State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaii 96813

September 9, 2011

Chairperson and Members
Board of Land and Natural Resources
State of Hawaii

Board Members:

SUBJECT: REQUEST ACCEPTANCE OF THE FINAL ENVIRONMENTAL ASSESSMENT FOR SHORT-TERM HIGH-ALTITUDE MOUNTAINOUS ENVIRONMENT TRAINING AND ISSUANCE OF A FINDING OF NO SIGNIFICANT IMPACT FOR THE PROPOSED PROJECT

BACKGROUND:

The U. S. Army Garrison-Hawai'i (USAG-HI) prepared an environmental assessment (EA) to assess the environmental impacts of the High-Altitude Mountainous Environment Training (HAMET) for the 25th Combat Aviation Brigade (CAB), Hawai'i for the month of October 2011. The proposed HAMET will train 90 helicopter pilots and crew for high-altitude missions in preparation for deployment to Afghanistan and to satisfy mandated annual training requirements.

The need for well-prepared aviation brigades to conduct combat operations in Afghanistan led the U.S. Army Forces Command to prioritize the development of standardized training for high-altitude (up to 14,000 ft [4,267 m]) mountainous conditions. HAMET was developed to ready experienced helicopter pilots for success in combat operations as part of their train-up for deployment under Operation Enduring Freedom. HAMET adapts the National Guard's school for individual mountain helicopter training taught at the National Guard's High-Altitude Aviation Training Site in Gypsum, Colorado, with helicopter training that individual Army CABs have been conducting as part of their regular training operations for the past several years.

PROJECT DESCRIPTION

The project will involve helicopter training flights for 90 25th CAB aviators (180 flights) from Bradshaw Army Airfield at Pōhakuloa Training Area (PTA) to three existing Mauna Kea landing zones (LZs) and three existing Mauna Loa LZs at high altitudes in the Mauna Kea and Mauna Loa Forest Reserves. The training flights are estimated to take 2 hours for each pilot to complete, requiring no more than 180 flight hours. This training would be conducted primarily from

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October 3-31, 2011.[1] HAMET training includes academic classroom instruction, simulator training, individual flight technique training, and collective (group) training. The individual flight technique training component is a hands-on, incremental process in which experienced pilots proceed from lower to higher elevations, building on skills acquired at each altitude. The individual flight technique training component is to be conducted in environments at or above 8,000 ft (2,438 m) to replicate future operating conditions.

Pilots will fly at high altitudes and land at designated high-altitude LZs using varying angles of approach, headings, and air speeds, under both day and night conditions, to reach proficiency for anticipated future operating conditions. Minimum altitude for all HAMET helicopters would be 2,000 ft (610 m) above ground level (AGL) while departing PTA and enroute to an inbound release point. After passing the inbound RP, the aircrew would make a controlled descent to the selected LZ. On departure the aircraft would maintain an altitude of 500 ft (152 m) AGL until reaching the outbound release point then remains above 2,000 ft (610 m) AGL until back inside the PTA property line. Aircraft may only deviate from the protocol during actual aircraft emergencies. The maximum number of helicopters training on any mountain at one time would be three. No HAMET flights would be conducted on weekends, holidays, or during any known scheduled ceremonies. HAMET would not be used in conjunction with ground maneuver training activities or for picking up/dropping off troops or supplies, and no sling-loading would be conducted. At no time would any aircraft involved carry ammunition. All flight paths are designed to avoid designated wilderness areas and to increase the distance from recreation and cultural areas. All aircraft would be staged at PTA when used for training exercises.

A copy of the final EA has been separately provided to the Board members. A copy of the final EA will be posted on the Land Board website.

ALTERNATIVES CONSIDERED:

Six alternatives are evaluated in this EA:

1. The Preferred Alternative: HAMET flights conducted from Bradshaw Army Airfield at Pōhakuloa Training Area (PTA) to three existing Mauna Kea landing zones (LZs) and three existing Mauna Loa LZs. Under this alternative the training outside the Army training area is estimated to take 2 hours for each pilot to complete, requiring no more than 180 flight hours. This training would be conducted from October 3-31, 2011. The existing LZs proposed for use are located on State of Hawai'i lands.

2. Mauna Kea Alternative: HAMET would be conducted from PTA and Bradshaw Army Airfield to three existing Mauna Kea LZs (i.e., the same LZs and processes identified under the Preferred Alternative).

