

Prepared by:



412 Mt. Kemble Avenue Morristown, New Jersey 07962

Robert J. Nardi, PP, Vice President Steven Bedford, Ph.D., Director Rebecca Warner, Graphic Designer

In association with:



733 Bishop Street, Suite 3100 Honolulu, Hawaii 96813

Bettina Mehnert, FAIA, LEED AP, President

Nathan Saint Clare, AIA, Principal

Katharine Stephens, AIA, Historic Architect, Associate

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1. Introduction

Background

The U.S. Navy ("Navy") has long maintained control over approximately 1,055 acres of lands encompassing the military installations which once existed in the present-day Kalaeloa area. Most of these lands have been conveyed or will soon be conveyed by the Navy to various public agencies and private interests. The Navy has been working to complete the identification of the historic facilities, sites, and landscapes prior to the transfer action.

Louis Berger U.S., Inc., a WSP Company, in association with Architects Hawaii Ltd, ("AHL"), has been assisting with identification of a preservation area involving lands once known as Ewa Field and later as MCAS, Ewa.

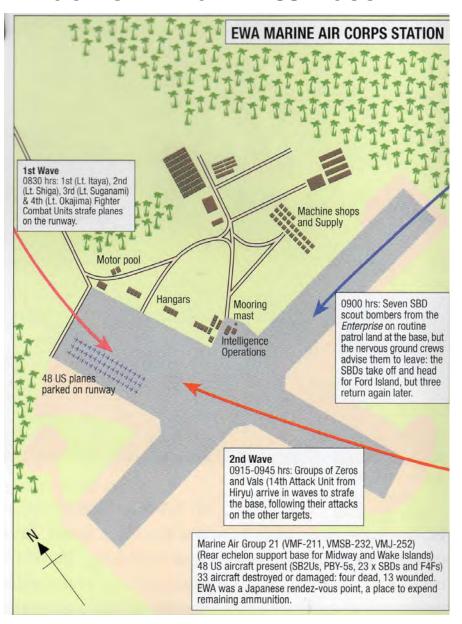
Ewa Field is located on lands of the former Naval Air Station Barbers Point (NASBP) on the Ewa Plain in southwestern Oahu. The study area comprises approximately 206 acres and represents the original boundaries of the Ewa Mooring Mast Field as leased to the Navy in 1925. The 206 acre area represents the Ewa Field boundary rather than the December 7, 1941 battlefield area since the battle itself did not occur on all 206 acres.



Ewa Mooring Mast Field, December 2, 1941 (Credit: Naval History Heritage Command)



Attack on Ewa MACS Base



Historic Context

Ewa Field was first established as Ewa Mooring Mast in 1925, a Navy air station dedicated to lighter-than-air dirigibles; however, no airships were ever moored at Ewa Field. In 1939, Ewa Mooring Mast transitioned into an emergency landing field and soon after became Ewa Mooring Mast Field, a temporary Marine Corps air field for training Marine aviators. At the time, Ewa Mooring Mast Field was attached to the larger nearby Naval Air Station Barbers Point (NASBP). Over time, the airfield was expanded and barracks, mess hall, dispensary, armory, recreation building, and other support facilities were developed. On December 7, 1941. lapanese aircraft bombed and strafed MCAS Ewa just minutes before attacking Pearl Harbor.

Attacking from the northwest approximately two minutes prior to the Pearl Harbor attack, the first group of Japanese Imperial Navy (JIN) Zekes targeted the aircraft parked on the warm-up platform and around the perimeter of the landing areas. The Commander of Ewa Field, LT COL Claude Larkin, reported that "enemy airplanes approached as low as 20 to 25 feet over the ground, attacking single airplanes with short bursts of gunfire." Based on eyewitness accounts, the First Wave lasted 10 to 15 minutes, enough time for Japanese planes to make eight passes over Ewa Field with the installation suffering casualties as well as the destruction of planes and buildings.

A second attack came from the east approximately 10-15 minutes after the first, targeting parked aircraft then strafing the camp area, buildings, installations, vehicles, and personnel. The two attacks left many of the aircraft and buildings on fire. The third attack was lighter than the first two due to the Marines' defensive gunfire. Approximately 15 fighter aircraft of the rear guard flew in from the east, strafing personnel before heading west to rendezvous with the remaining rear guard.

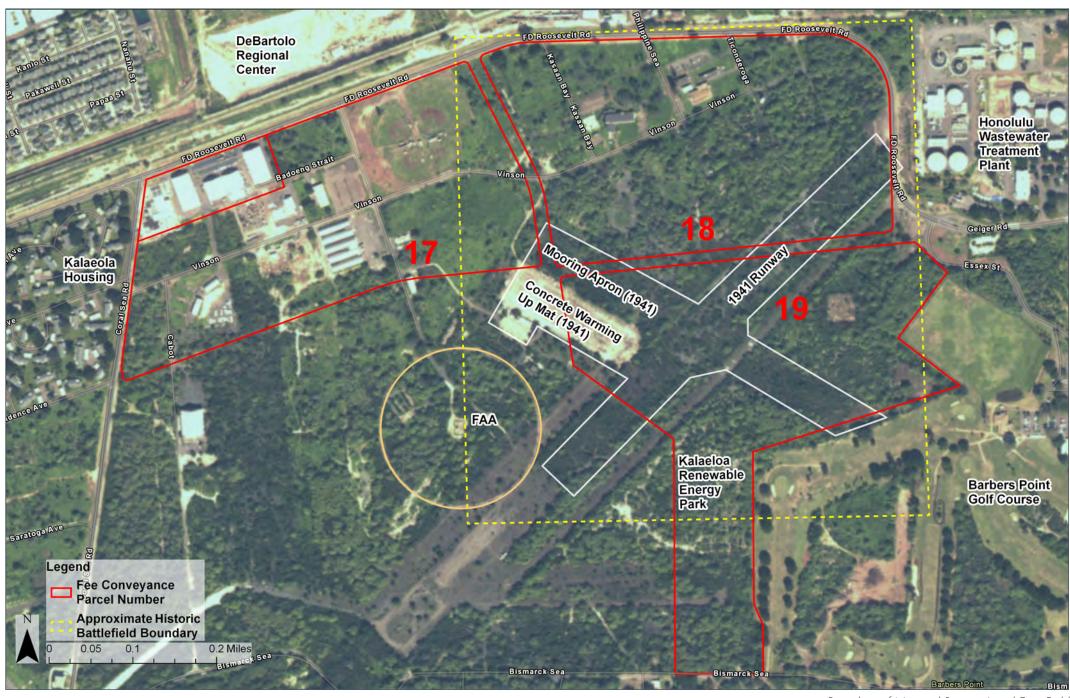
During World War II, Ewa Field became Marine
Corps Air Station Ewa (MCAS Ewa) and supported
various Marine commands that were training for
battle in outlying areas of the Pacific; however, Ewa
Field continued to be the more common designation.
Following the end of World War II, MCAS Ewa
continued to operate as a training area and staging
ground for demobilization and other Pacific-centered
campaigns. MCAS Ewa was closed in 1949 and the
property reverted to NASBP. In this report, the facility
will generally be referred to as Ewa Field, an unofficial
title that avoids the confusion of its many official
names.

