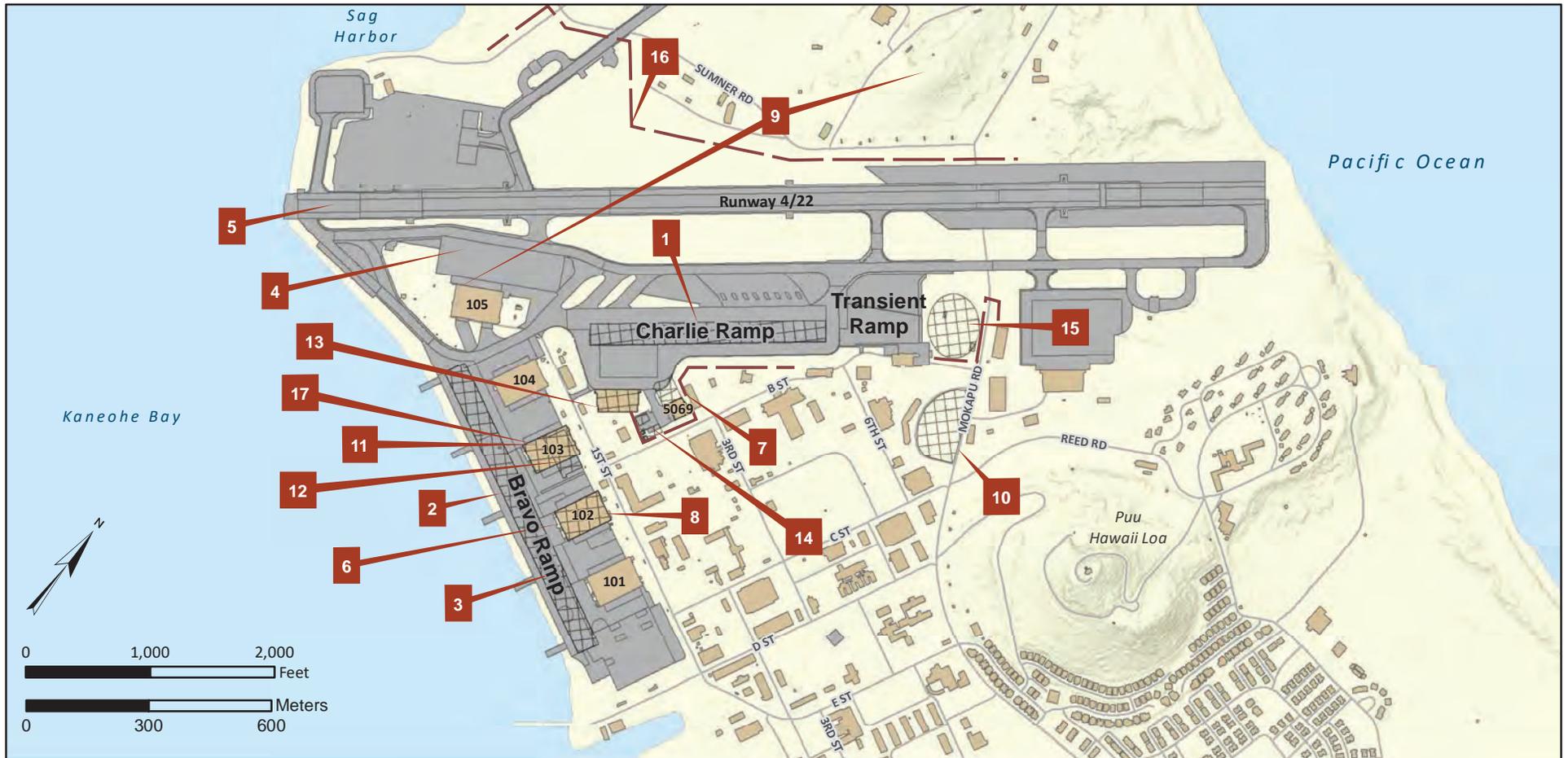


Sources: Esri, 2021; Hawaii Statewide GIS, 2021; MCBH, 2021

**ENCLOSURE 2: PROJECT ELEMENTS FOR THE HOME BASING OF THE MQ-9A & KC-130J SQUADRONS - JANUARY 2022**

Project Task		Description	Location	FY	
<b>Charlie Ramp Upgrades</b>					
1	Restriping of Charlie Ramp	Restriping	Area west of Hangar 6886; east of Taxiway A where C-130 parking apron project is currently.	TBD	
<b>Hangar 2 Renovations and Infrastructure Improvements for MQ-9</b>					
3	Tie-downs at Bravo Taxi Ramp and Bravo-1.	Install tie-downs at Taxiway Bravo and Bravo-1	Bravo Ramp	FY23	
4	Tie-downs and striping at end of Runway 4/22, west of Hangar 105 (Hangar 5)	Tie-downs near Hangar 105 and striping.	Near end of Runway 4/22; west of Hangar 105	FY22	
6	Hangar 102 modifications to accommodate MQ-9A	Hangar 102 will house the MQ-9 aircraft and squadron personnel. Minimal renovations to support the MQ-9 aircraft and operation include: <ul style="list-style-type: none"> <li>• Interior upgrades: electrical, mechanical and communication systems.</li> <li>• Install new training simulator</li> </ul>	Hangar 102	FY22	
8	Two Ground Control Stations (GCSs) with Environmental Control Units (ECUs)	Mobile GCS with ECUs	Hangar 102	FY22	
9	Two Ground Data Terminals (GDTs)	Two GDTs will be temporarily installed on top of Keawanui Hill (115 feet). Vegetation will be cleared, and temporary construction mats installed for the GDTs and a back-up generator. Power will be supplied through the existing overhead electrical line. GDTs will be tied down using stakes and/or 5,000-lbs. concrete blocks.	<ul style="list-style-type: none"> <li>• Keawanui Hill</li> <li>• Adjacent to Hangar 105</li> </ul>	FY22	
<b>Replace Hangar 3 &amp; Bravo Ramp Upgrades</b>					
2, 5	Resurfacing, repaving, and striping of Bravo Ramp	Repave and restripe for 10 MV-22 aircraft Taxiways B and T need asphalt replacement	Bravo Ramp Bay side of Hangars 2-4 Taxiway B provides access from Taxiway A to the Bravo Ramp. Taxiway T provides access from Taxiway A to the Charlie Ramp.	FY23	

11	Demolish Hangar 103	Demolition of Hangar 3 (Facility 103)	Existing Hangar 3 (Facility 103)	FY25	
17	Demolish 159, 160, 161	Demolition of Aircraft Spares Storage buildings (Facilities 159-161)	Adjacent to Hangar 3 (Facility 103)		
12	Construct new Type II Hangar 103 maintenance hangar for MV-22s	New Type II hangar similar to new MV-22 hangar (6886). Design guidelines will be developed as part of MOA during Section 106 Consultation.	Existing Hangar 3 (Facility 103)	FY25	
<b>P-876 Airfield Security Fencing</b>					
16	New Fencing	For the Level Two Restricted Area boundary perimeter security requirements for Bravo Ramp and Charlie Ramp. Discontinuous sections of fencing need to be filled in along with access control points and signage. The fence will limit access to the airfield.	Near existing aviation facilities along the Bravo Ramp, Charlie Ramp, Transient Ramp and in West Field.	FY24	
<b>Hangar 6886 Associated Work</b>					
7	Construct KC-130J wash rack	Type L wash rack with permanent scaffolding for personnel to safely wash the aircraft. A new tow way will provide access from Charlie Ramp to the wash rack. The Type L wash rack is required for the fixed-wing aircraft (KC-130J, P-8A, C-40, and C-20). The MQ-9 does not require a wash rack.	Wash Rack has been preliminarily located at the former corrosion control hangar (Facility 5069) site after it is demolished.	TBD	
13	Reconfigure Hangar 6886 interior spaces to convert from MV-22 to KC-130J use.	Reconfiguration of interior spaces to meet the needs of the squadron	Hangar 6886	TBD	
14	Construct new support facilities at Hangar 6886	Storage Facility Propeller Maintenance Facility	The project is currently under development	TBD	
<b>Refuel Pit</b>					
15	Demolish Facilities 4000 and 5068 and construct new Hot Refuel Pit, including lines from fuel farm and drainage system.	Installation of a new refuel pit (aircraft direct-fueling station) and new pipelines that will run from Fuel Farm. G-3 Storage building (Facility 4000), built in 1986 and the Aircraft Rescue Halon Reclaim Building (Facility 5068), built in 1991 are not historic.	Adjacent to the Transient Ramp. No confirmed utilities location.	FY26	
<b>Construction Laydown</b>					
10	Construction laydown and staging area at Crescent Circle	Potential construction laydown area. To be confirmed at later date.	Crescent Circle area behind MCAS Terminal Building. South side of Mokapu Road in the "Green Field" site.	TBD	



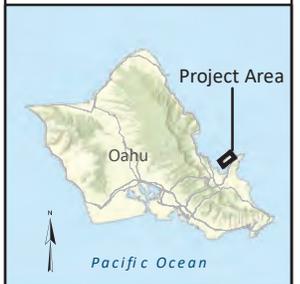
### Enclosure 3: Project Elements

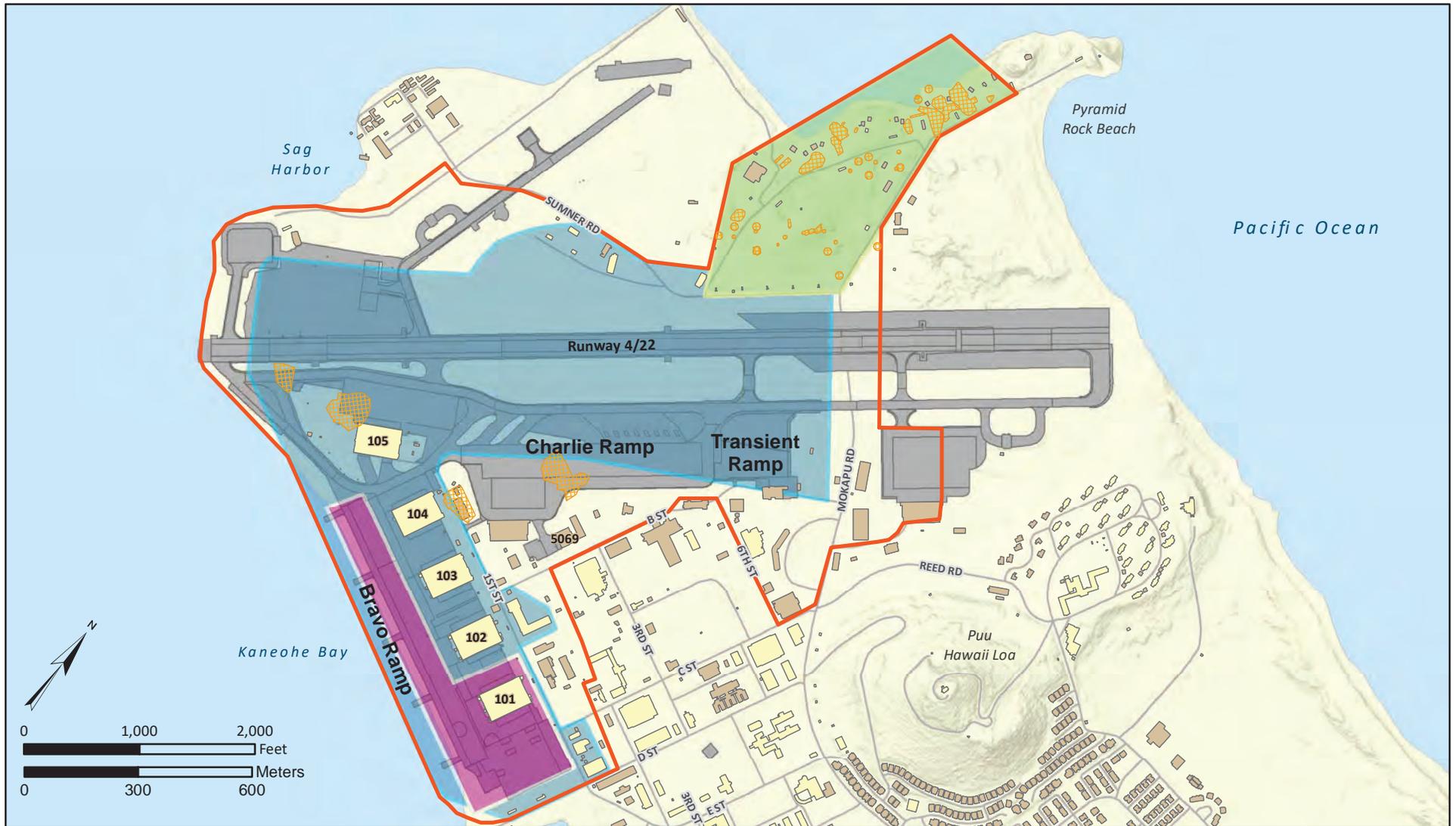
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| <ul style="list-style-type: none"> <li>(1) Restripe Charlie Ramp</li> <li>(2) Resurface, repave, and stripe Bravo Ramp</li> <li>(3) Install tie-downs at Bravo Taxi Ramp and Bravo-1</li> <li>(4) Install tie-downs at and stripe end of Runway 4/22, west of Hangar 105</li> <li>(5) Replace taxiway asphalt</li> <li>(6) Modify Hangar 102 to accommodate MQ-9A:<br/>-Interior upgrades: electrical, mechanical and communication systems<br/>-Training simulator</li> <li>(7) Construct a KC-130J wash rack</li> <li>(8) Install two Ground Control Stations (GCSs) with Environmental Control Units (ECUs) at Hangar 102</li> <li>(9) Install two Ground Data Terminals (GDTs):<br/>-Keawanui Hill<br/>-Adjacent to Hangar 105</li> </ul> | <ul style="list-style-type: none"> <li>(10) Construct laydown and staging area at Crescent Circle</li> <li>(11) Demolish Hangar 103</li> <li>(12) Construct Type II Hangar 103 aircraft maintenance hangar for MV-22s</li> <li>(13) Reconfigure Hangar 6886 interior spaces from MV-22 to KC-130J use</li> <li>(14) Construct new support facilities adjacent to Hangar 6886:<br/>-Storage Facility<br/>-Propeller Maintenance Facility</li> <li>(15) Construct new Hot Refuel Pit and demolish Buildings 4000 and 5068</li> <li>(16) Construct new Security Fencing</li> <li>(17) Demolish Buildings 159, 160, and 161</li> </ul> |
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#### Legend

