QUONSET HUT SURVEY
AND CONTEXT REPORT
FOR HAWAII AND NAVY
SUPPORTED ACTIVITIES
IN THE PACIFIC

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Naval Facilities Engineering Command
# QUONSET HUT SURVEY AND CONTEXT REPORT FOR HAWAII AND NAVY SUPPORTED ACTIVITIES IN THE PACIFIC

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EXECUTIVE SUMMARY
1.0 EXECUTIVE SUMMARY

“Once in a while, a really good design surfaces – robust, simple, and enduring. The DC-3, the Jeep and the Quonset hut are all examples of good design.”¹

Mention of the name “Quonset hut” immediately conjures up images of a corrugated metal building semi-cylindrical in shape. The name derives from its place of initial production, Quonset, Rhode Island, a small peninsula in Narragansett Bay that retained its Native American place name meaning “small long place.” Devoid of architectural pretension, the building has strictly utilitarian associations. An easily manufactured and constructed shelter, it was a practical solution to a logistical problem or, as St. Louis Dispatch reporter Elaine Viets observed, “They were as homely as sewer pipes and just as useful.”²

The Quonset hut was developed by the U.S. Department of Defense (DoD) to be quickly erected almost anywhere in the world; over 150,000 Quonset huts were constructed before and during the massive World War II build up of facilities. The majority were considered excess almost immediately after the war when the DoD no longer needed them. The nostalgia for Quonset huts is reflected in a website dedicated to documenting this building type. The website³ has so far located over 250 Quonset huts adapted for various uses throughout the world, but mostly in the United States.

Fig. 1-1 Cartoon Indicating the Ubiquitous Nature of the Quonset Hut
(New York Times, January 1946)
In Hawaii, Quonset huts were not the focus of the 1978 Preservation Plan for Pearl Harbor National Historic Landmark (PHNHL), when only 57 Quonset huts were included in the inventory. This plan was superseded by subsequent Section 110 inventories and cultural resource management plans. Barbers Point was not part of the inventory as it was not part of the Navy’s jurisdiction at the time. Based on maps and aerial photos from the 1960s to 1974, approximately 43 Quonset huts existed at Barbers Point and other areas not part of the PHNHL. Therefore a total of approximately 100 Quonset huts existed on what is now considered Navy or Navy-leased land. Forty of these huts still exist.

Of the 40 Quonset huts addressed in this report, two were found near former Navy lands during survey activities and are included in the inventory sheets but are not ranked. Four facilities that were included in the contract task order are not included in the report for the following reasons:

- Quonset hut 101 in Waipio was incorrectly identified in the original list provided by the Navy as S-193 and could not be located in the field survey. The Quonset hut was demolished in 1996.
- Facility 212 on Ford Island was a concrete hardened magazine structure, founded it is not an Armco hut during field survey.
- Facility Q326 on Kauai was found to be a new structure per NAVFAC.
- Facility 408 on Naval Submarine Base Pearl Harbor has been demolished.

There are basically four types of Quonset huts found on Navy lands.

- Standard Utility Hut (larger hut, approximately 40' wide by 100' long)
- Extended Hut (two large huts extending the length to approximately 200' long)
- Modified Standard Utility (the Standard Utility Hut was modified in numerous ways)
- Tropical Hut (small, approximately 20' x 48' with manufacturer’s standard modifications for a tropical climate)

When ranking the extant Quonset huts for treatment recommendations, the best examples of each type were given the highest ranks, taking both historic integrity and physical integrity into consideration. The district of Quonset huts used as warehouses at West Loch was given the highest ranking because they have retained the most historic integrity, including the contextual setting for the huts. Most huts were developed in multiples therefore this grouping of huts stands out not only as a good example in its original context, but this group has been used continually and are thus in fair condition. For the purposes of categorization, historic integrity was given more weight than physical condition, since most of the characters defining features remain. See Chapter 11 for a summary table of the report findings.

Due to its composition almost entirely of steel, the majority of the extant Quonset huts are not in good physical condition. Those huts that are in good physical condition often lack much of their historic integrity since they have been modified considerably over years of use. The Quonset huts that have been abandoned and unused for years are in extremely poor condition. While these huts may have retained their historic integrity, poor physical condition has made deconstruction the most viable treatment recommendation.
**Temporary building types prior to WWII**

Temporary buildings are always hurriedly needed in times of war and other emergencies. For economy and ease of construction, wood buildings were the material of choice before the Nissen or Quonset hut was developed. Basic tents were the most common temporary building, but also the Dallas Hut wood frame with canvas was used.

**ACKNOWLEDGEMENTS**

The assistance of numerous individuals during the survey and successive report production is gratefully acknowledged.

We wish to sincerely thank the many individuals who assisted us in the project or who provided essential information, including the staff at NAVFAC HI, NAVFAC PAC, CB Archives at Port Hueneme, and Hawaii State Archives. In particular, Jeff Dodge, AIA provided an incredible amount of information based on his extensive knowledge.

We very much appreciate the following people who gave their time, allowed us to interview them and provided valuable information: Mrs. Joyce Fasi, Mr. Ronald Hirahara, Mr. Cliff Garcia (owner of Tropical Lamp and Shade Co.), and Mr. Ernest DeCoto (Facilities Manager at Navy).

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**Endnotes**

1 Seabee Museum and Memorial Park, Quonset Huts, website: www.seabeesmuseum.com/Quonset_Huts.html.

2 Viets, *St. Louis Dispatch*, April 21, 1996, p. 4

INTRODUCTION
2.0 INTRODUCTION

Scope of Work

Commander, Navy Region Hawaii (CNRH) and other Navy activities in Hawaii are required under Section 110 of the National Historic Preservation Act of 1966 (NHPA), as amended, to inventory and develop a management treatment plan of historic properties that may be substantially altered or demolished as a result of a Navy action. The Navy has consulted with the Hawaii State Historic Preservation Division/HISHPO, the Advisory Council on Historic Preservation (ACHP), and other preservation groups regarding the CNRH Fiscal Year (FY) 2009 Footprint Reduction Program. This report is being prepared as mitigation for demolition that will occur under the FY09 program and out-year programs. The draft report has been presented to the consulting parties to the 2009 Footprint Reduction Program MOA and comments have been incorporated.

Goal of Report

The primary goal of this report is to provide supporting documentation to assist in the management of the Quonset hut facilities for CNRH. Facilities include 23NS, 1520, Q13, Q14, 17BE, A12, X8, X9, X18, X20, X21, X24, T15/15A, K19, K20, K21, K22, K23, K24, K28, K29, K30, K31, K32, K33, MQ39, Q353, Q345, 423, Q326 located on Navy land at various locations, Facility 152, 1144 (former 706), 1149 (former 734), 1150 (former 735), 1152 (former 741), 1153 (former 742), 1545 (former 607), 1562 (former 713), 1570 (former 725), 537, 1506 located at Navy’s leased land at Ewa/Barbers point, Oahu Island, Hawaii and selected facilities located at the former Navy land. Facilities S-193, 212, Q326, 408NS are not included for various reasons. (See Fig.2-3 and 2-4)

Area of Study

The Quonset hut inventory area of study includes land under Navy’s jurisdiction at the start of this study in 2010. Navy-leased land and former Navy land that were part of the 14th Naval District are covered in the broader historic context. The 14th Naval District, headquartered at Pearl Harbor Hawaii, was established in 1916. In May 1940, the U.S. Navy Battle Fleet moved from the West Coast of the United States to Pearl Harbor, Hawaii. The result of this movement and the division of the fleet into the Pacific and Atlantic Fleets resulted in a great expansion of base and support facilities at Pearl Harbor. This continued through-out World War II. In 1945, the 14th Naval District’s area of responsibility included the Hawaiian Islands, Midway, Wake, Kure, Johnston and Sand Islands and Kingman Reef. In 1950, the area of responsibility extended across the Pacific to include Kwajalein Atoll and the Marshall Islands. Fig. 2-1 indicates what was considered the 14th Naval District as of 1953. In 1979, the 14th Naval District was disestablished and control was passed to the Commander in Chief, U.S. Pacific Fleet with real estate management responsibilities passed to the Commander Naval Facilities Engineering Command (NAVFAC), Pacific.
Use of Report

This study will be used to help CNRH:

- Determine which Quonset huts are historically significant and should be a priority for continued use, and which would be likely candidates for future footprint reduction.
- Ensure character defining features and elements of these Quonset huts that contribute to their significance, are identified and adequately documented.
- Ensure appropriate historic property treatment measures are recommended.

Project Team

- Julie Lam, Researcher – Fung Associates, Inc.
- Geoffrey Mowrer, Historian/Researcher
- Nancy Farrell, Historian/Researcher – Cultural Resource Management Services (CRMS)
Fig. 2-3 Quonset Huts Deployment in the 14th Naval District
Fig. 2-4 1944 Navy and Army, Barbers Point to Honolulu Location Map
(Map Provided by NAVFAC HI)
Fig. 2-5 Location of Navy & Marine Installations in Hawaiian and Outlying Islands, Central Pacific Area

METHOD OF STUDY
3.0 METHODOLOGY

The work for this study fell into four major categories: background research, field analysis, data analysis, and report preparation as discussed below.

**Background Research/Data Collection**

Background research included developing a historic context of when the Quonset huts were built as well as their changes through the Cold War period (including Vietnam War context).

- Reviewed existing information including documents at the Navy’s History and Heritage Command (NHHC) in Port Hueneme California, such as the structural plans and as-built drawings of the building, maps, photographs and other relevant documents such as previous historical or cultural studies or assessments provided by the Navy.

- Interviewed two Quonset hut owners, one commercial property owner, and one who resided in a Quonset hut.

- Interviewed Ron Hirahara whose family owned Dan’s Lumber, competitor of Frank Fasi in the salvage business.

- Spoke with Joyce Fasi over the phone.

- Reviewed drawings available through NAVFAC archival research.

- Researched various books and websites to understand the broader national and regional historic context of Quonset huts.

- Reviewed the Quonset hut manufacturer’s product and erection manuals.