In the years that followed, most of the buildings and structures associated with Ewa Field were demolished, although NASBP retained use of several storehouses located in the northwest corner of the installation. A large portion of the former Ewa Field was converted into a golf course, while a cluster of aircraft revetments were adapted into horse stables, with both in use today. The northern part of the installation was redeveloped in support of various Cold War missions. In 1993, the Base Closure and Realignment Commission recommended NASBP for closure, and in 1999, the base was officially closed. In 2015, Ewa Field was determined eligible for the National Register of Historic Places as a military installation associated with the December 7, 1941, Japanese attack on Oahu, and in 2016, Ewa Field was added to the National Register.

Study Area

The Navy is ceding control over portions of the approximately 1,055 acres of land encompassing the military installations which once existed in the Kalaeloa area. The 206 acre National Register-listed study area represents only a portion of the total land area being transferred. Five entities will eventually control the lands within the 206 acre battlefield including: City & County of Honolulu (for park and recreation purposes), Federal Aviation Administration, the Department of Hawaiian Home Lands, and the Hunt Companies, with the Navy retaining control over lands comprising the Barbers Point Golf Course and the stables at the Barbers Point Riding Club.

The study area is located in the midst of a growing Ewa community with commercial, residential and industrial uses already existing or planned for development throughout the area. Currently, the northern portion of the study area, fronting Roosevelt Avenue, is utilized primarily for equipment storage, warehousing, and other light industrial purposes. An area to the southwest, including lands outside the study area, is the location of navigational equipment operated by the Federal Aviation Administration. Directly south and also extending outside the study area, is the Kalaeloa Renewable Energy Park with many acres of land devoted to photovoltaic panels while to the southeast is a small portion of the Navy-operated Barbers Point Golf Course. Just beyond the boundaries of the study area is the Honoliuli Wastewater Treatment Facility (to the northeast) and the historic Hawaiian Railway (to the north); undeveloped lands and the former NASBP runways (to the southwest), and the remainder of the 18-hole Barbers Point Golf Course (to the east and southeast), and the Barbers Point Riding Club (to the south).



Boundary of National Register-Listed Ewa Field



2. Conditions at Ewa Field

In developing this plan, it is necessary to document the conditions which currently exist within the approximately 206 acre area listed on the National Register of Historic Places. Natural and manmade resources including topographic conditions, vegetation, views and vistas, land uses, and access are summarized in the section that follows.

Topography

The Ewa Field study area is located in the Ewa Plain, a major physiographic and environmental province near the southwestern portion of Oahu and south of the Wai'anae range. This area is relatively flat with the ground surface sloping gently southward from a maximum elevation of approximately 65 feet above msl at the northern extent to sea level at the southern shoreline with the Pacific Ocean. The area comprising Ewa Field is characterized by a lowlying, and relatively flat expanse of emerged reef limestone dating from the Pleistocene era.

Vegetation

Much of the study area is dominated by introduced plant species such as kiawe and lowland scrub. Kiawe, a non-native, invasive mesquite that has established itself as the dominant species on the Ewa Plain, is a spreading bush or moderately-sized tree which has become naturalized in Hawaii. This species, which is covered in thorns, is usually found in disturbed areas that have been previously cleared. It is a successful invasive plant due to its ability to produce a large number of easily-dispersed seeds, and suckering, to create thick monotypic stands that shade out all competing plants nearby. It survives well in dry environments due to its extremely long taproot and is so efficient at withdrawing moisture from soil that it can kill nearby plants by depriving them of water. It is typically found in areas where other plants do not grow, such as sandy, dry, degraded slopes, salty soils, disturbed areas, and rocky cliffs.

Due to its abandoned status, the majority of the Ewa Field area is overgrown with unmanaged scrub vegetation. This includes the formerly built-up and paved areas of the battlefield. Unmanaged vegetation in this area is dominated by kiawe overstory and a grassy understory of various non-native grasses including buffel grass (Cenchrus ciliaris), Guinea grass (Panicum maximum) and fingergrass (Chloris spp.). Shrubs can be found in the kiawe understory, particularly in areas of opencanopied kiawe forests, including Chinese violet (Asystasia gangetica) and koa hoale (Leucaena leucocephala), and common natives 'ilima (Sida fallax) and 'uhaloa (Waltheria indica). Another common tree species in the kiawe woodlands is opiuma (Pithecellobium dulce).

Kiawe and opiuma are particularly adept at breaking through the asphalt surface of the former airfield and its surroundings. Long rows of Guinea grass growth on the airfield reflect the original paving methods. The concrete paving at the warming-up pad and the compass rose is too dense to allow the penetration of the kiawe; however Guinea grass has grown up in the tie-downs and cracks as they accumulate soil over time.

Managed vegetation exists on accessible roads, public recreation areas, and around the buildings that are in use today. These landscaped areas consist of mowed turf and a limited mix of ornamental trees. Sparse foundation plantings, hibiscus and spider lily, around the buildings show signs of aging and decline due to minimal maintenance. The two recreation areas consisting of Pride Field and the Barbers Point Golf Course are comprised of maintained turf.

Views and Vistas

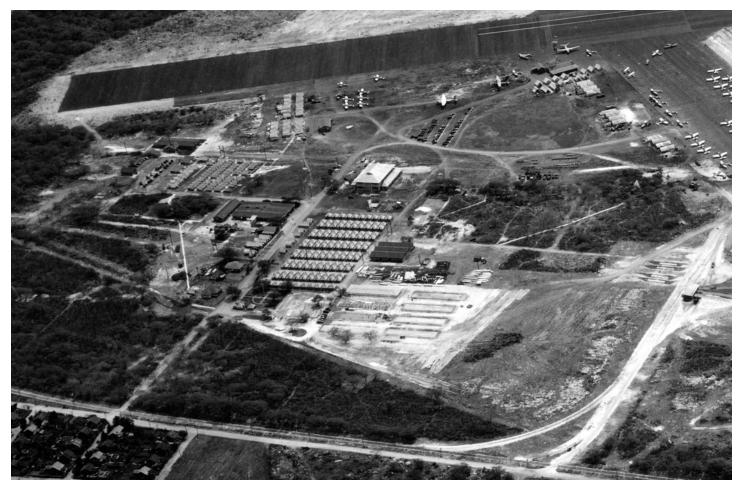
The Wai'anae mountains to the north, at approximately 4,000 feet above msl, are a prominent, yet distant feature, visible from the more open areas of Ewa Field. In open areas, the flat terrain throughout the area allows for good views to the north and to the more distant Ko'olau mountains to the east. The open areas around Philippine Sea Road and Pride Field lend themselves well to dramatic views of the mountains. Most parts of the Ewa Field area have become so overgrown with tall trees and dense vegetation that views to the mountains are obstructed.