- Proposed Fencing
- Proposed Project Area
- Paved Area
- Building
- Road





**Enclosure 4: Area of Potential Effect**

Legend		Historic Districts		Historic Buildings		Archaeological Sites (eligible)	
—	Road	█	Mokapu House Lots at Pali Kilo	█	National Register Listed or Eligible	█	Archaeological Sites (eligible)
█	APE	█	NAS Kaneohe National Historic Landmark	█	Not Eligible		
█	Paved Area	█	NAS Kaneohe Aviation District				

Sources: Esri, 2021; Hawaii Statewide GIS, 2021; MCBH, 2021

The inset map shows the island of Oahu with a black box indicating the Project Area's location on the eastern coast. A north arrow and the label 'Pacific Ocean' are also present.

Enclosure 5: Summary of Historic Properties within the APE for the Home Basing of the MQ-9A & KC-130J Squadrons

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
<b>NHL and Aviation District</b>			
Seaplane Ramps (5) Facilities 1-5	1940	Contributing resource to the <i>Kaneohe Naval Air Station National Historic Landmark District</i> and the Aviation District. Existed at the time of the 7 December 1941 attack and came under fire during the attack. Part of the 1939 initial proposed base layout and were critical to the primary purpose and mission of the original base.	
Maintenance Hangar 1 Facility 101	1941	Contributing resource to the <i>Kaneohe Naval Air Station National Historic Landmark District</i> and the Aviation District. Existed at the time of the 7 December 1941 attack. Bombed and strafed during the attack. As with its neighbor hangars, the building is a visual defining element of Main Base and dominates the landscape when viewed from public vantage points and within the aviation area. Designed by Albert Kahn, Inc.	
Bravo Ramp No Facility #	1939	Contributing resource to the <i>Kaneohe Naval Air Station National Historic Landmark District</i> and the Aviation District. One of the primary targets of the 7 December 1941 Japanese attack. Strafing marks from the attack remain.	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
<b>Aviation District</b>			
Maintenance Hangar 2 Facility 102	1939/ 1941	Contributing resource to the Aviation District. One of the first structures built on the NAS (original 1939 portion). Existed at the time of the 7 December 1941 attack. Mostly undamaged by surrounding bombing and strafing during the attack. As with its neighbor hangars, the building is a visual defining element of Main Base and dominates the landscape when viewed from public vantage points and within the aviation area. Designed by Albert Kahn, Inc.	
Maintenance Hangar 3 Facility 103	1941	Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. Undamaged by surrounding bombing and strafing during the attack. As with its neighbor hangars, the building is a visual defining element of Main Base and dominates the landscape when viewed from public vantage points and within the aviation area. Designed by Albert Kahn, Inc.	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
<b>Aviation District</b>			
Maintenance Hangar 4 Facility 104	1941	Contributing resource to the Aviation District. Under construction at the time of the 7 December 1941 attack. Undamaged by surrounding bombing and strafing during the attack. As with its neighbor hangars, the building is a visual defining element of Main Base and dominates the landscape when viewed from public vantage points and within the aviation area. Designed by Albert Kahn, Inc.	
Maintenance Hangar 5 Facility 105	1943	Contributing resource to the Aviation District. Built as a land plane hangar during World War II. As with its neighbor hangars, the building is a visual defining element of Main Base and dominates the landscape when viewed from public vantage points and within the aviation area. Designed by Albert Kahn, Inc.	
MWR Storage Facilities 106, 120, 610	1942	Contributing resources to the Aviation District. Part of World War II base build-up. A group of identical concrete buildings, originally built as torpedo storehouses	
Aircraft Spares Storage Facilities 159-163, 166-168, 170, 183, 184, 187-196	1942-1943	Contributing resources to the Aviation District. Part of World War II base build-up. Concrete hangar support building located primarily near Hangars 1-3. Originally stored aircraft armament and supplies	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
Shop Maintenance Elect-Refrig/ Public Works Shop Facility 201	1941	Former Utilities Shop and Parachute Loft Stowage Building. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. One of three associated early base support buildings (with Facilities 202 and 203). Part of the 1939 initial proposed base layout. Designed by Albert Kahn, Inc.	
Shop, Maintenance Machine/Public Works Shop Facility 202	1941	Former Torpedo Workshop Building. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. One of three associated early base support buildings (with Facilities 201 and 203). Part of the 1939 initial proposed base layout. Designed by Albert Kahn, Inc.	
Public Works Shop, Grounds/Jan/Pest Cont/Public Works Shop Facility 203	1941	Former Bombsight Workshop and Storage Building. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. One of three associated early base support buildings (with Facilities 201 and 202). Part of the 1939 initial proposed base layout. Designed by Albert Kahn, Inc.	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
		<b>Aviation District</b>	
MAG HQS/Photo Lab/ Academic Classroom Facility 301	1941	Former Squadron Offices and Storage Building. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. Part of the 1939 initial proposed base layout. Designed by Albert Kahn, Inc.	
Pump Houses Facilities 302 and 155	1941 and 1943	Concrete sump houses structures. Contributing resources to the Aviation District. Facility 302 existed at the time of the 7 December 1941 attack and was part of the 1939 initial proposed base layout.	
General Warehouse Facility 601	1941	Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. Matching concrete Buildings 601 and 602 were originally used to store smoke drums.	
General Warehouse Facility 602	1942	Contributing resource to the Aviation District. Part of World War II base buildup. Matching concrete Buildings 601 and 602 were originally used to store smoke drums.	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
<b>Aviation District</b>			
Storehouse Ordnance/Inert Storehouse Facility 603	1941	Former Small Arms Magazine and Inert Storehouse. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. Early base support structure originally used for arms storage.	
Ordnance Operations Building Facility 605	1941	Former Small Arms Magazine and Inert Storehouse. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack. Early base support structure originally used for arms storage.	
Aircraft Recovery Operations Ground Support Equipment Shop Facility 620	1945	Last extant Quonset intact hut. Former Aircraft Engine Salvage Shop. Contributing resource to the Aviation District.	
Community Storage Facilities 708-712	1942	Underground Structures. Five former Fuse and Detonator Magazines. Contributing resource to the Aviation District. Existed at the time of the 7 December 1941 attack.	

<b>Summary of Historic Properties within APE</b>			
<b>Name/Facility #</b>	<b>Year Built</b>	<b>Evaluation of Significance</b>	<b>Photo</b>
<b>Pali Kilo</b>			
Community Storage Facilities 701-707	1942	Storage magazines. Identical, historic World War II-period earth-sheltered munitions magazines located along the roads throughout the Pali Kilo area.	
Flammables Storehouse Facility 995	1942	The, built as a paint locker. The structure is a good example of cast concrete splinter-proof construction. Individually eligible for the NRHP.	
<b>Historic Buildings in APE But Not Within a District</b>			
Auto Vehicle Shop Facility 351	1941	WWII wood-framed base support building. Part of a grouping of three historic auto repair buildings (Facilities 351, 377, and 399). Individually eligible for the NRHP.	
Transportation Office Facility 352	1942	WWII wood-framed base support building adjacent to the auto shop group of buildings. One of the last remaining buildings of its type at the base, it is eligible for the NRHP.	

Summary of Historic Properties within APE			
Name/Facility #	Year Built	Evaluation of Significance	Photo
<b>Historic Buildings in APE But Not Within a District</b>			
Accessory Overhaul Building Facility 374	1943	Part of World War II base expansion in Hawai'i. A one-story concrete building with a small second-story mezzanine. Built as part of the Assembly and Repair Department for aircraft. Individually eligible for the NRHP.	
Assembly and Repair Shop Hangar Facility 375	1944	Repair shop hangar built as part of WW II base expansion in Hawai'i. Part of the aircraft Assembly and Repair Department. Individually eligible for the NRHP.	
Garage/Auto Repair Facility 377	1945	WWII wood-framed base support building. Part of a grouping of three historic auto repair buildings (Facilities 351, 377, and 399). Individually eligible for the NRHP.	
Auto Vehicle Shop Facility 399	1945	WWII wood-framed base support building. Part of a grouping of three historic auto repair buildings (Facilities 351, 377, and 399). Individually eligible for the NRHP.	
		End.	

Enclosure 6: Summary of Archaeological Sites within or near the APE for the Home Basing of the MQ-9A & KC-130J Squadrons

SIHP Site No. 50-80-11-	District/Area	Period	Site Description <sup>a</sup>	NRHP Status (Significance Criterion)	References
365	MHLAD; MPPA (Proposed) <sup>b</sup>	TH	<i>Heiau</i> ; on southern slope of Keawanui; location of St. Catherine's Catholic Church in 1840s; O'Day 2007 suggests that Sites 4619, 4620, 4622, and Temp Site 1 could define two sides of <i>heiau</i>	NRE-yes (D)	Thrum 1915; MacCaughey 1917; McAllister 1933; Ruzicka and O'Day 2005; O'Day 2007; Nickelsen and Kirkendall 2008a
367	MHLAD; MPAA (Proposed)	TH	Hina Stone; elongated waterworn boulder; one of three features including a fishing shrine with two uprights representing Kane and Kanaloa, a fish trap (Pa Ohua), and shrine with two stones representing Ku and Hina; damaged in 2009	NRE-yes (B, C, D)	MacCaughey 1917; McAllister 1933; Drolet et al. 1996; Schilz et al. 1996; Ruzicka and O'Day 2005; Nickelsen and Kirkendall 2008b
1017	--	TH	Mōkapu Burial Area	NRL (C, D)	Bowles 1940; Bowen 1961, 1974; NRHP 1972; Snow 1974; Barrera 1982; Athens 1985; Cleghorn 1987; Charvet-Pond and Rosendahl 1992a, 1992b, 1992d; Anderson 1997; Collins et al. 1994; Schilz and Allen 1996; Williams and Patolo 1998; Tuggle 1999, 2000, 2002a, 2002b; Prishmont and Anderson 2000; Gosser and Riford 2005; Morrison et al. 2010
2883	MHLAD; MPAA (Proposed)	TH; NM	Subsurface cultural deposits from pre- and post-Contact periods and pre-WWII house sites; pre-Contact deposit possibly continuous with 5733	NRE-yes (D)	Barrera 1982; Tuggle and Hommon 1986; Drolet et al. 1996; Anderson 1998; Ruzicka and O'Day 2005; O'Day 2007; Nickelsen and Kirkendall 2008c
2884	--	M	Four concrete house foundations, ca. WWII	NRE-yes (not given)	Tuggle and Hommon 1986; Drolet et al. 1996; Prishmont et al. 2001

SIHP Site No. 50-80-11-	District/ Area	Period	Site Description <sup>a</sup>	NRHP Status (Significance Criterion)	References
4453	MPAA (Proposed)	TH	Subsurface cultural deposit with pit features, postmolds, shell midden, charcoal; intact burials	NRE-yes (D)	Charvet-Pond and Rosendahl 1992c, 1992e; Prishmont and Anderson 2000; Prishmont et al. 2001; Gosser et al. 2002; Rasmussen 2007; Nickelsen and Kirkendall 2008d; Filimoehala et al. in prep.
4610	MHLAD	NM	House terrace/complex	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; Gosser et al. 2015
4611	MHLAD	NM	House site; pre-WWII	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005
4612	MHLAD	NM	House site; pre-WWII to 1943	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; Allen 2013
4613	--	NM	Stone wall and historic walkway	NRE-yes (D)	Drolet et al. al 1996; Allen 2013
4614	MHLAD	NM	House site; pre-WWII	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; Allen 2013
4615	--	M	Underground storage room; exterior door labelled "Paint Locker"; probable post-WWII	NRE-yes (not given)	Drolet et al. al 1996; Allen 2013
4616	MPAA (Proposed)	TH	Low basalt cobble and boulder wall	NRE-yes (D)	Drolet et al. 1996; Nickelsen and Kirkendall 2008e
4617	MHLAD	NM	House site; pre-WWII	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005
4618	MHLAD	NM	Building cluster; pre-WWII	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005
4619	MHLAD; MPAA (Proposed)	TH	Pavement w/ 2 waterworn uprights; on slope of Keawanui Hill; may be	NRE-yes (C, D)	Nickelsen and Kirkendall 2008f; Ruzicka and O'Day 2005
4620	MHLAD	TH	Enclosure; circular; on upper east facing slope of Keawanui Hill; may be part of Site 365 <i>heiau</i>	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; O'Day 2007; Nickelsen and Kirkendall 2008g
4621	--	NM	Building foundation	n/a	Drolet et al. 1996
4622	MHLAD; MPAA (Proposed)	TH	Rock and coral piles; may be part of Site 365 <i>heiau</i>	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; O'Day 2007; Nickelsen and Kirkendall 2008h

