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14. ABSTRACT

The Department of the Navy has prepared an Environmental Assessment for the establishment and operation of a Seafarers Training Center within the Hawaii Army National Guard's Kalaeloa Installation, Oahu, Hawaii. Proposed Action includes renovations to Buildings 19, 46 and 1874. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire-training, a new 43,000-gallon (163,000-liter) water safety training facility will be constructed in a vacant yard area adjacent to Building 19, and a new general instruction facility will be constructed in the parking lot in front of Building 46. The Proposed Action also includes a lifeboat and davit training facility at the nearby State of Hawaii Kalaeloa Deep Draft Harbor. The Proposed Action would not result in significant impacts on the environment and therefore an Environmental Impact Statement is not required.

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ENVIRONMENTAL ASSESSMENT

Seafarers Training Center

Kalaeloa, O`ahu, Hawai`i

Office of Naval Research

October 2003

DEPARTMENT OF DEFENSE
DEPARTMENT OF THE NAVY

FINDING OF NO SIGNIFICANT IMPACT (FONSI) FOR THE ENVIRONMENTAL ASSESSMENT (EA) FOR THE SEAFARERS TRAINING CENTER, KALAELOA, OAHU, HAWAII.

Pursuant to the Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA), and the Chief of Naval Operations Instruction 5090.1B, the Department of the Navy gives notice that an EA has been prepared and an Environmental Impact Statement is not required for the establishment and operation of a Seafarers Training Center (STC) within the Hawaii Army National Guard's (HIARNG) Kalaeloa Installation, Oahu, Hawaii (formerly Naval Air Station Barbers Point). Because the Department of the Navy's Office of Naval Research will fund the Proposed Action, NEPA requires the Navy to prepare an environmental assessment.

The Proposed Action includes renovations to Buildings 19, 46 and 1874 located within HIARNG's Kalaeloa Installation. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire-training, a new 43,000-gallon (163,000-liter) water safety training facility will be constructed in a vacant yard area adjacent to Building 19, and a new general instruction facility will be constructed in the parking lot in front of Building 46. The Proposed Action also includes a lifeboat and davit training facility at the nearby State of Hawaii Kalaeloa Deep Draft Harbor.

Alternatives considered to the Proposed Action include an alternate location ("Puunene STC") and No Action. The Puunene STC alternative included construction of a new STC within HIARNG's Puunene Armory project area in Puunene, Maui, Hawaii. The alternative would be significantly more costly than the Proposed Action because of the new construction required. The Puunene site is further away from the Honolulu metropolitan area and would be more difficult for Oahu students to access than the Kalaeloa site, but would be the same for Mainland students. The Coast Guard-required lifeboat and davit training facility would be located further away from the main training campus and, because of the high wind speeds associated with the Central Maui location, outdoor fire and smoke training props would not be effective. Although the No Action alternative would not achieve project objectives, it was carried forward in the analysis to satisfy CEQ regulations.

The EA evaluated the Proposed Action's potential short-term, long-term, direct, indirect and cumulative impacts. The Proposed Action would not result in significant impacts on the environment, including the following resource areas: physical (including water resources), biological, socio-economic, hazardous/regulated materials, utilities, traffic, solid waste, and coastal resources. The Proposed Action would have no effect on threatened and endangered species. The Proposed Action may require National Pollutant Discharge Elimination System (NPDES) permits for construction-related activities and for potential discharges of training tank water during the operational period. The Proposed Action would have a beneficial impact on Hawaii's seafarer training and readiness. The Proposed Action would not create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged

populations. The Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawaii Coastal Zone Management Program Office.

The Proposed Action would have no effect on cultural resources. The Navy has completed National Historic Preservation Act Section 106 consultation regarding the Proposed Action, and the Hawaii State Historic Preservation Officer has concurred with the Navy's determination of no historic properties affected. Air emissions from fire safety training exercises associated with the Proposed Action will be substantially less than defined significant emission rates, and it is anticipated that any air quality impacts from these emissions will be negligible. The Proposed Action and alternatives will not result in cumulative impacts when evaluated in conjunction with other reasonably foreseeable future actions.

Based on information gathered during the preparation of the EA, the Department of Navy finds that the establishment and operation of an STC within HIARNG's Kalaeloa Installation, Oahu, Hawaii will not significantly impact the human or natural environment.

The EA addressing this proposed action may be obtained from: Commander, Pacific Division, Naval Facilities Engineering Command, 258 Makalapa Drive, Suite 100, Pearl Harbor, Hawaii 96860-3134 (Attention: Ms. Connie Chang, PLN231), telephone (808) 471-9338. A limited number of copies are available to fill single copy requests.

11/27/03
Dated

Ronald E. Tickle
Head, Operational Environmental Readiness and Planning Branch
Environmental Readiness Division (OPNAV N45)
Deputy Chief of Naval Operations (Logistics)

ENVIRONMENTAL ASSESSMENT

Seafarers Training Center

Kalaeloa, O`ahu, Hawai`i

Office of Naval Research

October 2003

Cover Sheet

Proposed Action The Proposed Action is to establish the Seafarers Training Center at Kalaeloa, O`ahu, Hawai`i

Type of Document Environmental Assessment

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For Further Information

Mr. Andy Huang, PLN 231
Environmental Planning Division
Pacific Division, Naval Facilities Engineering Command
258 Makalapa Drive, STE 100
Pearl Harbor, HI 96860-3134
Telephone: (808) 471-9338

Summary

The Proposed Action is to establish and operate a U.S. Coast Guard-certified Seafarers Training Center (STC) within the Hawai'i Army National Guard's (HIARNG) Kalaeloa Installation, O'ahu, Hawai'i. Since the Proposed Action will use federal funds appropriated to the Navy, the National Environmental Policy Act (NEPA) of 1969 requires the Navy to prepare an Environmental Assessment (EA). This document is intended to fulfill NEPA requirements.

The Proposed Action includes renovations to Buildings 19 and 46 located near the western boundary of the HIARNG's Kalaeloa Installation, and to Building 1874 located near the northeastern boundary. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire safety training, a new water safety training facility will be constructed in a vacant yard area adjacent to Building 19 and a new general instruction facility will be constructed in the parking lot in front of Building 46. The Proposed Action also includes a lifeboat and davit training facility at the nearby Kalaeloa Deep Draft Harbor.

Alternatives to the Proposed Action include an alternate location ("Puunene STC") and No Action. The Puunene STC alternative included construction of a new STC within the HIARNG's Puunene Armory project area in Puunene, Maui, Hawai'i. Although the No Action alternative will not meet project objectives, it was carried forward in the analysis according to Council on Environmental Quality (CEQ) regulations.

The proposed Kalaeloa STC alternative would have no effect on cultural resources. The Navy has concluded the National Historic Preservation Act (NHPA) Section 106 consultations regarding the Proposed Action with the State Historic Preservation Officer concurring with the Navy's determination of "no historic properties affected." The Puunene STC alternative would have no adverse effect on cultural resources. The Proposed Action would not result in significant impacts on the environment including the following resource areas: physical (including water resources), biological, socio-economic, hazardous/regulated materials, air quality, utilities, traffic, solid waste, and coastal resources. The Proposed Action would have no effect on threatened and endangered species. The Proposed Action would have a beneficial impact on seamen's training and readinessand will not create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged populations. The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai'i Coastal Zone Management Program Office.

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LIST OF ABBREVIATIONS AND ACRONYMS

ACHP	Advisory Council on Historic Preservation
ACM	Asbestos-Containing Materials
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CIP	Campbell Industrial Park
CZMA	Coastal Zone Management Act
EA	Environmental Assessment
EPA	Environmental Protection Agency
ft	feet
FTE	Full Time Equivalent
ha.	hectares
HC&S	Hawaiian Commercial & Sugar Company.
HCC	Honolulu Community College
HIARNG	Hawaii Army National Guard
km	kilometer
m	meter
m^2	square meters
NAAQS	National Ambient Air Quality Standards
NAS	Naval Air Station
NASBP	Naval Air Station Barbers Point
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
ONR	Office of Naval Research
OPNAVINST	Chief of Naval Operations Instruction
SAAQS	State Ambient Air Quality Standards
SF	square feet
SHPO	State Historic Preservation Officer
SIU	Seafarers International Union
STC	Seafarers Training Center
TIWD	Temporary Industrial Wastewater Discharge
U.S.	United States
U.S.C.	United States Code
USCG	United States Coast Guard

Executive Summary

The Proposed Action is to establish and operate a Seafarers Training Center (STC) within the Hawai'i Army National Guard's (HIARNG) Kalaeloa Installation, Oah'u, Hawai'i (formerly Naval Air Station Barbers Point [NASBP]). The facility will be constructed and managed by the Paul Hall Center for Human Development, an agency of the Seafarers International Union (SIU). The Proposed Action involves the renovation of three buildings and the construction of new fire and water safety training facilities. Because the Department of the Navy's Office of Naval Research will fund the Proposed Action, the National Environmental Policy Act (NEPA) of 1969 requires the Navy to prepare an environmental assessment. This document is intended to fulfill NEPA requirements.

Purpose. US Coast Guard (USCG) regulations require merchant seamen to receive fire and water safety training in a USCG-certified program prior to being hired to work on ships. The seamen's proficiency must also be re-certified every five years. Historically, members of SIU have played a key role in Hawai'i's maritime industry. Thus far, SIU has been sending Hawai'i-based Seafarers to its nearest permanent training facility in Maryland for training. The Proposed Action will establish a Hawai'i Seafarer's training facility. In light of the need for a Hawai'i Seafarers training facility, the U.S. Congress has appropriated funds to construct a facility in Hawai'i.

Proposed Action. The Proposed Action includes renovations to Buildings 19 and 46 located near the western boundary of the HIARNG's Kalaeloa Installation, and to Building 1874 located near the northeastern boundary. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire-training, a new 43,000-gallon (163,000-liter) water safety training facility will be constructed in a vacant yard area adjacent to Building 19, and a new general instruction facility will be constructed in the parking lot in front of Building 46. The Proposed Action also includes a lifeboat and davit training facility at the nearby Kalaeloa Deep Draft Harbor.

Alternatives. Alternatives considered to the Proposed Action include an alternate location ("Puunene STC") and No Action. The Puunene STC alternative included construction of a new STC within the HIARNG's Puunene Armory project area in Puunene, Maui, Hawai'i. The alternative would be significantly more costly than the Proposed Action because of the new construction required. Although it has excellent airport access, it is further away from the Honolulu metropolitan area--the main employment base of Hawai'i's maritime industry--and would be more difficult for the students to access than the Kalaeloa STC (Proposed Action). The lifeboat and davit training facility would be located further away from the main training campus and, because of the high wind speeds associated with the Central Maui location, outdoor fire and smoke training props would not be effective. Although the No Action alternative would not achieve project objectives, it was carried forward in the analysis to satisfy CEQ regulations.

Environmental Consequences. The Proposed Action would not result in significant impacts on the environment, including the following resource areas: physical (including water resources), biological, socio-economic, hazardous/regulated materials, utilities, traffic, solid waste, and coastal resources. The Proposed Action would have no effect on threatened and endangered species. The Proposed Action may require National Pollutant Discharge Elimination System (NPDES) permits for construction-related

activities and for potential discharges of training tank water during the operational period. The Proposed Action would have a beneficial impact on Hawai'i's seafarer training and readiness. The Proposed Action would not create environmental health and safety risks that may disproportionately affect children and minority or disadvantaged populations. The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai'i Coastal Zone Management Program Office.

Cultural Resources. The Kalaeloa STC alternative would have no effect on cultural resources. The Navy has concluded National Historic Preservation Act (NHPA) Section 106 consultation with the State Historic Preservation Officer (SHPO) concurring with the Navy's determination of no historic properties affected (see Appendix A for Section 106 correspondence). The Puunene STC alternative would have no adverse effect on cultural resources.

Air Quality Resources. Emissions from fire safety training exercises associated with the Proposed Action will be substantially less than defined significant emission rates. Thus, it can be anticipated that any air quality impacts from these emissions will be negligible.