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[1] The period for the right-of-entry may be extended for good cause, such as delays in training activities due to inclement weather.

3. Mauna Loa Alternative: HAMET flights would be conducted from PTA and Bradshaw Army Airfield to three existing Mauna Loa LZs (i.e., the same LZs and processes identified under the Preferred Alternative).

4. Other High-Altitude Locations in the State of Hawai'i Alternative.

5. Other High-Altitude Training Sites on the Continental United States Alternative.

6. No Action Alternative.

Under these alternatives, up to 90 experienced helicopter aviators, newly assigned to the 25th CAB, as well as instructor pilots, would be trained for mountainous, high-altitude flights. For Hawai'i Action Alternatives, pilots would be trained using the UH-60 Black Hawk and the CH-47 Chinook aircraft. All aircraft would be unarmed (i.e., no pyrotechnic devices, ordinance, etc.). Training conducted under non-Hawai'i alternatives could use additional aircraft types, as available at the specific training facility.

The No-Action Alternative would result in no HAMET being conducted and the newly assigned aviators or instructors not being properly trained prior to deployment to Afghanistan. The No Action Alternative would be impracticable, undesirable, and costly when trying to capture the training needs of new pilots assigned to the CAB during this time and those pilots who need to conduct additional training to meet the advanced requirement. Familiarity with this specialized high-altitude environment is critical in saving the lives of our 25th CAB aircrews and the soldiers they transport when operating in support of Operation Enduring Freedom in Afghanistan.

Alternative 4, Other High-Altitude Locations (elevations above 8,000 ft [2,438 m]) in the State of Hawai'i, including other federal lands on Mauna Loa and lands on the island of Maui, was not considered further because of the following:

- Wilderness areas, including the federal lands on Mauna Loa and surrounding the summit in Haleakalā National Park, cannot be used for motorized vehicles.
- Federal lands on Maui are designated National Park Service (NPS) wilderness areas and require aviators to avoid overflights below 2,000 ft (610 m).
- Other areas on the island of Maui best suited for HAMET flights would require sharing airspace with hang gliders, paragliders, and other types of unregulated sport flyers considered incompatible with military helicopters and would be extremely unsafe.
- HAMET operations would require the use of Kahului Airport, a civilian facility requiring permissions and extensive coordination with airfield management, which would push the timeline for HAMET operations past the October 2011 target start date.

Alternative 5, High-Altitude Training Sites on the Continental United States Alternative, was not considered further because of the following:

- The decrease in dwell time that would result from mainland training in light of upcoming overseas deployment.
- The estimated cost totaling approximately $2M to send pilots and keep aircraft and maintenance crews on the mainland longer.

- The excess time the logistical challenges would require that could risk the CAB's ability to be trained prior to deployment.

After conducting its evaluation, the USAG-HI determined that Alternatives 1, 2, and 3 satisfied the purpose and need, and those alternatives were further evaluated. As required by the National Environmental Policy Act and Hawaii Revised Statutes (HRS) Chapter 343, the No Action Alternative, although considered unreasonable because it does not meet the purpose or need, was also evaluated further in the EA.

IMPACT OF ACTION ALTERNATIVES:

The Action Alternatives were evaluated with respect to their potential effects to the valued environmental components, which include climate, air quality, geology and soils, water resources, biological resources, cultural resources, socioeconomics and environmental justice, land use, recreation, noise, visual and aesthetic resources, human health and safety, traffic and circulation, and public services and utilities.

Climate
Impacts to local and regional climate conditions were evaluated, and it was determined that impacts to climate are not anticipated under the Action Alternatives. The climate at the proposed LZs, and the island of Hawai'i overall, would remain cool and tropical, with no impacts on average temperatures, rainfall, or wind patterns.

Air Quality
Particulate Matter 10 (PM_{10}) emissions resulting from helicopter rotor wash on the LZs were evaluated along with pollutants emitted from the aircraft. Impacts to air quality under the Action Alternatives are anticipated to be less than significant. Based on modeling, the impact of fugitive dust from helicopter activity on either Mauna Loa or Mauna Kea LZ areas would be less than significant. The maximum concentration at 1,093 yd (1,000 m) away from the center of the LZ(s) is less than 17.98 $\mu g/m^3$, which is below the state and U.S. Environmental Protection Agency emission standards.