SIHP Site No. 50-80-11-	District/ Area	Period	Site Description <sup>a</sup>	NRHP Status (Significance Criterion)	References
4623	MPAA (Proposed)	M	C-shaped structure; corrugated tin and glass bottles on surface; probable military	NRE-yes (D)	Drolet et al. 1996; Ruzicka and O'Day 2005; O'Day 2007; Nickelsen and Kirkendall 2008i; Allen 2013
4624	MPAA (Proposed)	NM	Enclosure; low walls, rectangular, 11 x 7 m; concrete slab fragment on surface; probably historic-period house	NRE-yes (D)	Drolet et al. 1996; O'Day 2007; Nickelsen and Kirkendall 2008j; Allen 2013
4625	MHLAD	NM	House site; pre-WWII	NRE-yes (D)	Ruzicka and O'Day 2005
4891	MPAA (Proposed)	TH	Subsurface cultural deposit; 6 features w/ cultural material; south of Pyramid Rock	NRE-yes (D)	Nickelsen and Kirkendall 2008k
4933	MPAA (Proposed)	TH	Subsurface cultural deposit with pits, postholes, firepits; bone arrow point	NRE-yes (D)	Schilz and Allen 1996; Rechtman and Wolforth 2000; Allen 2000; Prishmont et al. 2001; Gosser et al. 2002; Nickelsen and Kirkendall 2008l
5733	MPAA (Proposed)	TH; NM	Subsurface cultural deposits; traditional Hawaiian and 19th century; 20th century house and yard; in dune on west-facing slope of Pali Kilo	NRE-yes (D)	Rosendahl 1999; O'Day 2007; Nickelsen and Kirkendall 2008m; Gosser et al. 2015
5829	MPAA (Proposed)	TH	Subsurface cultural deposit, burials; around Building 6470, north of Hangar 104	NRE-yes (D)	Prishmont et al. 2001; Roberts et al. 2002; Dixon et al. 2002; Nickelsen and Kirkendall 2008n; Allen and Rieth 2014; Allen 2015; Barna et al. 2017
5968	--	NM	Historic basalt retaining wall, possibly associated with the Mokapu Experimental Game farm	TBD	Roberts et al. 2002
5969	--	M	Concrete foundation; immediately west of Keawanui	TBD	Roberts et al. 2002
7722	MHLAD	TH	Subsurface cultural deposit	NRE-yes (C, D)	Gosser et al. 2015
7723	--	TH	Intact but disturbed human burial remains; sparse traditional Hawaiian artifacts	n/a	Gosser et al. 2015

SIHP Site No. 50-80-11-	District/ Area	Period	Site Description <sup>a</sup>	NRHP Status (Significance Criterion)	References
7724	MHLAD	TH	Disturbed subsurface cultural deposit (including one human tooth)	NRE=yes (C, D)	Gosser et al. 2015
7725	MHLAD	NM	Retaining wall	NRE=yes (C, D)	Gosser et al. 2015
7726	--	M	Concrete foundations; WWII-era	NRE=no	Gosser et al. 2015

<sup>a</sup> Site descriptions and period designations are reproduced from the updated ICRMP (Tomonari-Tuggle and Clark 2021:Table II-7).

<sup>b</sup> MHLAD: Mōkapu House Lots Archaeological District; MPAA (Proposed): Mōkapu Peninsula Archaeological Area (Proposed).

NRE = National Register Eligible; NRL = National Register Listed

Probable period of use: TH=traditional Hawaiian (pre-Contact/19th Century; NM=non-military; M=military (20th Century)





## **Appendix D**

# **Endangered Species Act Section 7 Consultation**

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# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pacific Islands Fish and Wildlife Office  
300 Ala Moana Boulevard, Room 3-122  
Honolulu, Hawaii 96850

In Reply Refer To:  
2022-0081200-S7

November 21, 2022

Major Jeffrey Hart  
Director, Environmental Compliance and Protection Division,  
Facilities Department  
Marine Corps Base Hawaii  
Box 63002  
Kaneohe Bay, Hawaii 96863-3002

Subject: Informal Consultation for MCBH Home Basing MQ-9 UAV, KC-130J Refueler Squadrons, Oahu

Dear Major Hart:

The U.S. Fish and Wildlife Service (Service) received your August 31, 2022, e-mail request, for consultation. The Marine Corps proposes the home basing of the MQ-9 Unmanned Aerial Vehicle Squadron and the KC-130J Marine Aerial Refueler Transport Squadron at MCBH Kaneohe Bay. You requested our concurrence with your “may affect, but not likely to adversely affect” determination for the project which is on the island of Oahu, Hawaii. Specifically, you requested consultation for the following species:

- Hawaiian waterbirds
  - Hawaiian stilt or (*Himantopus mexicanus knudseni*)
  - Hawaiian coot or (*Fulica americana alai*)
  - Hawaiian gallinule (*Gallinula galeata sandvicensis*)
  - Hawaiian duck (*Anas wyvilliana*)
- Hawaiian seabirds
  - Hawaiian petrel (*Pterodroma sandwichensis*),
  - Hawaii DPS of the band-rumped storm-petrel (*Oceanodroma castro*) and
  - Newell’s shearwater (*Puffinus auricularis newelli*)
- Hawaiian turtles
  - Central North Pacific DPS of the green sea turtle (*Chelonia mydas*)

On July 5, 2022, the U.S. District Court of the Northern District Court of California vacated the 2019 regulations implementing section 7 of the Endangered Species Act (ESA). On September

INTERIOR REGION 9  
COLUMBIA-PACIFIC NORTHWEST

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PACIFIC ISLANDS

IDAHO, MONTANA\*, OREGON\*, WASHINGTON  
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AMERICAN SAMOA, GUAM, HAWAII, NORTHERN  
MARIANA ISLANDS

21, 2022, the Ninth Circuit Court of Appeals granted a request to stay the U.S. District Court of Northern California's July 5, 2022, order that vacated the 2019 ESA regulations. As a result, the 2019 regulations are again in effect, and the Service has relied upon the 2019 regulations in issuing our written concurrence on the action agency's "may affect, not-likely-to-adversely affect" determination. However, because the outcome of the legal challenges to the 2019 ESA regulations is still unknown, we considered whether our substantive analyses and conclusions would have been different if the pre-2019 regulations were applied in this informal consultation. Our analysis included the prior definition of "effects of the action." We considered all the "direct and indirect effects" and the "interrelated and interdependent activities" when determining the "effects of the action." We then considered whether any "effects of the action" that overlap with applicable ranges of listed species would be wholly beneficial, insignificant, or discountable to the species. As a result, we determined the substantive analysis and conclusions would have been the same, irrespective of which regulations applied.

We based our analysis and decisions on the Biological Assessment (BA) for this project and other pertinent data. A complete consultation record is on file at our office. Our response is in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*).

### **Project Description**

The proposed action is to home base an MQ-9 UAV squadron and a KC-130J squadron at MCB Hawaii Kaneohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC-130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay.

The squadrons associated with the proposed action would be the Marine Unmanned Aerial Vehicle Squadron (VMU) for MQ-9 aircraft and the Marine Aerial Refueler Transport Squadron (VMGR) for KC-130J aircraft. The proposed action would house the MQ-9 squadron in Hangar 102, house the KC-130J squadron in Hangar 6886 (currently occupied by an MV-22 squadron), and demolish and reconstruct Hangar 103 as the replacement hangar for the MV-22 squadron. The proposed action would be implemented over a 5-year period from 2023 to 2027. Temporary facilities such as trailers, equipment storage, and communications connections would be located within the project footprint near the hangars and on the parking aprons and ramps to allow for partial operation of the squadrons while construction of permanent facilities are underway. MQ-9 aircraft would park on Bravo Ramp near Hangar 102, and KC-130J aircraft would park on the north end of Charlie Ramp near the transient ramp. The temporary facilities would not be sufficient to support the full set of aircraft, personnel, and operations associated with the proposed action. Home basing the full complement of MQ-9 and KC-130J aircraft, associated personnel and dependents, and all infrastructure support is anticipated to be complete by 2027.

**Table 1. Proposed Construction for MQ-9 UAV, KC-130J Refueler Squadrons**

<b><u>Project</u></b>	<b><u>Aircraft</u></b>	<b><u>Fiscal Year</u></b>	<b><u>Description</u></b>
Hangar 102 Renovations	MQ-9	2023–2024	Hangar 102 interior upgrades: electrical, mechanical, and communication systems • Two GCSs with up to two ECUs
Infrastructure Improvements	MQ-9	2023–2024	Two GDTs (at Keawanui Hill and adjacent to Hangar 105)
Building 4041	MQ-9/ KC-130J	2023–2024	Training simulator installation
Apron Improvements	MQ-9	2023–2024	Tie-downs and striping near end of Runway 04/22 west of Hangar 105
Charlie Ramp Upgrades	KC-130J	2023–2024	Restriping of Charlie Ramp west of Hangar 6886 and east of Taxiway A
KC-130J Support Facilities	KC-130J	2023–2024	Construction of a wash rack east of Hangar 6886
Temporary Construction Staging Laydown Area	All	2023	Establish the temporary construction laydown area to stage construction equipment and materials at the Crescent Circle area behind MCAS terminal building
Airfield Security Fencing	All	2023–2024	• Fencing on north side of Runway 04/22 • Demolish Motor-T buildings/parking lot across from Hangar 101
Bravo Ramp Upgrades	MV-22	2025–2027	• Repaving and restriping Bravo Ramp on bay side of Hangars 102, 103, and 104 • Replacing taxiway asphalt • Installing heat resistant concrete at parking spots • Tie-downs at Bravo Ramp
Hangar 103 Replacement	MV-22	2025–2027	Demolition of Hangar 103 and associated support buildings adjacent to the southwestern side (Buildings 159, 160, 161, 183, and 184), and construction of new Type II Hangar 103 to accommodate MV-22s from Hangar 6886
Hangar 6886 Renovations	KC-130J	2026–2027	Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use
KC-130J Support Facilities	KC-130J	2026–2027	Construction of new support facilities east of Hangar 6886: • Storage Facility • Propeller Maintenance Facility
KC-130J Aircraft Direct Refueling System	KC-130J	2026–2027	Construction of a new refuel lane with an Aircraft Direct Refueling System: • Demolition of Buildings 4000 and 5068 • Construction of concrete pavement, asphalt shoulders, striping, fuel lines from the existing fuel farm, and a drainage system with storm water detention capability.



Figure 2. Conceptual Overview of the Proposed Action Location



Figure 1. Conceptual Overview of the Project Location.

### Conservation Measures

The following conservation measures will occur to avoid and minimize impacts to listed species and their habitats:

#### *General*

All construction contractors and aircraft squadron personnel will participate in MCB Hawaii Kaneohe Bay’s existing natural resources education program. The program would include, at a minimum, the following topics: (1) occurrence of natural resources (including ESA-listed species); (2) sensitivity of the natural resources to human activities; (3) legal protection for certain natural resources; (4) penalties for violations of federal law; (5) general ecology and wildlife activity patterns; (6) reporting requirements; (7) measures to protect natural resources; (8) personal measures that users can take to promote the conservation of natural resources; and (9) procedures and a point of contact for ESA-listed species observations.

*Hawaiian Waterbirds*

- During construction, areas of standing water will be eliminated to minimize attraction of waterbirds.
- During construction, in areas where waterbirds are known to be present, reduced speed limits will be posted and implemented, and project personnel and contractors will be informed about the presence of endangered species on-site.
- If a waterbird nest or active brood is found within the project site the Marine Corps will:
  - Notify the USFWS within 24 hours.
  - Establish and maintain a 100-foot buffer around all active nests and/or broods until the chicks/ducklings have fledged. No potentially disruptive activities or habitat alteration will be conducted within this buffer.
  - Have a biological monitor that is familiar with the species' biology present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.
- The storm water detention basin will be covered to minimize attraction of waterbirds.