Land Use

The majority of area comprising the National Register-listed Ewa Field is currently vacant and overgrown with dense vegetation and no standing structures that date to December 7, 1941 still remaining. Within Ewa Field itself, a number of vacant buildings front Roosevelt Avenue while at the southern end, a solar energy farm (Kalaeloa Renewable Energy Park) operates with the Barbers Point Riding Club stables. Pride Field, a complex of community baseball fields, is found along the western boundary while the Honouliuli Wastewater Treatment Plant and the Barbers Point Golf Course form the eastern boundary.



Former Mooring Mast (Credit: National Archives)



Credit: National Archives

Vehicular Access

Primary vehicular access to Ewa Field is via Franklin D. Roosevelt Avenue and Philippine Sea Road. Roosevelt Avenue is a State of Hawaii Department of Transportation route that is the northern limit of the National Register Ewa Field area. The state highway is a two-lane, 24-foot-wide asphalt roadway with five-foot paved shoulders. Philippine Sea Road, a 22-foot-wide, paved asphalt road, intersects with Roosevelt Avenue and serves as the main access from the north. The road provides access to leased buildings along its east side, and is currently barricaded at the intersection with Vinson Road.

Two secondary roads of the former air station intersect with Roosevelt Avenue, and both are barricaded to prevent vehicular access into these areas: Amende Road and Kasaan Bay Street. These roads are generally single-lane, 14 feet across, paved asphalt with overgrown grassy shoulders. A third road, Ticonderoga Road, is open to vehicular access from Roosevelt Avenue, but is barricaded at the intersection with Vinson Road. Vinson Road is oriented generally east-west and is barricaded at Philippine Sea Road and near Pride Field. Vinson Road is in better condition, having been repaved more recently than other secondary roads in the area. Day Road and Ackerman Street, both oriented parallel to Vinson Road, are not accessible and are heavily encroached upon by vegetation. Bober Road, once a secondary road that intersected with Roosevelt Avenue, is barely visible through the vegetation growing up through the asphalt paving. Narrow, coral access roads exist around the FAA periphery and provide access to the Kalaeloa Renewable Energy Park.

Plans for the Kalaeloa area also anticipate new north-south and east-west roads to accommodate the traffic as the area develops and lands have already been set aside for such roads.

Public Transit

Public transportation across the island of Oahu is primarily provided by "TheBus" system of fixed routes (trunk, local, and express) and transit hubs. A transit hub has been created to the north of Kalaeloa in Kapolei. The transit hub is connected by TheBus to the transit hub in Ewa, with a limited number of transit stops along Roosevelt Avenue in Kalaeloa. Construction is currently underway on a rail transit system extending from East Kapolei to the Ala Moana Center. Once completed, the East Kapolei station would be located approximately one mile northeast of the study area.



3. Significance

Significant Resources

Ewa Field was an important military installation at the time of the December 7, 1941 Japanese attack on Pearl Harbor. Recognition of the association of the site with the battle, and the understanding of the background, context and the events before and after December 7, 1941, resulted in the nomination of the Ewa Field Battlefield for listing on the National Register of Historic Places in 2015, and its listing on the National Register in 2016.

The National Register boundary doe not include all of the original Ewa Field, as portions that are now part of the sewage treatment plant and golf course have lost their integrity. Within the National Register boundary are the remains of resources present on December 7, 1941, which the Keeper found still convey the significance of the battle.

The National Register Nomination for the Ewa Field Battlefield provides the following list of contributing elements to the significance of the battlefield.

Above Ground:

- Runways and Aircraft Parking Aprons Asphalt
- Warm-Up Platform Concrete Pad
- OR&L Railroad Spur
- Swimming Pool
- Road Network, 1941
- Philippine Sea Road at Main Gate, formerly D Street
- Ackerman Street, formerly Fourth Street
- First Street
- Vinson Road, formerly Second Street
- F.D. Roosevelt Avenue, formerly North Hanson Road
- Ticonderoga
- Old Beach Access Road

Subsurface:

- Hanaar
- Mooring Mast/Control Tower
- Barracks
- Latrines and Boiler Room
- Flagpole by North Entrance Gate
- Fuel Tanks
- Compass Rose (1941-1943)
- Storage Building

A different list of key battlefield features is provided by the 2011 Battlefield Evaluation of Ewa Field (AECOM 2011):

- The warm-up platform is characterized by a grid of 20-foot concrete squares with central metal tie-downs. It retains the open, level character central to its original function. The surface is scarred in several locations with damage identified as strafing marks from the 1941 attack (MAI 2011). The concrete platform is also defined by its proximity to the runways, parking apron, and hangar foundation. It supports integrity of the battlefield, and is the location in which the history of the event is most evident.
- The **parking apron** survives beneath vegetative growth, its edges defined by changes in vegetation and remnant paving. The apron is defined as a space in proximity to the warm-up platform and runways, and is seen in its level character, the remains of macadam paving, regularly spaced metal tie-downs. It minimally supports integrity of the battlefield.
- The **hangar's foundation** survives, but the structure is no longer present. At the time of the attack, the hangar roof and framing was extant, as it was under construction; today, the footprint of hangar remains visible, aiding in the spatial understanding of the aviation areas that were the focus of the attack.

- The **swimming pool** site survives today; it was under construction during attack, and its excavation served as an important defensive position. Today, the pool, which was subsequently completed, is filled with soil. It supports integrity through its proximity and orientation to the aviation areas, showing its relationship to lines of attack. The existing structure marks the use of the former excavation by Marines as cover.
- The **runways** survive in a ruinous state. The area of the 1941 runway paving is more overgrown with woody vegetation than the later World War II-era runway extensions. The macadam paving survives in ruinous condition. While views are currently blocked by vegetation, this may be considered removable; the vegetation differs on the 1941 and later paved areas, rendering the edges of the 1941 paving legible. The evident spatial area of the runways supports the integrity of the battlefield.
- The **view** toward the Wai'anae Mountains is also considered a significant element of the Ewa Field base and December 7, 1941 attack.

Taken together, these resources represent the core area on which preservation efforts are focused.



4. Ewa Battlefield Preservation Area

Based on the available research into the history of Ewa Field, and following discussions with a broad array of agencies, officials, stakeholders and individuals, areas within the overall 206 acre National Register-listed battlefield have been identified for permanent preservation and protection. This includes the:

- Mooring Apron;
- Concrete Warming-Up Mat;
- Foundation of the 1941 Hangar; and
- Portions of the Runways in existence on December 7, 1941.