- Conducted field visits to verify existing conditions.
Field Analysis

Field analysis was performed at the various areas of study noted on following maps to review and assess the following:

- Character-defining interior and exterior architectural features, as well as identification of unique features
- Non-historic features not noted in drawings
- Condition of structures for treatment recommendations
- Significance of each facility in its context

Data Analysis

Data analysis of historic features of these structures included:

- Determination of the degree of original elements and modification of the individual features and structures that have occurred since initial construction
- Determination of unique or significant structural elements from the analysis of archival and field data
- Coordination with the Navy Technical Representative (NTR) to select Quonset huts remaining on former Navy lands for the purpose of enhancing the context information
- Treatment and ranking analysis utilizing information gathered from drawings, field analysis and Secretary of the Interior standards and guidelines

Report Preparation

- Coordinated with the NTR to determine the Navy’s priorities and capabilities of maintenance for deteriorating Quonset huts
• Prepared illustrations, drawings and photographs to aid in explanation of concepts and document features
• Prepared historic contexts
• Prepared inventory forms
• Prepared tables to summarize and organize elements of this report
LEGISLATION, POLICIES AND NHPA CONSULTATION HISTORY
4.0 LEGISLATION, POLICIES, AND NHPA CONSULTATION HISTORY

The following sections include legislation and polices that federal agencies need to take into consideration for any project or action that may affect a historic resource.

Federal Legislation

National Historic Preservation Act (NHPA) of 1966 (as amended) (16 USC 470 et seq.)
The intention of this legislation is to encourage the preservation of historical and archaeological sites in the United States of America. The Act contains several sections which specify procedures and mechanisms for developing and implementing historic preservation programs. The following two sections apply to the creation and use of this report.

Section 106
Requires the Navy, as a federal agency, to consider the effects of proposed undertakings on historic properties prior to the approval of the expenditure of any federal funds on the undertaking, and to give the ACHP, SHPO, and other interested parties the opportunity to comment. The implementing regulation for Section 106 is Code of Federal Regulations Title 36, Part 800. The development of any Programmatic Agreement follows procedures in this section.

Section 110
The Navy is responsible for the preservation of historic buildings under its control or ownership and to use historic buildings to the maximum extent feasible. Section 110 also requires the Navy to establish a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places all historic resources under its jurisdiction or control. The development of the Quonset hut inventory is in compliance with Navy responsibility.

National Environmental Policy Act (NEPA) of 1969 (42 USC 4321-4347 et seq.)
This Act requires federal agencies to identify and consider the impacts of federal actions on the environment, including impacts to historic resources.

Preserve America 2003 (Executive Order 13287)
Actively encourages the preservation of America’s heritage through grants and establishes Federal policy to provide leadership in using historic properties owned by the Federal government.
Policies

The following policies and instructions reflect and provide guidance to protect and manage cultural resources under the jurisdiction of the U.S. Navy. These policies are thoroughly noted in the 2008 ICRMP.

Provides the policy of DoD to integrate historic preservation requirements with the planning and management of activities under DoD control.

Provides guidance regarding the maintenance and repair of structural and architectural elements of Navy facilities, though historic properties are not focused in this document.

Provides Navy personnel with the necessary information for identification, preservation and maintenance of historic resources.

SECNAVINST 5090.8, Policy for Environmental Protection, Natural Resources, and Cultural Programs December 18, 2000
Establishes the U.S. Department of Navy (DoN) policy to integrate environmental protection, natural resources and cultural resources program considerations into all operations and activities as appropriate.

SECNAVINST 4000.35A, Department of the Navy Cultural Resources Program April 9, 2001
Establishes policy and assigns responsibilities within DoN to fulfill the requirements of cultural resources protection laws, regulations, executive policies and directives.

OPNAVINST 5090.1D, OPNAV ENVIRONMENTAL READINESS PROGRAM MANUAL, Cultural Resources, Chapter 13, 1/10/2014
Establishes Navy responsibilities for the management of historic and cultural resources including the policy to incorporate preservation considerations into routine management of cultural resources and to ensure timely consultation with the preservation partners.

COMNAVREG HAWAII INSTRUCTION 5750.1 July 15, 2004
Establishes policy and assigns responsibilities for the management of cultural resources within the Commander, Navy Region Hawaii (COMNAVREG HI) area of responsibility.
NHPA Consultation History

When the Pearl Harbor National Historic Landmark was established and the survey was completed in 1977, Quonset huts were not taken into consideration. The 1978 MOA categorized every Quonset hut as a Category 3 structure. Subsequently much discussion among Preservation Partners has ensued and the following is a brief history of consultation dealing with Quonset huts that may affect the future treatment of these resources. Note that the 1978 MOA and Pearl Harbor Historic Preservation Plan was superseded by subsequent Section 110 inventories and cultural resource management plans. See Appendix E for copies of the consultation letters and agreements summarized below.

Agreement between DoD, the Advisory Council on Historic Preservation (ACHP), and the National Conference of State Historic Preservation Offices (NCSHPO) to mitigate the adverse effect of the program of demolition of World War II temporary buildings. In 1983, DoD was directed by a report by the Senate Armed Services Committee to demolish World War II temporary wooden buildings. Documentation and identification of examples to be kept was part of the resulting mitigation for the demolition of these temporary buildings. The Army was the primary lead agency responsible for documentation of the national context. Navy provided a supporting role. Sixty-four types of wooden buildings were documented in the Army’s most intensive report “World War II and the U.S. Army Mobilization Program: A History of 700 and 800 Series Cantonment Construction” (Wasch, Bush, Glass, Landreth, 1992). Implementing legislation is included in the Appendices.¹

Murphy, John, Memo to Commander, Naval Facilities Engineering Command April 14, 1989
Due to the uncertainty of what was considered a temporary building and an increased interest in World War II temporary buildings, the Department of the Navy attempted to clarify through the Navy Historic and Archaeological Resources Preservation (HARP) Program Manager, John Murphy. The memo generalized that all temporary buildings were those designated in the Detailed Facilities list (P164) as those with a “T” for temporary.

Murphy, John, Memo to Dr. Keith Landreth, Construction Engineering Research Laboratory, Environmental Division May 9 1989
A memo which lists 830 Navy and 284 Marine Corps World War II “temporary” buildings in the Navy Facilities Assets Data Base (NFADB) also called the P164 list for installations that retained over 20 temporary World War II facilities. The structures on this list of temporary buildings and in the inventory of this report include Buildings Q13, Q14 at Ford Island; 17BE at Makalapa; X8, X9 and X24 at NAVFAC HI; T15/15A at Shipyard; 1144, 1149, 1150, 1153, 1520, 1562, 1570 on Barbers Point Navy-leased land; and MQ39 and Q345 at West Loch though these buildings were listed at Lualualei. (See Appendix E for the list, pages with Hawaii properties only.)
Wall, Louis, Memo to Commander, Western Division, Naval Facilities Engineering Command May 15, 1989
Clarifies that temporary buildings listed as such on the P164 list may be substantially altered, demolished or removed after
procedural prerequisites. Provides for exceptions when structure is:
- Unaltered since initial construction
- Unusual, prototype, or one-of-a-kind
- Part of or constitutes a sizable cluster of such facilities
- Previously identified as eligible for listing prior to the agreement
- Identified as Permanent or Semi-Permanent at the time of the agreement.
The Navy HARP Program Manager should be afforded an opportunity to comment on projects that would affect these exceptions.

Amendment to the PMOA among the United States DoD, ACHP, NCSHPO and the Historic American Buildings Survey/ Historic
American Engineering Record, regarding Demolition of World War II Temporary Buildings, 1991
An amendment was made to the PMOA to include larger contextual studies of the various temporary building types so that
an overview and holistic approach could be taken to determine which examples should be maintained to complete the
story of the World War II build up in America.

Murphy, John, Memo to Advisory Council on Historic Preservation, December 18, 1992
In the 1992 letter, the DoN states that the Navy has implemented all stipulations to have completed all mitigation measures to
meet the 1986 PMOA with the 1990 amendment by documenting major types of temporary wooden structures. The U.S. Army
was responsible for recording the WWII temporary wooden structures and included Quonset huts in their supplemental
Training Stations in the United States,” (Garner, 1993).

Programmatic Agreement Among the Commander, Navy Region Hawaii, ACHP and the HISHPO Regarding Navy Undertakings in Hawaii, June 2003
This PA allows certain types of activities to proceed without further consultation provided activity reviewed by qualified
Navy historic personnel. The PA acknowledges that the 23 structures listed in Appendix B of the PA may be governed by the
1986 PMOA, however, the parties to the PA have agreed to engage in discussions to explore preservation options for these
structures. Of the 23 structures listed in the Appendix B, 20 are Quonset huts. Of the 20 Quonset huts listed, 18 still exist and are
included in this report. The PA also stipulates that CNRH will notify the parties to the PA of any action which would be adverse
to be taken under the PMOA with respect to the structures listed in Appendix B of the PA.

Scott, David, Letter to G.P. Jennings, Historic Preservation Program Coordinator, July 30, 2004
Representing a preservation partner, Historic Hawaii Foundation, the letter reviews a Quonset hut survey done by CNRH in
2003 and recommends classification of remaining huts.
Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities, August 18, 2006

Provided the Navy has met the conditions of this Program Comment which includes a supplemental context study and documentation of representative samples, no further Section 106 review is required for World War II and Cold War Era ammunition storage facilities such as the Armco huts.

Yokota, C.K., Letter to Ms. Laura Thielen, Interim Chairperson and SHPO, Department of Land and Natural Resources, SHPD, August 31, 2007

This letter, in response to earlier correspondence from the SHPO, reiterates Navy’s commitment to consult following the 2003 PA regarding the 23 temporary buildings listed, though the 1986 PMOA should take precedence.

Moe, Richard, Letter to Mr. John Nau, Chairman, ACHP, October 29, 2007

Richard Moe, representing preservation partner, the National Trust for Historic Preservation, expressed concerns about the 1986 PMOA. Moe requested a second look at this PMOA especially in its application at Pearl Harbor, a National Historic Landmark.