*Hawaiian Seabirds*

- All construction activities will occur during daylight hours.
- All windows, doors, and walls will include tinted glass or film resulting in visible light transmittance value of 30% or less.
- Aircraft hangar doors will be designed to be non-translucent (solid) without windows. If a hangar door requires a window, tinting will be required.
- Unless nighttime operations are in progress, doors will remain shut at night to prevent light emitting outward. This could include partially closing doors and turning off lighting when operations are not occurring, as well as incorporation of an easy-to-use light switching system. Doors should allow user to open and close with ease to ensure that hangar doors can be shut at night to prevent light emitting outward.
- Exterior lighting would follow MCB Hawaii standards (MCB Hawaii, 2022a). When exterior lighting is required, all exterior lights for new construction, replacement of existing fixtures, and renovations would meet or exceed USFWS, NOAA, and/or IDA standards unless otherwise required by the military mission, per the MCB Hawaii INRMP (MCB Hawaii, 2017, pg. C2-15) and will be reviewed by the MCB Hawaii environmental team.
- Construction and operation of new and renovated buildings along the flightline would be coordinated with MCB Hawaii Environmental Division Natural Resources and follow

lighting requirements to the maximum extent feasible to prevent seabirds from being attracted to areas with aircraft operations and these include:

- The wavelength of all exterior lighting should be equal to or greater than 560 nanometers.
- Exterior lighting will be shielded (points downward) and full cutoff.
- Set controls to be “On” only when needed and have ability to shut off lighting when not in use.
- Use timers and motion-activated lighting to minimize unnecessary light remaining on throughout the night.
- Minimize light trespass. Light only the required area – to conserve energy and to prevent unwanted light from trespassing into regions where it is not needed.
- Minimize brightness. Be no brighter than necessary.
- Minimize blue light emissions.
- Use full cutoff downward/shielded bollards in parking areas and sidewalks, and full cutoff downward/shielded wall packs for walkways and entrances/exits.
- Place light fixtures as low as possible to the ground.
- All nighttime construction work and construction lighting would be pre-approved with Environmental Compliance & Protection Division Natural Resources.
- Use warm light sources for exterior lighting.

## **Effects of the Proposed Action**

### *Hawaiian Waterbirds*

Hawaiian waterbirds are currently found in a variety of wetland habitats including freshwater marshes, coastal estuaries and ponds. All four waterbirds have been observed on MCBH in natural and man-made wetlands and habitats, however, waterbirds are rarely observed in the proposed project area. On MCBH, the Hawaiian coot is most commonly observed in the Nuupia Ponds Wildlife Management Area (WMA). The Hawaiian gallinule are periodically observed in the Sag Harbor wetland and Nuupia Ponds WMA, however, the greatest numbers have been documented at the Klipper Golf Course ponds. Hawaiian stilts are distributed throughout the MCBH wetlands, and are seen foraging in lawns and roadside areas. USDA Wildlife Services regularly disperses Hawaiian stilts off the airfield.

There is minimal risk of injury or death to birds due to vehicle or equipment collisions during construction. Conservation measures described above to prevent temporary ponding would minimize attraction of birds to the construction area. In accordance with existing permits, current bird hazing activities would continue to be conducted by the USDA Wildlife Services to discourage birds from the airfield where they may be at risk of aircraft strikes.

Construction and aircraft noise would result in temporary impacts to waterbirds. Construction-related noise may temporarily displace such wildlife from habitat in the immediate vicinity of the project area. However, because construction would occur at previously developed and actively used areas where aircraft and machinery are in regular use around the airfield creating a noise environment consistent with a construction area, birds are expected to temporarily relocate from the construction areas to adjacent similar habitats, and would likely resume their normal

behaviors shortly thereafter. In addition, the proposed aircraft operations would result in lower average noise levels than conditions prior to 2022 when the number of annual aircraft operations was higher.

We do not expect a measurable disruption to their normal behaviors or disruption of nesting and rearing of young, therefore effects to waterbirds are considered insignificant or discountable.

### *Hawaiian Seabirds*

Hawaiian seabirds may traverse the project area at night during the breeding, nesting and fledging seasons (March 1 to December 15). Hawaiian seabirds have been documented on Oahu, but are not known to breed on Oahu (Pyle and Pyle 2017; Young et al. 2019). Outdoor lighting could result in seabird disorientation, fallout, and injury or mortality. Seabirds are attracted to lights and after circling the lights they may become exhausted and collide with nearby wires, buildings, or other structures or they may land on the ground. Downed seabirds are subject to increased mortality due to collision with automobiles, starvation, and predation by dogs, cats, and other predators. Young birds (fledglings) traversing the project area between September 15 and December 15, in their first flights from their mountain nests to the sea, are particularly vulnerable to light attraction. However, implementation of conservation measures is expected to minimize project-related light attraction, therefore, effects to seabirds are considered discountable.

### *Green Sea Turtle*

Green sea turtles may nest on any sandy beach area in the Pacific Islands. Nesting occurs on beaches from May through September, peaking in June and July, with hatchlings emerging through November and December.

In 2019, green sea turtles started routinely nesting at MCBH on North Beach and Ft. Hase shorelines in increasing numbers. In 2020, hatchlings from two previously undocumented Hawaiian green turtle nests emerged on Fort Hase Beach. In both occurrences, a subset of emerging hatchlings became misoriented due to artificial ambient light from a residential subdivision adjacent to Fort Hase beach and crawled inland, instead of towards the ocean. Nesting turtles may be deterred from approaching or laying successful nests by lighting visible on the nesting beaches. Turtles may become disoriented by artificial lighting, leading to exhaustion and placement of a nest in an inappropriate location (such as at or below the high tide line). Hatchlings that emerge from nests may also be disoriented by artificial lighting. Based on the proposed project lighting, adverse effects to adult turtles or hatchlings are unlikely to occur due to implementation of the above conservation measures, so the effects would be considered insignificant or discountable.

Green sea turtles also may occasionally haul-out on the beaches at MCBH. Noise changes associated with proposed aircraft operations in the region of influence where sea turtles can occur would be minimal. Exposure of a sea turtle to aircraft presence are currently happening and lasts for only seconds as the aircraft quickly passes overhead. Aircraft takeoffs, landings, or overflights could potentially startle animals; however, these events only produce noise at any given location for a brief period as the aircraft climbs to cruising altitude and pass quickly

overhead. Sea turtles hauled out on beaches at MCBH typically show no evidence of startle reaction or behavior changes during aircraft overflights, while monk seals have been observed to have a brief startle reaction to some overflights (L. Bookless, personal communication, 7 July 2022, 18 July 2022). It is uncommon for sea turtles to be hauled out on the same location of a beach throughout the year, so repeated exposure to individuals over short periods (days) is unlikely. As a result, in the event sea turtles encounter aircraft noise, behavioral reactions to aircraft overflight noise are likely to be brief and not result in any measurable change in behavior, and thus any effects would be insignificant or discountable.

## Summary

We have reviewed our data and conducted an effects analysis of your project. By incorporating the conservation measures listed above, effects to listed species are either too small to be meaningful or measurable, or extremely unlikely to occur. Therefore, effects are expected to be insignificant and discountable. Because impacts from the proposed project are insignificant and discountable, we concur with your determination that the proposed action may affect, but is not likely to adversely affect the Hawaiian stilt, Hawaiian coot, Hawaiian gallinule, Hawaiian duck, Hawaiian petrel, Newell's shearwater, band-rumped storm petrel, and green sea turtle.

We appreciate your efforts to conserve endangered species. If you have any questions concerning this consultation, please contact James Kwon, Fish and Wildlife Biologist, at 808-792-9433 or by email at [james\\_kwon@fws.gov](mailto:james_kwon@fws.gov). When referring to this project, please include this reference number 2022-0081200-S7.

Sincerely,

**LORENA  
WADA**

Digitally signed by  
LORENA WADA  
Date: 2022.11.21  
18:49:55 -10'00'

Lorena Wada  
Planning and Consultation Team Manager

## Literature Cited

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**UNITED STATES MARINE CORPS**  
 MARINE CORPS BASE HAWAII  
 BOX 63002  
 KANEOHE BAY HAWAII 96863-3002

IN REPLY REFER TO:  
 5090  
 LFE/102-22  
 31 Aug 22

Field Supervisor  
 U.S. Fish and Wildlife Service, Pacific Islands Office  
 Room 3-122, Box 50088  
 300 Ala Moana Boulevard  
 Honolulu, Hawaii 96850

Dear Field Supervisor,

**SUBJECT: SECTION 7 INFORMAL CONSULTATION FOR MARINE CORPS BASE  
 HAWAII HOME BASING PROJECT, MARINE CORPS BASE HAWAII,  
 KANEOHE BAY**

Pursuant to Section 7(a)(2) of the Endangered Species Act (ESA) and its implementing regulations (50 CFR Part 402), Marine Corps Base Hawaii (MCBH) requests informal consultation related to the proposed home basing of a Marine Corps MQ-9 Marine Unmanned Aerial Vehicle (UAV) (hereinafter “MQ-9”) Squadron and a KC-130J Aerial Refueler Transport (hereinafter “KC-130J”) Squadron at MCBH Kaneohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC-130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay.

MCBH has developed this Biological Assessment (BA) (Enclosure 1) to assess potential impacts to the species shown in Table 1. Based on this BA, MCBH is requesting informal consultation on the Hawaiian duck, Hawaiian coot, Hawaiian gallinule, Hawaiian stilt, band-rumped storm petrel, Newell’s shearwater, Hawaiian petrel, Hawaiian monk seal, and green sea turtle.

**Table 1 Special-Status Species Known to Occur or with Potential to Occur in the Project Area and Region of Influence**

<i>Scientific Name</i>	<i>Common Name (Hawaiian Name)</i>	<i>Regulatory Status</i>	<i>Effects Determination</i>
<b>Birds</b>			
<i>Anas wyvilliana</i>	Hawaiian duck (Koloa moali)	FE, SE	May affect, not likely to adversely affect
<i>Fulica alai</i>	Hawaiian coot (‘Alae ke‘oke‘o)	FE, SE	May affect, not likely to adversely affect

<i>Scientific Name</i>	<i>Common Name (Hawaiian Name)</i>	<i>Regulatory Status</i>	<i>Effects Determination</i>
<i>Gallinula galeata sandvicensis</i>	Hawaiian gallinule ('Alae 'ula)	FE, SE	May affect, not likely to adversely affect
<i>Himantopus mexicanus knudseni</i>	Hawaiian stilt ('Ae 'o)	FE, SE	May affect, not likely to adversely affect
<i>Oceanodroma castro</i>	Band-rumped storm-petrel ('Akē 'Akē)	FE, SE	May affect, not likely to adversely affect
<i>Pterodroma sandwichensis</i>	Hawaiian petrel ('Ua'u)	FE, SE	May affect, not likely to adversely affect
<i>Puffinus auricularis newelli</i>	Newell's shearwater ('A'o)	FT, ST	May affect, not likely to adversely affect
Marine Mammals			
<i>Neomonachus schauinslandi</i>	Hawaiian monk seal ('Ilioholoikauaua)	FE, SE	May affect, not likely to adversely affect
Marine Reptiles			
<i>Chelonia mydas</i>	Green sea turtle (Honu)	FT, ST	May affect, not likely to adversely affect

Notes: Selections for Listing Status Column include: C = candidate species for federal ESA listing, FE = federal endangered, SE = state endangered, FT = federally threatened, ST = state threatened.

We look forward to your review of and concurrence with MCB Hawaii's determination on the species included in this informal consultation. Please direct correspondence regarding this matter to Lance Bookless, MCBH Senior Natural Resource Manager at lance.bookless1@usmc.mil, (808) 257-7000.

Sincerely,

HART.JEFFRY.  
P.1242350568

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J. P. HART  
Director, Environmental Compliance and  
Protection Division, Facilities Department  
By direction of the Commanding Officer

Enclosure: 1. Biological Assessment for Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron At Marine Corps Base Hawaii Kaneohe Bay, Oahu, Hawaii

**BIOLOGICAL ASSESSMENT TO SUPPORT INFORMAL CONSULTATION  
FOR HOME BASING OF THE MQ-9 MARINE UNMANNED AERIAL  
VEHICLE SQUADRON AND KC-130J MARINE AERIAL REFUELER  
TRANSPORT SQUADRON AT MARINE CORPS BASE HAWAII KANEOHE  
BAY  
OAHU, HAWAII**

**August 2022**



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# Biological Assessment to Support Informal Consultation for Marine Corps Base Hawaii Home Basing of the MQ-9 Marine Unmanned Aerial Vehicle Squadron and KC-130J Marine Aerial Refueler Transport Squadron at Marine Corps Base Hawaii Kaneohe Bay

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1 **1 Purpose and Need for the Action**

2 **1.1 Purpose and Need**

3 The purpose of the proposed action is to enhance the airborne and intelligence capabilities of Marine  
4 Corps forces through the integration of multi-mission aerial refueler and transport capability and  
5 persistent intelligence, surveillance, and reconnaissance unmanned aerial systems, thereby enhancing  
6 the Marine Corps' ability to transport Hawaii-based Marines and provide them real-time situational  
7 awareness to support the United States (U.S.) Indo-Pacific Command (USINDOPACOM). The need for  
8 home basing and operations of the MQ-9 and KC-130J squadrons is to extend the capability, versatility,  
9 and range of Hawaii-based Marine Corps and other forces through additional refueler, transport,  
10 intelligence, surveillance, and reconnaissance capabilities, in support of USINDOPACOM.

11 **1.2 Description of the Action Area**

12 The proposed action is located on the western shore of Marine Corps Base (MCB) Hawaii Kaneohe Bay,  
13 on the island of Oahu, in the state of Hawaii (Figure 1). MCB Hawaii Kaneohe Bay encompasses 2,951  
14 acres on Oahu's eastern shore at Mokapu Peninsula. Mokapu Peninsula is bounded by the waters of  
15 Kaneohe Bay on the west, the Pacific Ocean to the north, Kailua Bay to the east, and residential  
16 development to the south. Kailua and Kaneohe are the communities nearest to the base.