Cumulative Impacts. The Proposed Action and alternatives will not result in cumulative impacts when evaluated in conjunction with other reasonably foreseeable future actions.

1.0 PURPOSE OF AND NEED FOR ACTION

1.1 Summary of Proposed Action

The Proposed Action is to establish and operate a Seafarers Training Center (STC) within the Hawai'i Army National Guard's (HIARNG) Kalaeloa Installation, Oah'u, Hawai'i (part of the former Naval Air Station Barbers Point [NASBP]). The facility will be constructed and managed by the Paul Hall Center for Human Development, an agency of the Seafarers International Union (SIU). The Proposed Action involves the renovation of three buildings and the construction of new fire and water safety training facilities. Because the Proposed Action will be funded by the Department of the Navy's Office of Naval Research, the National Environmental Policy Act of 1969 (NEPA) requires the Navy to prepare an EA. This document is intended to fulfill NEPA requirements.

The SIU proposes to occupy several facilities within the HIARNG installation comprising its STC (Figure 1). Facilities include Buildings 19 and 46 located on the western boundary of the HIARNG parcel and Building 1874 located on the northeastern boundary. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire-training, a new water safety training facility will be constructed in a vacant yard area adjacent to Building 19, and a new general instruction facility will be constructed in the parking lot in front of Building 46.

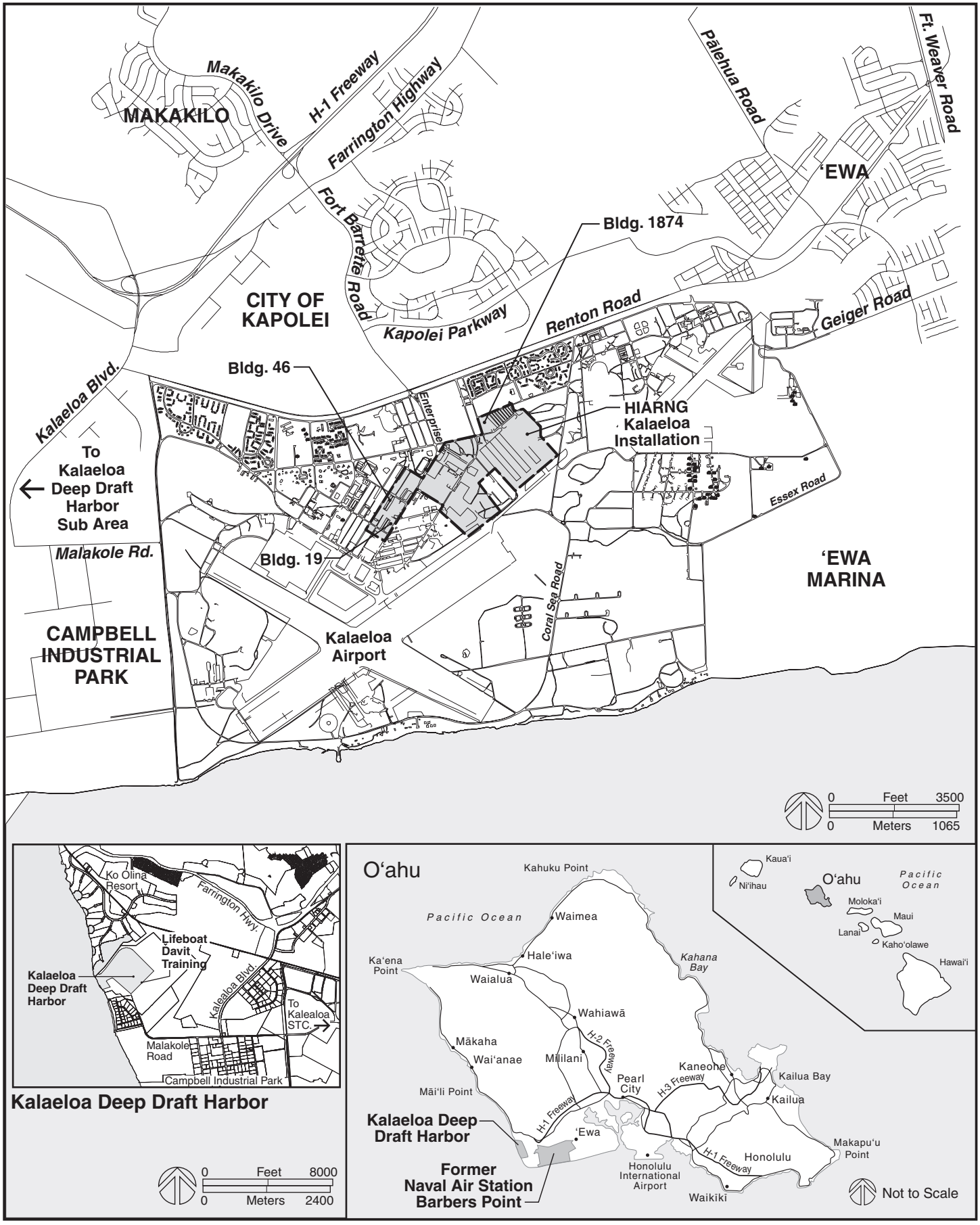
The Proposed Action includes a lifeboat and davit training facility at the Kalaeloa Deep Draft Harbor, approximately five miles (eight kilometers) west of the Kalaeloa facility. This facility will consist of a set of lifeboat davits bolted to the end of a pier and may also include a small manual boom crane for practicing launch and retrieval of rubber inflatable boats. The SIU would utilize the site under a revocable permit issued by the State of Hawai'i.

1.2 Purpose and Need

United States Coast Guard (USCG) regulations require merchant seamen to receive fire and water safety training in a USCG-certified program prior to being hired to work on ships (46 CFR 15.1105). USCG regulations require seamen's fire and water safety proficiency to be re-certified every five years.

The SIU represents unlicensed United States merchant mariners sailing aboard U.S.-flag vessels in the deep sea, Great Lakes and inland trades. The union also represents licensed U.S. mariners in the Great Lakes and inland sectors. SIU members sail in the three shipboard departments: deck, engine and steward. They work aboard a wide variety of vessels, including commercial containerships and tankers, military support ships, tugboats and barges, passenger ships, gaming vessels and many more. An SIU-affiliated entity, the Paul Hall Center for Maritime Training and Education, located in Piney Point, Maryland, provides vocational training for SIU members.

SIU's Hawai'i membership includes crew from the following companies/ organizations: Matson, Horizon Lines (formerly known as Sealand and CSX Lines), two tug boat companies, civilian operated Military Sealift Command (MSC) vessels, and SIU members residing in Hawai'i and working outside of the State. Norwegian Cruise Lines plans to bring three US flag ships to Hawai'i over the next several years, providing up to



Project Location Map (Kalaeloa STC) Figure 1

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3,000 new jobs for merchant seamen in Hawai'i (one ship (Pride of America) is planned to enter service in July 2004)—all of which will require USCG-certified training. Historically, the SIU has paid to send its Hawai'i-based crewmen to its Maryland facility to receive the required training.

The purpose of the action is to establish a USCG-certified training facility in Hawai'i to meet the training needs of Hawai'i-based merchant seamen, including civilian Seafarers of Department of Defense contractors, other maritime employers and public entities such as the Hawai'i Army National Guard and local fire departments. Based on the demonstrated need for the project, the U.S. Congress has appropriated funds to construct the Hawai'i STC at Kalaeloa, Oah'u, formerly NASBP (Section 8092 of the Defense Appropriations Act, 107th Congress, 1st Session and supplemental appropriation Public Law 107-117 [H.R. 3338]; 115 STAT. 2230; Jan 10, 2002; Section 8092).

1.3 Scope of Environmental Assessment

This EA documents the Navy's compliance with NEPA (42 U.S.C. §4321, et seq.), as implemented by the CEQ regulations (40 CFR Parts 1500-1508) and Chief of Naval Operations Instruction (OPNAVINST) 5090.1B CH-4, Environmental and Natural Resources Program Manual of June 4, 2003. The EA describes potential environmental impacts of the Proposed Action and alternatives with regard to establishing the STC facility, as well as appropriate measures to minimize any potential adverse impacts. It provides sufficient evidence and analysis for the Navy to determine whether to prepare an environmental impact statement (EIS) or a finding of no significant impact (FONSI). Chapter 2 provides a discussion of the Proposed Action, alternatives and their environmental consequences. Chapter 3 discusses the affected resource areas and Chapter 4 focuses on the impacts of the Proposed Action and alternatives. The following issues are addressed in detail in the EA because initial analysis determined that they had the potential to be impacted by the Proposed Action or alternatives considered:

- Cultural Resources
- Air Quality

1.4 Statutory and Regulatory Overview

The Proposed Action and alternatives in this EA are subject to regulatory constraints and requirements. The following section summarized the key statutory and regulatory requirements that may be required to implement the Proposed Action.

1.4.1 Section 106, National Historic Preservation Act (NHPA)

The National Historic Preservation Act of 1966 (as amended) (16. U.S.C. §470) was passed by Congress to recognize the nation's heritage and to establish a national policy for the preservation of historic properties. It established the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of the undertakings on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The Section 106 process, as defined in 36 CFR Part 800, provides for the identification and evaluation of historic properties, determining the effects of

undertakings on such properties, and developing ways to resolve adverse effects in consultation with consulting parties.

The Section 106 process has been completed for the Proposed Action. The proposed establishment of the STC at Kalaeloa was determined to result in “no historic properties affected.” The Navy proposed this finding to the Hawai`i State Historic Preservation Officer (SHPO) in accordance with 36 CFR 800.4(d) (1). Copies of Section 106 correspondence with the Hawai`i SHPO are included in Appendix A.

1.4.2 Clean Air Act

In order to ensure that Federal activities do not hamper local efforts to control air pollution, Section 176(c) of the Clean Air Act (CAA), 42 U.S.C. 7506(c), prohibits Federal agencies, departments, or instrumentalities from engaging in, supporting, providing financial assistance for, licensing, permitting or approving any action which does not conform to an approved State or Federal implementation plan. Conformity to an implementation plan means: Conformity to a plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of such standards; and that such activities will not (1) cause or contribute to any new violation of the NAAQS; (2) increase the frequency or severity of an existing violation; or (3) delay the timely attainment of a standard, interim emission reduction, or milestone. Section 176(c) was amended in 1995 to clarify that the conformity requirements apply only to designated non-attainment and maintenance areas. The action proponent may make a determination that the Proposed Action is not subject to the General Conformity Rule. Since the Proposed Action is in an attainment area, it is not subject to the General Conformity Rule.

The Clean Air Act sets NAAQS for sulfur dioxide, carbon monoxide, minus ten-micron particulate matter, nitrogen dioxide, lead, ozone and hydrocarbons. Non-attainment areas require the permitting of all major pollution sources. Attainment areas require the installation of the best available control technology for all major sources and must fall within the next increment of degradation. Major pollution sources require an air quality permit before construction.

Analysis of potential emission sources conducted as part of this EA indicates that the emissions from the Proposed Action will be substantially less than the defined significant emission rates. Therefore, any air quality impacts from these emissions are negligible.

1.4.3 Coastal Zone Management Act (CZMA)

The purpose of the Coastal Zone Management Act (CZMA) is to "preserve, protect, develop, and where possible, restore and enhance the resources of the Nation's coastal zone for this and succeeding generations." It encourages coastal States to properly manage use of their coastal resources. The CZMA states that federal activities that directly affect the coastal zone are to be conducted in a manner consistent with the state's Coastal Zone Management program to the maximum extent practicable. The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai’i Coastal Zone Management Program Office.

1.4.4 Clean Water Act

The Proposed Action may require coverage of the following National Pollutant Discharge Elimination System (NPDES) general permits from the State of Hawai'i Department of Health:

- Storm Water Associated with Construction Activities
- Hydrotesting
- Dewatering Permit

There may be localized concerns from the discharge of pollutants entrained in the storm water, but they should be minimized with site specific structural and non-structural controls mandated by the permit.