Updates to the 1978 Preservation Plan occurred in 1998, 2002, 2008 with another update scheduled for 2014. The original MOA associated with the Preservation Plan was cancelled and is currently replaced by the 2003 CNRH Programmatic Agreement (amended July 2012). In summary, the past correspondence, agreements, emails and memos indicate a concern by the preservation partners as to the treatment of Quonset huts. Although it is the Navy’s position that Quonset huts are part of the 1986 PMOA for temporary buildings, in response to the concerns of the preservation partners, as part of an MOA for the FY09 foot print reduction program of CNRH, this study was agreed upon to provide CNRH with a basis for decision making. Various preservation parties have had the opportunity to comment on this document to help ensure that historic properties are managed and maintained in a way that takes preservation into consideration.
Endnotes

1. Also refer to following documents that are not included in the Appendices:
      (Primary HABS/HAER documentation for the Nationwide PMOA, 64 wooden mobilization structure types documented, Fig. 5 shows an experimental steel barrack (Series 17), Camp Grant, 1941).
   2. “World War II Temporary Military Buildings, A Brief History of the Architecture and Planning of Cantonments and Training Stations in the United States, (Garner), 1993” (Provides a brief historic context of mobilization structures and includes three metal hut illustrations: Fig. 3.6 “Nissen Hut,” Isometric, 1917, Fig. 3.24 Navy Quonset Hut by George A. Fuller, 1941, and Fig. 3.25 Navy and Marine Cantonments and Training Stations, 1943.)
HISTORIC CONTEXT
5.0 QUONSET HUTS HISTORIC CONTEXT

QUONSET HUTS

Introduction

Mention of the name “Quonset hut” immediately conjures up images of a corrugated metal building semi-cylindrical in shape. The name derives from its place of initial production, Quonset, Rhode Island, a small peninsula in Narragansett Bay that retained its Native American place name meaning “small long place.” Devoid of architectural pretension, the building has strictly utilitarian associations. An easily manufactured and constructed shelter, it was a practical solution to a logistical problem, or as St. Louis Dispatch reporter Elaine Viets observed, “They were as homely as sewer pipes and just as useful.”

Corrugated Iron

Without the development of corrugated iron there would be no Quonset hut. This highly affordable, transportable, and durable material was invented in 1829 by Henry Robinson Palmer, an architect and engineer for the London Dock Company. In Patent Number 5786, the thirty-four-year-old described his invention as, “The use or application of fluted, indented or corrugated metallic sheets or plates to the roofs and other parts of buildings.”

Palmer, who was preoccupied working full time overseeing the expansion of London’s docks, sold his patent within months of its approval to Richard Walker, a carpenter and builder, who appears to have been charged with constructing the earliest known corrugated iron building, the Turpentine Shed at the London Docks (1830). To construct the building, flat sheet iron was purchased, and Walker oversaw the process of corrugating and curving the material on-site. The corrugating of the metal involved passing it through fluted rollers, a method which is still in common use today.

The Turpentine Shed was an open pavilion with a barrel-vault-shaped, corrugated iron roof. The building consisted of parallel rows of cast iron columns with gutters running the length of the building and tie rods connecting each pair of columns for lateral support. The sheets of corrugated iron were curved and riveted together to form a self-supporting arch, depending completely on the rigidity of the...
corrugated iron to achieve the required span. Thus from the start corrugated iron was associated with a curved arch, an architectural innovation perfected by the ancient Romans, who found it allowed them to span great distances with heavy masonry construction.

The new material was employed as roofing during the 1830s in such buildings as England’s Eastern Counties Railway station (1839), a 17,000-square-foot single-story building whose central span was 36’ wide. It also saw applications as a wall material, but, overall, its use was rare. Construction applications for the material did not accelerate until after 1843, when Walker’s patent expired, and the material could be mass produced. Throughout the rest of the century corrugated iron became more prevalent, especially for the construction of factories, railway terminals, naval shipyards, and agricultural buildings. In addition, it found an application in pre-fabrication, and corrugated iron buildings were shipped from England around the world to such places as the United States, Canada, Australia, and India. As a result of its early applications, corrugated iron became recognized as an unpretentious material with strong industrial associations and was considered cheap, temporary and, more often than not, ugly.

Today the name corrugated iron is a generic term, applied to any profiled metal sheeting. Malleable iron has been rarely used since the opening years of the twentieth century. The material’s descendants are most commonly made from steel, zinc, aluminum and some composites like zinc-titanium. Ferrous metal was frequently coated with zinc galvanizing or aluminum to protect against rust, and asbestos for fire protection.

Nissen Huts

Corrugated sheet metal’s relatively easy portability and straightforward construction, as well as its durability, resulted in one of its most well known twentieth century applications: temporary military storage and housing facilities. In 1916 the military application for corrugated sheet metal emerged when Peter Norman Nissen (1871-1930), a British soldier assigned to the 103rd Field Company Royal Engineers, was confronted with the problem of insufficient billets in the bombed out villages surrounding Verdun. Inspired by the large semicircular, corrugated iron Drill Shed where he played ice hockey while attending Queen’s University in Ontario, Canada, Nissen developed a portable, pre-fabricated building which could be constructed by six men in four hours. The semicircular building was composed of corrugated sheet metal sheets supported on a steel frame with timber end walls where windows and doors were installed. The corrugated metal walls and roof were the same, seamless component, overlapped and fastened together. The curve of the roof began at the floor of the building and formed a barrel roof, with its corrugated metal sheathing attached to steel arched ribs fastened to the floor. The structure sat on a timber base, and the interior was also finished in wood. Two models were manufactured: the Nissen Bow Hut, which measured 27’ long, 16’ wide, and 8’ high, and the Nissen Hospital Hut, which was

Fig. 5-2 Nissen Hut
(http://www.nissens.co.uk)
larger, standing 60' long, 20' wide, and 10' high. The British Army inspected the first hut in May 1916, made several revisions in the design, and placed the first order in August 1916. Within six months over 20,000 huts had been placed in operation, and by the end of World War I over 100,000 Nissen Bow Huts were in use. In addition, approximately 10,000 Nissen Hospital Huts had been constructed. As a result, between 1916 and 1918 2.5 million British servicemen on World War I battlefields found shelter in Nissen Huts.

Quonset Huts

The thought of constructing metal buildings by the United States military emerged at least as early as 1936, when the Army bandied about the idea of constructing metal officer's housing. Following Hitler's invasion of Poland, the Army, as part of its mobilization planning, again contemplated the use of steel prefabricated structures as semi-permanent cantonments. However, this idea was quickly cast aside in favor of prefabricated wooden barracks because of cost and speed of construction concerns. The Navy in 1941 also investigated the use of steel as a building material, but moved outside the standard rectangular shaped building in its explorations. Using the Nissen Hut as a prototype, the Quonset hut was designed for the United States Navy by Otto Brandenberger of George A. Fuller and Company in several weeks during April and May 1941.

George A. Fuller and Company was founded in Chicago in 1882 and in the early twentieth century had emerged as a major construction company, responsible for the construction of such buildings as the Flatiron Building in New York City (1902), the Lincoln Memorial (1918), and the U. S. Supreme Court (1933). In July 1940 they, along with the marine salvage and wrecking company, Merritt-Chapman and Scott Corporation, were awarded the contract for the construction of the 1,192-acre naval air station at Quonset Point, Rhode Island. In March 1941 Admiral Ben Moreel of the Bureau of Yards and Docks met with representatives of the Fuller Company at their offices at Quonset Point, Rhode Island, and their contract was expanded to include the development and production of a prefabricated hut system to shelter American troops abroad to serve in a manner similar to the World War I Nissen Hut. The contract called for the first shipment of huts to be made by June 1, 1941, which may be considered the date of the first Quonset huts. On March 30, 1941 the Navy issued the official notice to proceed with the contract amendment. Within nine days Fuller Company erected and placed in partial operation a factory on lands in West Davisville, Rhode Island, which lay in close proximity to the Quonset Point Naval Air Station (NAS). Simultaneously, a four-man team was assigned the task of designing the new portable hut. Otto Brandenberger, a licensed architect, was made the head of the team, which also included Robert McDonnell, Tomasino Secondino, and Dominic Urgo. Brandenberger (1894-1980) studied architecture at Zurich Technical Institute and immigrated to the United States in 1913. He served as a volunteer in the U.S. Army during World War I and during the Depression worked for the Works Progress Administration, where he developed measured drawings for historic New Jersey buildings and reviewed the plans for the Empire State Building. Brandenberger’s team worked with Lieutenant Commander E. S. Huntington, Lieutenant A. W. Van Leer, and Lieutenant W. T. Wishart of the U.S. Navy to come up with the final Quonset hut design.
Fig. 5-3 (Left) Standard Portable Buildings Plan, 1918

Fig. 5-4 World War I Mobilization Building Type Used by Navy in Europe and for Initial Construction of Submarine Base, 1920
The Navy had three requisites for the portable hut: an arch shape was to be used for strength and deflection of shell fragments, it must be easily mass produced, and the building had to be quickly and easily assembled. In addition, it was to be adaptable to any geographic or climatic condition. The intent of the new design was to replace the heavier World War I wood panelized temporary buildings. The team was provided the British Nissen Hut as a starting point. Preliminary drawings were submitted on April 4, 1941 and final drawings executed on May 15, 1941. The design was larger than but along similar lines to that of the Nissen Hut; however, the team added insulation between the inner masonite walls and outer corrugated metal walls, and also added tongue-and-groove wood floors. The team also simplified the way in which the walls were attached to the framework. The initial design, later known as the “T-Rib Quonset hut,” measured 16’ x 36’ with the semi-circular, 2” x 2”, T-shaped structural ribs formed to an 8’ radius. It used wood perlins, and the exterior skin was affixed to the frame by screws. In addition to the standard form, Brandenberger’s team designed specialized huts for various functions, modifying the interior partitions and adapting the plans for concrete floors and to accommodate sloped dormer windows. A tropical version allowed for more ventilation by substituting an additional roof ventilator in lieu of a smoke stack. Also a smaller, 16’ x 20’ version was manufactured.
Fig. 5-8 Building 44, 1920s Steel Portable Building Raised Boat House
(Plan Provided by NAVFAC HI)
The initial drawings of the new hut were labeled, “Temporary Aviation Facilities, Standard 16' x 36' Hut.” However, in common parlance, the huts were referred to as “Nissen Huts,” because of the similarity of the American hut to the British one. Concerned with patent right issues, Lieutenant Commander E. S. Huntington on July 18, 1941 issued a short memorandum on behalf of Admiral Ben Moreell, the chief of the Navy’s Bureau of Docks and Yards, requesting that, “in the future the hut be referred to as the Quonset hut on all drawings, all correspondence, and in conversations.” As a result of this memorandum, “Quonset hut” henceforth became the name of the American semi-circular, corrugated sheet metal structure. However, as late as March 6, 1943, W. E. Kunz of the Pacific Fleet Radar School requested the allocation of “a prefabricated hut of the Nisson (sic) or similar type” to house his school’s staff, and he was not the only person in the far off Pacific to refer to the Quonset by its predecessor’s name.