17 **1.3 Species Addressed in the Analysis**

18 MCB Hawaii has developed this analysis (Enclosure 1) to assess potential impacts to the species shown  
19 in Table 1.

20 **1.4 Species Eliminated from Detailed Analysis**

21 MCB Hawaii conducted a thorough review of all potential ESA-listed species with the potential to be  
22 directly or indirectly affected by Alternative 1 (the preferred alternative), including a review of the  
23 USFWS Information for Planning and Consulting (IPaC) database (USFWS 2022).

24 MCB Hawaii considered the Hawaiian hoary bat (*Lasiurus cinereus semotus*), monarch butterfly (*Danaus*  
25 *plexippus*), and the Hawaiian yellow-faced bee (*Hylaeus anthracinus*) and determined that the preferred  
26 alternative would have no effect on these species.

27 MCB Hawaii determined that the proposed action and its interrelated and interdependent actions will  
28 not directly or indirectly affect the short-tailed albatross (*Phoebastria albatrus*) and the hawksbill sea  
29 turtle (*Eretmochelys imbricata*). The short-tailed albatross is not known to occur at MCB Hawaii Kaneohe  
30 Bay, and no nesting or haul-outs by hawksbill sea turtles have ever been documented on any of MCB  
31 Hawaii Kaneohe Bay beaches.

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Figure 1. Project Location Map



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Figure 1 Project Location Map

1 MCB Hawaii determined that the proposed action and its interrelated and interdependent actions will  
 2 not directly or indirectly affect threatened or endangered plant species: `akoko (*Euphorbia celastroides*  
 3 var. *kaenana*), `ena`ena (*Pseudognaphalium sandwicensium* var. *molokaiense*), Carter's panicgrass  
 4 (*Panicum fauriei* var. *carteri*), ihi (*Portulaca villosa*), kamanomano (*Cenchrus agrimonioides*), ohai  
 5 (*Sesbania tomentosa*), and *microlepis strigosa* var. *mauiensis*. These plant species do not occur in the  
 6 project area. The project area consists primarily of developed area with minimal vegetation. Vegetated  
 7 portions of the project area consist of mostly planted landscape material; no notable ecological  
 8 communities occur on or adjacent to the construction sites. Therefore, there would be no potential to  
 9 directly or indirectly affect threatened or endangered plant species.  
 10 For these reasons, these species are not included further in this analysis and informal consultation.

**Table 1 Special-Status Species Known to Occur or with Potential to Occur in the Project Area and Region of Influence**

<i>Scientific Name</i>	<i>Common Name (Hawaiian Name)</i>	<i>Regulatory Status</i>	<i>Effects Determination</i>
Birds			
<i>Anas wyvilliana</i>	Hawaiian duck (Koloa maoli)	FE, SE	May affect, not likely to adversely affect
<i>Fulica alai</i>	Hawaiian coot ('Alae ke'oke'o)	FE, SE	May affect, not likely to adversely affect
<i>Gallinula galeata sandwicensis</i>	Hawaiian gallinule ('Alae 'ula)	FE, SE	May affect, not likely to adversely affect
<i>Himantopus mexicanus knudseni</i>	Hawaiian stilt ('Ae'o)	FE, SE	May affect, not likely to adversely affect
<i>Oceanodroma castro</i>	Band-rumped storm-petrel ('Akē 'Akē)	FE, SE	May affect, not likely to adversely affect
<i>Pterodroma sandwichensis</i>	Hawaiian petrel ('Ua'u)	FE, SE	May affect, not likely to adversely affect
<i>Puffinus auricularis newelli</i>	Newell's shearwater ('A'o)	FT, ST	May affect, not likely to adversely affect
Marine Mammals			
<i>Neomonachus schauinslandi</i>	Hawaiian monk seal ('Ilioholoikauaua)	FE, SE	May affect, not likely to adversely affect
Marine Reptiles			
<i>Chelonia mydas</i>	Green sea turtle (Honu)	FT, ST	May affect, not likely to adversely affect

11 Notes: Selections for Listing Status Column include: C = candidate species for federal ESA listing, FE = federal endangered, SE =  
 12 state endangered, FT = federally threatened, ST = state threatened.

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## 2 Details of the Proposed Action

### 2.1 Proposed Action

Figure 2 shows an overview of the proposed action, and Figure 3 shows proposed construction projects for Alternative 1, the preferred alternative. Table 2 shows construction projects associated with the proposed action. The proposed action is to home base an MQ-9 UAV squadron and a KC-130J squadron at MCB Hawaii Kaneohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC-130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay.



Photo: MQ-9 Aircraft



Photo: KC-130J Aircraft

The squadrons associated with the proposed action would be the Marine Unmanned Aerial Vehicle Squadron (VMU) for MQ-9 aircraft and the Marine Aerial Refueler Transport Squadron (VMGR) for KC-130J aircraft. The proposed action would house the MQ-9 squadron in Hangar 102, house the KC-130J squadron in Hangar 6886 (currently occupied by an MV-22 squadron), and demolish and reconstruct Hangar 103 as the replacement hangar for the MV-22 squadron. The proposed action would be implemented over a 5-year period from 2023 to 2027. Temporary facilities such as trailers, equipment storage, and communications connections would be located within the project footprint near the hangars and on the parking aprons and ramps to allow for partial operation of the squadrons while construction of permanent facilities are underway. MQ-9 aircraft would park on Bravo Ramp near Hangar 102, and KC-130J aircraft would park on the north end of Charlie Ramp near the transient ramp. The temporary facilities would not be sufficient to support the full set of aircraft, personnel, and operations associated with the proposed action. Home basing the full complement of MQ-9 and KC-130J aircraft, associated personnel and dependents, and all infrastructure support is anticipated to be complete by 2027.



Figure 2. Conceptual Overview of the Proposed Action Location



Figure 2 Conceptual Overview of the Proposed Action Location

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Figure 3. Alternative 1

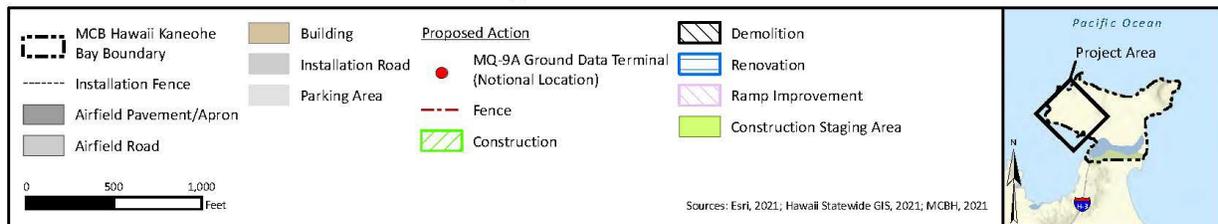


Figure 3 Alternative 1 (Preferred Alternative)

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**Table 2 Proposed Facilities Construction at MCB Hawaii Kaneohe Bay**

<i>Project</i>	<i>Aircraft</i>	<i>Fiscal Year</i>	<i>Description</i>
Hangar 102 Renovations	MQ-9	2023–2024	<ul style="list-style-type: none"> <li>Hangar 102 interior upgrades: electrical, mechanical, and communication systems</li> <li>Two GCSs with up to two ECUs</li> </ul>
Infrastructure Improvements	MQ-9	2023–2024	Two GDTs (at Keawanui Hill and adjacent to Hangar 105)
Building 4041	MQ-9/ KC-130J	2023–2024	Training simulator installation
Apron Improvements	MQ-9	2023–2024	Tie-downs and striping near end of Runway 04/22 west of Hangar 105
Charlie Ramp Upgrades	KC-130J	2023–2024	Restriping of Charlie Ramp west of Hangar 6886 and east of Taxiway A
KC-130J Support Facilities	KC-130J	2023–2024	Construction of a wash rack east of Hangar 6886
Temporary Construction Staging Laydown Area	All	2023	Establish the temporary construction laydown area to stage construction equipment and materials at the Crescent Circle area behind MCAS terminal building
Airfield Security Fencing	All	2023–2024	<ul style="list-style-type: none"> <li>Fencing on north side of Runway 04/22</li> <li>Demolish Motor-T buildings/parking lot across from Hangar 101</li> </ul>
Bravo Ramp Upgrades	MV-22	2025–2027	<ul style="list-style-type: none"> <li>Repaving and restriping Bravo Ramp on bay side of Hangars 102, 103, and 104</li> <li>Replacing taxiway asphalt</li> <li>Installing heat resistant concrete at parking spots</li> <li>Tie-downs at Bravo Ramp</li> </ul>
Hangar 103 Replacement	MV-22	2025–2027	Demolition of Hangar 103 and associated support buildings adjacent to the southwestern side (Buildings 159, 160, 161, 183, and 184), and construction of new Type II Hangar 103 to accommodate MV-22s from Hangar 6886
Hangar 6886 Renovations	KC-130J	2026–2027	Reconfiguration of Hangar 6886 interior spaces to convert from MV-22 to KC-130J use
KC-130J Support Facilities	KC-130J	2026–2027	Construction of new support facilities east of Hangar 6886: <ul style="list-style-type: none"> <li>Storage Facility</li> <li>Propeller Maintenance Facility</li> </ul>
KC-130J Aircraft Direct Refueling System	KC-130J	2026–2027	Construction of a new refuel lane with an Aircraft Direct Refueling System: <ul style="list-style-type: none"> <li>Demolition of Buildings 4000 and 5068</li> <li>Construction of concrete pavement, asphalt shoulders, striping, fuel lines from the existing fuel farm, and a drainage system with storm water detention capability</li> </ul>

Notes: Project locations are shown in Figure 3.

EUC = Environmental Control Unit; GCS = Ground Control Station; GDT = Ground Data Terminal; MCAS = Marine Corps Air Station.

Source: Marine Corps, 2021.

1 **2.2 Baseline Conditions of the Project Footprint**

2 Figure 4 shows general biological resources features in the project area and region of influence. The  
3 project area and region of influence consists entirely of built or modified landscape with no notable  
4 ecological communities on or adjacent to the construction sites. Historically, the project area was  
5 cleared with heavy equipment and lacks native vegetation cover. Wildlife found in the project area  
6 consists of mammalian and bird species consistent with those found in a developed and urbanized  
7 environment. Seabirds and migratory species utilize the region of influence. Wetlands, including  
8 mudflats, shallow ponds, estuarine and coastal wetlands exist within the region of influence and provide  
9 some habitat for waterbirds.

10 All areas on MCB Hawaii Kaneohe Bay have been precluded from designation as Critical Habitat for all  
11 endangered species due to conservation measures included in the MCB Hawaii INRMP and based on  
12 those area being managed in a way that provides a benefit to the various federally listed species.

13

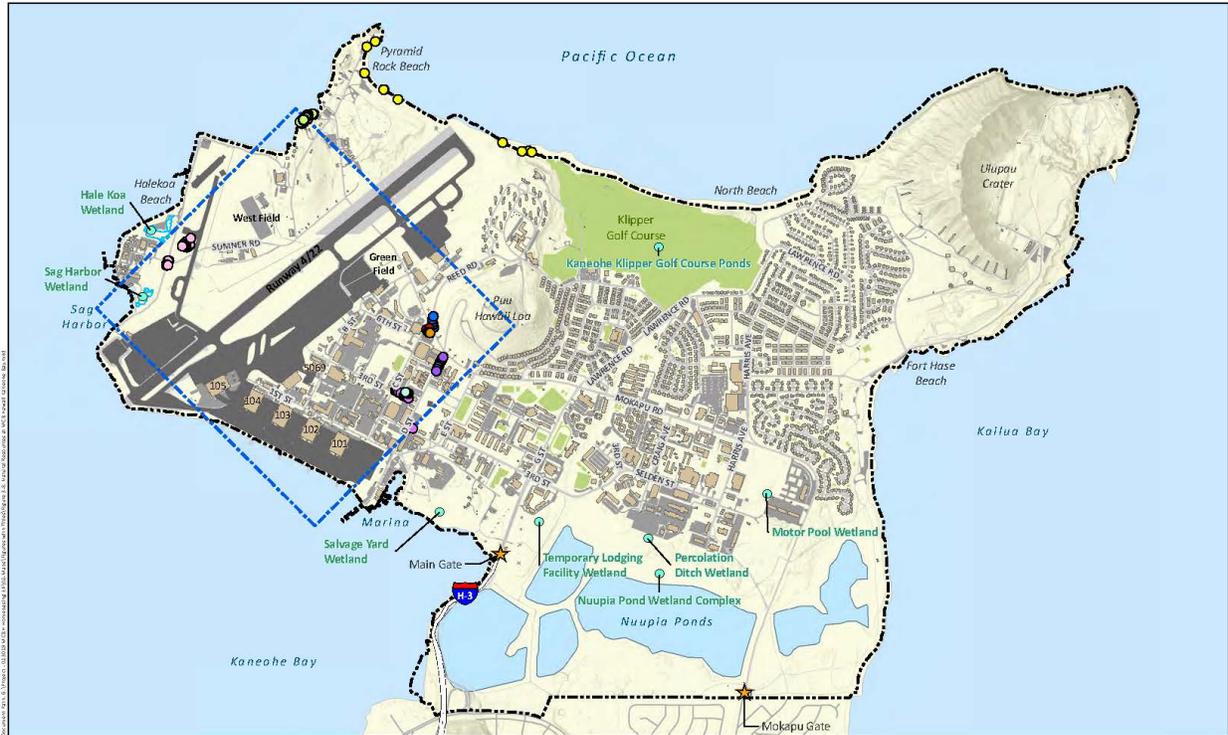


Figure 4. Natural Resources at MCB Hawaii Kaneohe Bay

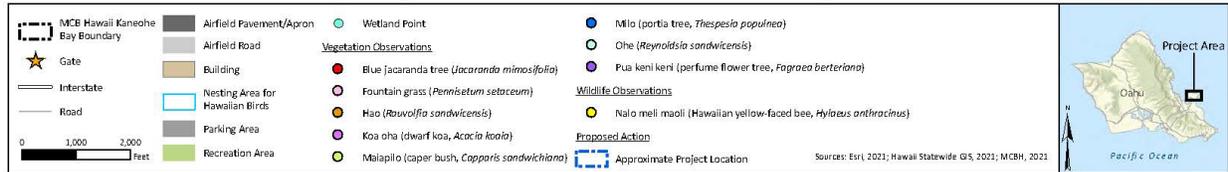


Figure 4 Biological Resources at MCB Hawaii Kaneohe Bay

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### 3 Description of the Species and Baseline Conditions

The federally listed species included in this environmental analysis are the Hawaiian duck, Hawaiian coot, Hawaiian gallinule, Hawaiian stilt, band-rumped storm petrel, Hawaiian petrel, Newell's shearwater, Hawaiian monk seal, and green sea turtle. Species status and their environmental threats are described below. Information sources include the USFWS Pacific Islands Office and Hawaii Department of Land and Natural Resources (DNLN) Division of Forestry and Wildlife web pages.