The contiguous area encompassing these resources totals approximately 30 acres. Separate, isolated areas surrounding both the Swimming Pool and Compass Rose site are also recommended for preservation and protection. Collectively, these battlefield elements best encompass features directly associated with the December 7, 1941 attack and would be set aside for permanent preservation and protection by the eventual property owners.

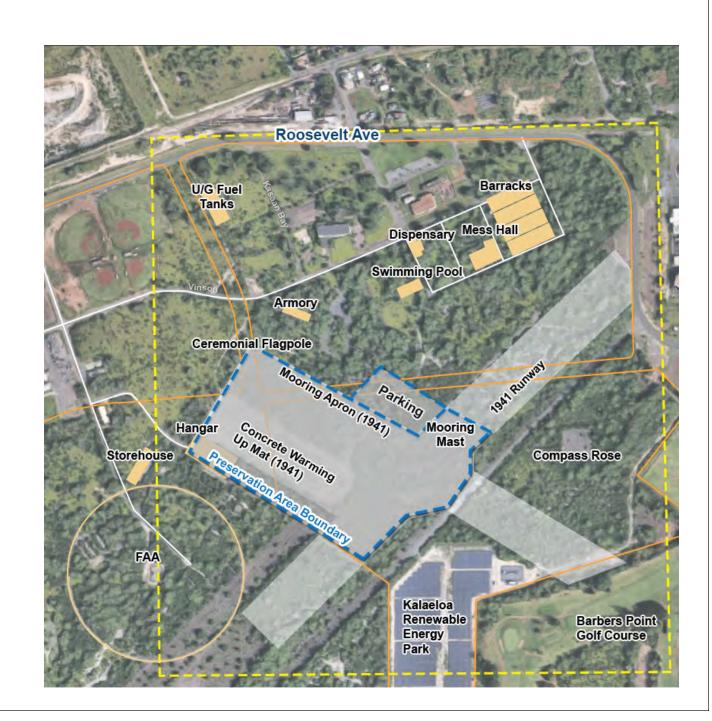
To ensure long-term preservation, protection, and eventually interpretation, these high-value areas require the following considerations:

- Preservation areas will require access control to ensure against unwanted intrusion, inadvertent damage, etc.
 Access to key resource areas must also be managed to avoid uncontrolled and indiscriminate entry.
- Providing for line-of-sight views in directions of first and second wave aerial attacks is equally important to understanding the events of December 7, 1941.

- Areas where development will be excluded or managed shall be identified.
- Securing public and private funding is critical to the long-term protection, preservation, restoration and maintenance of the historic resources.
- Identifying an entity to accept responsibility for overseeing and managing the battlefield preservation areas and resources.

Inherent in this plan for the Ewa Field battlefield are:

- Providing opportunities to visit and interpret areas of the battlefield containing resources and contributing elements associated with December 7, 1941 and World War Il by improving access for vehicles, pedestrians, and bicycles via an entrance driveway.
- Integrating the battlefield preservation areas with nearby public trails, historic sites, and existing and planned City/County parks and recreational facilities in the Kalaeloa area where possible.
- Setting aside designated areas for vehicular parking and visitor gatherings while improving areas devoted to commemorative ceremonies and other related events.
- Acquiring, installing, and maintaining interpretative signs, exhibit boards, way-finding signage and other visuals leading to and at the resource locations to describe the December 7, 1941 battle, its significance, and the role of Ewa Field during World War II.



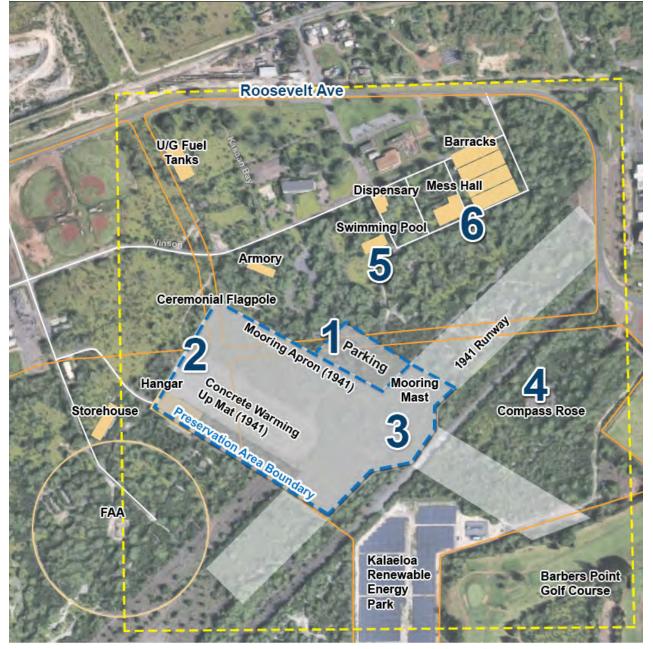


5. Ewa Battlefield Preservation Plan

The relatively recent listing of Ewa Field on the National Register, the somewhat remote location in southwest Oahu, and the conditions which currently exist in the area have largely precluded public awareness of the battlefield and its history. The absence of standing structures dating to 1941 further limits an understanding of the site and its historical importance. Even the most knowledgeable individual would have difficulty locating the surviving elements of Ewa Field under its present conditions. In addition, access to the battlefield area is strictly limited to avoid illegal dumping, damage to the remaining resources, and similar impacts, further reducing the public's knowledge and appreciation.

Along with reaching agreement amongst the key parties concerning a battlefield preservation area, an important step in the sequence of actions is to develop a plan that will help inform and educate the public about Ewa Field and its role in the Japanese attack on Pearl Harbor on December 7, 1941. Based on the historic resources that are present at Ewa Field, this Preservation Plan has been developed to aid in accessing and interpreting the battlefield, identifying important resource locations, offering recommendations regarding placement of permanent information kiosks, display exhibits, and way-finding signs; and safe and convenient pathways to provide access to the key resources and information to visitors. The plan must also recognize the need for an ADA-compliant experience.

Based on the agreed-upon battlefield preservation area and the resources identified for preservation and protection, this plan identifies proposed locations for public access, vehicle parking, and pedestrian paths that would lead visitors to the key resource locations at Ewa Field. The proposed pathways would be well-defined to encourage exploration of the entire Ewa Field preservation area. Placement of informational kiosks, panels and exhibits would follow the designated pathways to explain various aspects of the December 7, 1941 battle and mark the former locations of important structures, together with key elements on the landscape that help explain and understand the events of that fateful day. As part of future preservation phases, images for informational displays would be gathered to aid in describing the history of Ewa Field and its importance, along with design, construction and installation of interpretive materials, exhibit panels, and kiosks.