Manufacture of the Quonset huts began on April 14, 1941 with Anderson Sheet Metal Company as the prime contractor. On June 11, 1941 the first huts were loaded on the vessel Empire Gull for shipment to U.S. Navy forward air bases under development in Ireland and Scotland. Shortly thereafter, the Marines placed orders for 279 of the new huts for use at their bases in Quantico, Virginia, Parris Island, South Carolina, and in other parts of the nation, including San Diego, which shared the allocation of huts with Hawaii.

Approximately 8,200 of the T-Rib huts were manufactured before it was supplanted in October 1941 by the “Quonset Redesign” which also had a 16' x 36' floor area, although it appears a 24' wide version with varying lengths may have been produced and Stran-Steel may have also manufactured a 16' x 48' version. The newer version of the Quonset hut featured 4' high vertical walls from which the round arched ribs sprang to the height of 9', and could house 12 persons in single beds. This modification was made in order to more efficiently utilize the interior space of the building. Approximately 25,000 of this type were produced between September 1941 and late 1942. In addition to the vertical walls, the Quonset Redesign also introduced Stran-Steel’s framing system, which combined the strength and durability of steel with traditional hammer-and-nail construction. This system used 2" x 3-5/8" pairs of lightweight steel “C” channels that were tack welded back to back to form an I-shaped structural frame member. The gap between the two channels served as a nailing groove, which allowed for the interior Masonite finished wall panel and exterior corrugated metal sheathing of the Quonset huts to be nailed to the structural frame, eliminating wood and the numerous bolted connections previously used. This framing system had been developed by Stran-Steel in the early 1930s, and was first publicly displayed at the Chicago World Fair of 1933, making its debut in the art deco style, steel and baked iron enamel house built by Good Housekeeping and Stran-Steel in the Houses of Tomorrow exhibit. The Navy initially experimented with Stran-Steel structural members in extensions added to the T-Rib type Quonsets, and once adopted for the Quonset Redesign the lighter weight and easier to erect Stran-Steel back-to-back “C” channel frame became the standard in all subsequent Quonset hut designs.
In January 1942, following the United States’ entry into World War II, the demand for Quonset huts increased from 40 to 150 units a day. The West Davisville plant in Rhode Island was expanded, and then a second plant was constructed. To augment the production efforts, by July 1942 the manufacturing of Quonset huts was being dispersed to factories in other parts of the nation. As the war progressed production figures rose to as high as 9,000 units per month, and by the end of 1942 all Quonset hut manufacturing was assigned to Stran-Steel, a subsidiary of Detroit’s Great Lakes Steel Corporation, with factories in the Midwest. This, in turn, led to the conversion of the West Davisville plants into warehouses in December 1942. Stran-Steel developed a new design, the New Arch Rib Stran-Steel Hut (SSAR 20 Hut), a 20’ x 48’ building which supplanted the Quonset Redesign and restored the hut’s semi-cylindrical appearance without the vertical walls. To reduce shipping weight the floors were made of 4’ x 8’ sheets of half inch, tongue-and-groove plywood. Although spatially less efficient, its ease of fabrication and erection, as well as its smaller and lighter shipping size, justified the return to the earlier shape. Initially the SSAR Hut was clad with siding whose corrugation was applied parallel to the arch; however this was modified after a short time to use factory-curved panels only along the ridge and sheets with their corrugation running horizontally below. By January 1944 this was the standard form produced by Stran-Steel. Although not the best solution for shedding water, this design facilitated shipping by reducing bundle sizes from 450 cubic feet of shipping space to 325 cubic feet. The SSAR 20 hut could be constructed in a day by 10 men with no special construction skills, and over the course of the war approximately 120,000 SSAR 20 huts were produced. In addition Stran-Steel also produced the large, approximately 40’ x 100’, Stran-Steel Quonset 40 (SSAR 40), also known as a Utility Building Quonset or Elephant Hut, manufacturing approximately 11,800 of these 12.5 ton behemoths. This design supplanted an earlier two-story, large-hut design, of which only about 300 buildings were manufactured, that utilized the same footprint but had vertical sides and was used primarily for storage. A crew of 24 men could erect the SSAR 40 including a concrete floor in four days.
Other Quonset hut variations included a Stran-Steel Quonset 24, or a two-thirds Quonset hut, and a 20' x 48' Tropical SSAR 20. In the Tropical Quonset hut the 27-1/2" x 144" corrugated metal sheets forming the curved roof at the ridgeline were raised approximately 18", and the ventilation opening between the 12' wide raised roof, or umbrella hood, and the body of the hut was covered by bronze screening. In addition, the Tropical Quonset featured two banks of screened openings running 40' down its two sides. A lower row of ventilators was at floor level, while an upper, window height row, was protected from the elements by a braced shed roof canopy. Hinged corrugated metal sheets, called vent flaps, allowed the bottom screened ventilators to be either open or closed. In August 1944 J. W. Sanborn, who in 1953 was assigned to the USNAV CERELAB at Port Hueneme, recommended that the bottom adjustable screened openings be eliminated as experience found there was ample movement of air without them. In addition to the Tropical SSAR 20, there was also a Tropical SSAR 40, named the B-1B Elephant Quonset hut. It had a 28' wide, raised, umbrella hood running along its ridge line, ground level ventilators and three banks of windows running down each side. These were primarily employed as double-deck barracks.

From the end of 1943 through the spring of 1945, one version of the SSAR 20 came with 4' overhangs at either end to protect the bulkheads from the elements, while retaining the original 960 square feet (20' x 48') of interior space. These were sometimes called 20' x 56' Quonset huts. A variation allowed for an 8' overhang at one end and no overhang at the other, and another allowed for an 8' overhang at one end and a 4' at the other. The Tropical version of these Quonset huts with overhangs came with bulkhead walls made of screens mounted on a 2" x 4" frame of white pine, fir, or yellow pine, with a centered screen door. Canvas curtains could be lowered to protect the interior during inclement weather. In temperate climates a plywood bulkhead was utilized. In the spring of 1945 the overhang option was discontinued for the temperate zone Quonset huts, but continued in the tropical version.

The Seabees developed further variations on the Quonset hut design in the field. The SSAR 20 was made extra-wide by the simple expedient of inserting 4' or 8' wood spreader members in the crown of the two-section arch ribs to form 24' and 28' wide huts. Flared-out sides were another common variation, built by framing large continuous windows down either side of the Quonset hut and flaring the corrugated metal siding out over the frames to form “eyebrows.” Structures varied in length from a few 4' sections used as proscenium arches over outdoor movie screens to a 400' long warehouse using four 40' x 100' Utility Buildings. Shed-roofed, lean-to additions were another typical field addition to the huts, frequently added during the initial construction for buildings functioning as shops. The framing for these additions frequently utilized Quonset hut floor stringers as horizontal studs, with either corrugated metal sheathing applied in the usual Quonset hut manner or wood shiplap siding used for walls.

Although various writers noted that a SSAR 20 could be put up in a day by 10 men, such an approach to construction was not the norm. Rather a Seabee carpenter worked on a number of Quonset huts in a day, as specialized crews worked exclusively on constructing certain parts of the building such as rib and bulkhead erection, purlin and corrugated sheet attachment, or window and door insertion. Such an assembly-line approach was further facilitated by frequently having the Quonset huts sited in a line, with relatively little space between the structures (Campbell).
Fig. 5-12 Utility Quonset Frame Erection
(Image provided by NAVFAC HI)

Fig. 5-13 Quonset Hut Seabee Construction
(Image provided by NAVFAC HI)

Fig. 5-14 Small Tropical Hut
(Erection Instructions for the 20' x 48' Hut, U.S. Navy Steel Arch Rib Hut Stran-Steel Division, November 1944)
Fig. 5-15 Ventilators and Smoke Stacks
("U.S. Navy Steel Arch Rib Hut Instructions Booklet for Erecting the Hut 20' x 56' Hut," Stran-Steel Division, January 1944)
ADAPTATIONS
END EXTENSION

In some instances a longer overhang is desired at one end of the hut. To accomplish this, the enclosed part of the hut is shifted 4'0" on the sills so that the bulkhead on one end is attached to the end rib of the hut.

1. Set the joist sills as outlined on page 5 except place interior joist sills so that the ends of all sills are in line on the end of hut where no overhang is desired. Start the joists at this end, placing the first joist at the end of the sills, then spacing them at 2'0" intervals. Use hand punch to punch holes in the sill for the second joist. At the other end of the outside sills there will then be an 8'0" space where no joists occur. At the ends and 4'0" from the ends of these sills attach the rib shoes Mk. R 5-1.

2. Erect ribs as before, being careful to locate the ribs with the wood blocking where the bulkheads will occur. Turn these ribs so the wood blocks face outward.

3. Follow previous instructions for erecting balance of hut.

Fig. 5-16 Overhang
("U.S. Navy Steel Arch Rib Hut Erection Instructions for the 20' x 56' Hut," Stran-Steel Division, January 1944)
Fig. 5-17 Plywood Bulkhead
("U.S. Navy Steel Arch Rib Hut Erection Instructions for the 20' x 56' Hut," Stran-Steel Division, January 1944)
The efficiency of the Stran-Steel Quonset hut, in terms of shipping, ease of construction, and versatility of use was unparalleled. The corrugated siding nested in each other, allowing them to be compactly bundled for shipping, giving the Quonset hut the smallest shipping cube per man housed than any other temporary hut, including canvas tents with wood frames and floors, referred to as “Dallas Huts.” The huts required less steel and less weight of material than any other type of framing, with 6″ wide ribs spanning a width of 40′ in the SSAR 40, and 3-5/8″ ribs used in the SSAR 20. In addition, the rib structural members allowed the building to be expanded to any desired length, and the parts were interchangeable, making repairs and improvisations possible. The structural design also allowed the hut to be “fully demountable for transfer and re-assembly.”

Studies undertaken at Davisville, Rhode Island in 1944 found it took a crew of 10 men, not skilled or trained in construction, nine hours to dismantle an SSAR 20 and a little over 16 hours to reconstruct it. Each hut cost between $800 and $1,100 to manufacture, and could house 24 men in bunk beds. The Navy compared this cost to the price of other structures and determined the cost per man housed by the Quonset hut to be approximately half that of other structures. In addition, the metal-clad Quonset huts reduced the hazard of fires on base, and the insulated, double wall building could be easily adapted to both warm and cold environments with only minor modifications.
Fig. 5-19 Dallas Huts
(Image Provided by NAVFAC HI)

Fig. 5-20 Inside the Military Hut
(“The Improved Military Hut,” Stran-Steel, Unknown date, RG12, Series VI, Box 108, Quonset Huts Booklets Folder, Port Hueneme)
Of the approximately 155,000 Quonset huts (including T-Rib, Quonset Redesign, and SSAR 20 buildings) purchased by the Navy and Marines between 1941 and 1945, approximately 111,200 were placed into overseas use. How many found their way into the Pacific Theater has yet to be ascertained, as other overseas areas where Quonset huts were constructed during World War II include Alaska, North Africa, and Great Britain.