The Army concludes that the cumulative air quality impacts on ozone or other secondary pollutants would be less than significant under the Action Alternatives, and that these Action Alternatives, when considered in combination with other past, present, and reasonably foreseeable future actions, would not be cumulatively significant.

Geology, Topography, and Soils
Adverse impacts to existing geologic conditions, including soil loss, sedimentation, and exposures to people or structures from geologic hazards, were evaluated. Impacts to geology and soils are not anticipated under the Action Alternatives. There would be no impact to geology or topography, because no construction to the LZs would be required. The soils present may be compacted or crushed by the weight of the helicopter. However, the soils are very resilient to wind forces, and fugitive dust has been modeled to be below state and EPA emission standards. The Army concludes that the Action Alternatives do not contribute to slope-stability or geology-

disturbing direct or cumulative impacts and contribute only negligibly to cumulative soil disturbance, because existing LZs would be used.

Water Resources
Degradation of water quality, impacts on availability, and compliance with water quality standards were evaluated. Based on this evaluation, impacts to water resources are anticipated to be less than significant under the Action Alternatives. No impacts to surface water are expected as a result of the Alternative Actions, because there are no perennial streams or other surface water resources that could potentially be affected. The only potential, but unlikely, impact to groundwater would be contamination of an aquifer through an unlikely spill. Based on depth and geological formations, the spill constituents are not anticipated to reach an aquifer. Additionally, Army helicopters have self-sealing primary and auxiliary fuel systems for rotary winged aircraft to reduce the possibility of leakage, fire, and explosion during impact. When considered in combination with other past, present, and reasonably foreseeable future actions, in the unlikely event of a crash resulting in a spill, would not result in significant cumulative impacts.

Biological Resources
Comprehensive physical (pedestrian) surveys were conducted for each of the LZs to identify vegetation, birds, bats, and arthropods that could be potentially impacted by HAMET operations. The potential for impacts to endangered and threatened species, other species of concern, or habitat in general, are anticipated to be less than significant. No plant species of concern were identified within the operational areas of the LZs. Moreover, vegetation within the operational areas of LZs is extremely sparse to absent. Habitat use by faunal species of concern within the LZ operational areas was determined to be minimal, extremely limited, or transitory. Along the projected flight paths, no impact is anticipated to any avian species of concern. Measures in place to reduce the impacts from invasive species, noise and wildfires are expected to result in, as a whole, impacts to biological resources that are less than significant. Army helicopters have self-sealing primary and auxiliary fuel systems for rotary winged aircraft to reduce the possibility of leakage, fire, and explosion during impact reducing the potential for wildfires in the unlikely event of a helicopter crash. The CAB has logged thousands of hours of flight time in Hawaii without a crash resulting in a wildfire. As a precautionary measure, crews capable of assisting in fighting wildland fires will be on standby.

Cultural Resources
The areas proposed for activities were studied through thorough literature review, archaeological surveys, and consultation with Native Hawaiians. In addition discussions with subject matter experts and reconnaissance-level surveys were performed at each LZ on Mauna Loa and Mauna Kea. The project was discussed with the PTA Cultural Advisory Committee at four meetings between November 2010 and May 2011. The PTA Cultural Advisory Committee advises the PTA Commander on stewardship of the land and resources at PTA. They are Native Hawaiians who volunteer to contribute to the Army's stewardship of cultural resources and the land at PTA. Members include J. Curtis Tyler III, Ruby McDonald, Ululani Sherlock, Clarence Ku Ching, E. Kalani Flores, Leiola Garmon-Mitchell, Leina'ala Benson, Leilani Hino, Danny Akaka Jr., Lucky Puhi, Kaleo Kuali'i, and Frank Trusdell Efforts were made to identify cultural practices that take place in the vicinity of the landing zones on Mauna Kea during the proposed training dates.

It was determined that there are no historic properties within any of the LZs. Several features were identified near but outside the LZs. There was nothing associated with these features to indicate either date of construction or function. However, it was determined that these resources would not be impacted as a result of HAMET.