Ewa Battlefield Preservation Plan Elements

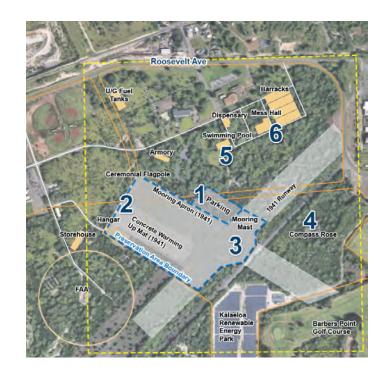


Junction of Roosevelt Avenue and Philippine Sea Road; one possible entrance to battlefield preservation area.





Example of entrance signage to be placed at entrance to Battlefield Preservation Area. Consider use of lava rock as base for signage.



Ewa Battlefield Entrance

Regional access to the Ewa Battlefield is available from a number of existing main roadways including Roosevelt Avenue, which connects to Fort Barrette Road, Kapolei Parkway, and eventually H-1, or via Geiger Road which connects to Kapolei Parkway and Fort Weaver Road and eventually H-1.

From Roosevelt Avenue, entry to the battlefield preservation area could be gained via Philippine Sea Road, the original access road to the base. However, relying upon Philippine Sea Road will require considerable vegetation removal to reach the preservation area. Other alternatives could include use of Corregidor Street and Arndt Street, Kasaan Bay Street to Vinson Road, or Bober Road. Each alternative would lead to a new Visitor Center and visitor parking lot to be established close to the preservation area and the historic resources.

Another alternative could be to develop a new access roadway from Geiger Road that would lead to the Ewa Battlefield preservation area along an alignment running parallel to the 1941 runway or by using the adjoining 1943 taxi strip. Either alignment would lead to a new visitor parking area to be established close to the preservation area and the historic resources.

Permanent signage would be placed at the eventual entrance location to direct visitors to the Ewa Battlefield parking area. Overgrown vegetation and any debris or obstructions along the proposed entrance roadway would need to be removed and the pavement repaired or resurfaced as necessary.

Location #1: Battlefield Preservation Area Access and Parking

From the main entrance road (Roosevelt Avenue or Geiger Road), one would enter the battlefield area via an access drive leading to a designated parking area; it will be important that the access drive accommodate visitors who walk, bicycle or drive to the battlefield. Ideally, the new parking area would be located adjacent to or in proximity to the Mooring Apron and the first of several key locations where the story of Ewa Field and the December 7, 1941 battle would be explained. A centrally-located parking area is necessary to allow for easy access to Ewa Field, reduce walking distances to important historic features, and allow for a rapid response in the event of an emergency. Permanent signage and exhibits would be placed at the parking area to orient visitors to the features within the preservation area. Overgrown vegetation and any debris or obstructions along the proposed entrance roadway would need to be removed and the roadway pavement repaired or resurfaced as necessary and an area set aside for vehicle parking.



Directional signage (typical).





Proposed location of new parking area adjacent to Mooring Apron



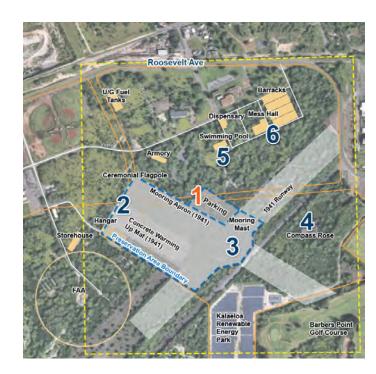
Parking to be provided within designated lot near Mooring Apron (example).



Example of Quonset Hut for possible use as visitor center



Example of Quonset Hut for possible use as visitor center



Theme: WWII in the Pacific & Ewa Field

Location #1: Ewa Battlefield Visitor Center

To attract visitors and help raise awareness of the unique importance of the Ewa Battlefield, establishing a Visitor Center will be necessary. Such a center, to be co-located with the parking area, would be the starting point for visitor orientation, points of interest, concessions, etc. Restrooms would also be provided at this location.

It would be here that visitors would be introduced to the historic battlefield. The Visitor Center should present the overall historical context of World War II in the Pacific, the important roles that Hawaii played in supporting the U.S. during the war, and that of Ewa Field on December 7, 1941, and throughout the war until its eventual closure. Over time, the Visitor Center would be equipped with displays, videos, information on the history of Ewa Field, the locations of other World War II military installations in Hawaii, along with handouts to guide visitors to historic sites throughout Oahu including Ewa Field. Over time, with contributions from military and historical groups, the Visitor Center could become a museum, housing historical artifacts, maps, and other similar materials for future generations.

Although there are no structures standing at Ewa Field dating to December 7, 1941, consideration should be given to identifying possible structures, such as a vacant/unused Quonset Hut or similar World War II or mid-20th century structure, that could be dismantled, transported, and reassembled at Ewa Field to serve such a purpose. Building availability, condition, and suitability for relocation, along with source(s) and amounts of funding necessary for acquisition, renovations, maintenance, and operation would need to be determined.

Theme: Ewa Field History

Location #2: Battlefield Preservation Area

After arriving at the parking area, visitors would travel a short distance to a permanent shelter and information kiosk (Location #2). Information provided at this location would depict the boundary of the Ewa Battlefield preservation area and the locations of the historic resources contained within it.

The information provided at this location would also describe the history of Ewa Field and impart the significance and contribution of the installation in Hawaii's history prior to, during and following World War II. Included would be the history of the development of the base initially for use by dirigibles, its transformation to an emergency airfield and later a Marine Corps airfield, the December 7, 1941 attack, use of the airfield and installation during World War II, and following the end of the war.

Additional information to be provided at this location would include the overall Ewa Field base layout and history along with the locations of the Mooring Apron, Concrete Warming-Up Mat, 1941 Hangar, Ceremonial Flagpole, Runways, Mooring Mast/Control Tower, and Compass Rose. Views toward mountains where attacking planes approached would also be highlighted and described. This area was the heart of the airfield.







Credit: Gray Marine Corps Research Center

Credit: U.S. Nav





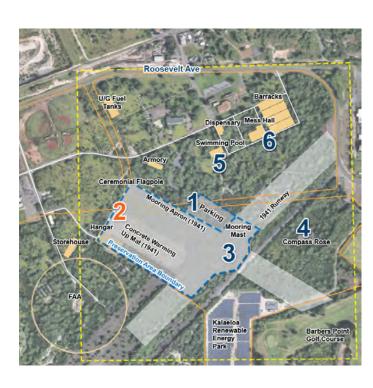
Mooring Apron (obscured by dense vegetation).



Mooring Apron, 1941 (Credit: National Register of Historic Places Nomination)



Present day landscape (typical).