It was not until after the commencement of war with Japan, that Quonset huts made their appearance in Hawaii in 1942. The initial arrivals, which included both 16’ x 36’ and 16’ x 20’ Quonset huts, were described as follows:

The side walls and roof of these structures are formed by continuous arches. The supporting members and channels, placed back to back, and are spot welded. The floor joists are double channels, spot welded and the sill is a single channel. The structure is covered with galvanized sheets, bent to fit the curvature of the roof.8

These had been a portion of an order for one thousand Quonset huts constructed by the Marines prior to the outbreak of hostilities, and appear to have followed the original Quonset hut form insofar as their dimensions and continuous arched walls and roof are concerned. However, the described structural members appear to follow the Stran-Steel system used in the Quonset Redesign, and the Depot Quartermaster’s October 19, 1942 enumeration of issued Quonset huts describes them as “Quonset (Redesigned) Tropical Huts.”

By May 1942, several shipments of Quonset huts had arrived at Pearl Harbor, in partial fulfillment of the Marine Corps order, and it was estimated that approximately 400 units were on hand.9 These were stored in the vicinity of the Marine Barracks at the Pearl Harbor Navy Yard. Although the Marines were in possession of the Quonset huts, their distribution was authorized by the Commandant of the 14th Naval District, as it had been determined in Washington D.C. that the Bureau of Yards and Docks was to be responsible for the distribution of all materials issued to Advance Base operations. It became quickly apparent that the volume of materials was too vast for the Bureau of Yards and Docks to handle, and a new program, Advanced Base Depot (ABD) was established on February 27, 1942. The Quonset huts ordered by the Marines for Hawaii went to the Marine’s Depot Quartermaster, but thereafter Quonset huts were received by the ABD’s Pearl City Center.

Fig. 5-21 Barracks at the Staging Center Pearl Harbor (“Building the Navy’s Bases in WWII: History of the Bureau of Yards & Docks & the Civil Engineer Corps 1940-1946 Volume II,” United States Government Printing Office, Washington, 1947)
Fig. 5-22 90th Seabee Battalion Combine with Marines
Move a Quonset Hut, Pearl Harbor Marine Barracks

Fig. 5-23 Civil Engineer Corps Logo
(“Can Do! The Story of the Seabees,” William Brandford Huie, 1945)

Fig. 5-24 Seabee Logo
(Image Provided by NAVFAC HI)
During World War II the housing area expansion at Pearl Harbor was placed under the jurisdiction of the Navy Yard. Enlisted military were housed in Housing Areas I, II and in the Naval Station and Aiea Receiving Barracks; officers housing included Housing Area V at Makalapa and Little Makalapa; civilians were housed at Civilian Housing Area III (CHA III) with single bachelors housed in the Cantonment, and Housing Area IV. There was also the construction of additional Bachelor Officers Quarters (BOQ) barracks near the Navy Yard, Makalapa, Moanalua Ridge and Ford Island. The need for additional housing at the outlying commands and air stations was handled by the individual commands, including the use of Quonset hut camps for temporary and interim housing. The initial housing expansion was done under the Pacific Naval Air Bases (PNAB) contract and later, the Navy Construction Battalions (CBs) assumed the primary construction role, especially for construction in outlying areas. With the great influx of workers in 1942 and 1943, the Commandant of the Yard felt that the only way to conserve housing for his civilian workers in the face of an increase in the number of district civilian workers was to arbitrarily limit the number of accommodations for the latter group. The yard had now become coveous of its housing and tended to forget the growing needs of the district. It became necessary, as a result, for the Commandant of the District to change this restrictive policy and establish a percentage rule for the yard to follow.10

Learning of the presence of Quonset huts in Hawaii, the Chief of the Bureau of Ordnance in Washington D.C. was one of the first to request their use through a memorandum to the Chief of the Bureau of Yards and Docks:

> The Bureau understands that a large number of standard Quonset huts 16’ x 36’ for which there is no immediate need have been recently delivered to the Hawaiian area. It is therefore requested that five standard 36’ x 16’ Quonset huts be released and delivered to the Naval Ammunition Depot, Oahu to meet this urgent requirement [for dispensaries]. The Bureau understands that these standard units may be readily adapted for dispensary use.11

These five huts were released for use as dispensaries at the Naval Ammunition Depots at West Loch (two huts) and Lualualei (three huts).

The Navy and Marines quickly found uses for the huts, and by July 1942 78 huts were allocated to NAS Barbers Point, 30 to the Marine Corps Depot of Supplies at Camp Catlin, three to the 5th Naval Construction Battalion, 42 to Marine Defense Forces Pearl Harbor, and a number were immediately shipped to the Navy’s advance bases, including 50 to Midway, 26 to Palmyra Island, and 24 to Johnston Island.12

Near the end of July the 14th Naval District submitted a request for an additional 250 huts.13 By this time the Stran-Steel SSAR-20 had been developed. The new hut’s greatly reduced shipping footprint made its use attractive for shipment to the Pacific’s advance bases, thus rather than immediately filling the requested order, Lieutenant Commander E. S. Huntington, after consulting with the Commandant of the 14th Naval District, authorized the shipment of 200 SSAR-20 Quonset huts to Hawaii.14 These were apparently shipped from Port Hueneme in early November 1942, as was Kimsul Insulation for 258 of the original huts, as it was discovered this material had mistakenly not been included in a number of the initial units shipped to Hawaii.
Throughout most of 1942 the private contractor, Pacific Naval Air Bases, undertook most of the construction associated with the expansion of naval facilities at Pearl Harbor, as at that time only small units of the recently established 5th and 10th Naval Construction Battalions were on island. However, with the arrival of the 16th Naval Construction Battalion in October 1942, the Seabees took over many of the Pacific Naval Air Bases projects, and soon were responsible for all Navy construction jobs, including the erection of Quonset huts.

The Naval Construction Battalions were a product of World War II. Planning for the development of the Navy's Civil Engineering Corps (CEC) to include militarized construction units was conceived during the 1930's. On December 1, 1937 the President selected Commander Ben Moreel to be Chief of the Bureau of Yards and Docks and the Chief of the Civil Engineers of the Navy, and advanced him to the rank of Rear Admiral (without having ever been a Captain). Moreel had known Franklin D. Roosevelt since World War I when Roosevelt was the Assistant Secretary of the Navy. After the attack on Pearl Harbor, use of private contractors utilizing civilian workers in war zones was considered politically unacceptable and impractical. On the 28th of December 1941 Marine, Navy and Civilian Contractor (Morrison Knudsen Company) personnel at Wake Island surrendered to a superior Japanese force. On the same day Admiral Moreel requested authority to recruit skilled workers to activate the Navy's own construction units. He effectively used the strong sentiment at the time about the fall of the Naval Base at Wake Island to quickly gain approval which allowed the Navy to proceed with national recruitment, breaking the long gridlock that had existed concerning preparations for war. Authority to proceed was officially given on January 5, 1942. This date is considered the birth date of the Naval Construction Battalions – (CB's or Seabee's) with their official motto created by Moreel: Construimus, Batuimus – "We Build, We Fight." This construction component of the Navy would number over 325,000 men by the end of World War II, playing a major role in the United States' victories, especially in the Pacific theater, where they were active on over three hundred islands.

In August the Fifth Naval Construction Battalion requested, and received authorization to obtain 38 "Nisson' (sic), or Quonset, huts" and in September 1942 10 more huts were shipped to Palmyra and six to Johnston Island. By the middle of October 1942 the Depot Quartermaster had issued 465 Quonset huts, with 105 provided to Commander Helfrich, USN as an emergency reserve supply and a total of 150 shipped to Midway, Palmyra and Johnston Islands.

While still awaiting the arrival of the 200 Quonset huts requested in July 1942, the Depot Quartermaster in mid-October 1942 submitted a request for an additional 500 Quonset huts, to be delivered in increments of 250, with the intention of continuously maintaining a five hundred hut inventory in the Advance Base Pool of the 14th Naval District. Issues concerning the ABD's jurisdiction led to the withdrawal and superseding of this request by a similar request made on November 24, 1942 by the Commandant of the 14th Naval District. In a mailgram response, dated December 31, 1942, the Bureau of Yards and Docks desired more information on the priority and urgency of the request. Apparently satisfied by the response, the first increment was readied for arrival in Hawaii by late January 1943.

With the start of the new year, on January 4, 1943 authorization was granted to issue eight 16' x 20' Quonset huts to meet the expanding needs of the Marine Corps Air Station, Ewa for use by the newly organized station quartermaster unit and to house the radio sections, and on the following day five more 16' x 20' huts were provided to the Commanding General of the Marine Forces. However, when the Depot Quartermaster placed a request for an additional 202 Quonset huts for Ma-
the new supply of SSAR 20 Quonset huts was expected any day.

Pearl Harbor's supply of Quonset huts remained tight, and in April 1943 the Commandant of the 14th Naval District denied the Naval Ammunition Depot's request for eight Quonset huts to be used to:

1. overhaul mechanical time fuses (two huts),
2. inspect and disassemble 20mm ammunition (two huts),
3. house Marine guard personnel (three huts), and
4. overhaul and recondition aircraft bomb fuses (one hut),

"because of the present scarcity of Quonset huts in the District and the urgent need for conserving available supply for use only at advance bases." This was but one of several disapprovals for Quonset huts issued by the Commandant in April 1943.

The second shipment of 250 SSAR 20 Quonset huts must have arrived in May or June, as in July 1943 the Marines obtained authorization from the Commandant of the 14th Naval District to have one 36' x 16' and two 20' x 16' Quonsets released for use as office space for the Commanding General of the Marine Forces, 14th Naval District. Similarly on March 18, 1943, six of the Quonset Redesigns were authorized to be taken from the Advance Base Materials Pool to be sent to Midway for its dredging project, and another was removed from storage at the Marine Barracks for use by the Pacific Fleet Radar School at Camp Catlin. In addition, one 16' x 36' Tropical Quonset hut was authorized for use as a brig at NAS Barbers Point. Apparently as the new SSAR 20 huts were obtained, the early 1942 Quonsets that had been held in emergency reserve were placed in service primarily on Oahu, while the newer, more spatially compact huts were sent in bulk to the advance posts or held in reserve in the event of an emergency.