In addition, the Proposed Action may require Temporary Industrial Wastewater Discharge (TIWD) Permit if chlorinated water from the proposed training tank is discharged into the wastewater system. Water used from fire suppression training activities will be recycled, filtered and stored for reuse.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This chapter provides a description of the Proposed Action, alternatives and a summary of the environmental consequences of the Proposed Action and alternatives.

2.2 Analysis of Alternatives

The following alternatives were considered:

- Proposed Action (Kalaeloa, Oah'u STC)
- Alternative Action (Puunene, Maui STC)
- No Action

A comparison of the environmental impacts of the Proposed Action and other alternatives is presented at the end of this chapter (Table 1).

2.2.1 Proposed Action

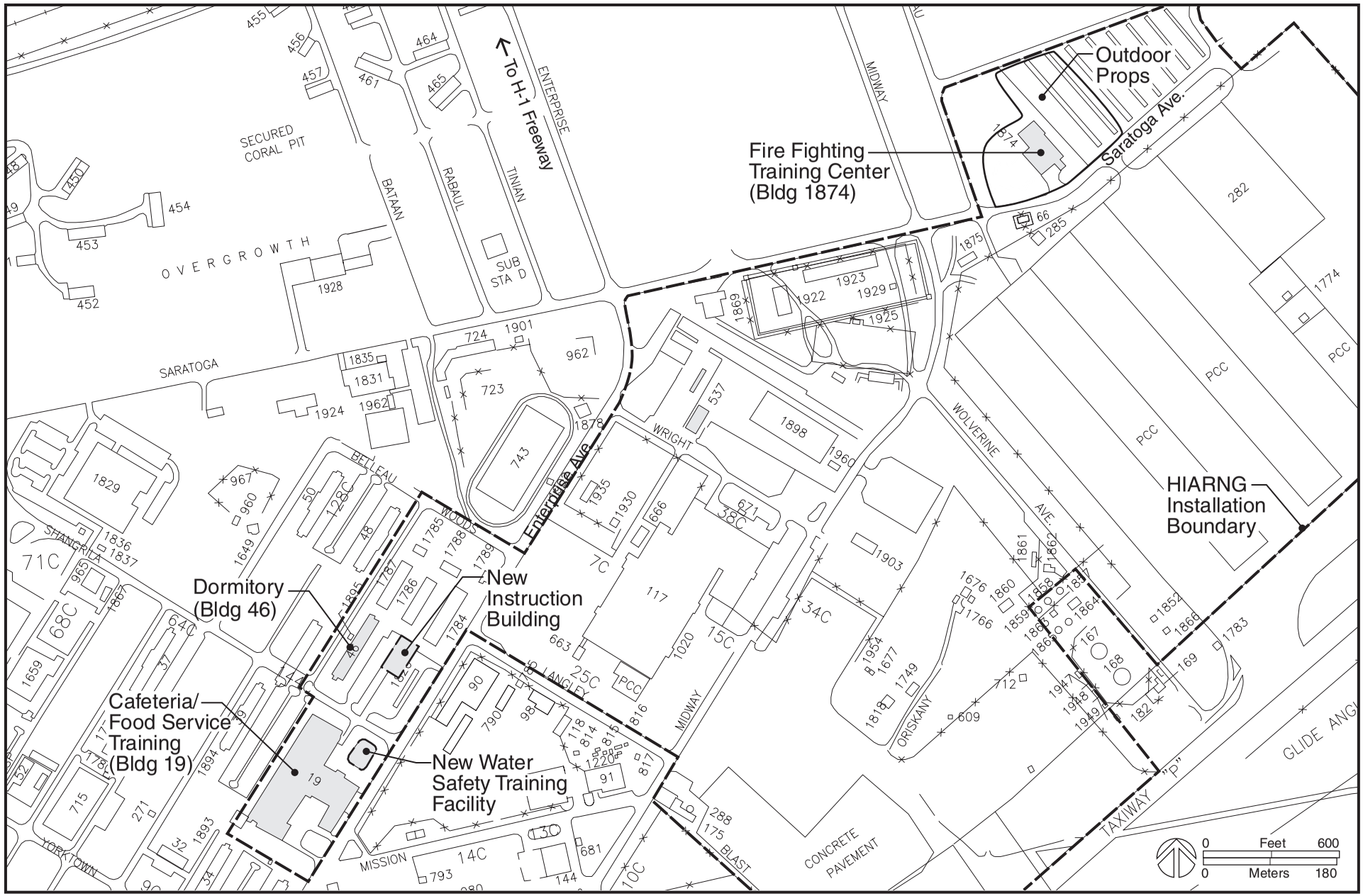
The Proposed Action involves the construction and operation of the Kalaeloa STC. Improvements would include renovation of Buildings 19, 46, and 1874 and construction of new instruction, fire and water safety training facilities within the HIARNG's Kalaeloa, Oah'u installation (Figure 2). The Kalaeloa STC includes one off-site facility: a lifeboat and davit training facility to be located within the State of Hawai'i-owned Kalaeloa Deep Draft Harbor, approximately five miles west of the STC. Occupancy of US Army and State of Hawai'i property would be permitted via license and revocable permit, respectively.

As proposed, SIU will on average run two simultaneous one-week classes at the facility. Occasionally, it will run four simultaneous one-week classes. Each class is limited to 25 students by USCG regulation. Classroom facilities are being designed to accommodate a maximum of eight simultaneous one-week classes (200 students). Approximately 90% of the students will commute to the STC on a daily basis (Oah'u residents). Approximately 10% of the students will reside in dormitory facilities to be provided as part of the STC project. Generally, students will check-in on Sunday and check-out on the following Saturday. Classes will run from 8:00 a.m. to 5:00 p.m., Monday to Friday. General administration of the Kalaeloa STC will require a full time equivalent (FTE) of 1.5 staff. Each 25-student class will require 2 FTE instructors. For 50 students, total de facto population would be 55.5 persons. For 100 students, de facto population would be 109.5 persons.

A discussion of the major components of the Proposed Action is provided below. See Figure 2 for locations of the proposed facilities.

2.2.1.1 Enterprise Avenue Facilities

Buildings 19 and 46 are located on the western boundary of the HIARNG parcel adjacent to Enterprise Avenue, the former base's main road.



Site Map (Kalaeloa STC) Figure 2

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Building 19, an existing mess hall, may be reused for food service.

A new Water Survival Training Facility would be constructed within an empty yard area adjacent to Bldg 19 (Figure 3). The facility would include an in-ground 43,000-gallon (163,000-liter) tank to conduct water safety training and associated pump and filtration equipment. Training activities would include swimming proficiency tests, life raft familiarization and rescue drills.

Building 46 is a three-story, 64-room dormitory currently used by HIARNG. Improvements to this facility are limited to new floor coverings, door lock replacement, and appliances.

A new instruction facility would be constructed in the Bldg 46 parking lot. The proposed one-story, concrete reinforced masonry facility would have a floor area of approximately 5,775 SF (536 square meters (m^2)). The facility would include a briefing room, a multi-purpose room with movable partition walls, and restrooms.

2.2.1.2 Saratoga Avenue Facilities (Figure 4)

Bldg 1874. The Saratoga Avenue facilities would be centered around Building 1874, located near the northeastern boundary of the HIARNG installation adjacent to Saratoga Avenue. Originally constructed as a pilot training center, Bldg 1874 would become the fire safety training center, with existing spaces providing classrooms and lecture halls, as well as offices for administrative and teaching staff. Improvements to this facility would include painting, new floor coverings and construction of a three story "maze" within the high-bay portion of the building. The maze is intended to simulate various shipboard spaces including the engine room, galley and bunk rooms. Students would be required to move about the maze in darkness, simulating an electrical blackout aboard ship.

Bldg 1874 Outdoor Training Facilities. Two bays of the existing parking lot adjacent to Building 1874 would be reconfigured to accommodate props and equipment to support the staging of fire-training exercises. The storage locker would be located on the western side of Building 1874. Major components include:

- Smokehouse. The smokehouse would consist of two twenty-foot containers arranged in an L-shape configuration. A theatrical smoke machine would burn a vegetable oil based fuel and the smokehouse would confine the smoke, allowing students to practice search and rescue exercises in a smoke-filled environment.
- Maze. The confined space maze building would consist of one twenty-foot shipping container. This structure would also allow students to practice search and rescue exercises in a confined, dark environment.
- Storage Locker. The storage locker, in an adjacent area, would consist of one twenty-foot (7 m) shipping container. This structure would house equipment used in fire-training exercises (e.g., spare tanks, air compressor, fire coats and gear).
- Fire Training Props. Several exterior fire training props would also be located within this area. Most props will be built on concrete pads with propane burners, with underground lines connecting the control station to each prop. In order to provide students with the experience of using fire extinguishers and fully charged fire hoses, one prop will utilize a steel burn pan filled with water. The pan would rest on a 6-foot by 6-foot platform (1.8 m by 1.8 m) and a flex line would connect the burn pan to a

Bldg. 1874 (fire safety props to be installed in parking lot area)

Bldg. 46 Dormitory

Burnhouse Prop

Water Safety Training Tank Site
(Bldg 19 in background)

Smoke House Prop

Fire and Smoke Training Props

Site Photographs Figure 3

SEAFARERS TRAINING CENTER
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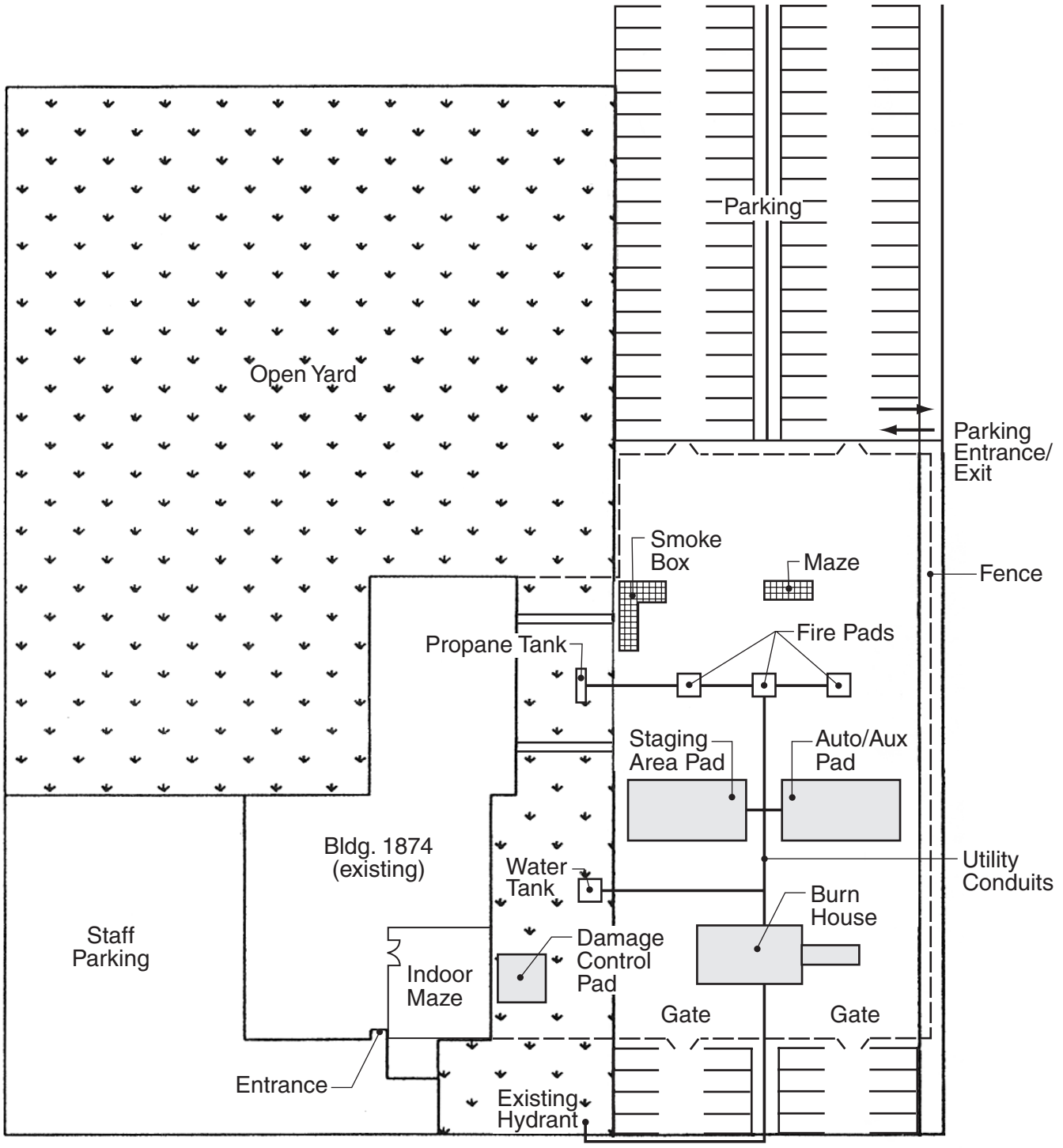


Map Source: Paul Hall Institute (12 August '03)

Fire Safety Training Center Outdoor Props Figure 4

1,100-gallon (4,164-liter) propane tank. The propane would percolate through the water and would be ignited to simulate a shipboard fire. This process would provide a clean, safe and controlled experience for students, instructors, and the environment.