#### 3.1 Hawaiian Duck (*Anas wyvilliana*)

The Hawaiian duck was listed as endangered in 1967 (USFWS 2011). Hawaiian ducks are known to occur on all the main Hawaiian Islands except for Lanai and Kahoolawe (USFWS 2011). Both sexes resemble a dark female mallard, mottled brown with blue wing bars bordered on both sides by white. Males have darker head and neck feathers, an olive-colored bill, and bright orange feet and legs. Females have a more orange- or gray-colored bill with a dark mark on the upper ridge, feet and legs that are dull orange, and are smaller in size. Data indicate there has been extensive hybridization between Hawaiian ducks and feral mallards on Oahu. There is often difficulty distinguishing genetically pure Hawaiian ducks (*Anas wyvilliana*) from true mallards (*Anus platyrhynchos*) and Hawaiian duck mallard hybrids, although mallards and hybrids tend to be larger. Hawaiian ducks occupy coastal wetlands, freshwater pools, bogs, streams, and marshy areas. They prefer shallow water with dense cover nearby (MCB Hawaii 2017).

The estimated Oahu population is approximately 300 individuals including Hawaiian duck hybrids (USFWS 2011). From 2007 to the present, an average of 95 Hawaiian duck-mallard hybrids have been observed during the MCB Hawaii base-wide waterbird counts (MCB Hawaii 2017 INRMP). During the August 22, 2019, state waterbird count, nine Hawaiian duck-mallard hybrids were observed in the wetlands next to the project footprint (MCB Hawaii unpublished data 2019). Hawaiian ducks forage in open lawn areas, especially after rains that create areas of standing water. This includes the grass strip between the departure and taxi runways, the grassy area at the intersection of Mokapu Road and Tank Trail, and along the mowed strip on each side of Mokapu Rd. Up to 10 Hawaiian ducks have been observed foraging along Mokapu Road.

Currently, the largest threat to Hawaiian duck populations is hybridization with non-native mallards. This is especially problematic on Oahu where most individuals are hybrids. In addition, feral pigs (*Sus scrofa*) significantly reduce the suitability of nesting habitat for Hawaiian ducks (DLNR 2015).

#### 3.2 Hawaiian Coot (*Fulica alai*)

The Hawaiian coot was listed as endangered in 1970 (USFWS 2011). The Hawaiian coot is a small waterbird with a black head, a solid grayish-black body, a white bill, a prominent white frontal shield and white tail feathers that are easily seen when the bird is swimming or displaying. Feet are lobed (not webbed) and are greenish gray. Hawaiian coots occur on all the main Hawaiian Islands except Kahoolawe, which lacks suitable wetland habitat. Hawaiian coots generally occur in lowland freshwater wetland habitats consisting of a mixture of emergent plant growth with open water. Occasionally they use brackish and saltwater habitats. They typically forage in shallow water (less than 12 inches) but will dive in water up to 48 inches deep (MCB Hawaii 2017). Hawaiian coots nest primarily in fresh or slightly brackish shallow water (15–40 inches) interspersed with robust emergent wetland plants. They may construct floating nests with aquatic vegetation in open water or anchored to emergent vegetation.

Nesting occurs year-round but prime nesting season is between March and September. Clutch size is three to ten eggs (MCB Hawaii 2017).

The Oahu population of Hawaiian coots fluctuates between 500 and 1,000 birds (USFWS 2011). During the August 22, 2019, state waterbird count, 275 coots were observed at the wetlands next to the project footprint; however, this is atypical with recent counts typically averaging 50 coots. The largest part of the coot population resides in Pa‘akai and Kaluapuhi ponds (MCB Hawaii unpublished data 2019).

### **3.3 Hawaiian Gallinule (*Gallinoula chloropus sandvicensis*)**

The Hawaiian gallinule was listed as endangered in 1967 (USFWS 2011). Gallinules are generally found on Kauai and Oahu only, with some occurrences on Hawaii Island (USFWS 2011). The Hawaiian gallinule is black on the top of its body with dark slate blue below and a white stripe on the flanks. They have a red frontal shield over their red and yellow tipped bill and their feet are lobed rather than webbed. They are found in freshwater marshes, wetland agricultural areas, reservoirs, wet pastures, and occasionally brackish water. Nesting habitat is restricted to areas of standing freshwater less than two feet deep with dense emergent vegetation. Nesting occurs year-round, but mainly takes place during spring and summer months. Floating nests are constructed in dense vegetation (MCB Hawaii 2017).

The DLNR statewide waterbird survey counted an annual average of 287 gallinules over 10 years from 1998 to 2007 (USFWS 2011). Gallinules are widely distributed across Oahu and prevalent across the northern and eastern shoreline from Haleiwa to Waimanalo. Small numbers exist in Pearl Harbor and Lualualei Valley. At MCB Hawaii Kaneohe Bay, the average count of gallinules during annual waterbird surveys through December 2019 was 20 birds with the largest population occurring in the Klipper Golf Course ponds. Gallinules have been frequently observed by Natural Resource staff in areas adjacent to the project site in the northeastern portion of Nu‘upia Ekolu, Wai Puna, and the northern edge of Pa‘akai.

### **3.4 Hawaiian Stilt (*Himantopus mexicanus knudseni*)**

The Hawaiian stilt was listed as endangered in 1970. They are known to occur on all the main Hawaiian Islands except for Kahoolawe (USFWS 2011). Hawaiian stilts utilize fresh, brackish, and coastal waters. They use little vegetation for nesting or feeding and breed in marshland, mudflats, shallow open water, flooded fields, borders of salt ponds, mangrove swamps, coastal wetlands, and ephemeral wetlands. They require low-growing vegetation with specific water depths of around five inches for optimal foraging (MCB Hawaii 2017).

The USDA Wildlife Services regularly disperses stilts off the airfield. The DLNR annual statewide waterbird surveys from 1998 through 2007 averaged 1,484 stilts with fluctuations between 1,100 and 2,100 birds, with an average of 100 stilts counted at MCB Hawaii. During the August 2019 state waterbird count, 35 stilts were observed at the wetlands next to the project footprint (MCB Hawaii unpublished data 2019). Hawaiian ducks forage in open lawn areas, especially after rains that create areas of standing water. Up to seven stilts from the nearby wetland have been observed foraging in an open grassy area at the intersection of Mokapu Road and Tank Trail in the project footprint.

### **3.5 Band-rumped Storm Petrel (*Oceanodroma castro*)**

The band-rumped storm petrel was listed as endangered in 2016. The Hawaii Distinct Population Segment (DPS) of the ‘akē‘akē (band-rumped storm-petrel, *Oceanodroma castro*) is an endangered

seabird that is found throughout the Pacific Ocean basin, and nests in the Hawaiian Islands. Band-rumped storm-petrels are a small seabird measuring approximately 8 inches long with a wingspan of 19 inches and weighing about 2 ounces. Both sexes are alike in size and appearance. Vocalizations at breeding colonies can be used to further distinguish this species from other Procellariiformes seabirds (albatrosses and petrels) found throughout Hawaii (Allan 1962, p. 279; James and Robertson 1985, pp. 391-392). Band-rumped storm-petrels are long-lived (15 to 20 years). When not at nesting sites, adults spend their time foraging on the open ocean for small fish, squid, and crustaceans.

In Hawaii, the breeding population is unknown, but likely very small. Threats include introduced predators, feral ungulates, artificial lighting, collisions, and colony locations.

### **3.6 Hawaiian Petrel (*Pterodroma sandwichensis*)**

The Hawaiian petrel was listed as endangered in 1967. The Hawaiian petrel is a medium-sized, nocturnal gadfly petrel (Family: *Procellariidae*) endemic to Hawaii. Due to its dark back color, the 'W' pattern across its back and upper wing surface is not visible except in worm plumage. The Hawaii petrel often feed thousands of kilometers from their breeding colonies, usually foraging within mixed species hunting groups over schools of predatory fishes. In Hawaii, they feed primarily on squid, but also are known to consume fish (especially goatfish and lantern fish), and crustaceans. The Hawaiian petrel nests in colonies, form long-term pair bonds, and return to the same nest site year after year. Colonies are typically in high-elevation, xeric (low moisture) habitats or wet, dense forests. They nest in burrows, crevices, or cracks in lava tubes; nest chambers can be from 3-30 feet deep. Most eggs are laid in May and June and birds fledge by December, although there are significant inter-island differences in breeding phenology.

Threats include hunting, introduced predators, feral ungulates, artificial lighting, collisions, and colony locations.

### **3.7 Newell's Shearwater (*Puffinus auricularis newelli*)**

The Newell's shearwater was listed as endangered in 1975. Newell's shearwater (Family: *Procellariidae*) is highly pelagic year-round and is endemic to the Hawaiian Islands. Adult males and females are dark, sooty brown above, with white throat and underparts, and have a dark bill with a hooked tip. Flight is direct, fast, and usually low over water, powered by rapid wing beats intercalated with glides; wing loading is higher than in more aerial shearwaters due to the specie's foraging method. It often forages in large, mixed hunting groups comprised of several species associated with schools of large, predatory fishes. Newell's shearwaters feed mainly by pursuit-plunging; individuals dive into water and swim using their partly folded wings for propulsion. Diet is not well known, but likely consists of fish and squid. They are colonial and nest on steep mountain slopes, with variable amounts of vegetation, where they lay a single egg in cavities and burrows, often located at the base of a tree. Breeding is highly synchronized, and eggs are laid in early June, and most young start to fly by November. Both parents incubate the egg, and brood and feed the nestling. Parents forage hundreds of kilometers offshore and return to the colony at night to feed the chicks. Age at first breeding is six to seven years.

The Newell's shearwater nests on Kauai, Hawaii, Molokai, and Lehua, and may also nest on Oahu, Maui, and Lanai, but that is not confirmed. They have never been found in the project area or region of influence. Threats include hunting, introduced predators, habitat loss and degradation, feral ungulates, artificial lighting, collisions, overfishing, colony locations, and catastrophes.

### 3.8 Hawaiian Monk Seal (*Neomonachus schauinslandi*)

The Hawaiian monk seal was listed as endangered in 1976. Hawaiian monk seals are among the most critically endangered mammals in the world, with only about 1,200 seals alive today. Most seals live in the Northwestern Hawaiian Islands, but there is a small and potentially growing population of seals in the main Hawaiian Islands (a 2005 survey observed 76 seals). Hawaiian monk seals have been sighted on the Mokapu Peninsula northern beaches. Hawaiian monk seals occasionally come to shore (haul-out) on the beaches within the region of influence at MCB Hawaii Kaneohe Bay. An average of 45 seals per year hauled out on the beaches between 2017 and 2021 (MCB Hawaii, 2017). This can occur at any of the beaches on base. Approximately 30–60 monk seal sightings annually are reported to MCB Hawaii Environmental Compliance and Protection Division (MCB Hawaii, 2021).