Mauna Kea is of cultural significance to Native Hawaiians as an ancestor and as a place to communicate with the gods. The Army has concluded that the cumulative impacts associated with the Action Alternatives would be less than significant on cultural resources, and that these alternatives, when considered in combination with other past, present, and reasonably foreseeable future actions, would not be significant, because access would not be restricted, flights would avoid known cultural resources, noise modeling showed insignificant impacts, the inherent cultural values associated with Mauna Kea would not be compromised, the presence of the helicopters would be temporary and of relatively short duration, and the proposed LZs have no historic properties to alter or destroy. The flight paths that were chosen under the alternatives were designed to minimize the area of overflight and avoid the vast majority of known cultural properties on both mountains.

Socioeconomics and Environmental Justice
The potential impacts to unemployment rate, changes in total income, and business volume along with the impacts on local housing markets were evaluated. Disproportionate affects to any social, economic, physical, environmental, or low-income or minority groups or children were analyzed. Impacts to sociological resources, economic resources, environmental justice, and environmental health effects on children are not anticipated under the Action Alternatives. The alternatives would not alter the current state of the current conditions.

Land Use
Impacts to land use are not anticipated under the Action Alternatives. Basic land use would not change with the Action Alternatives. HAMET would not restrict access to any areas. Prior to any HAMET activities, the USAG-HI would notify the National Park Service and the DNLR in addition to the providing press releases. The Proposed Action does not involve acquiring land or rezoning land for use. As such, the Proposed Action and the use of the LZs would not result in any changes in current or planned land uses or zonings and thus would not cumulatively impact land use.

Recreation
Impacts to recreation are not anticipated under the Action Alternatives. Overflights may be perceived as a slight noise and visual distraction by people in the immediate area of any of the Action Alternatives, but HAMET would not significantly impact or result in the cessation of any recreational activities or access to them, including Mauna Loa Observatory Access Road, Saddle Road, and Mauna Kea Summit Access Road. The Action Alternatives also do not alter use of land for recreation and thus do not cumulatively impact recreation.

Noise
Impacts from noise on humans are not anticipated under the Action Alternatives. Noise modeling was performed to determine day-night averages associated with the proposed helicopter training. In addition, noise sampling was conducted for areas of potential concern to recreationists,

cultural practitioners, and biological resources. The anticipated noise levels are acceptable for current land uses in these areas. The noise sampling results did not measure maximum decibel level discernable above background levels for areas of concern to cultural practitioners or recreationists. Levels measured within the flight plan did not show levels of concern for biological resources. The noise could impact sensitive species by causing the wildlife to flee the area and interrupting life-cycle events like breeding; however, it was determined that wildlife activities return to normal when the disturbance is over, and wildlife often adapt to frequent noise. Design features of the alternatives (e.g., flight-corridor and minimum-elevation requirements through the flight corridor) also result in less-than-significant impacts.

While noise sensitivity is species specific and varies among individuals within each species, average noise levels for the combination of any of the Action Alternatives with existing and future noise sources are unlikely to cause excessive disruption or annoyance in noise-sensitive locations. Thus, the Army concludes that the cumulative noise impacts associated with implementing any of the Action Alternatives would be negligible.

Visual and Aesthetic Resources
Sixteen representative view points were selected based on what were considered sensitive to cultural practitioners, sight seers, and residents. Spatial analysis was used to determine the potential that people at these locations could see a helicopter. Impacts to visual and aesthetic resources are anticipated to be less than significant under the Action Alternatives. The visual sensitivity associated with HAMET would have less-than-significant impacts, because the areas are not identified as areas of high scenic quality and are not readily accessible to, or used by, large numbers of people. HAMET flights would be unlikely to obstruct one's view of natural beauty sites within the Hamakua and North Hilo planning districts. In addition, air-quality impacts to visibility are less than significant, intermittent, and of short duration and, in combination with other past, present, and reasonably foreseeable future actions, would not be cumulatively significant.

Human Health and Safety Hazards
Impacts to human health and safety are anticipated to be of no impact for hazardous materials under the Action Alternatives. A less-than-significant determination was made for the remote possibility of a crash that results in wildfire in vegetation that could sustain a wildfire. There is no such habitat at the LZs. A less-than-significant determination was made for LZ safety, because it is possible, but highly unlikely, for the public to be in the vicinity of operations. A less-than-significant determination was made for accident/incident investigation and recovery because of the CAB's safety record and the low potential for future accidents.