- Burnhouse. A two-story, steel burnhouse would be constructed adjacent to the other fire-training modules (a third deck may possibly be added to the structure, which would be decorative and non-functional). The burnhouse would simulate a ship with propane gas piped to it. A control unit housed within this structure would allow an instructor to observe training exercises and control the fire. The burnhouse would be configured to provide several fireplaces to simulate the various types of shipboard fires including: engine room fire, passenger area fire, bunkroom fire, galley fire, and storage area fire. A shaft alley smoke area is also proposed to be constructed for confined space training in conjunction with smoke generation.
- Infrastructure. Infrastructure for the outdoor fire training facilities includes the installation of one below-grade 1,100-gallon (4,160-liter) propane tank, a below-grade 5,000-gallon (18,930-liter) water tank and associated below-grade sumps, pumps, piping, plumbing and electrical utility systems. The outdoor fire training facilities will be contained within a sealed system designed to retain and recycle water used in practice drills. Fire hose water used on the simulators will be drained, filtered, stored and recycled. Water lost to evaporation will be supplemented from the installation's water system. No chemicals will be used in the training exercise that might pollute the fire hose water. A fire pump constructed near the burnhouse would pump recycled water to extinguish fires. Nearby fire hydrants would provide a backup source of water to extinguish fires.

2.2.1.3 Kalaeloa Deep Draft Harbor Facilities

Life Boat and Davit Facility. The life boat and davit facility would be located at the Kalaeloa Deep Draft Harbor, approximately five miles west of the STC (Figure 1, inset). The practical demonstration of competencies (i.e., direct launch and retrieval into a water body) is an absolute requirement of the USCG water survival course certification and therefore this training operation cannot be accommodated within the HIARNG's Kalaeloa installation. Students would be bused to the harbor facility to conduct the training exercises. The harbor facility would consist of a set of lifeboat davits bolted to the end of a pier with students practicing launch and retrieval of the lifeboat via a manual crank and cable system. The area would be fenced and may also include a small, manual boom crane that would enable practice launch and retrieval of rubber inflatable boats. The SIU would occupy the site under a revocable permit issued by the State Department of Transportation, Harbors Division.

2.2.2 Alternatives

The Navy considered an alternative to the Proposed Action that is reasonable and meets the purpose and need of the project. This alternative is described in Section 2.2.2.2 and discussed in the analysis presented in Chapters 3 and 4. The alternative site ("Puunene STC") was identified based on an evaluation of a number of potential sites discussed in Section 2.2.2.1 below.

2.2.2.1 Alternatives Development

Based on the physical design parameters of the STC, nine screening criteria were identified to evaluate potential alternatives:

1. Parcel Size (≥2-acre (1-ha.) site or equivalent area if shared use)
2. Zoning (zoned for industrial use by county zoning ordinances)
3. Permanent location (vice temporary location)
4. Cost (opportunities to reuse/share existing facilities and infrastructure, and overall facility and infrastructure costs)
5. Topography (flat to gently sloping)
6. Drainage (avoid areas subject to flooding)
7. Compatibility with adjacent land uses (low density, industrial setting, removed from residential and other urban uses where people tend to congregate)
8. Convenience (to personnel and students)
9. Harbor Access (required to conduct Coast Guard-required lifeboat training)

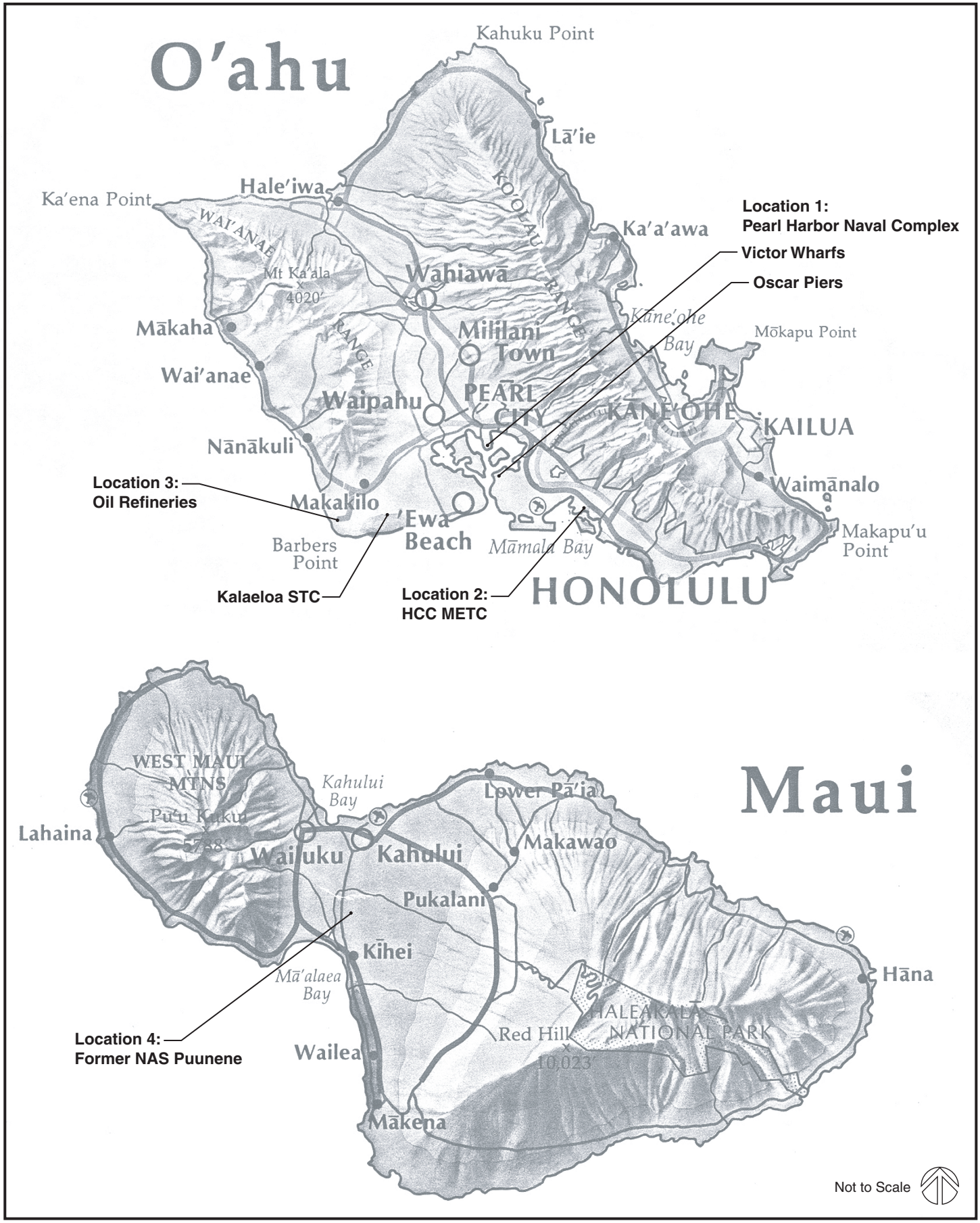
Based on the above criteria, several alternative sites were identified for preliminary consideration: three on Oah'u and one on Maui. Each of the sites is reviewed below. Figure 5 presents an overall location map for the candidate sites.

Location 1: Pearl Harbor Naval Complex. Two sites within the Pearl Harbor Naval Complex were considered:

1. Shipyard area near the Oscar Piers, and
2. Pearl City Peninsula near the Victor Wharfs.

Both areas have sufficient land area, zoning, topography and drainage, with appropriate harbor access. Navy long range land use plans indicate future development of these sites for other Navy uses so only temporary facilities could be constructed. There are no existing buildings within these areas available for reuse. From time-to-time, the US Army uses the Victor Wharf area as a staging area for loading and unloading ships supporting the Pohakuloa Training Area on the Island of Hawai'i, so STC training would temporarily be disrupted to accommodate the Army training events. Nearby family housing, and in the case of the Oscar Pier site, an elementary school, make both sites incompatible for the proposed use. Navy security procedures would require personnel and students to secure and maintain base personnel and vehicle passes, providing a logistical difficulty for accessing the training facilities. During times of heightened security, access to the on-base facilities is restricted to essential personnel, essentially closing down STC operations.

Location 2: Honolulu Community College (HCC) Marine Education and Training Center (METC). The 3.1-acre (1.25-ha.) METC is located on Sand Island fronting Ke'ehi Lagoon. It is a state-of-the-art training facility featuring four large work bays to allow work on vessels up to 45 feet, a concrete pier equipped with two cranes to allow work on vessels in the water, finger piers for removing vessels from the water employing a marine straddle-lift, as well as classroom, laboratory, and office space. The METC offers a two-year program focusing on Boat Maintenance and Repair with a main goal to prepare individuals for employment in the boat maintenance, repair, and manufacturing industries. The site is suitably zoned, STC activities would be compatible with adjacent land uses and the site has excellent harbor access. However, since the site is relatively



Potential Alternative Sites Considered Figure 5

SEAFARERS TRAINING CENTER
Environmental Assessment
Kalaeloa, O'ahu, Hawai'i

small with no available open space areas for fire and water safety training equipment and facilities, and shared use with METC students for other than limited classroom facilities would be impractical, the METC location was dropped from further consideration.

Location 3: Chevron Oil and Tesoro Oil Refineries. Oah'u's two major oil refineries are located near each other within the 1,300-acre (526-ha.) Campbell Industrial Park—located adjacent to the former NAS Barbers Point, the site of the Kalaeloa STC (Proposed Action). Both refineries have sufficient land area, with adequate zoning, topography, drainage, and harbor access. STC activities would be compatible with the heavy industrial nature of the Campbell Industrial Park. Only temporary use would be permitted, however, and new facilities would need to be constructed. Importantly, both Chevron and Tesoro were concerned about the liability associated with fire safety training on their respective properties.

Location 4: Former Naval Air Station Puunene. The HIARNG is in the process of constructing an installation at the former Naval Air Station (NAS) Puunene on Maui, on land owned by the State of Hawai'i. Unlike HIARNG's Kalaeloa installation, the Puunene site has no extant infrastructure or facilities, having been largely vacant for many years and under long-term lease to Hawai'ian Commercial & Sugar Company (HC&S) for sugar cultivation. The site satisfies most of the evaluation criteria with the exception of cost and convenience. It would be a permanent facility; compatible with surrounding land uses with the opportunity for sharing infrastructure provided by the HIARNG. New facilities would have to be constructed, however, and off-island personnel and students would have to travel to Maui for training. The Kahului Airport, located 5 miles (8 km) to the north, provides excellent access to international and Mainland destinations, as well as providing frequent inter-island air service, so, although it would be less convenient than an Oah'u location, it is still considered feasible from an overall convenience perspective.