### 3.9 Green Sea Turtle (*Chelonia mydas*)

The green sea turtle was listed as endangered in 1978. Green sea turtles are a common occurrence in Hawaii waters, including those of the MCB Hawaii Kaneohe Bay. Green sea turtles from the Hawaiian Islands and Johnston Atoll are classified as the Central North Pacific Distinct Population Segment (DPS), in which green turtles are geographically discrete in range, movements and genetic composition (Seminoff et al. 2015). Since 1960, the primary nesting site for these green sea turtles was the French Frigate Shoals in the Northwest Hawaiian Islands. Based on telemetry data, the majority of reproductive females and males (i.e., up to 96% of the population) migrate to the French Frigate Shoals for seasonal breeding, after which they return to various foraging areas 500–800 miles away (NMFS 2011). Peak nesting in this DPS occurs from May through August, and nesters return to breed at an interval of four years. Green turtles in the Central North Pacific DPS bask on beaches throughout the Main Hawaiian Islands, a behavior considered to allow thermoregulation, raise core body temperatures, and vary seasonally. These turtles feed on sea grass and algae in nearshore, coastal habitats (less than 100 feet deep).

Green sea turtles also occasionally haul-out on the beaches within the region of influence at MCB Hawaii Kaneohe Bay. Nesting has been documented along the Fort Hase and North Beach shorelines (MCB Hawaii, 2022b). Approximately 7–30 green sea turtle sightings annually are reported to MCB Hawaii Environmental Compliance and Protection Division (MCB Hawaii, 2021).

1 **4 Conservation Measures**

2 Conservation measures mitigate potential impacts by avoiding, minimizing, or eliminating impacts.

3 Proposed measures and include existing policies, practices, and measures to reduce the environmental

4 impacts of proposed activities. The conservation measures identified in this document are inherently

5 part of and would be implemented as part of the proposed action. Table 3 lists the relevant

6 conservation measures that would be implemented as part of the proposed action.

**Table 3 Proposed Conservation Measures**

<i>Conservation Measure</i>	<i>Impacts Reduced/Avoided</i>	<i>Description</i>	<i>Applicability</i>
Storm Water LID Techniques	Minimize pollutants in storm water flows	LID techniques such as bio-retention, vegetated swales, and/or vegetated filter strips would be used during construction. Features such as underground chambers and pervious pavement should be considered as LID for water management beyond the construction period.	Construction
Storm Water Permit Requirements	Minimize pollutants in storm water flows	Implement all requirements of the NPDES permit required for the discharge of storm water associated with construction activity, including a SWPPP.	Construction
Storm Water Detention Basin	Minimize attraction of birds	Cover the detention basin to avoid attracting birds.	Construction
Windows	Minimize attraction of birds	For all windows facing or adjacent to the flightline that have the potential to attract birds to the flightline implement design features to minimize their attraction, including tinted glass or film with a visible light transmittance value of 30% or less (inside to outside).	Construction
Hangar Doors	Minimize attraction of birds	Aircraft hangars should not use translucent doors or have windows. The hangar doors should be solid and not allow any interior light to pass through. If a hangar door has a window requirement, tinting is required.	Construction
Hangar Doors	Minimize attraction of birds	Unless nighttime operations are in progress, doors would remain shut at night to prevent light emitting outward. This could include partially closing doors and turning off lighting when operations not occurring, as well as incorporation of an easy-to-use light switching system. Doors should allow user to open and close with ease to ensure that hangar doors can be shut at night to prevent light emitting outward.	Operation

**Table 3 Proposed Conservation Measures**

<i>Conservation Measure</i>	<i>Impacts Reduced/Avoided</i>	<i>Description</i>	<i>Applicability</i>
Lighting	Bird/bat disorientation/fallout	<p>Exterior lighting would follow MCB Hawaii standards (MCB Hawaii, 2022a). When exterior lighting is required, all exterior lights for new construction, replacement of existing fixtures, and renovations would meet or exceed USFWS, NOAA, and/or IDA standards unless otherwise required by the military mission, per the MCB Hawaii INRMP (MCB Hawaii, 2017, pg. C2-15) and will be reviewed by the MCB Hawaii environmental team.</p> <p>Construction and operation of new and renovated buildings along the flightline would be coordinated with MCB Hawaii Environmental Division Natural Resources and follow lighting requirements to the maximum extent feasible to prevent seabirds from being attracted to areas with aircraft operations and These include:</p> <ul style="list-style-type: none"> <li>• The wavelength of all exterior lighting should be equal to or greater than 560 nanometers</li> <li>• Shielded exterior lighting (points downward) and full cutoff.</li> <li>• Controlled; only be “On” when needed and have ability to shut off lighting when not in use.</li> <li>• Timers and motion-activated lighting to minimize unnecessary light remaining on throughout the night.</li> <li>• Minimize light trespass. Only light the required area – to conserve energy and to prevent unwanted light from trespassing into regions where it is not needed.</li> <li>• Minimize brightness. Be no brighter than necessary.</li> <li>• Minimize blue light emissions.</li> <li>• Use full cutoff downward/shielded bollards in parking areas and sidewalks, and full cutoff downward/shielded wall packs for walkways and entrances/exits.</li> <li>• Light fixtures as low as possible to the ground.</li> <li>• All nighttime construction work and construction lighting would be pre-approved with Environmental Compliance &amp; Protection Division Natural Resources.</li> <li>• Use warm light sources for exterior lighting.</li> </ul>	Construction/ Operation
Lighting	Minimize attraction of birds	Limit use of lights during the seabird fledging period.	Operation

**Table 3 Proposed Conservation Measures**

<i>Conservation Measure</i>	<i>Impacts Reduced/Avoided</i>	<i>Description</i>	<i>Applicability</i>
Windows	Minimize attraction of birds	For windows facing or adjacent to flightline that have the potential to attract birds to the flightline: tinted glass or film with a visible light transmittance value of 30% percent or less (inside to outside) used on all glass windows, doors, and walls within line of sight of the flightline.	Operation
Hangars	Minimize bird nesting	Interior portions of the hangars would be designed with netting or slanted surfaces to keep birds from nesting in the hangar.	Construction/ Operations
Education	Minimize indirect effects to ESA-listed species from contractors, personnel, and dependents	All construction contractors and aircraft squadron personnel would participate in MCB Hawaii Kaneohe Bay's existing natural resources education program. The program would include, at a minimum, the following topics: (1) occurrence of natural resources (including ESA-listed species); (2) sensitivity of the natural resources to human activities; (3) legal protection for certain natural resources; (4) penalties for violations of federal law; (5) general ecology and wildlife activity patterns; (6) reporting requirements; (7) measures to protect natural resources; (8) personal measures that users can take to promote the conservation of natural resources; and (9) procedures and a point of contact for ESA-listed species observations.	Construction/ Operations

*Notes:* % = percent; ESA = Endangered Species Act; IDA = International Dark-Sky Association; INRMP = Integrated Natural Resources Management Plan; LID = Low Impact Development; MCB = Marine Corps Base; MS4 = Municipal Separate Storm Sewer System; NOAA = National Oceanic and Atmospheric Administration; NPDES = National Pollutant Discharge Elimination System; SWPPP = Storm Water Pollution Prevention Plan; USFWS = United States Fish and Wildlife Service.

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## 5 Analysis of Effects to Species

### 5.1 ESA-listed Bird Species

The following analysis applies to all ESA-listed bird species at MCB Hawaii Kaneohe Bay (see Table 1): Hawaiian duck, Hawaiian coot, Hawaiian gallinule, Hawaiian stilt, band-rumped storm petrel, Hawaiian petrel, and Newell's shearwater.

Vegetation Clearing. There are no shrubs or trees in the project area that provide suitable habitat for wildlife. Approximately 4.25 acres of landscaped vegetation would be cleared and developed. Vegetated portions of the project area consist of mostly planted landscape material; no notable ecological communities occur on or adjacent to the construction sites. Site preparation and construction activities would involve the clearing of non-native shrubs and grasses. Operational activities would include vegetation maintenance. Vegetation restoration would include ground preparation, planting, temporary irrigation, and maintenance. Restored turf grass vegetation would be installed over a bio-degradable erosion-control fabric and would incorporate at least 50% native plant species. Proposed native plant vegetation restoration and landscape repair would result in minor beneficial impacts to vegetation in the project area.

Fallout. Seabird fallout can occur when unnatural lighting at night attracts and disorients birds to areas that may place them in dangerous conditions leading to their injury or death, as well as increased risk for potential bird-aircraft strikes. Many bird species are attracted to facilities with lights, so lighting use during nighttime construction is a potential stressor to nocturnal or light sensitive seabird species. To minimize this potential impact, construction is proposed only for daytime hours. If limited unplanned nighttime construction must occur, or lighting is required for safety during non-construction hours, all exterior lights would meet or exceed USFWS, National Oceanic and Atmospheric Administration (NOAA), and/or International Dark-Sky Association (IDA) standards for the type of work to be undertaken. Equipment to reduce fallout include installation of downward-shielded lights, tinted windows, and a full cut-off feature that minimizes backlight, uplight, and glare. This feature also includes automatic motion sensor switches and controls on all lights visible to the outdoors (see Table 3 for complete lighting conservation measures). Procedures such as closing doors when activity is not in progress and limiting use of lights during the seabird fledging period further reduce instances of fallout. Additional conservation measures to further reduce risk of fallout (see Table 3) include use of tinted windows, elimination of lighting on the top of the buildings, relocating lights as close to the ground as possible, use of solid hangar doors that do not allow any interior light to pass through, and closing doors when activity is not in progress. In addition, all on-site contractors would be briefed on how to conduct construction in the presence of light-sensitive bird species (L. Bookless, personal communications, 6 March 2022) and lighting decisions will be coordinated with MCB Hawaii Natural Resources

Strike. There is minimal risk of injury or death to birds due to vehicle or equipment collisions during construction. Conservation measures described above to prevent temporary ponding and excess lighting would minimize attraction of birds to the construction area. In accordance with existing permits, current bird hazing activities would continue to be conducted by the USDA Wildlife Services to discourage birds from the airfield where they may be at risk of strike. The proposed action would cause no appreciable change in the timing of daytime flights and flight patterns from current operations, where birds have adapted to airfield conditions. Therefore, the two new squadrons would not introduce any new strike hazards.

1 Noise. Figure 5 shows average Day-Night Average Sound Level (DNL) noise contours associated with  
2 proposed aircraft operations at MCB Hawaii Kaneohe Bay. Construction and aircraft noise would result  
3 in temporary impacts to birds and other wildlife. Construction-related noise may temporarily displace  
4 such wildlife from habitat in the immediate vicinity of the project area. However, because construction  
5 would occur at previously developed and actively used areas where aircraft and machinery are in regular  
6 use around the airfield creating a noise environment consistent with a construction area, birds have  
7 either adapted to the general noise of the flightline and other construction areas or would temporarily  
8 relocate from the construction areas to adjacent similar habitats. The addition of the MQ-9 and KC-130J  
9 squadrons to MCB Hawaii Kaneohe Bay results in a slight expansion in the average noise contours  
10 throughout the region of influence when compared to existing conditions, most notably at the very  
11 north end of the airfield (see Figure 5). In areas that support greater populations of wildlife due to  
12 increased tree canopy, such as at Sag Harbor Wetland at the northwestern end of the airfield, the  
13 potential increase in area affected by noise (75 dB DNL and above) would be approximately 75 feet. The  
14 sand dunes directly northwest of the airfield and on the flightline would see no greater than 250 feet of  
15 contour extension for the 75 DNL boundary. Wildlife species currently existing in the region of influence  
16 have been exposed to aircraft noise and are habituated to operational noise that currently occurs at  
17 MCB Hawaii Kaneohe Bay. In addition, the proposed aircraft operations would result in lower average  
18 noise levels than conditions prior to 2022 when the number of annual aircraft operations was higher.  
19 For these reasons, Alternative 1 (the preferred alternative) may affect, but is not likely to adversely  
20 affect, ESA-listed bird species.

## 21 **5.2 Hawaiian Monk Seal and Green Sea Turtle**

22 Hawaiian monk seals and green sea turtles occasionally haul-out on the beaches at MCB Hawaii Kaneohe  
23 Bay. Noise changes associated with proposed aircraft operations in the region of influence where monk  
24 seals and sea turtles can occur would be minimal. Though the change in noise contours include  
25 approximately 38 additional acres of surface area under the 75 dB DNL, most of this new area is over the  
26 runway and nearshore surface waters and represents less than a 2% increase in area over existing  
27 conditions. The number of overflights that would occur in this area could increase in a typical day or  
28 week compared with existing conditions; however, in-water monk seals and green turtles that could  
29 occur in this area would not experience a change in type or magnitude of single-event noise levels at or  
30 below the surface of the water due to the MQ-9s and KC-130Js operational similarity to other propeller  
31 aircraft that use the airfield. Furthermore, exposure of a monk seal or sea turtle to aircraft presence are  
32 currently happening and lasts for only seconds as the aircraft quickly passes overhead. Aircraft takeoffs,  
33 landings, or overflights could potentially startle animals; however, these events only produce noise at  
34 any given location for a brief period as the aircraft climbs to cruising altitude and pass quickly overhead.  
35 Sea turtles hauled out on beaches at MCB Hawaii Kaneohe Bay typically show no evidence of startle  
36 reaction or behavior changes during aircraft overflights, while monk seals have been observed to have a  
37 brief startle reaction to some overflights (L. Bookless, personal communication, 7 July 2022, 18 July  
38 2022). It is uncommon for monk seals and sea turtles to be hauled out on the same location of a beach  
39 throughout the year, so repeated exposure to individuals over short periods (days) is unlikely. As a  
40 result, in the event monk seals or sea turtles encounter aircraft noise, behavioral reactions to aircraft  
41 overflight noise are likely to be brief, discountable, and insignificant and would not affect natural  
42 behaviors.