Traffic and Circulation
Impacts to traffic and circulation are anticipated to be less than significant under the Action Alternatives. The airspace will remain Class G uncontrolled. Pilots performing HAMET operations will use the Island Traffic Advisory Frequencies and the Common Traffic Advisory Frequency for communications and deconfliction with other aircraft. Impacts to air traffic would be less than significant because of the small volume of commercial and recreational air traffic involved and the ability for recreational pilots to be redirected temporarily through air traffic control and use of the Common Traffic Advisory Frequency in response to HAMET missions.

During periods of HAMET activity, the incremental increase in air traffic by HAMET is 3% over current levels. This increase is not considered cumulatively significant.

Public Services and Utilities
Impacts to public services and utilities are not anticipated under the Action Alternatives. Activities at the LZs would not require public services or utilities. While HAMET could marginally increase the demand for public services at PTA, current services are adequate.

MITIGATION MEASURES:

Although no significant negative impacts are anticipated under the Action Alternatives, the following conservation recommendations would be implemented to ensure there is no significant impact.

General
- Have firefighting resources on standby while training, and have transportation available for firefighting personnel.
- Notify Mauna Loa Observatory air-quality instrumentation personnel prior to conducting HAMET missions (requested by National Oceanic and Atmospheric Administration personnel).
- Notify the NPS prior to conducting HAMET (as requested).
- Notify the public, through press releases, of training schedules.

Biological Resources
- Maintain a minimum altitude of 2,000 ft (610 m) in the flight path (e.g., when flying over palila critical habitat).
- Inspect the exterior of the aircraft for the presence of invasive ants and parts of invasive plants, and clean as required, prior to flight operations to reduce the potential for spread of invasive species.
- Apply pesticides and herbicides, as needed, to the helicopter landing pads located at Bradshaw Army Airfield to reduce the potential for spread of invasive species.

Cultural Resources
- Continue to participate in open communication with Native Hawaiians, other land use groups, and other interested parties to identify resources and reduce impacts.
- Conduct cultural awareness training for all HAMET personnel, with particular emphasis on intangible resources and their importance to Native Hawaiians.
- Avoid hovering directly over possible cultural features in the vicinity of LZs 5 and 6 on Mauna Kea.

Monitoring
- Monitor for the presence of Hawaiian petrel and the band-rumped storm-petrel.

PUBLIC OUTREACH:

After review of the public comments in response to previous environmental analyses, the USAG-HI expanded its agency/organization outreach. Interdisciplinary teams presented to each agency/organization a HAMET briefing that explained the purpose, need, and details of the Preferred Alternative. Other alternatives were also presented and discussed. Dialogue ensued and concerns from the agencies/organization were solicited, discussed, and addressed at the meeting. The results of the outreach program are reflected in this EA.

The Army provided draft copies of the July 2011 EA to all who commented on the April 2011 EA. In addition advertisements of the notice of availability was provided in the in the Office of Environmental Quality Control's The Environmental Notice as well as in two local newspapers that circulate on the Island of Hawaii. Furthermore the Army invited members of the public and state agencies to PTA to attend an informational meeting and demonstration flight. Results of the demonstration flight did not indicate significant impacts to the environment.

Cultural Consultation

In compliance with Section 106 of the National Historic Preservation Act, the USAG-HI submitted a letter to the Hawai'i State Historic Preservation Division (SHPD) and other consulting parties on the Proposed Action in October 2010. The letter determined that the project constitutes an undertaking, identified the area of potential effect, and made a no historic properties affected determination. The other consulting parties included the NPS, which concurred with the USAG-HI's determination of no effect to historic properties in the LZs. However, the NPS did express concern regarding traditional practitioner access and disturbance from HAMET activities. The SHPD formally responded to both the Section 106 consultation letter and the December 2010 National Environmental Protection Act (NEPA) EA on January 31, 2011. Concerns from both the National Park Service and SHPD consultation were addressed as part of the public comment analysis. The USAG-HI responded to the SHPD on April 15, 2011.

The SHPD reviewed the USAG-HI letter dated April 15, 2011, and the revised EA issued in July 2011. The SHPD noted that new information and program modifications address their Section 106 and NEPA concerns noted in the USAG-HI memo dated January 31, 2011. SHPD informally noted that the new information provided and modifications in the EA comply with state law. The informal response from the SHPD indicated that they concur that there will be no adverse effect to historic properties for the single 30-day training period proposed for October 2011.