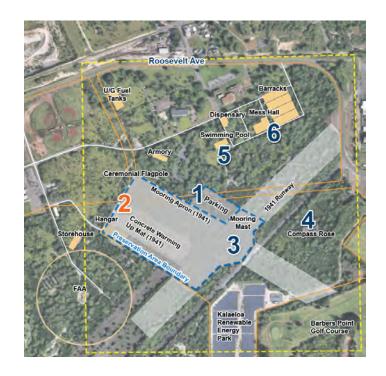


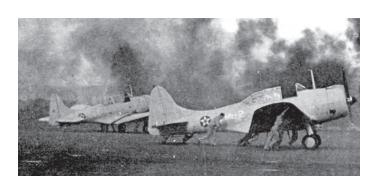
Theme: Ewa Field History Location #2: Mooring Apron

The Mooring Apron would be a gathering area for visitors and the first of several historic features within the Ewa Battlefield. A permanent information display would be provided where visitors can view historical photos and images of the Mooring Apron and learn of its construction and use. Extensive clearing of vegetation would be needed to reveal the entire Mooring Apron. Information would be provided that would lead visitors from the Mooring Apron to the Concrete Warming-Up Mat, Ceremonial Flagpole, former Hangar, and other historic features in the vicinity.

Theme: Ewa Field History **Location #2: Concrete Warming-Up Mat**

Visitors are directed from the Mooring Apron to a permanent information display at the Concrete Warming-Up Mat located south of the Mooring Apron. Information and exhibit boards would be provided with historical photos and information about the use of Concrete Warming-Up Mat and strafing marks and other evidence of the December 7, 1941 battle. Directional information would be provided from the Concrete Warming-Up Mat to the Flagpole, former Hangar, and other kiosks and historic features in the vicinity. The Concrete Warming-Up Mat would also be used to access other historic resources in immediate vicinity (i.e., former Hangar, Flagpole, Runways). Vegetation and debris would need to be removed to expose more of the Concrete Warming-Up Mat and to allow for safe pedestrian use.









Concrete Warming-Up Mat (present day). (Credit: AECOM)



Concrete Warming-Up Mat (1941).





Present-day Ceremonial Flagpole location on Concrete Warming Up Mat (Credit: AMVETS Hawaii)



Flagpole location in western portion of Concrete Warming-Up Mat



Theme: Ewa Field History Location #2: Ceremonial Flagpole

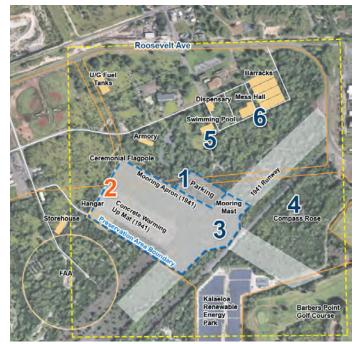
Visitors would be directed to the area of the Ceremonial Flagpole located within the western portion of the Concrete Warming-Up Mat. Although not the historical location of the Ewa Field flagpole, it has long been the location for memorial remembrance ceremonies honoring Marine Corps veterans and those who perished at Ewa Field during World War II. The area of the Ceremonial Flagpole would continue to be the focal point for future commemorative celebrations, events, observances, and similar activities. The surrounding area would be enhanced by removing any invasive vegetation, debris, and other materials. A large permanent display exhibit would be provided with historical photos and information, images of past ceremonies and events at this location. It will be especially important that this location is ADA-accessible. Directional information would also be provided from the Ceremonial Flagpole to the Mooring Apron, Concrete Warming-Up Mat, former Hangar location, and other historic features in the vicinity.



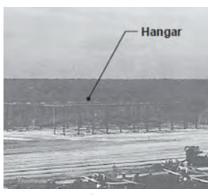
Original flagpole near base entrance, August 21, 1941. (Credit: National Archives and Records Administration)

Theme: Ewa Field History **Location #2: Former Hangar Location**

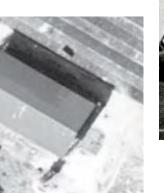
Visitors would be directed from the Ceremonial Flagpole to another permanent information display exhibit to be installed at or near the former 1941 Hangar location adjacent to and south of the Concrete Warming-Up Mat. With the 1941 Hangar no longer standing, exhibits would depict historical photos and images of its construction and use along with information explaining the role of the Hangar at the base. Any vegetation and debris would be removed as necessary to reveal the entire Hangar footprint. Directional information would also be provided to lead visitors to the Ewa Field Runways, the former Mooring Mast, the Compass Rose, and other historic features in the vicinity.







Hangar (Credit: Gray Marine Corps Research Centerl





Former Hangar location south of Concrete Warming-Up Mat.



Hangar under construction (Credit: Goldstein and Dillon, 1991)





Credit: National Archives

Roosevelt Ave Dispensary Mess Hall Swimming Pool Armory Ceremonial Flagpole Armory Storehouse Roosevelt Ave Dispensary Mess Hall Swimming Pool Armory Storehouse Roosevelt Ave Armory Swimming Pool Armory Armory Swimming Pool Armory Swimming Pool Armory Armory Armory Armory Swimming Pool Armory Armory



Runways are deteriorating from vegetative growth, weather, other factors.

Theme: Ewa Field HistoryLocation #3: Ewa Field Runways 3 and 29

Visitors would be directed from other historic features, the parking lot, and elsewhere to the intersection of the Ewa Field Runways Nos. 3 and 29. The location represents an opportunity to provide a permanent information display exhibit depicting images of the runways and their evolution in construction and use. Maps and other images would show the types of aircraft stationed at Ewa Field, the direction of attack, Japanese aircraft involved in the battle, and the aftermath with damage and destruction to aircraft, structures, and personnel. Directional information would also be provided leading visitors to the former Mooring Mast location, Concrete Warming-Up Mat, Compass Rose, and other kiosks, exhibits, and historic features in the vicinity. Extensive vegetation removal will be necessary to reveal portions of the north-south and eastwest runways and allow for clear sight lines towards distant mountains and directions of attack.

Given the poor condition of all runways, concerted efforts will be needed to provide safe, ADA-compliant pedestrian access. Opportunities to connect the exposed runways to the planned City/County park and recreation area to be developed south of runway should also be explored with City/County Parks and Recreation Department.

Theme: Ewa Field History

Location #3: Former Mooring Mast/ Control Tower Location

With the origins of Ewa Field largely the result of the Navy's Rigid Airship Program, attention should be given to the history and location of the former Mooring Mast. This presents another opportunity to install a permanent display exhibit with historic photos, a plan of the base depicting the location of the Mooring Mast, along with information about development of the base for use by dirigibles.

A 160-foot tall mooring mast was installed in 1925 although never used, followed by conversion into a Control Tower to support Ewa Field as an emergency airfield and a training site, and later as a Marine Corps Air Station. The evolution of the dirigibles and aircraft during the time that Ewa Field was active would also be described. Vegetation would need to be cleared and debris and obstructions removed to reveal the Mooring Mast/Control Tower area.