During the course of 1943-1944 Quonset huts came to dot the island of Oahu, and also found their way to Maui (NAS Kahului, NAS Puunene, Maalaea Bay training camp, and 4th Marine Division Camp in Makawao) and the island of Hawaii (NAS Hilo and Camp Tarawa). With the rapid military build-up of the islands the Quonset hut came to be recognized as a reasonably priced, quickly constructed structure, which could be used for a diversity of functions. While Quonset huts were constructed at Pearl Harbor, they appeared in even larger numbers in off-base locations which were built to momentarily support and expand the capabilities of the Naval Base for the duration of the war.
Fig. 5-27 Fourth Marine Division Storage Depot Kahului Harbor, Maui
(Image Provided by NAVFAC HI)

Fig. 5-28 Quonset Huts on Maui
(http://www.history.navy.mil/museums/seabee/UnitListPages/NCB/048%20NCB.pdf)

Fig. 5-29 Quonset Hut, Oahu
In August 1943 the Naval Air Transport Squadron (NATS) was relocated from Alameda, California to Pearl City and two Quonset huts were allocated for their use; similarly a Quonset hut was authorized to serve as a post office at the Navy’s Wahiawa Radio Station, and two Quonset huts were provided to store audio-visual instruction equipment at the Navy Yard Receiving Station.\(^{24}\)

In addition, Quonset huts began to be sent to the neighbor islands with four SSAR 20 temporarily provided to house members of the 59th Naval Construction Battalion while they built NAS Hilo\(^{25}\) and another three were provided to the station as ready rooms;\(^{26}\) seven SSAR 20s went to NAS Kahului for use as offices, ready rooms, shops, an armory, and a chapel;\(^{27}\) and NAS Puunene on Maui received five SSAR 20 huts for use as a chapel, tailor shop, brig, operations office and Combat Aircraft Service Unit (CASU), and another two SSAR 20s to be used as store houses. With regards to the latter, the 3rd Naval Construction Regiment was asked to contact Mr. Ossipoff with regard to arrangements for transportation.\(^{28}\)

In a September 16, 1943 memorandum Commander L. S. Medsom of the Naval Air Facility requested four, “20 x 48 arch rib Quonset huts with tropical extension,” which was approved, indicating this very new design had made its way to the islands by this date. The advantages of this design in warm climates were sufficiently high that by December 3, 1943, C. W. Porter of the Second Naval Construction Brigade wrote to the Director of the Pacific Division of the Bureau of Yards and Docks and to the District Public Works Officer,

1. It is noted that the Bureau of Yards and Docks Stock List carries in addition to standard Quonset huts (strain steel) (sic) 20’ x 8’ extensions and 20’ x 12’ extensions stock numbers 143-2, 143-1.
2. It is believed that instead of ordering a larger number of standard size Quonset hut units for future construction, it will be advantageous to design huts with extension length by increments of eight or twelve feet and these extensions can then be inserted without complications of floor framing.\(^{29}\)

District Public Works Officer G. D. Wetsel responded to the Director of the Pacific Division of the Bureau of Yards and Docks,

1. Forwarded, concurring.
2. It is requested that 500 extensions be ordered for ABCD to provide for projects now current or contemplated, 250 of each type, 143-1 and 143-2.\(^{30}\)

Also of interest, in early September 1943 a request was made for three “large type Quonset huts” to be used by NATS at its Pearl City Terminal as shop buildings for the storage, assembly, and repair of aircraft parts.\(^{31}\) Whether the recently relocated squadron was familiar with SSAR 40 Utility Buildings on the mainland, is unclear; however, they were authorized three SSAR 20s as there were no SSAR 40 Utility Buildings in Hawaii at that time.
Near the end of September 1943, 100 of the 40’ x 100’ Quonset huts were received by the 14th Naval District Public Works Office. Thirty of these structures were assigned to outlying stations as recreation facilities, and on October 5, 1943 Roy W. M. Graham of the Office of the Commandant, 14th Naval District requested that the District Public Works Officer provide one of these huts to the Fleet Records Office for use as a post office, as it was anticipated that their present space was inadequate to handle the mail expected to arrive for the Christmas season. The Fleet Records Office had already placed a request with the Director of the Pacific Division of the Bureau of Yards and Docks’ Advance Base Material Pool for an SSAR 40; however their shipment of SSAR 40s was not expected to arrive for several weeks. Commander A. D. Hunter indicated he could not provide the desired Utility Quonset as it, is not now available for erection due to the fact that the 100 – 40x100 Quonset huts received have been allocated to projects carrying a much higher priority on the list of recorded priority projects. . . . On arrival of the next shipment assignment of one hut will be requested for this purpose. Due to the heavy demands made upon shipping of Advance Base type buildings at this time we have no information as to the date these huts will arrive. Commander Hunter’s determination appears to have been overridden, as a note to the file indicates the Fleet Records Office post office was erected by November 5, 1943.

Also in September 1943, a Quonset hut was provided to the Pacific Fleet Radar Center at Camp Catlin. Camp Catlin was established in March 1942 as a Marine encampment housing the Marine 6th Base Ordnance Depot and the Pacific Fleet Schools. The radar center was established at Camp Catlin in July 1943 to coordinate the various radar training centers in the Hawaiian Area. In October 1943 five more SSAR 20s were erected at Camp Catlin to house approximately one hundred officers, and it was anticipated further expansion of the school would necessitate more additions later.

With the influx of military personnel to the islands, Camp Catlin’s Pacific Fleet Radar Center was not the only installation to experience a housing shortage. To accommodate all the construction battalions on Oahu the former Contractors’ Camp at Red Hill was greatly expanded. In addition to the 62nd and 90th Naval Construction Battalions which occupied the camp’s buildings, space was needed for the 92nd Naval Construction Battalion, 5th Naval Construction Battalion, 4th Naval Construction Battalion, and the 14th Special Naval Construction Battalion, as well as staff of the Brigade and Regimental headquarters. To address this major expansion, on November 1, 1943 the Chief of the Bureau of Yards and Docks directed the Officer in Charge of Camp Hueneme to ship to Hawaii 224 SSAR 20 Quonset huts, 24 SSAR 40 huts, sixteen Tropical SSAR 20 huts for officers’ quarters, four 1000-1500 man galleys, four 1000-3000 man bakeries, 44 SSAR 20 huts for enlisted men’s showers and latrines, eight SSAR 20 huts with three 675 cubic foot refrigerators each, sixteen Tropical SSAR 20 huts for laundry, four Tropical SSAR 20 huts as hospital wards with a quiet room, and four Tropical SSAR huts for pharmacy, and dental use. It appears this order addressed more than the requirements necessary to expand the Red Hill Camp, and these materials may also have been utilized in part for other major Quonset hut building programs known to have occurred on Oahu during late 1943 and 1944, such as the expansion of the Aiea Receiving Barracks, where a group of SSAR 20 Quonset huts with six flush type win-
Fig. 5-30 40' x 100', Stran-Steel Quonset 40
(“Stran-Steel Arch Rib Utility Building, Instructions for Erecting the 40' x 100' Building,”
Stran-Steel Division Great Lakes Steel Corp. Penobscot Building, Detroit, Unknown date)
Fig. 5-31 Tropical Extension
("Erection Instructions for the 20' x 48' Hut, U.S. Navy Steel Arch Rib Hut," Stran-Steel Division, November 1944)
dows, three to a side, overhangs, and exterior corrugation running parallel to the buildings’ curve were constructed in 1944 to increase the capacity of the installation, which included two-story temporary wooden barracks as well as Dallas huts.

Also in mid-November 1943, 17 SSAR 20 huts were requested to house the 321 enlisted personnel and 9 officers recently assigned to the Mine Assembly Base at West Loch. In concluding his request, Ross P. Whitemarsh, the Commander of Service Squadron Six, a unit in Service Forces Pacific Fleet, now known as COMSERVPAC, noted, “It is understood that the erection of more permanent buildings will require longer time then can be accepted.” To facilitate the commencement of construction on the new housing units, the Medical Officer-in-Charge of Pearl Harbor Hospital placed on temporary loan four Quonset huts from the new hospital construction to get the West Loch project started immediately.

In addition, during November 1943, a request for “a sufficient number of pre-fabricated Quonset huts be made available without transfer of funds to provide for twenty six thousand (26,000) square feet of floor space” at NAS Kaneohe Bay to provide housing for personnel temporarily assigned there. The Air Station received approximately 80 SSAR 20 Quonset huts with six flush type windows, three on each side, extensions, and the corrugation of their outer sheathes running parallel with the curve of the buildings. These were erected by the 56th Naval Construction Battalion, which was stationed at the Air Station from April 1943 through June 1944.

In addition, buildings fabricated from Tropical Quonset huts elevated to two stories, lined G Street. There were eight of these two-story huts, with four on each side of G Street. To service these two sets of four barracks, on each side of the road a single story Quonset hut latrine and shower was sited between two of the two-story huts.

During November 1943 Marine Corps Air Station Ewa also requested 15 SSRA 20 huts to house the Construction Battalion Maintenance Unit (CBMU) recently assigned to the air field, and the recently constructed NAS Keehi Lagoon requested 11 SSAR 20 huts, 10 to serve as temporary barracks until permanent buildings could be constructed and one to serve as a temporary bakery. Following the arrival of the 130th Naval Construction Battalion in May-June 1944, Marine Corps Air Station Ewa witnessed major development, the result of a $2.5 million construction program.