The Proposed Action was also presented to the PTA Cultural Advisory Committee during the November 2010 meeting. No serious concerns were raised. The PTA Cultural Advisory Committee has also been involved in subsequent consultation with Kahu Ku Mauna, an advisory committee to the Office of Mauna Kea Management.

Public Involvement

The formal opportunity to comment involves a 30-day period for public review of the draft EA and an anticipated Finding of No Significant Impact (FONSI)/Anticipated Negative Determination. A notice of availability of the draft EA and draft FONSI/Anticipated Negative Determination was published in the State of Hawai'i's Office of Environmental Quality Control's publication, The Environmental Notice, and website on July 23, 2011. Also, a public notice was

published in the *Hawaii Tribune Herald* and *West Hawaii Today* newspapers to notify interested persons and organizations. Copies of the draft EA were provided to the Hilo Public Library, 300 Waianuenue Avenue, Hilo, Hawai'i; the Kailua-Kona Public Library, 75-138 Hualalai Road, Kailua-Kona, Hawai'i; and the Thelma Parker Memorial Public and School Library, 67-1209 Mamalahoa Highway, Kamuela, Hawai'i. Copies also were mailed to the following interested individuals, organizations, Native Hawaiian organizations, and government agencies.

Hawaii Volcanoes National Park
United States Fish and Wildlife Service
Sierra Club (Deborah Ward)
Sierra Club (Moku Loa Group)
Office of Mauna Kea Management
Office of Hawaiian Affairs
Ms. Cory Harden
Jose Martinez
Kahu Ku Mauna
KAHEA
Joe Estores
Hanalei Fergerstrom
Division of Fish and Wildlife
State Historic Preservation Division

SUMMARY OF COMMENTS AND RESPONSES:

The USAG-HI reviewed comments received during the public comment period to determine whether the Proposed Action had potentially significant impacts that could not be reduced to less than significant with appropriate mitigation. Twenty-seven comment letters were received from individuals and groups. All comment documents were read in their entirety to identify unique issues. The comments identified were grouped by similarity to reveal themes. The following provides a summation of the comments received and responses provided in general themes:

Theme: Support for our troops (the common reason cited by supporters of the action)
Response: Thanks for your comment

Theme: Concern that public involvement and consultation were inadequate.
Response: The Army provided draft copies of the July EA to all who commented on the April EA. We also provided notice of availability in the OEQC publication, The Environmental Notice, as well as in two local newspapers that circulate on the Island of Hawaii. All comments received on this as well as our responses are provided as an appendix in the final EA. Section 1-7 (pages 1-5 to 1-7) provides a description of the outreach and consultation the Army performed in support of this EA. Through efforts, the Army feels that we have met the consultation requirements for a project of this scope.

Theme: Concern that the Fort Carson Alternative was not considered.
Response: The Fort Carson alternative was considered. However, the proposed action in this EA assesses the impacts of training air crews who cannot make it to Fort Carson to receive this training and therefore the alternative was not considered for further evaluation.

Theme: Concern regarding noise disturbances to threatened and endangered species.
Response: Potential impacts associated with avian species are discussed in Section 4.6.3 of the draft EA. In addition concerns for avian species in the action area are addressed in the Memorandum For Record dated 20 June 2011 pertaining to the Determination of No Effect (Peshut, 7 pp), the Memorandum For Record dated 04 April 2011 pertaining to Hawaiian Avifauna Surveys (Peshut and Schnell, 47 pp), and the Memorandum For Record dated 10 June 2011 pertaining to Hawaiian Petrel Surveys (Peshut and Schnell, 4 pp). These documents will be added as an appendix to the final EA.

Theme: The EA is inadequate and EIS is required.
Response: Through the EA process the Army has come to the conclusion that there are no significant impacts and an EIS is not required.

Theme: Cultural impact assessment was not adequate.
Response: The Army relied on published documentation concerning the cultural resources and cultural significance of both Mauna Kea and Mauna Loa in preparation of the EA. Native Hawaiians were consulted, as were SHPD and OHA. Concerted efforts were made to identify persons with lineal ties or attachment to consult with concerning the proposed action and the impacts specific to the LZ areas. No persons with lineal ties or attachment were identified. Surveys were conducted on the area of potential effect, no historic properties were identified, no significant impacts from the proposed action were identified.