Based on the foregoing evaluation, the former NAS Puunene site was determined to be the most reasonable alternative. A matrix summarizing the four candidate alternatives relative to the criteria is presented below in Table 1.

Table 1: Comparison of Candidate Alternatives

	Alternative Locations			
Criteria	Pearl Harbor	HCC METC	Oil Refineries	Former NAS Puunene
1. Parcel Size	+	-	+	+
2. Zoning	+	+	+	+
3. Permanent location	-	-	-	+
4. Cost	-	-	-	-
5. Topography	+	+	+	+
6. Drainage	+	+	+	+
7. Compatible use	-	+	-	+
8. Convenience	-	++	+	-
9. Harbor Access	+	++	+	+

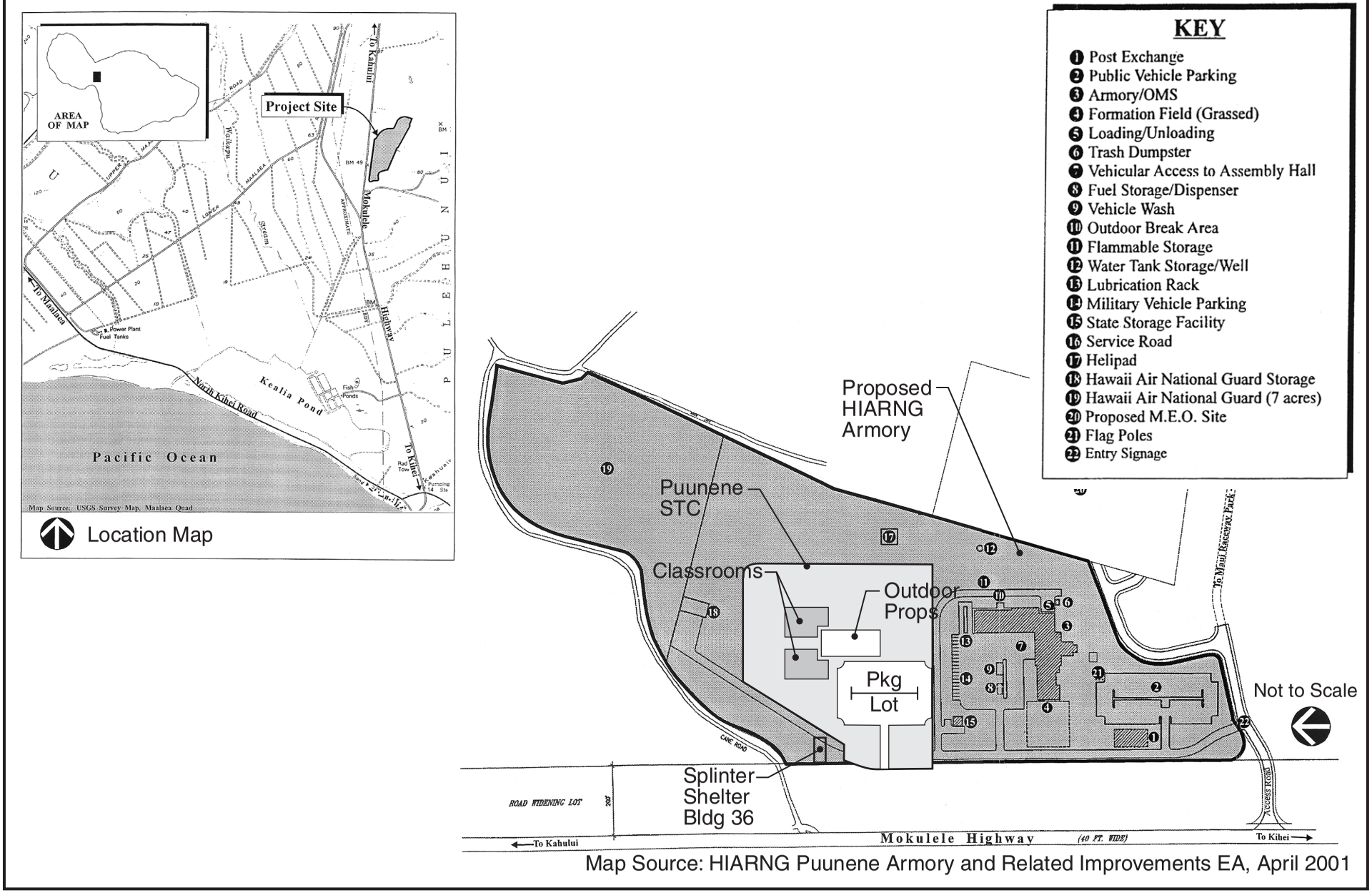
Legend: ++ excellent; + superior; - inferior

2.2.2.2 Alternatives Considered

Puunene, Maui STC Alternative

The HIARNG is in the process of developing a 30-acre (12.2-ha.) facility within the former NAS Puunene. The site is located adjacent to Mokulele Highway in Central Maui (Figure 6). Nearby uses include a County-owned drag strip, commercial quarry operation and a proposed transportation base yard for Maui Economic Opportunity, Inc., a provider of subsidized transit services on Maui. The entire area is within the center of HC&S's Central Maui Sugar Plantation. The nearest residential area is in Kihei, some five miles away to the south. The HIARNG is now in the process of developing its facilities including a new armory and post exchange.

The STC complex would be constructed in an open area to the north of the HIARNG's armory complex. Instructional, food service and dormitory facilities, as well as outdoor training facilities would have to be constructed, unlike the Kalaeloa STC alternative where existing facilities could be utilized. More dormitory and food service facilities would be required at this site than at Kalaeloa because most of the students live on Oah'u. Major offsite infrastructure that would be needed to service the Puunene STC (water, wastewater, and electrical power) is being constructed by the HIARNG as part of its overall site development. The life boat and davit training would be located either at Kahului Harbor or at the Maalaea Small Boat Harbor, approximately six miles to the north and south, respectively. Kahului Harbor is Maui's only commercial port and Maalaea is Maui's primary small boat harbor; both harbors experience greater congestion and activity than Kalaeloa Deep Draft Harbor.



Alternative Location: Hawaii Army National Guard's Puunene Armory (Puunene STC) Figure 6

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2.2.3 No Action

The No Action or no build alternative would deny the SIU a permanent training facility in Hawai'i. This alternative does not meet the purpose and need of the action but is carried through the analysis in to satisfy CEQ requirements.

2.3 Environmental Effects of the Proposed Action and Alternatives

Table 2 summarizes the environmental effects of the Proposed Action and alternatives. The information in the table is summarized from Chapter 3 (Affected Environment) and Chapter 4 (Environmental Consequences).

Table 2: Summary of Environmental Effects of the Proposed Action and Alternatives

Resource Area	**Proposed Action** (Kalaeloa STC)	**Alternative** (Puunene STC)	**No Action**
Cultural Resources	No historic properties affected	No historic properties affected	No historic properties affected
Air Quality	No effect	No effect	No effect
Physical (incl. water resources)	No effect	No effect	No effect
Biological	No effect	No effect	No effect
Socio Economic	No effect	No effect	No effect
Hazardous/Regulated Materials	No effect	No effect	No effect
Contaminated Soils	No effect	No effect	No effect
Utilities	No effect	No effect	No effect
Traffic	No effect	No effect	No effect

3.0 AFFECTED ENVIRONMENT

3.1 Overview

3.1.1 Kalealoa STC

Kalaeloa, the area formerly occupied by NAS Barbers Point, is roughly 3 miles (3 km.) long and 2 miles (5 km.) wide, covering about 3,700 acres (1,497 ha.) along the southwestern shore of Oah'u. It is located on the Ewa plain approximately 22 miles (35 km.) west of downtown Honolulu and just south of the City of Kapolei. Elevations within this area vary from sea level along its southern coastal boundary to over 50 feet (15 m) above sea level at its northern end. The majority of Kalaeloa is relatively flat, with an average slope of about 0.5 percent.

The area under consideration for the STC is located within the 150-acre (61 ha.) HIARNG installation, in the northern, central area of Kalaeloa. Buildings 19 and 46 are located on the western boundary of the HIARNG parcel on Enterprise Avenue. Building 1874 and the adjacent parking area are located on the northeastern boundary on Saratoga Avenue. The primary land uses in the vicinity of the project area include food service and physical fitness facilities within Bldg 19, dormitory use in Bldg 46 and vacant administrative and classroom spaces within Bldg 1874. The site of the proposed fire training props adjacent to Bldg 1874 is currently part of a large, unused parking lot. The site of the proposed instruction facility adjacent to Bldg 46 is also a paved parking lot. The site of the proposed water safety training tank is within a grassed yard area adjacent to Bldg 19.

The secondary project area is located at the Kalaeloa Deep Draft Harbor, a commercial harbor located about five miles (eight kilometers) west of the main campus of the STC at Kalaeloa. Kalaeloa Deep Draft Harbor has a 92-acre (37-hectare) inshore harbor basin, with a depth of 38 feet (11.6 meters) at mean low tide. It includes two main berthing areas, ship and cargo handling facilities, and 4,600 linear feet (1,400 meters) of wave absorbing structures.

3.1.2 Puunene STC

The Puunene STC would be located within the 30-acre (12.1-ha.) installation being developed by HIARNG within the boundaries of the former NAS Puunene in Central Maui. The installation is located adjacent to the Mokulele Highway (Figure 5). Nearby uses include a County-owned drag strip, commercial quarry operation and a proposed transportation base yard for Maui Economic Opportunity, Inc., a provider of subsidized transit services on Maui. The entire area is within the center of HC&S's Central Maui Sugar Plantation. The nearest residential area is in Kihei, approximately two miles (3.2 km) away to the south. The HIARNG is now in the process of developing its facilities including a 29,000 SF (2,700 m^2) armory, organizational maintenance shop, post exchange, helipad, ancillary facilities and a 7-acre (2.8-ha.) area for future Hawai'i Air National Guard use (HIARNG's Puunene Armory and Related Improvements Final EA, April 2001).

3.1.3 Resources Not Affected

Preliminary project screening indicated that the Proposed Action will not affect or be affected by many of the environmental resources typically addressed in construction or land development environmental assessments. The Proposed Action has the potential to significantly impact

cultural and air quality resources, and therefore, these resource areas are addressed in greater detail.

The following environmental resources are unlikely to be significantly impacted by the Proposed Action or alternatives:

- Physical (e.g., topography, climate, soils, water resources, noise) – The topography in the vicinity of both the Kalaeloa and Puunene STC's is generally flat. None of the alternatives would impact the physical resources beyond the facility property boundaries. No significant impacts to topography, climate, soils, water resources, infrastructure or noise are anticipated. No significant impacts are anticipated from the construction and operation of the new water safety training tank and the water filtering/storage/recycling facilities. The No Action alternative would have no impact on physical resources.

- Biological (e.g., vegetation, wildlife) – The Kalaeloa and Puunene STC's are not adjacent to or within biologically sensitive areas. There are no threatened or endangered floral or faunal species in either area. The proposed renovation and construction activities will be conducted in such a manner as to avoid disturbance to any mature trees. The No Action alternative will have no impact on biological resources and no effect on threatened or endangered species.

- Socio-economic (e.g., population, employment, effects on children, disadvantaged and minority populations) - None of the alternatives would impact the overall resident population or employment levels in the City and County of Honolulu, County of Maui or the State of Hawai`i. Students using the training facilities would already be employed in Hawai'i's maritime industry. There are no known significant or adverse environmental impacts that will disproportionately affect minority or low-income communities and no increase to health and safety risks that disproportionately affect children (see discussion of Executive Orders 12898 and 13045 in Section 4.4). The Puunene STC facility would be more costly to develop than the Proposed Action because of the need to construct all new facilities (vice occupy existing facilities). Although it has excellent airport access, it is further away from the Honolulu metropolitan area--the main employment base of Hawai'i's maritime industry--and would be more difficult for the students to access than the Kalaeloa STC (Proposed Action). The No Action alternative would have an adverse impact on the readiness and proficiency of Hawai'i's seamen in that it would continue to make it difficult for them to receive the USCG-certified training they need for their jobs.