Credit: Paradise of the Pacific



Former Mooring Mast location east of Mooring Apron (obscured by dense vegetation)

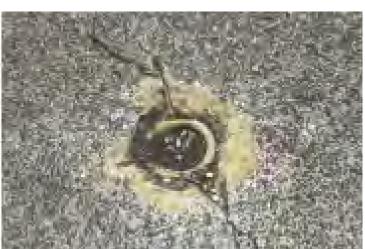


Ewa Mooring Mast looking North-North East, January 8, 1935

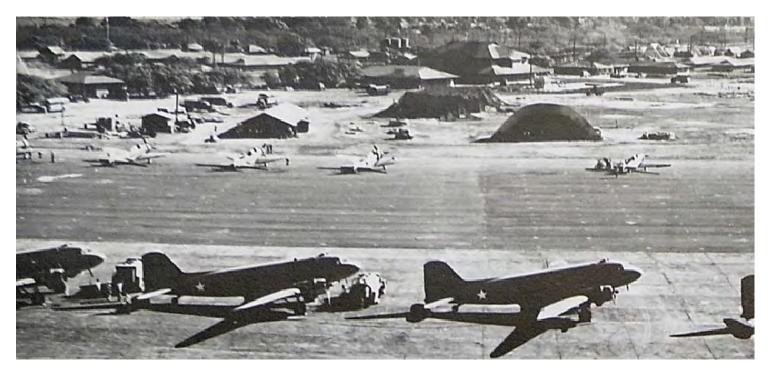


Former Mooring Mast (Credit: National Archives)





Compass Rose (Credit: HHF Planners)







Theme: Aviation

Location #4: Compass Rose

Another important historic feature at Ewa Field is the Compass Rose. The Compass Rose is symbolic of military aviation, and was used to calibrate the aircraft magnetic compass and served as a unique airfield identifier. Since the location of this feature is not contiguous with the historic resources comprising Location #3, a path would be established extending eastward through the dense vegetation along Cross Runway 29 to the Compass Rose (Location #4), recognizing that the original Compass Rose was in another location. Here a small area of land (approximately one acre) would be cleared and permanently set-aside to preserve and protect the Compass Rose from encroachment by development.

A permanent exhibit display would be installed with information describing aviation from the 1920s through the time that Ewa Field was closed in 1949, historic images of the Compass Rose and a description of its function, use, and importance to aircraft operations, along with images and descriptions of World War II aircraft and aerial warfare at the time.

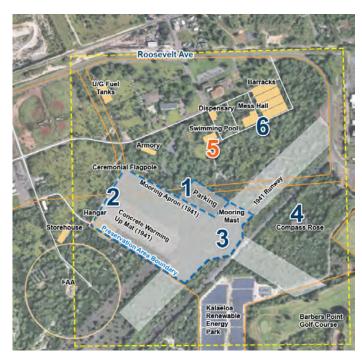
Theme: Recreation

Location #5: Swimming Pool

Another important historic feature at Ewa Field is the Swimming Pool which on December 7, 1941 was still under construction. Nonetheless, Marines used the pool for protection while they returned fire against the Japanese attack.

Recreation served as a social and physical outlet from the routineness of daily military life and the stress of preparing for battle and was encouraged as a way to reduce stress, build skills, bond with fellow soldiers, and encourage fitness. A permanent exhibit display would be installed here with information focusing on the military and how recreation was integrated into the soldier's life. Maps and photographs of the historic Ewa Field installation would be exhibited along with the area of the base within which the recreation center and swimming pool existed. A description of the important role recreation played in a soldier's life along with the Swimming Pool's important role as a defensive site during the December 7, 1941 attack would also be provided.

As with the Compass Rose, this feature is not contiguous with the historic resources comprising Location #3, therefore a small area of land (approximately one acre) would be permanently set-aside to preserve and protect the Swimming Pool from encroachment by development. To provide access and restore the area to a condition resembling that of December 1941, a path would be established by removing the dense vegetation between Philippine Sea Road and the Swimming Pool. Additional vegetation removal will be necessary to provide an area for vehicle parking. Removal of the debris that currently obscures the Swimming Pool would also be necessary to restore its original appearance.





Present day swimming pool (Credit: AECOM)



Marines in pool construction on December 7, 1941 (Credit: National Park Service)



Present day swimming pool (Credit: AECOM)



Recreation building (Credit: National Archives)



Finished swimming pool adjacent to recreation building

Theme: Military LifeLocation #6: Barracks Area

Understanding a soldier's daily life in 1941, outside of warfare training, is another important aspect of the story of Ewa Field. This area of the base included sleeping arrangements, daily duties, meals, laundry, and the day-to-day tasks and activities that occupied the enlisted soldier when not in training. It is where a large portion of a soldier's daily life occurred. These included assigned tasks to help the installation to operate efficiently, as well as personal time and time spent socializing with their fellow servicemen.

As with other historic features, the Barracks Area is not contiguous with the historic resources comprising Locations #2, #3, #4 or #5. All that remains of this once densely occupied and well-utilized area comprising the original locations for the barracks, mess hall, and other troop-support structures, are concrete slabs that once served as the foundations for the buildings here. Preserving these slabs would not help people to understand what once was here and its context to the organization of the base, but the story of the soldier's military life, responsibilities, and how the quickly-constructed camps and bases became the soldier's home for months or years, is an important aspect to understanding what occurred at Ewa Field. The opportunity to read and see images about the buildings once here and activities that took place is more meaningful when one can stand at that same location, as it provides a context of where day-to-day life occurred on the base. It also allows a human connection of being at the same place where the soldiers ate, slept, and connected with each other outside of their daily duties. Exhibits should be located here to describe the soldier's life aspect of the base history. To provide access, a pathway would be established by removing portions of the dense vegetation, debris and obstructions along Day Road from its junction with Philippine Sea Road.

In this area, various exhibits with historic photos and information about this area of the base which in December 1941 included clusters of wooden buildings and canvas tents supporting housing, mess hall, dispensary, and other features. Directional signage would also be provided along Day Road guiding visitors to other historic features and exhibits. The trail would also connect to Philippine Sea Road and signage would be provided for those returning to the parking lot, Visitor Center, etc.





Barracks area









6. Stakeholder Engagement

Success in advancing battlefield preservation efforts that respects the historical significance of the Ewa Field battlefield while acknowledging the future planned development in Kalaeloa, requires the input and advice from a broad array of agencies, organizations, stakeholders, and individuals who have devoted themselves to honoring the men and women associated with the December 7, 1941 battle. Ultimately, a plan will succeed if it is developed with the support of key stakeholders and the public and is adopted by decision-makers.