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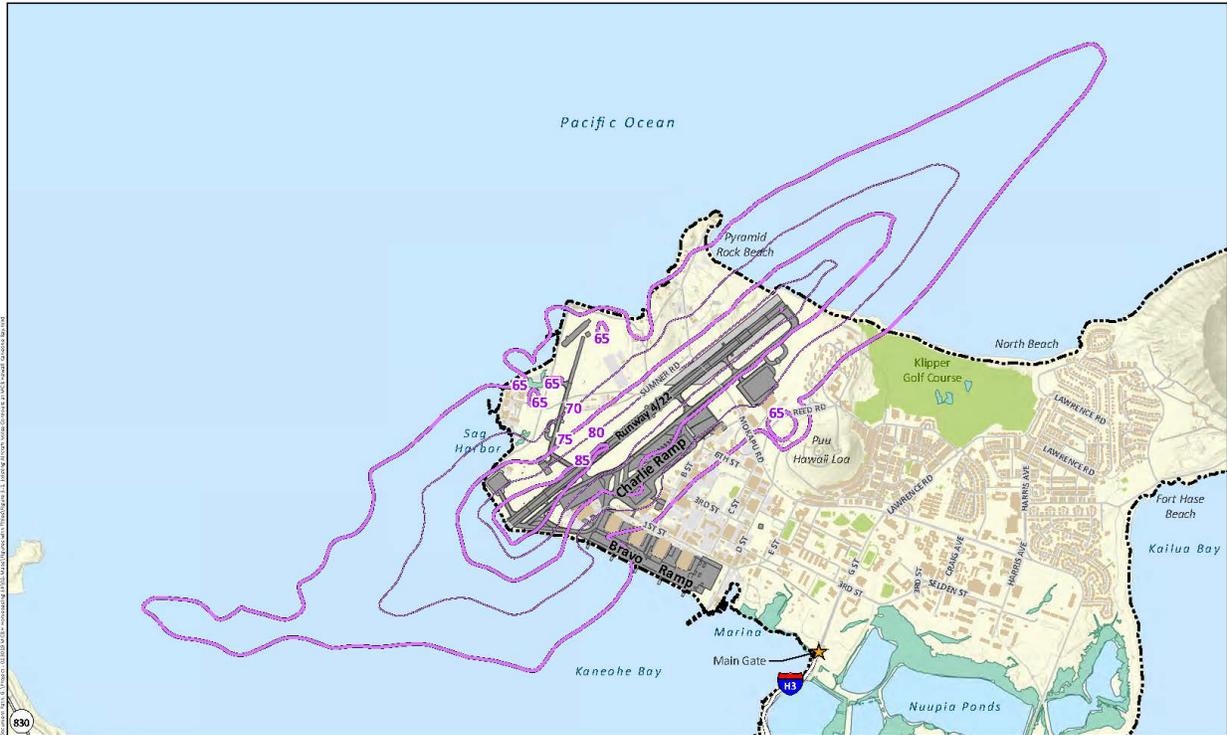
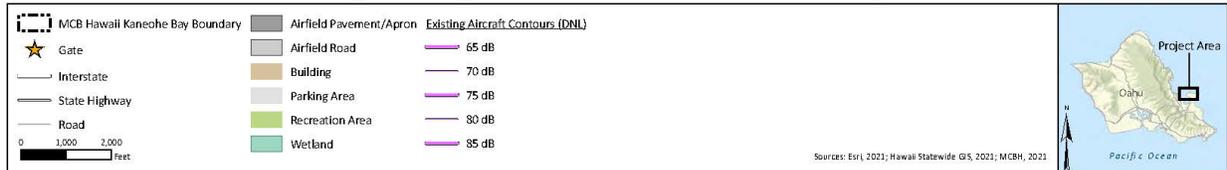


Figure 5. Existing Aircraft Noise Contours at MCB Hawaii Kaneohe Bay



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Figure 5 Alternative 1 (Preferred Alternative) Noise Contours at MCB Hawaii Kaneohe Bay Compared to Existing Conditions

1 The proposed action would include an increase in military personnel and dependents from baseline  
2 conditions; however, the proposed action represents a reduction of 165 personnel and dependents  
3 from historical base populations. Potential indirect impacts to monk seals and sea turtles could  
4 potentially occur from recreational use of beaches on the installation where these species occasionally  
5 haul out. Currently, the potential threats to this species due to disturbance from beach visitors are  
6 mitigated through existing education efforts, reporting requirements, and placement of temporary  
7 barriers to keep the public away from the individuals (MCB Hawaii, 2017). The MCB Hawaii  
8 Environmental Compliance and Protection Division would continue current education and signage  
9 procedures to minimize the potential for these types of interactions. Under the proposed action, all  
10 associated personnel and contractors would be required to complete a natural resources education  
11 program that details measures to protect ESA-listed species they may encounter (see conservation  
12 measures in Table 3). In addition, the MCB Hawaii INRMP (MCB Hawaii, 2017) requires that any  
13 incidents of basking/nesting sea turtles or hauled-out seals be reported to the NOAA hotline and the  
14 military police, barriers be erected and monitored around the animal, and that people and pets remain  
15 at least 50 feet away. Additional procedures identified in the INRMP include: assistance and  
16 enforcement of rules by military police animal control officers, placement of cautionary signs along  
17 fences to inform people of how to limit disturbance of monk seals and green sea turtles,  
18 implementation of appropriate response procedures to ensure protection of marine mammals and  
19 turtles resting on MCB Hawaii beaches, and monitoring for protected species on land or in water during  
20 training exercises)and. Implementation of these current and proposed conservation measures would  
21 minimize the potential disturbance impacts from the public.

22 Therefore, Alternative 1 (the preferred alternative) is not likely to adversely affect the Hawaiian monk  
23 seal and green sea turtle.

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## 6 Conclusion

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Species included in this analysis include the Hawaiian duck, Hawaiian coot, Hawaiian gallinule, Hawaiian stilt, band-rumped storm petrel, Hawaiian petrel, Newell’s shearwater, Hawaiian monk seal, and green sea turtle. MCB Hawaii Kaneohe Bay has determined the proposed action may affect but is not likely to adversely affect these nine species. MCB Hawaii Kaneohe Bay requests concurrence with these determinations.

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34



**Appendix E**  
**Coastal Zone Management Act**  
**Coordination**

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**From:** [Mendes, Debra L](#)  
**To:** [Bomar CIV Jacquelyn C](#)  
**Cc:** [Hart Maj Jeffrey P](#); [Frantz CIV Christopher T](#)  
**Subject:** [Non-DoD Source] RE: Notification of Proposed Home Basing of the MQ-9A and KC-130J Squadrons at MCBH Navy/Marine Corps De Minimis Activities under CZMA  
**Date:** Monday, November 21, 2022 1:25:02 PM

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Aloha Jackie,  
Thank you for the additional information. The maps you provided are sufficient.

This acknowledges receipt of the notification of the U.S. Marine Corp's use of the CZMA De Minimis List.

Thank you,  
Debra Mendes  
Hawaii Coastal Zone Management Program

-----Original Message-----

From: Bomar CIV Jacquelyn C <jacquelyn.bomar@usmc.mil>  
Sent: Friday, November 18, 2022 8:38 AM  
To: Mendes, Debra L <debra.l.mendes@hawaii.gov>  
Cc: Hart Maj Jeffrey P <jeffry.hart@usmc.mil>; Frantz CIV Christopher T <christopher.frantz@usmc.mil>  
Subject: [EXTERNAL] RE: Notification of Proposed Home Basing of the MQ-9A and KC-130J Squadrons at MCBH Navy/Marine Corps De Minimis Activities under CZMA

Hi Ms. Mendes,

Thank you so much for the response and for your review of the proposed de minimis activities. Attached is a location map and two conceptual maps/drawings.

Please don't hesitate to reach out if you have additional questions.

V/R,

Jackie Bomar

NEPA Program Manager  
Environmental Compliance and Protection Division  
MCBH Kaneohe Bay  
Jacquelyn.bomar@usmc.mil

-----Original Message-----

From: Mendes, Debra L <debra.l.mendes@hawaii.gov>  
Sent: Thursday, November 17, 2022 2:48 PM  
To: Bomar CIV Jacquelyn C <jacquelyn.bomar@usmc.mil>  
Cc: Hart Maj Jeffrey P <jeffry.hart@usmc.mil>; Frantz CIV Christopher T <christopher.frantz@usmc.mil>  
Subject: [Non-DoD Source] RE: Notification of Proposed Home Basing of the MQ-9A and KC-130J Squadrons at MCBH Navy/Marine Corps De Minimis Activities under CZMA

Aloha Jackie,  
Thank you for your patience.

As I review the proposed de minimis activities, can you please provide site location maps and (general) project plans or drawings of the proposed activity?

Thank you,  
Debra Mendes

-----Original Message-----

From: Bomar CIV Jacquelyn C <jacquelyn.bomar@usmc.mil>  
Sent: Thursday, November 10, 2022 12:47 PM  
To: Mendes, Debra L <debra.l.mendes@hawaii.gov>  
Cc: Hart Maj Jeffry P <jeffry.hart@usmc.mil>; Frantz CIV Christopher T <christopher.frantz@usmc.mil>  
Subject: [EXTERNAL] Notification of Proposed Home Basing of the MQ-9A and KC-130J Squadrons at MCBH Navy/Marine Corps De Minimis Activities under CZMA

Aloha Ms. Mendes,

The U. S. Marine Corps is preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act of 1969 (NEPA), as implemented by the Council on Environmental Quality regulations, Department of the Navy Regulations, and Marine Corps Order 5090.2 for implementing NEPA. The proposed action is to home base a Marine Corps MQ-9 Extended Range Unmanned Aerial Vehicle Squadron and a KC-130J Aerial Refueler Transport Squadron at Marine Corps Base (MCB) Hawaii Kaneohe Bay.

The proposed action is to home base an MQ-9 UAV squadron and a KC-130J squadron at MCB Hawaii Kaneohe Bay. Under the proposed action, the Marine Corps would replace and modify existing hangars and supporting infrastructure, perform aviation maintenance, provide training for operators and maintainers, conduct approximately 3,000 MQ-9 and 5,280 KC 130J annual aircraft operations, and station approximately 676 personnel (229 MQ-9 and 447 KC-130J personnel) plus dependents at MCB Hawaii Kaneohe Bay.

The proposed action would house the MQ-9 squadron in Hangar 102, house the KC-130J squadron in Hangar 6886 (currently occupied by an MV-22 squadron), and demolish and reconstruct Hangar 103 as the replacement hangar for the MV-22 squadron. Hangars 102 and 103 are located along Bravo Ramp, which is adjacent to Kaneohe Bay.

The proposed action falls within the Navy/Marine Corps De Minimis Activities Under CZMA, Item 1: New Construction, and Item 11: Demolition:

Item 1. Construction of new facilities and structures wholly within Navy/Marine Corps controlled areas (including land and water) that is similar to present use and, when completed, the use or operation of which complies with existing regulatory requirements.

Item 11. Demolition and disposal involving buildings or structures when done in accordance with applicable regulations and within Navy/Marine Corps controlled properties.

The relevant project mitigation/general conditions under the De Minimis agreement for New Construction and Demolition actions are: 1, 3, 6, 8, 9, 10, 11, 12, 13, 14, 16:

1. Navy/Marine Corps controlled property refers to land areas, rights of way, easements, roads, safety zones, danger zones, ocean and naval defensive sea areas under active Navy/Marine Corps control.

3. Turbidity and siltation from project related work will be minimized and contained to within the vicinity of the site through appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.

6. No project-related materials (fill, revetment, rock, pipe, etc.) will be stockpiled in the water (intertidal zones, reef flats, stream channels, wetlands, etc.).

8. No contamination (trash or debris disposal, alien species introductions, etc.) of adjacent marine/aquatic environments (reef flats, channels, open ocean, stream channels, wetlands, etc.) shall result from project-related activities.

9. Fueling of project-related vehicles and equipment will take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed. Absorbent pads and containment booms will be stored on-site, if appropriate, to facilitate clean-up of accidental petroleum releases.

10. Any under-layer fills used in the project shall be protected from erosion with stones (or core-loc units) as soon after placement as practicable.

11. Any soil exposed near water as part of the project shall be protected from erosion (with plastic sheeting, filter fabric, etc.) after exposure and stabilized as soon as practicable (with vegetation matting, hydroseeding, etc.).

12. Section 106, of the National Historic Preservation Act (NHPA), consultation requirements must be met. Also, follow guidelines in the area-specific Integrated Cultural Resources Management Plan (ICRMP) if applicable.

13. Navy/Marine Corps shall evaluate the possible impact of the action on species and habitats protected under the ESA.

14. The NEPA review process will be completed.

16. Navy or Marine Corps staff shall notify State CZM of de minimis list usage for projects which require an EA.

Please contact me if you have any questions by email or call.

V/R,

Jackie Bomar

NEPA Program Manager  
Environmental Compliance and Protection Division MCBH Kaneohe Bay  
Jacquelyn.bomar@usmc.mil