- Hazardous/Regulated Materials. Surveys have detected Lead-Based Paint (LBP) in Buildings 19 and 1874 and Asbestos Containing Materials (ACM) in Buildings 19 and 46. Since neither of the buildings qualify as "target housing" (residential structures housing children less than 6 years of age) as defined by the Residential Lead-Based Paint Hazard Reduction Act of 1992, no LBP abatement actions are required. The ACM found in Buildings 19 and 46 were in good condition and do not require removal or replacement. All ACM will be managed in place by encapsulation and monitoring, eliminating the need for any remediation or abatement. The HIARNG is responsible for ACM within its property and for complying with all applicable federal, state, and local laws and regulations pertaining to ACM (HIARNG, June 2001). Because the Puunene STC would involve only new construction, no LBP or ACM issues are likely to be encountered. The No Action alternative would have no impact on LBP or ACM issues.

- Contaminated Soil – The Proposed Action and alternatives would not be impacted by past soil contamination. Several underground storage tanks were removed from the vicinities of Buildings 46, 1874 and 19 at Kalaeloa. Any remediation of the project area necessary to comply with federal and state standards commensurate with the proposed use will be completed prior to commencement of the Proposed Action. The Puunene site may contain a number of underground storage tanks associated with the former NAS Puunene. There may also be unexploded ordnance at the Puunene site associated with WWII training activities. If necessary, remediation necessary to comply with federal and state standards would be completed prior to implementation of the STC at the Puunene site.

- Utilities – Utilities (i.e., electricity, wastewater, water) to the Kalaeloa and Puunene STC's are provided (Kalaeloa) or would be provided (Puunene) through the HIARNG base infrastructure system. Utilities are in place at the Kalaeloa installation while new facilities would need to be constructed at the Puunene STC. During the project design phase, verification will be made that the utility systems are adequate to service the existing and new customers. The No Action alternative would have no impact on utilities.

- Traffic - Proposed facilities within the Kalaeloa STC alternative are readily accessible to privately-owned vehicles from Enterprise and Saratoga Avenues, both primary collector roads providing access to the Kalaeloa installation. Enterprise Avenue connects directly with Fort Barrette Road and the H-1 Freeway. The Puunene STC alternative is adjacent to the Mokulele Highway, accessed via a new entry road to be constructed as part of the proposed HIARNG installation. Given the direct connection to major arterials and the modest class sizes (between 50 to 100 students), the Kalaeloa and Puunene STC's would not adversely impact existing traffic levels of service. The No Action alternative would have no impact on traffic.

- Solid Waste – Any construction and demolition wastes generated at either the Kalaeloa or Puunene STC would be disposed of by commercial contractor at an approved construction and demolition landfill. Operational period wastes would be disposed of by commercial contractor at an authorized municipal solid waste landfill. Recycling and reuse measures are encouraged to minimize both construction period and operational period wastes. The No Action alternative will eliminate the near term generation of demolition or renovation waste.

- Coastal Resources – The Kalaeloa and Puunene STC's are not located within a floodplain or area designated as a wetland. The lifeboat and davit facility at the Kalaeloa Deep Draft Harbor would consist of a set of lifeboat davits bolted to the end of a pier for practicing launch and retrieval of the lifeboat via a manual crank and cable system. The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai'i Coastal Zone Management Program Office. The No Action alternative would not impact coastal resources.

3.2 Cultural Resources

The NHPA defines *historic property* as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register…" (16 USC 470w). For the purposes of this EA, the terms "historic properties" and "cultural resources" are

used synonymously. The two categories of historic properties considered in the EA are archaeological sites and historic buildings.

Factors considered in determining a significant impact to cultural resources include the extent or degree to which an alternative results in a change in the characteristics that qualify a historic property for listing on the National Register of Historic Places (NRHP).

3.2.1 Proposed Action – Kalaeloa STC

The earliest archaeological survey of the area was by J. Gilbert McAllister in 1930. Later, the Bishop museum conducted the first extensive survey of the military installation recording 42 sites (Haun 1991). Since then, numerous archaeological field projects and limited investigations have followed, and are summarized in the Phase I inventory survey performed by International Archaeological Research Institute Inc. (IARII) (Tuggle and Tomonari-Tuggle 1997).

Archaeological sites include Hawai'ian sites, ranching sites, early 20th century sites, and World War II sites. Hawai'ian sites consist of habitation complexes, agricultural complexes, and sinkhole complexes. Human remains have been found associated with 13 sites at Kalaeloa, most of which are associated with Hawai'ian habitation sites. Early 20th century sites include habitation sites, storage sites, and sisal walls. A variety of World War II sites have been documented including anti-aircraft battery complexes, roads, pads, walls, pillboxes, sentry post and a plane wreck. A total of 53 archaeological sites have been identified as eligible for listing in the NRHP. Most sites and features are located at either the northwest or southwest corners of former NAS Barbers Point property. No archaeological sites are within the proposed project areas.

Historic buildings and structures at the former NAS Barbers Point include World War II and Cold War era resources. The IARII Phase I inventory survey summarizes the results of previous Barbers Point historic building surveys (i.e. Spencer Mason Architects 1993; Yoklavich *et al.* 1995). The vast majority of historic buildings are World War II era. The list of 108 NRHP eligible pre-1950 historic buildings includes aircraft revetments, Quonset huts, storage facilities, ready magazines, laundry building, captain's quarters, air operations and control tower, command center, and a theater. Colt Denfield, military historian, examined historic buildings and objects of the installation, with an emphasis on the history of the Cold War (Spencer Mason Architects 1993). Four buildings associated with the Cold War have been determined eligible for the NRHP. Eligible Cold War resources include a hangar (Bldg 282), headquarters building (Bldg 972), SOSUS Operations (Bldg 1767), and SOSUS Power Plant (Bldg 1768). Previous surveys of historic buildings and structures have not identified any significant cultural resources within the proposed STC sites at the former NAS Barbers Point.

3.2.2 Alternative - Puunene STC

Limited archaeological work has been conducted in the Puunene vicinity of Pulehunui, Maui. Most of the archaeological work was limited to surface surveys. Many, if not all, of the pre-contact Hawai'ian sites were likely destroyed by the development of sugarcane fields (Tomonari-Tuggle *et al.* 2000:63). Tomonari-Tuggle *et al.* (2000) have conducted a recent inventory survey of former NAS Puunene summarizing previous research. Sites previously identified include existing features of NAS Puunene, remains of a cattle ranch dating from the late 1940s to the 1950s, surface artifacts from pre-war Camp 6, features from the HC&S sugar plantation, a 1930s cane road, irrigation canals from various historic periods, a pre-1914 section

of the Kihei Ditch, and remains of the Kihei railroad line. More contemporary sites include evidence of early 1960s Civil Defense activity and late 1980s timber processing. Sites 4800 (Sugarcane Plantation Features), 4802 (Old Kihei Railroad Bed), and 4803 (Haiku Ditch and Reservoir) have been recommended eligible for the NRHP (Tomonari-Tuggle *et al.* 2000:126).

NAS Puunene Site 50-50-09-4164 has been determined eligible for listing on the State and National Registers of Historic Places (Tomonari-Tuggle *et al.* 2000:70-73; 120-121). Architectural historians have examined nineteen standing buildings at the former NAS Puunene (Tomonari-Tuggle *et al.* 2000). These include four buildings in the original Navy base, four scattered buildings west of Mokulele Highway, one building in Housing Area A, nine buildings in the southern magazine complex, and a transformer building (Bldg 1-400). This research concluded that fifteen of the nineteen buildings have retained their integrity, and embody distinctive characteristics of World War II construction.

The existing historic properties of the former NAS Puunene were originally documented by Sinoto and Drolet (1998), who conducted an inventory survey of the area proposed for the HIARNG Armory. The survey identified five splinter shelter buildings as historically significant and National-Register eligible. One of these buildings, Building 36, is located adjacent to the Puunene STC alternative site (Figure 5).

3.3 Air Quality Resources

The air in Hawai'i is relatively clean and low in pollutants. Based on air quality data collected and published by the Hawai'i Department of Health, Hawai'i complies with the standards of the Clean Air Act of 1970, as well as the National and the State Ambient Air Quality Standards (NAAQS/SAAQS) for carbon monoxide, nitrogen dioxide, sulfur dioxide, ozone, particulate matter, and lead. Hawai'i ambient air quality standards are equivalent to or more stringent than the NAAQS.

3.3.1 Proposed Action – Kalaeloa STC

Existing air pollutant emissions at Kalaeloa originate from mobile and stationary-type sources. These include aircraft and vehicle engines, boilers, generators, and other industrial sources. Just west of Kalaeloa is Campbell Industrial Park (CIP), the largest industrial park in the state of Hawai'i. Although stationary-source air pollutant emissions are concentrated in this area, the Department of Health (DOH) Clean Air Branch determined, based on monitoring data, that the Federal and State standards have been met in this region. In addition, CIP lies downwind of Kalaeloa during typical tradewind conditions, moving air pollution emissions away from the site.

3.3.2 Alternative – Puunene STC

Existing air pollution sources in the vicinity of Puunene include motor vehicle traffic from nearby roadways, aircraft at Kahului Airport, boilers and generators at Puunene Mill, and dust and smoke from agricultural operations. In general, Puunene is situated in an area where there is good ventilation from the trade winds most of the time. Although very little ambient air quality data exist for this area, it is probable that all NAAQS and SAAQS are met except possibly for occasional incidents related to dust and smoke from sugarcane cultivation.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Overview

This chapter evaluates the probable direct, indirect, short term, long term and cumulative environmental consequences of the Proposed Action and the alternatives to the Proposed Action: the Puunene STC alternative and No Action. Because the Proposed Action generally involves reuse of existing facilities for originally contemplated uses, it has low potential to affect most environmental resources. No chemicals will be used in the firefighting training, including chemical fire extinguishers. The only fire extinguishers students use for training exercises are carbon dioxide extinguishers, considered benign in the environment. The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai'i Coastal Zone Management Program Office. Analysis of the Proposed Action and alternatives indicated the following environmental resources will not be affected, and therefore they are not described in detail in this chapter (see Section 3.1.3 for an overview of Resources Not Affected).

- Physical (including water resources)
- Biological
- Socio-economic
- Hazardous/regulated materials
- Utilities
- Traffic
- Solid Waste
- Coastal Resources

Cumulative impacts on environmental resources result from the incremental effects of development and other actions when evaluated in conjunction with other government and private, past, present and "reasonably foreseeable future actions." Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The analysis of cumulative impacts was done on a qualitative basis, and includes known land use changes in the vicinity, such as disposal and reuse of other Navy lands at Kalaeloa as designated in the Kalaeloa Redevelopment Plan as well as future actions within the former NAS Puunene.

4.2 Cultural Resources

For the purposes of this analysis, significant cultural resources are those properties listed, or eligible for listing in the National Register of Historic Places (NRHP). As defined in the implementing regulations for Section 106 of the National Historic Preservation Act (NHPA), impacts of an undertaking on significant cultural resources would be considered adverse if they "diminish the integrity of the property's location, design setting, materials, workmanship, feeling, or association" [36 C.F.R. §800.9(b)]. Examples of adverse effects include, but are not limited to, the following:

- Physical destruction, damage, or alteration of all or part of the property;
- Isolation of the property from, or alteration of the character of, the property's setting when that character contributes to the properties qualification for listing on the NRHP;

- Introduction of a visual, audible, or atmospheric elements that are out of character with the property, or alter its setting;
- Neglect of a property resulting in its deterioration or destruction; and
- Transfer, lease, or sale of the property [36 C.F.R. §800.9(b)].

The Navy has concluded National Historic Preservation Act (NHPA) Section 106 consultations regarding the proposed action and the State Historic Preservation Officer has concurred with the Navy's determination of "no historic properties affected" (Appendix A).