The NAS Barbers Point also was expanded as a number of SSAR 40 Utility Buildings were erected for warehouse storage during 1944. The post exchange, and a station library which also held offices for two chaplains and a Red Cross representative also were housed in Quonset huts. These were most likely constructed by the 72nd Naval Construction Battalion, who were stationed at Barbers Point from May 1943 through June 1944. In addition this Seabee unit was probably responsible for erecting six SSAR 20 huts which provided for the storage of gear by visiting air groups, and combining another two Quonset huts for a chapel. The station commanding officer had requested an SSAR 40 for the latter; however, the unavailability of this hut, resulted in the substitution of the two SSAR 20s built to form one 104’ building. In August 1944, the station did obtain a 40’ x 100’ Utility Building for a shop to repair airborne radio and radar equipment.
Fig. 5-32  Pearl Harbor Aerial View, May 25, 1944
(PPFUR-2-3.017 Hawaii State Archives, Admiral Furlong Collection)
Fig. 5-33 Tropical Quonset Huts, Former “Mongoose Manor” at NAS Barbers Point
(“Naval Air Station Barber’s Point,” ca. 1946)

Fig. 5-34 WAVES Recreation Hut at NAS Barbers Point
(“Naval Air Station Barber’s Point,” ca. 1946)

Fig. 5-35 Chapel at NAS Barbers Point
(“Naval Air Station Barber’s Point,” ca. 1946)

Fig. 5-36 Shops at NAS Barbers Point
(“Naval Air Station Barber’s Point,” ca. 1946)
NAS Kaneohe Bay also was more intensely developed during 1944 with the 112th Naval Construction Battalion operating here from March to December 1944, and the 74th Naval Construction Battalion being assigned to the base from June 1944 to May 1945. While stationed at this windward side air station these units constructed a 400’ x 5,000’ runway for fighters, a connecting taxiway, fuel tanks and camp facilities. Among the facilities they constructed were about forty-five 20’ x 48’ huts located on the south side of Sixth Street, just west of Warehouse 250. These Quonsets were listed in a 1945 Navy data book as “C.B. Quonset hut camp, 33 huts” and “Training Unit A.S.W., 12 Huts.” By June 1949 the use of these huts had changed to “Dependent public quarters, enlisted personnel” with two of them listed as a “laundry & boiler room” and a “public works storehouse.” This group of Quonset huts remained until after February 1954. The Seabees also constructed a group of about 18 20’ x 48’ Quonset huts in an area just north of Hangar No. 1, which were designated as a “Training & Educational Center” in a 1945 listing of Navy buildings.

Fig. 5-37 Kaneohe Bay Naval Air Station

Fig. 5-38 Roads and Shops, Kaneohe Bay Naval Air Station
(RG 10 - Hawaii, Box 10, Port Hueneme)
Fig. 5-39 Kaneohe Bay Naval Air Station Map, 1946
Quonset Huts are Highlighted in Yellow
(ON-NI-1511, District Public Works Department, Pearl Harbor)
During the summer of 1944, Naval Air Facility Honolulu also was expanded, thanks primarily to the efforts of the 13th and 133rd Naval Construction Battalions, who graded runways, service aprons, parking areas and roads, as well as installed seaplane ramps and a drainage system. These Seabee units also built a number of double-decker Quonset hut barracks at the air station, which was described as, “a new type of large quonset-hut barracks with two decks.”  

Fig. 5-40 Aerial View of Naval Air Facility Honolulu, 1948
(Image Provided by Hickam History Library)
On the neighbor islands Quonset huts were also seen as a solution to the military's housing shortage. Thus with the completion of the NAS Puunene the new station was allowed to retain the 15 Quonset huts used to house the 48th Naval Construction Battalion, who built the airfield, rather than disassemble and remove them, in light of the need for additional base housing. In addition to the NAS Puunene's barracks, Quonset huts also appeared at other military installations on Maui. NAS Kahului utilized SSAR 20 huts for barracks starting in 1943, and obtained thirteen additional Quonset huts in March 1944. The Fourth Marine Division Camp, which was built near Makawao on the side of the mountain overlooking Kahului Harbor by the 48th Naval Construction Battalion in four and a half months, used Quonset huts for mess halls, galleys, ordnance buildings, and shops. The troops were housed in Dallas huts. The Marine Corps' amphibious tractor training camp at Maalaea Bay also used Dallas huts for quarters and SSAR 40 Quonset huts were used for shops and storage. The Marine Corps Storage Depot on Maui included 40 SSAR 40 Quonset huts mounted on 4' high concrete walls with a 2,000' long retaining wall and loading platform placed in front of the huts. On the island of Hawaii, in addition to the several Quonset huts used at NAS Hilo, Quonset huts were used for warehouses, administration, recreation halls, and messing at Camp Tarawa in Kamuela, which functioned initially as a training camp and then was used as a rehabilitation center. Its personnel were housed in tents.

In addition to housing incoming personnel, Quonset huts were also utilized to handle the wounded returning from the front. Only days before the invasion of Tarawa, which would see 1,677 American Marines and sailors die and another 2,296 wounded in a four-day period, nine SSAR 40 Quonsets were requisitioned for Base Hospital No. 8 at McGrew Point, and another 26 for the “New Naval Hospital Pearl Harbor,” which became Aiea Naval Hospital. Base Hospital 8 at McGrew Point was constructed in November 1943 by the 92nd Naval Construction Battalion and consisted almost exclusively of Quonset huts. This 1,000-bed facility used 214 SSAR 20 Quonset huts for wards, operating rooms and quarters. Galleys, mess halls, and storage were accommodated in the SSAR 40 Quonset huts and 35 wood frame buildings housed various shops. Many of the SSAR 20 huts extended to a 144' length. 14 sets of these long huts were paired with a standard hut in between them and connected by covered walkways to form an H-shaped plan. These huts were early SSAR-20 Quonsets as the corrugation of their outer sheathes ran parallel with the curve of the buildings. These structures also featured the long bank of continuous screened openings, usually associated with the Tropical Quonset hut, running down their sides. Similarly, Quonset huts were almost exclusively employed at the hospital constructed on Moanalua Ridge as a temporary facility to assist the Aiea Naval Hospital (present day Camp Smith). Construction of this 115 acre facility commenced in October 1943 by the 90th Naval Construction Battalion. The hospital included 100 wards which were made by placing end to end three SSAR 20 Quonset huts with vertical corrugated metal siding to form a 20' x 175' building. The wards had overhangs at each end. A group of 12 SSAR 40 Utility Huts, used as storehouses, separated the corpsmen's quarters, which were also Quonset huts, from the wards. The screen of the outdoor movie theater included a proscenium arch following the lines of a Quonset hut. Only the mess halls, boiler houses, galleys, garages and small storage sheds were of frame construction.
Fig. 5-41 Pearl Harbor Aerial View, Naval Base Hospital No. 8 at McGrew Point, looking NE, February 14, 1944
(PPFUR - 2 - 2.025, Historic Photo from Admiral Furlong Collection, Hawaii State Archive)
Fig. 5-42 New Naval Hospital, Moanalua Camp, February 13, 1944
(PPFUR - 2 - 2.015, Historic Photo from Admiral Furlong Collection, Hawaii State Archives)

Fig. 5-43 New Naval Hospital Wards at Moanalua

Fig. 5-44 Interior of Typical Medical Quonset Hut, Image is T-109 at Pohakuloa Training Area
(Image Provided by NAVFAC HI)
Fig. 5-45 New Naval Hospital, Moanalua Camp
(RG10-Hawaii, Box 9, Port Hueneme)

Fig. 5-46 Recreation Facilities, Moanalua
(RG 10 Hawaii, Box 10, March 2, 1945, Port Hueneme)
In addition, Quonset huts were relied upon to address other difficulties engendered by the influx of more and more personnel. At the Supply Depot on Kuaahua Island an SSAR 20 was set up as a galley to relieve the overcrowded conditions of the existing mess hall and galley (Building 408), and two Quonset huts were provided the Officer-in-Charge of Contracts for the storage of records required in the event of an audit. Post offices also appear to have been a popular use for Quonset huts. In addition to the Fleet Records Office’s post office and the ones at NAS Puunene and the Wahiawa Radio Station, SSAR 20 huts were provided for post offices at NAS Kaneohe Bay and NAS Pearl Harbor at Ford Island, as well as the Submarine Base.

With such a heavy increase in demand for Quonset huts during the last quarter of 1943, a shortage again loomed in Hawaii. By late November and early December 1943 requests were couched in such language as, “request that thirty (30) 20' x 48' SSAR Huts be released for shipment to NOB [Navy Operating Base], Midway from the first available huts after present commitments have been issued,” and requests were approved with the caveat, “if available,” or “when huts become available”. This language continued through January 1944. In addition, many activities in their requests now offered to have their personnel erect the Quonset huts rather than wait for available Naval Construction Battalion personnel.

A shortage of huts continued into the new year, and in February 1944, the Director of the Pacific Division of the Bureau of Yards and Docks denied a request for an SSAR 40, as,

There is at the present time no unobligated 40' x 100' hut in the ABCD yards, and it is not anticipated that there will be any available in the near future. Accordingly this request cannot be approved.

There are some 20' x 40' huts in the yard unallocated, and it is suggested that consideration be given to the thought of substituting a number of 20' x 48' huts for the one 40' x 100' either on the basis of equivalent floor space or storage space, whichever is necessary for the purpose.

To match the cubic square footage of an SSAR 40 Utility Building, would require the use of eight SSAR 20 huts.

The volume of Quonset huts used by the Navy increased even more in 1944, primarily for use in forward areas, but also in small part due to a shift in policy by the Chief of the Bureau of Yards and Docks which allowed for the substitution of Quonset huts for certain buildings previously requiring wood or concrete construction. NAS Kaneohe Bay was quick to request additional Quonset huts in accordance with the new directive. As a result two 40' x 100' Utility Huts were sent to the base for use as an Oxygen Overhaul Shop and a Parachute Loft and another was obtained as a Cold Storage Facility. The station also acquired an additional 20 SSAR 20 huts in March 1944 for classrooms, storage, operating facilities, and housing.

The flow of personnel into and through Hawaii continued in 1944, as the military consolidated its gains in the Gilbert and Marshall Islands and prepared for its assault on the Mariana Islands. 22 additional SSAR 20 huts were built, most likely by the 92nd Construction Battalion, at Camp Catlin for the Marines' 5th Amphibious Corps, and the Mine Assembly Base at West...
Loch requested six additional SSAR 20 huts to house both permanent and temporary officers, which most likely were erected by the 43rd Naval Construction Battalion.

The 62nd Naval Construction Battalion most likely built the base at Waipio for the Salvage Force which operated there, but whose personnel had been housed at Aiea Barracks. This new compound included barracks, a mess hall, and collateral facilities, all using SSAR 20 huts. The Landing Craft Facilities Camp at Waipio, again most likely the work of the 62nd Naval Construction Battalion, was also expanded with the addition of 15 SSAR 20 huts and one SSAR 40, and the Marine Transient Center at Moanalua also obtained three additional SSAR 40s and an SSAR 20 to expand their barracks capacity.