Theme: Concern that there are significant impacts to cultural resources and their sacredness, which are not mitigatable, and that these impacts are not understood by the Army.
Response: The Army does understand the cultural landscape of Mauna Kea and Mauna Loa. Based on the information that has been gathered the Army has determined that the effects of the project will be less than significant. The areas proposed for activities have been studied through thorough literature review, archaeological survey, and consultation with Native Hawaiians; there appears to be a difference of opinion on what should be the subject of study. The only surveys of these areas are those conducted by archaeologists working for the Army. The Army requested permission to test the mounds in an effort to determine age and function, but this was not granted by the State. The landing zones are located in Mauna Kea Forest Reserve, which is managed by the State, not the Army. The Army conducted research for which it was granted access to these areas. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their actions on historic properties, it does not require that they do not disturb the properties.

Theme: Concern that the peace and safety of nearby neighbors are threatened and that there are no mechanisms for citizens to complain about problems they experience during training operations.
Response: The Army acknowledges that there are hazards to nonmilitary personnel or wildlife in the vicinity of LZs. During HAMET flights would be mitigated by the pilot conducting a reconnaissance flyover prior to conducting any HAMET maneuvers. During the reconnaissance flyover, pilots would visually inspect the LZ to ensure landing would not create an unreasonable

risk to human health or safety. This procedural step would ensure that unauthorized personnel or wildlife are not exposed to the hazards associated with the training exercises.

In accordance with Chapter 343 of the Hawai'i Revised Statutes, the USAG-HI has provided responses to each of the individuals and groups that provided written comments on the draft EA. These comments are included in Appendix E of the final EA.

The USAG-HI has determined that, after the application of mitigation measures, it will process a final EA and sign the finding of no significant impact (FONSI), after which the proposed action can be implemented.

DISCUSSION:

The Division has reviewed the EA for the proposed action and agrees with a FONSI. During the analysis for the EA, the Army conducted surveys for species of greatest concern, including the Hawaiian petrel and Wekiu bug, and found no presence in the LZs or in areas that would be impacted by the proposed flight path. The LZs are previous disturbed sites and impacts to biological resources by the short-term HAMET is not anticipated to be significant. Additionally, the proposed flight path and height is adequate to mitigate potential impacts to designated critical habitat for endangered forest birds in the Mauna Kea Forest Reserve.

Disturbance of peace and solitude from HAMET flights would be expected to be of short duration and should not obstruct or curtail practitioner activities. The proposed HAMET will require only limited closure of the LZs to public access for public safety, and the Army will provide notification of activities and the HAMET schedule prior to commencement of the proposed action.

The Army took into consideration the cultural resources and cultural significance of both Mauna Kea and Mauna Loa in preparation of the EA. The training will be of short duration, and sporadic and temporary by its nature and there is no required modification to the existing landscape of Mauna Kea or Mauna Loa. Thus the project will not change the inherent qualities of the mountains that make them significant cultural places for Native Hawaiians.

To use the proposed LZs, the Army is required to obtain a right-of-entry (ROE) from the Board of Land and Natural Resources for permission to land the helicopters on state land. The final EA and FONSI must be accepted and approved by the Board of Land and Natural Resources prior to the issuance of the ROE. The ROE document is the instrument by which the State of Hawai'i will regulate the Army's use of Mauna Kea and Mauna Loa Forest Reserves.

Due to the limited duration of the HAMET, the remoteness of the proposed sites and limited size of the affected area, the Division believes that the project will have no significant effect on the environment or cultural resources such that acceptance of the short-term HAMET final EA and issuance of a FONSI for the proposed project is appropriate.

RECOMMENDATION:

That the Board:

1. Accept the Final Environmental Assessment for High Altitude Mountainous Environment Training.

2. Based on review of the Final Environmental Assessment and the comments received during the 30-day public comment period and the Army's responses, find that the project will not have a significant effect on the environmental and cultural resources of the area and approve the issuance of a finding of no significant impact (FONSI) for the proposed project.

3. Authorize the Chairperson to publish a FONSI for the proposed project in the Office of Environmental Quality Control's The Environmental Notice.

Respectfully submitted,

Paul J Conry

PAUL J. CONRY
Administrator

APPROVED FOR SUBMITTAL:

Guy H. Takushi

FOR WILLIAM J. AILA JR., CHAIRPERSON
Board of Land and Natural Resources