4.2.1 Proposed Action – Kalaeloa STC

The Kalaeloa STC alternative would have no affect on historic properties. No historic buildings or structures are in the vicinity of the proposed STC project area at the former NAS Barbers Point. Furthermore, no surface archaeological resources, or unexplored sinkholes have been identified within the proposed former NAS Barbers Point project area. It is not likely that subsurface remains exist, in that the proposed project area rests on a solid coral limestone surface. For example, the 'Ewa Plain emerged reef limestone formed during the plus 7.6 m (25 ft) Waimanalo sea stand, and recent radioactive isotope dating confirms an interglacial age of about 114,000 to 131,000 years ago (Macdonald and Abbott 1970: 355). Furthermore, flames or fuel from the burn simulator and damage control centers will be well contained and will not have potential to spread away from the property.

4.2.2 Alternative – Puunene STC

The Puunene STC alternative would have no adverse effect on cultural resources. The alternative site would be located in an area that contains no archaeological resources or historic buildings (Drolet and Sinoto 1998). A significant historic building, Building 36 - splinter shelter, is located adjacent to the alternative site boundary. The construction of STC facilities would not alter the character or setting of the splinter shelter.

4.2.3 No Action Alternative

The No Action alternative would have no effect on historic properties.

4.2.4 Cumulative Impact

Proposed Action – Kalaeloa STC. Because the Proposed Action would not cause effects on cultural resources, it would not contribute to a cumulative impact when considered with other government and private, past, present and "reasonably foreseeable future actions."

Alternative – Puunene STC. There will be no cumulative impacts on cultural resources if the Puunene STC alternative is considered. This is because the specific project site location does not contain cultural resources. The Puunene STC would be one of a number of development projects planned for the former NAS Puunene. Other projects include the ongoing HIARNG Armory, the MEO Baseyard, and implementation of the County of Maui's long range plan for the former NAS including relocation of County baseyards and recreational uses.

4.3 Air Quality

4.3.1 Proposed Action – Kalaeloa STC

Any impact from the Proposed Action on air quality would be of a temporary and minor nature. During the short term, the Proposed Action will involve construction activities that may generate dust. The equipment used may also be a source of airborne emissions that would otherwise not be present at the site. To minimize the impacts on air quality, site construction activities will incorporate Best Management Practices, which typically includes watering of active work areas and use of wind screens in dust-prone or dust-sensitive areas.

From a long-term perspective, the Proposed Action will not result in adverse air quality impacts. Fire-training exercises will involve the burning of propane which is considered to be a "clean-burning" fuel by the US Environmental Protection Agency. In addition to fire-training exercises, students will practice search and rescue exercises in a smokehouse. A smoke machine will burn a vegetable oil-based fire and the smoke produced will be confined to the smokehouse. The annual usage of vegetable oil is estimated to amount to 6.25 gallons (23.7 liters) assuming 4 ounces (118.3 milliliters) per class and two classes per week. Once the building is ventilated, smoke dissipates rapidly and will not have a significant effect on air quality.

To quantify the potential emissions from the Proposed Action, annual emissions were estimated based on the expected annual usage of propane and U.S. EPA emissions factors for propane-fueled industrial boilers. The annual usage of propane is estimated to amount to 5,000 gallons (18,930 liters). This assumes that each class will consume approximately 50 gallons (189.3 liters) for all fire-fighting props and that two classes per week will be conducted. U.S. EPA emission factors for propane-fueled industrial boilers are indicated in the table below:

Pollutant	Emission Factor (lb/1000 gal)
Particulate Matter	0.6
Sulfur Dioxide	0.02
Nitrogen Oxides	19
Carbon Monoxide	3.2
Total Organic Compounds	0.5

Assumes fuel sulfur content does not exceed 0.2 gr/100 cubic feet. Source: Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, U.S. Environmental Protection Agency, AP-42, Fifth Edition, January 1995.

Applying the above emission factors to the estimated annual propane usage results in the following estimated annual emissions:

Pollutant	Annual Emissions (tons)
Particulate Matter	0.002
Sulfur Dioxide	0.00005
Nitrogen Oxides	0.048
Carbon Monoxide	0.008
Total Organic Compounds	0.001

The above estimated annual emissions do not include any emissions from the approximately 6.25 gallons (23.7 liters) of vegetable oil consumed by the smoke machine, but it is expected

that these emissions will be negligible. There is no means available to quantify the emissions from vegetable oil usage except to assume possibly that the entire mass of vegetable oil becomes particulate matter. Assuming that one cup (118.3 milliliters) of vegetable oils weighs 1 pound (0.45 kilograms), that one cup per class is used and that there are two classes per week, the total annual emissions would amount to about 100 pounds (45.4 kilograms). This is negligible when compared to the state-defined significant emission rate for particulate matter, 15 tons (13,608 kilograms) per year (see following table).

To ascertain the significance of the emissions from the Proposed Action, the estimated annual emissions shown above can be compared to the significant emission rates defined in Hawai'i Administrative Rules (HAR), Title 11, Chapter 60.1. The significant emission rates for particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide and volatile organic compounds are indicated in the table below:

Pollutant	Significant Emissions (tons/yr)
Particulate Matter	15
Sulfur Dioxide	40
Nitrogen Oxides	40
Carbon Monoxide	100
Volatile Organic Compounds	40

A comparison of these two tables shows that the emissions from the Proposed Action will be substantially less than the defined significant emission rates. Thus, it can be anticipated that any air quality impacts from these emissions will be negligible.

4.3.2 Alternative - Puunene STC

If the STC is established at Puunene, the air pollution emissions and impacts will be the same as those described in Section 4.3.1.

4.3.3 No Action Alternative

The No Action alternative would have no effect on air quality.

4.3.4 Cumulative Impact

Proposed Action – Kalaeloa STC. The cumulative impact of operating the STC at the former NASBP site will not cause effects on air quality resources and will therefore not contribute to cumulative air quality impacts. This is because the annual emissions will be negligible.

Alternative – Puunene STC. Because the emissions will be so small, cumulative air quality impacts for the former NAS Puunene site are the same as for the Kalaeloa STC.

4.4 Executive Orders

Executive Order 12898, Environmental Justice

Under Executive Order 12898 dated 11 February 1994, and the Secretary of the Navy Notice 5090 dated 27 May 1994, the Navy is required to identify and address potential for disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations.

The Kalaeloa and Puunene parcels are located in areas limited to entry by authorized personnel. They are also located away from heavily populated areas. The Proposed Action and alternatives would not have any significant or adverse environmental impacts, including human health, economic or social effects, to minority and low-income populations.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045 dated 21 April 1997 requires federal agencies to make children's health a high priority. Each federal agency shall make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children; and shall ensure that its policies, programs, activities and standards address disproportionate risks to children that result from environmental health and safety risks to children.

The Proposed Action and alternatives would not have any significant impacts or create environmental health and safety risks that may disproportionately affect children. The STC would be restricted to authorized personnel and located away from areas frequented by children.

4.5 Irreversible and Irretrievable Commitments of Resources

Resources that are committed irreversibly or irretrievably are those that cannot be recovered if the Proposed Action, or the alternative to the Proposed Action, is implemented. The Proposed Action would entail permanent construction of a 5,775 SF (536 m^2) instruction building, a new 43,000-gallon (163,000-liter) water safety training center and fire training simulators within the HIARNG' s Kalaeloa installation—in addition to continued occupancy and use of training, meal service and dormitory facilities. The Puunene STC alternative would require the construction of a significant number of new facilities in addition to the instruction and training props associated with the Kalaeloa STC alternative, and the continued occupancy and use of training, meal service, and dormitory facilities.

4.6 Means of Mitigating Potentially Adverse Effects

The EA has not identified any potential adverse effects and therefore no mitigation is proposed.

5.0 CONCLUSIONS

The Proposed Action is to establish and operate a USCG-certified STC within the HIARNG's Kalaeloa Installation, O'ahu, Hawai'i. The Proposed Action includes renovations to Buildings 19 and 46 located near the western boundary of the HIARNG's Kalaeloa Installation, and Building 1874 located near the northeastern boundary. In addition, the parking area adjacent to Building 1874 will be used as a staging area for outdoor fire safety training, a new water safety training facility will be constructed in a vacant yard area adjacent to Building 19, and a new general instruction facility will be constructed in the parking lot in front of Building 46. The Proposed Action also includes a lifeboat and davit training facility at Kalaeloa Deep Draft Harbor, approximately five miles (eight kilometers) west of the Kalaeloa facility. This facility will consist of a set of lifeboat davits bolted to the end of a pier and may also include a small manual boom crane for practicing launch and retrieval of rubber inflatable boats. The SIU would occupy the site under a revocable permit issued by the State of Hawai'i.

No significant impacts will occur to the environment as a result of the Proposed Action, and the preparation of an EIS is not required. The Proposed Action will have no effect on endangered or threatened species and consultation under the Endangered Species Act with the U.S. Fish and Wildlife Service (and the National Marine Fisheries Service) is not required. The SHPO has concurred with the Navy's determination of "no historic properties affected." The Navy has conducted an effects test and concluded that the Proposed Action would not have reasonably foreseeable direct or indirect effects on any coastal use or resource of the State's coastal zone; therefore, no documentation is required to be sent to the Hawai'i Coastal Zone Management Program Office.

6.0 LIST OF AGENCIES, ORGANIZATIONS AND PERSONS CONSULTED

State
Hawaii Army National Guard
State Historic Preservation Officer
Hawaii Coastal Zone Management Program Office

Others
Seafarers International Union

7.0 REFERENCES

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8.0 LIST OF PREPARERS

PACNAVFACENGCOM
Environmental Planning Division

Planner-In-Charge	Andy Huang, P.E. B.S. Civil Engineering M.S. Environmental Engineering
NEPA Branch Head	Connie Chang, P.E. B.S./M.S. Mechanical Engineering
Archaeologist	Eric West M.A. Anthropology

Helber Hastert & Fee Planners, Inc.

Principal Author	Thomas A. Fee, AICP M.A. Urban Planning
Certified Consulting Meteorologist	Barry D. Neal B.S. Meteorology

APPENDIX A

Section 106 Correspondence

DEPARTMENT OF THE NAVY
PACIFIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
258 MAKALAPA DR., STE. 100
PEARL HARBOR, HI 96860-3134

5750.2B
Ser PLN233/1057
2 JUN 2003

Mr. Peter Young
Chairperson and State Historic Preservation Officer
Department of Land and Natural Resources
State Historic Preservation Division
Kakuhihewa Building
601 Kamokila Boulevard, Room 555
Kapolei, HI 96707

Dear Mr. Young:

Pursuant to Section 106 of the National Historic Preservation Act, the Navy requests your review of the proposed project entitled "Seafarer's Training Center." In accordance with the implementing regulations for Section 106 of the National Historic Preservation Act, we have reviewed the project and determined that it is an undertaking as defined in 36 CFR § 800.16 (y).

The proposed location of the Seafarer's Training Center is the former Naval Air Station (NAS), Barbers Point, Kalaeloa, Oahu [enclosure (1)]. The purpose of the new facilities is to provide safety training for U.S. merchant mariners in Hawaii. This training program resulted as a cooperative effort between the Seafarer's International Union, the Hawaii Army National Guard, the U.S. Navy, and various U.S. merchant ship operators, including American Classic Voyages and Horizon Lines. In October 2000, the Seafarer's Training Center established itself in temporary quarters provided under licensed use by the Hawaii Army National Guard, at the former NAS Barbers Point. The proposed development of the Seafarer's Training Center will revitalize and make continued and appropriate use of buildings abandoned at the closure of the former NAS Barbers Point. Also, the training center will be economically beneficial to the area.

Project Description

This project proposes to establish a Hawaii campus of the Seafarer's Training Center that will continue use, and improve upon, existing buildings at the former NAS Barbers Point. There is currently another Seafarer's Training Center campus operating in Maryland. The proposed Seafarer's Training Center will provide classrooms, administrative office space, storage, dormitory housing, certified infrastructure to teach water survival and advanced fire-fighting courses, and will establish food service capabilities to support the teaching mission of the training center. The following project details are provided.