Since initiating the planning process, meetings have been held with key stakeholders to engage in a dialogue to identify common goals and objectives and the means to achieve such goals. Such discussions have yielded valuable insight and guidance so that the eventual agreed-upon battlefield preservation area and Interpretive Plan properly considers the valuable historic resources. Outreach and engagement has occurred with the following organizations:

- U.S. Navy (NAVFAC)
- Historic Hawaii Foundation
- Hawaii State Historic Preservation Division
- Department of Hawaiian Home Lands
- Hawaii Community Development Authority
- City & County of Honolulu Parks and Recreation Department
- AmVets Hawaii Service Foundation
- State and Local Elected Officials
- Barbers Point Riding Club
- Naval Air Museum Barbers Point
- Pearl Harbor Aviation Museum
- The Outdoor Circle
- Hawaii Community Foundation
- Kanahili Cultural Hui Save Ewa Field
- National Trust for Historic Preservation
- Kapolei Chamber of Commerce
- HCDA Kalaeloa Community Network
- Others

One-on-one meetings and small group sessions have already been held with additional discussions and coordination held asneeded as this effort advances to seek out the input of participants in the planning process, ensure the accuracy of information, and ultimately support a successful outcome.



7. Telling the Story of Ewa Battlefield

With virtually all evidence of Ewa Field and the structures that existed on December 7, 1941 lost, telling the story of Ewa Field and the historic event that day will be challenging. Therefore, available historic photos, first-hand accounts, maps and other images and information will be relied upon to bring the story to life.

Exhibits and other interpretive materials would be developed and installed at various locations to educate visitors about the men and women who lived and worked at Ewa Field before, during, and following the December 7th battle. Included would be maps, photos, illustrations and descriptions of the structures that existed at the time that comprised the base. Each exhibit would focus on the historic feature or structure at particular locations along the battlefield walking trail to provide visitors the information about what took place at that specific location. The information provided on the exhibits would be developed to educate visitors of all ages and backgrounds.

Information kiosks would also be installed at key gathering places to provide general information to visitors. Maps would be used to identify the routes and the important historic features along the route. Rules and regulations for visiting the battlefield would also be provided along with information about how to support the preservation and restoration of the battlefield, volunteer groups, schedules of events and ceremonies, and other activities.



Sample kiosk







Sample exhibit boards







Sample kiosks



8. Next Steps

The success of any plan is dictated by the actions and resolve of those involved in its implementation. Recommended steps for moving the planning process forward are offered below:

- Finalize the boundaries of the proposed preservation area to reach consensus and gain acceptance by the Navy, affected landowners, Hawaii State Historic Preservation Division, and others.
- As a result of reaching consensus on a preservation area, determine areas that can be developed, to what extent, and under what conditions.
- Establish a Task Force, Committee, or other group comprised of representatives of the Navy, affected landowners, Hawaii State Historic Preservation Division, state and local governments, and/or others to oversee short-term management of the preservation area.
- Empower the Task Force (or similar group) to develop long-term objectives and a management plan for preserving and restoring the Ewa Battlefield to include short-range and long-range goals, preservation priorities, phasing, timing, funding requirements, etc.

- Solicit an entity (governmental agency, non-profit, other organization) to accept responsibility for long-term protection and management of preservation area.
- Establish an overall vision for battlefield preservation to guide future activities.
- Prioritize actions to provide access, guide preservation efforts, and ensure long-term protection of the battlefield preservation area. For example, allow controlled access to Ceremonial Flagpole for volunteers to enhance the area and permit commemorations and events to take place.
- Collaborate and coordinate with Hawaii Community
 Development Authority and others to ensure battlefield
 area is recognized and incorporated within area-wide
 plans.
- Support policies and plans that will advance battlefield access, protection, and restoration and avoid conflicting with or detracting from long-term access and preservation.

- Solicit funds, grants, and other financial support for preservation area protection, management and restoration.
- Organize individual volunteers and groups (Scouts, historic preservation advocates, military organizations, etc.) to assist with clean-up and vegetation removal; serve as tour guides, docents, etc.
- Develop public information materials, website, and other approaches to increase awareness and understanding of historic Ewa Field and its role on December 7, 1941, and World War II.



9. References Consulted

Documents

14th Naval District, Pearl Harbor, T.H.

1940-1945. Collections located at National Park Service, Pearl Harbor; National Archives, San Francisco; and National Archives, College Park MD.

AECOM. March 2011. Battlefield Evaluation of Ewa Field, Charlottesville, VA

GAI Consultants

2013 National Register of Historic Places Nomination Form for Ewa Plain Battlefield , Kapolei, HI, December 2013.

2018 National Register of Historic Places Nomination Form for Ewa Field South Revetment Historic District, August 2018.

HHF Planners and Louis Berger

2015 Ewa Field Cultural Landscape Assessment. Prepared by HFF Planners and Louis Berger for NAVFAC Hawaii.

Hollingshead, Billie, 2nd Lt., USMCWR., 1945 The Japanese Attack of 7 December 1941 on the Marine Corps Air Station at Ewa, Oahu, Territory of Hawaii. Headquarters U.S. Marine Corps Historical Division, January 1945.

Lt. Colonel Claude Larkin Collection, 1941-1942- Personal Papers, Gray Marine Corps Research Center.

Mason Architects, Inc. March 2011. Inventory and Historic Contexts.

Naval History and Heritage Command, 1940-1945 MCAS Ewa, Photographs, General Development Plans, and Operations Histories.

NAVFAC Hawaii, 2014 National Register of Historic Places Registration form (Determination of Eligibility) for the Ewa Mooring Mast Field, Kalaeloa, HI. February 2014

NAVFAC Hawaii, Real Estate Division,

1940-1945 Mapping, deeds and aerial photographs, MCAS EWA.

U.S. Department of the Interior, National Park Service, Keeper of the National Register.

2015 "Determination of Eligibility Notification for the Ewa Mooring Mast Field." Signed February 9, 2015.

Tuggle, David, and Tomonari-Tuggle, M.J.

1997 A Cultural Resource Inventory of Naval Air Station, Barbers Point, Oahu, Hawaii, Part I: Phase I Survey and Inventory Summary. International Archaeological Research Institute for NAVFAC Pacific.

Personal Communications

AMVETS Hawaii Service Foundation Corp.

Barbers Point Riding Club

City and County of Honolulu, Department of Parks and Recreation

City and County of Honolulu Department of Planning and Permitting

Department of Hawaiian Home Lands

Federal Aviation Administration

Hawaiian Railway Society

Hawaii Community Development Authority

Hawaii Community Development Authority, Kalaeloa Community

Hawaii Department of Land and Natural Resources, State Historic Preservation Division

Hawaii Department of Transportation - Airports Division

Historic Hawaii Foundation

Kanahili Cultural Hui - Save Ewa Field

Kapolei Chamber of Commerce

Members, Hawaii State Senate

Members, Honolulu City Council

Museum of Military Vehicles of the Pacific

National Trust for Historic Preservation

Naval Air Museum, Barbers Point

Pacific Historic Parks

Pearl Harbor Aviation Museum

U.S. Department of the Interior, National Park Service

U.S. Navy, NAVFAC Hawaii