Classroom Facilities - Classroom facilities will be created to maximize training opportunities. These expanded facilities are needed to meet the surge of training demand created by training requirements for civilian U.S. merchant mariners working aboard vessels supporting the missions of the U.S. Navy's Military Sealift Command and other U.S. merchant ship operators.

Building 1874 will be refurbished for classroom facilities, academic offices, computer facilities, storage space, and a two-story confined space maze [enclosure (1)]. The confined space maze will be used to simulate rescues on a ship when there is no electricity and lighting. All of the utilities are currently working in Building 1874, and only new carpet and paint will be required for classroom and office refurbishing.

Also, a new 12,000 square-foot freestanding building will be constructed adjacent to Building 46 to provide new classrooms [enclosure 1]. The building will be slab on grade construction, and no plans are currently available. These classrooms will be used for water safety training, because they will be in close proximity to the water tank facility (see "Water Tank" section below).

Fire-Fighting Simulator - A permanent fire-fighting simulator will be constructed in the parking lot adjacent to Building 1874 to teach advanced fire-fighting classes. The simulator will be two stories tall, approximately 15 feet wide and 28 feet long, and have a façade that makes it look like a tugboat. In addition, an outdoor burn area will be built to accommodate damage control stations for fire-fighting training. The existing parking lot adjacent to Building 1874 will contain these damage control stations and will be used as a staging area for advanced fire-fighting training exercises. There will be several fire-fighting modules consisting of aluminum and steel shipping containers adapted for specialized use, that will provide students with the experience of using fire extinguishers and fully charged fire hoses. A steel burn pan will also be located next to the existing parking lot of Building 1874, and will entail the construction of a new 6 by 6 foot concrete slab on grade. Mechanical excavation will be required to accommodate the installation of new water pipes and a small underground water storage tank next to the parking lot of Building 1874 to provide sufficient water to do the fire-fighting exercises.

Water Tank - An in-ground water tank is proposed that will allow the Seafarer's Training Center to teach practical elements of personal water survival and life raft handling. This water tank will allow the Seafarer's Training Center's curriculum to include U.S. Coast Guard-certified water survival courses. The water tank will be located adjacent to Building 19 [enclosure (1)]. Mechanical excavation will be required for the in-ground tank, concrete footings, and associated water pipes. Also, a six-foot high fence will be installed around the perimeter of the water tank area to conform to safety mandates.

Dormitory Housing - Building 46 will be remodeled in order to provide housing for students and/or instructors at the training center [enclosure (1)]. Subsurface excavation is not required for the dormitory housing, as all of the utilities are pre-existing and functioning.

Food Service Facilities - Food service facilities will be developed for students who are boarding at the Seafarer's Training Center while completing their coursework. This component will consist of revamping the previous food service facility operated by the U.S. Navy in Building 19 of the former NAS Barbers Point [enclosure (1)]. Included in this development will be construction of restroom facilities in the dining hall. There will be no change of use or purpose

of the food service area, simply upgrades to the existing vacant facility. Remodeling will include new air conditioning, new floor covering, new locks and new paint. Utilities such as sewer, water, storm drainage, telecommunications, and electricity are already in place.

Area of Potential Effect

The area of potential effect (APE) includes the footprint of Building 1874, as well as the adjacent parking lot. Additionally, the footprint of Building 19 and the proposed flanking water tank are part of the APE. Finally, the footprints of Building 47 and the proposed new 12,000 square-foot classroom building are incorporated in the APE.

Identification of Historic Properties

A cultural resource inventory of NAS Barbers Point, entitled "A Cultural Resource Inventory of Naval Air Station, Barbers Point, Oahu, Hawaii; Part I: Phase I Survey and Inventory Summary," was carried out by International Archaeological Research Institute Incorporated in 1997 (Tuggle and Tomonari-Tuggle 1997). A copy of this report has been provided to your office for your library and use. According to this study, none of the buildings to be refurbished (Buildings 19, 46, and 1874) are eligible for the National Register of Historic Places (NRHP). For example, Building 1874 was built in 1982, and was not identified as eligible for the NRHP (Tuggle and Tomonari-Tuggle 1997:137-139, 189). Additionally, Buildings 19 and 46 were not found to be historically significant (Tuggle and Tomonari-Tuggle 1997: Tables 14, C-1, and C-2).

Previous archaeological surveys have not identified archaeological resources within the APE. To illustrate, Figure 28, of the above-mentioned cultural resource inventory, shows a map of previously documented archaeological sites at the former NAS Barbers Point (Tuggle and Tomonari-Tuggle 1997:72). The map illustrates that Site 1729 (sinkhole complex) is the closest archaeological resource to the project area. Site 1729 is approximately 330 meters away from Building 1874 and will not be impacted by the construction project. The project area is in a developed part of the base that has been graded and built upon, decreasing the probability of finding intact archaeological resources.

Determination of Effect

According to previous cultural resource studies, there are no historic buildings or structures located in the APE. Moreover, there will be no change in use for any of the buildings used for the Seafarer's Training Center. For example, Building 1874 was previously used for teaching people how to fly airplanes, and once had a flight simulator where the proposed confined space maze will be installed. Also, Building 19 was previously a cafeteria, and is still used by the National Guard Youth Challenge as a dining hall. Building 46 was previously used for housing, and is proposed for outer island trainee dormitory housing in this Seafarer's Training Center project.

Furthermore, no surface archaeological resources, or unexplored sinkholes have been identified within the APE. It is not likely that subsurface remains exist, in that the APE rests on a solid coral limestone surface. To illustrate, the 'Ewa Plain emerged reef limestone formed during the plus 7.6 meters (25 feet) Waimanalo sea stand, and recent radioactive isotope dating confirms an interglacial age of about 114,000 to 131,000 years ago (Macdonald and Abbott 1970: 355). Therefore, we have reached a finding of "no historic properties effected" as defined in 36 CFR § 800.4(d), and request your review of this finding. We will assume your agreement if we receive no response from your office within 30 days from receipt of this letter.

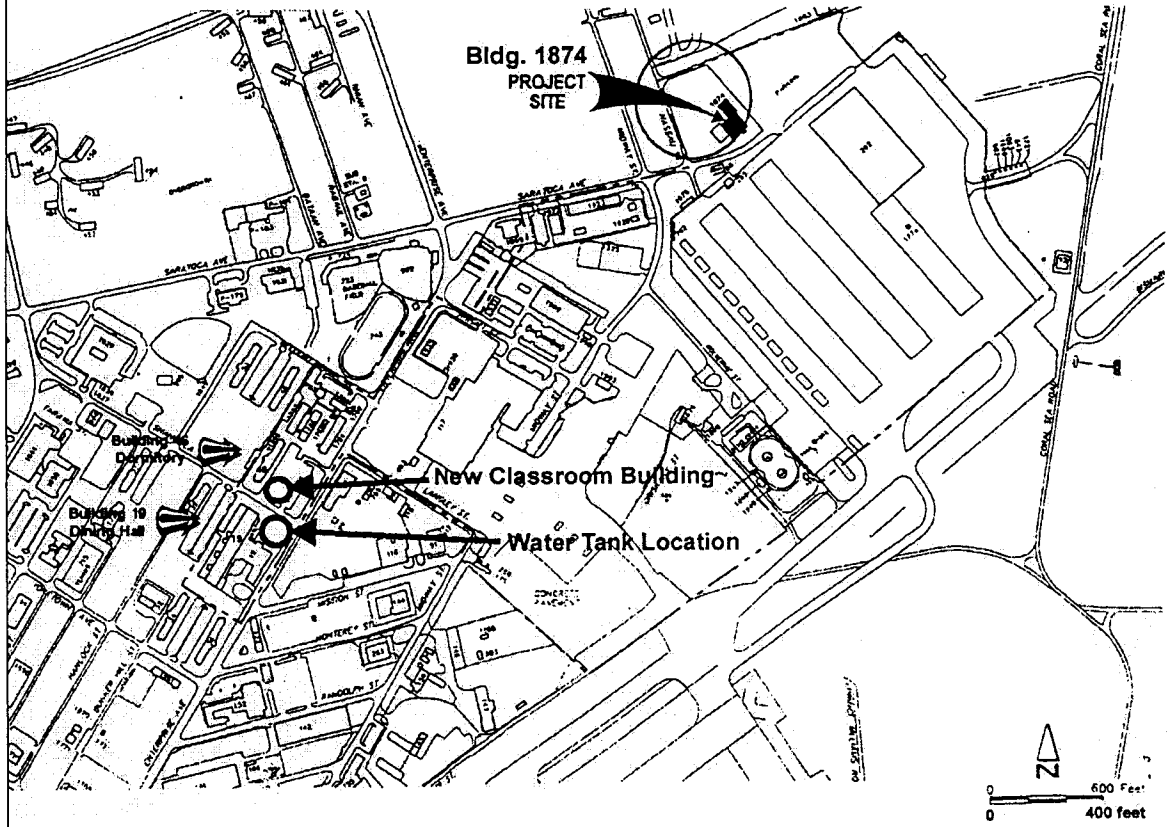
Should you have any questions regarding this undertaking, please contact Mr. Eric West, Navy Archaeologist, at 808-474-4708, or via E-Mail at WestEW@efdpac.navfac.navy.mil.

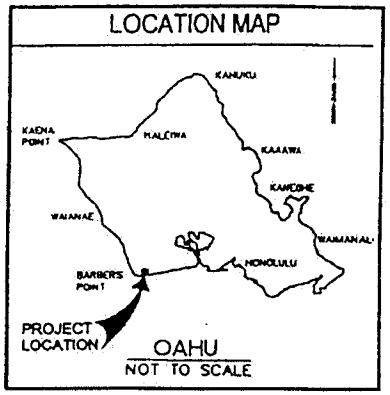
Sincerely,

MELVIN N. KAKU
Director
Environmental Planning Division

Encl:
(1) Map of Construction Site Locations

Map of Site Locations





Seafarers Training Center

MAIN PROJECT SITE:
Building 1874 &
adjacent parking lot

Enclosure (1)

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

JUL -2 2003

Department of the Navy
Pacific Division
Naval Facilities Engineering Command
258 Makalapa Dr., Ste. 100
Pearl Harbor, HI 96860-3134
Attn: Melvin Kaku

LOG NO: 2003.0931
DOC NO: 0306EJ25

Dear Mr. Kaku:

SUBJECT: **National Historic Preservation Act Section 106 Review – Seafarer's Training Center, (Former) Barbers Point Naval Air Station, O`ahu**
Honouliuli, `Ewa, O`ahu
TMK: (1) 9-1-013:001

Thank you for the opportunity to comment on the proposed project to establish a Hawaii campus of the Seafarer's Training Center at former NAS Barbers Point. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the project areas. We received notification of this undertaking from your office on June 3, 2003.

The undertaking proposes to:

1) Refurbish Building 1874 for classroom facilities, academic offices, computer facilities, storage and a training space maze.
2) Construct new 12, 000 square-foot slab on grade freestanding building adjacent to Building 46 for water safety training
3) Construct fire-fighting simulator in parking lot adjacent to Building 1874
4) Construct in-ground water tank located adjacent to Building 19
5) Renovate Building 46 to provide housing
6) Revamping Building 19 for a food service facility.

According to you, none of the buildings to be refurbished (Buildings 19, 46 and 1874) are eligible for the National Register of Historic Places. Also previous archaeological surveys have not identified any archaeological resources within

the project areas. The nearest historic site, Site 1729 (a sinkhole complex), is located approximately 330 meters away from Building 1874 will not be impacted by any of the proposed activities.

Because no significant historic buildings or structures are located within the APE and because archaeological resources have not been identified or are likely to be found within the APE, we concur with your "no historic properties affected" determination for this undertaking.

Should you have any questions about archaeology, please feel free to call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027. Should you have any questions about architecture please feel free to contact Tonia Moy at 692-8030.

Sincerely,

Peter T. Young, Chairperson and
State Historic Preservation Officer

EJ:jk