In January 1944 an SSAR 20 hut was provided to the Coast Guard for the quartering of officers at their Wailupe Training Station as “the recent steady influx of officers at this station has gone beyond the available housing facilities,” and in March 1944 another two were provided for their use as a radio laboratory at Wailupe Loop and for enlisted men’s quarters at Sand Island.

The 16th Naval Construction Battalion returned to Pearl Harbor in the middle of February 1944 following duty in the Marshall and Gilbert Islands. Over the course of the next several months they constructed facilities to house themselves and also two camps for other Seabee units, as well as the mammoth Seabee camp at Waiau. The latter included over 100 barracks as well as brigs (4), recreation halls (4), bakeries (4), offices (5), and an infirmary (1), all utilizing SSAR20 huts. In addition, at least 22 SSAR40 huts were built to serve such functions as shops (4), storehouses (4), mess halls (8), recreation buildings (4), ships service (1), and a theater (1).

However, the flow of Quonset huts to meet the 14th Naval District’s military needs suddenly stopped as an increasing need for supplies to support American combat troops in their move across the Pacific towards Japan diverted almost all equipment to that effort. In early March 1944, the Director of the Pacific Division, Bureau of Yards and Docks advised the Commandant, 14th Naval District that,

1. In the past Dirpacdocks has followed the policy of supplying Advance Base materials and equipment when available at ABCD on properly authorized requests for activities other than Advance Bases. In many cases these requests represented needed
improvement or maintenance in connection with operation of established shore facilities rather than new construction. Many of them in all probability represented desirable extensions of facilities which normally would be assigned a lower priority than similar facilities at newly established bases.

2. Latest information from mainland procurement agencies definitely predicts that due to recent and unanticipated progress of military operations in Pacific the full capacity of mainland procurement will be completely absorbed in logistic support of forward moves. These estimates establish that even though ABCD stocks are already depleted, there definitely will be no opportunity to augment these stocks for other than reshipment to forward areas.

3. In recognition of these conditions all activities are advised that release of material and equipment from ABCD will be limited as of this date to definite obligations in connection with outfitting of Advance Base units and new construction on authorized projects.72

New requests for Quonset huts following the issuance of the above memorandum received a brief response from the Commandant of the 14th Naval District, “Returned. The Commandant regrets that shortage of Quonset huts renders approval of this request impracticable at the present time.”73 The Director of the Pacific Division of the Bureau of Yards and Docks responded to such requests with similar sentiments,

1. Returned with the information that all huts in ABCD stock are allocated, accordingly this release request cannot be granted at this time.
2. It is not definite when the ABCD stock of huts will be replenished by shipments that have been requested from the mainland.
3. If alternative facilities are not provided in the meantime, it is suggested that this request be resubmitted at a future date.74

In mid-April 1944, two SSAR 20 were released for use on the Submarine Base to store training aids and serve as classrooms, as the Director of the Pacific Division of the Bureau of Yards and Docks learned that, “a limited number of huts are now available for release at ABCD.”75 Two days later a request from the Commandant of the 14th Naval District for two Quonset huts for a Girl Scout Clubhouse and an office for the district’s Athletic Association was turned down, as the “the stock of huts is depleted, and this office can only approve release for military purposes of higher priority.”76 Apparently, the Commandant was exploring to determine where the Bureau of Yards and Docks perceived priorities to lay.

The number of requests for Quonset huts substantially declined, although some activities still attempted to obtain them. In May 1944, the Commandant turned down a request for a Quonset hut to be used as living quarters for personnel attached to the Fleet Motion Picture Exchange77 and recommended the personnel be housed at the Aiea Naval Barracks. Similarly in a response to a request by the Joint Intelligence Center for three Quonset huts to store large quantities of multilith paper as well as certain power equipment and captured material, the Commandant reminded the Joint Intelligence Center that two buildings with a total of 41,400 square feet had just been completed for their program.78 Others requesting Quonset huts to house personnel were informed to use tents.79
Despite the stringent allocation of Quonset huts, the Commandant, 14th Naval District did favorably respond to Harold Dillingham’s request for two Quonset huts for Kauikeolani Children’s Hospital. Dillingham in his request noted that the hospital served many children of Naval personnel as well as war workers, and Honolulu was in the midst of a measles epidemic. As it was not permissible for the Navy to sell Advance Base Type materials to civilian organizations without going through an involved procedure, the Commandant offered to loan two huts to the hospital until the epidemic had ended. An appreciative Dillingham agreed to this arrangement; however, it was not until the end of December 1944 when the Seabees delivered and erected the two huts.  

To further assure that only priority projects obtained the highly in-demand Quonset huts, the authorization procedure now required an initial endorsement from an activity’s Commanding Officer before being transmitted to the Commandant, 14th Naval District. If it received a second endorsement from the Commandant the request was forwarded to the Pacific Division of the Bureau of Yards and Docks at the Pearl Harbor Navy Yard for final approval and release. During early 1945, another step was added to the process as the Commandant could refer the request to the District Logistical Board prior to making his determination, and the Commander In Chief of the Pacific Fleet was delegated the authority to grant final approval.

In August 1944 the Naval Hospital at McGrew Point was provided with an SSAR-20 to extend an existing building in which “persons are admitted with nervous conditions.” Service Squadron Six also was also able to obtain 11 SSAR 20 huts to house the 20 officers and 32 enlisted men of the newly established Pacific Mine Modification Unit and Mobile Explosive Investigation Unit #4 at the Mine Assembly Base, West Loch, and to provide equipment storage and electrical and mechanical laboratory space, and in September approval was received for a Tropical SSAR 20 to house the fire boat crew at West Loch. The approvals for the huts at West Loch, especially for the fire boat crew, may have in part been viewed in light of the May 21, 1944 West Loch Disaster in which a chain of explosions and fires destroyed six ships and three landing craft, loaded with troops, fuel, ammunition and supplies for the upcoming invasion of Saipan, killing 163 men and injuring another 396. A part of

Fig. 5-49
Aiea Receiving Barracks
Oahu Expansion Barracks, May 16, 1944
(RG 10, Box 7, Port Hueneme)
Fig. 5-50 Naval Base Hospital No. 8 at McGrew Point, 1945
Quonset Huts are Highlighted in Yellow
(OA-NI-1372, Pearl Harbor Region Master Shore Station Development Plan)
the Naval Ammunition depot was also damaged by the accident. An additional nine SSAR 20 huts were provided to the Mine Assembly Base in December 1944 to house the additional 60 officers and 150 enlisted men anticipated to arrive in January or February 1945. Included as part of the justification for the additional huts was the statement, “Tents and temporary wooden structures are unacceptable because of fire hazard.”

At the end of September 1944, the Submarine Base also obtained an SSAR 20 for use as a shop to repair radar gear and to operate certain training equipment, an early indication that the restrictions on the allotment of Quonset huts may have been loosening. However, the Naval Supply Depot’s (NSD’s) request for 12 Quonset huts to house 250 men at the Salt Lake Storage Area, where the Seabees had earlier constructed 15 SSAR 40 warehouses, and the Damon Tract Maintenance Area, did not result in the allocation of new huts, but instead the relocation of a block of SSAR 20 huts from the 6,000-man Moanalua Quonset encampment.

While the dispersal of new materials was still rigorously prioritized, the supply annex for the Advance Base Construction Depot (ABCD) was deemed of sufficiently critical importance to include 24 Quonset warehouses on the 342 acres at Iroquois Point. These were erected by the 8th and 43rd Naval Construction Battalions between June 1944 and the spring of 1945, before the 8th Naval Construction Battalion departed for Iwo Jima. In addition, these Seabee units constructed barracks, shop buildings, and administration buildings and installed the sewer and water lines at Iroquois Point. Many of these structures were also Quonset huts, with 62 barracks all being SSAR 20s. These Quonset huts augmented the approximately 118 Quonset huts constructed in this supply depot during 1943 and early 1944. The 109th Naval Construction Battalion built a number of Quonset huts at Iroquois Point, including their own quarters in December 1943, and the 125th Naval Construction Battalion in March 1944 erected a Quonset hut area, as well as a motor pool, fire station, bakery, mess hall and galley, and an administration building. The 62nd Naval Construction Battalion was also active at Iroquois Point during 1943 and 1944.

Also in the closing months of 1944, several other activities were able to obtain Quonset huts for use on Oahu. A request for an SSAR 20 was approved for the hospital at McGrew Point, as “the facilities of the hospital have greatly expanded to accommodate a large number of additional patients without commensurate enlargement of postal facilities.” The Mine Assembly Base received another three 20’ x 36’ Tropical Quonset huts, two to be used as a mine school and museum, and the third as a chapel and crew library. Three SSAR 20 huts with overhangs were released to house 21 senior officers and another as a mess hall for these officers. These Quonset huts most likely were constructed by the 43rd Naval Construction Battalion. However, a request for an SSAR-20 to be used by the officers of Naval Construction Battalion Maintenance Unit #600 was “returned disapproved with regrets that the extensive building program prohibits any further construction. It is essential that all existing housing be used to the maximum.”

In December 1944 Quonset huts were approved for use to house the officers and enlisted men attached to the Pearl City Gasoline Storage Plant, and for a Marine Corps Transient Center, and in February 1945 Naval Hospital No. 8 at McGrew Point received authorization for a 20’ x 112’ Quonset hut made of two SSAR 20 huts to be built to accommodate the Epidemiological Unit responsible for improving and maintaining sanitary conditions on board the fleet’s ships, for “as many as 5 transports have been disabled at one time because of communicable disease on board. This unit helps to prevent loss of ships in this way. Its work is considered essential.” Although receiving approval, the hospital was chastised for starting
Fig. 5-51 Iroquois Point Facility Boundary Map, 1946
(OA-NI-1512, District of Public Works Department, Pearl Harbor, Oahu)
construction prior to approval, “which is in violation of CincPOA directives.” Also in February 1945, two SSAR 20 huts were approved for recreational use by the WAVES stationed at Aiea Hospital, and one was constructed for the storage of drones and ordnance gear for a drone maintenance shop at Waianae’s Anti-Aircraft Training Center.

In early 1945 the Territory of Hawaii’s Department of Public Instruction inquired into the possibility of acquiring Quonset huts for use as Day Care Centers for children of mothers working in essential industries and for the Kauai Vocational School at Kalaheo to use three huts located in Hanapepe, which the Navy had used for amphibious training and then abandoned.

The Kauai Vocational School request was not granted, as the Navy intended to use the three buildings, but the Child Care Center request was approved by the Director of the Pacific Division of the Bureau of Yards and Docks despite a recommendation by the Commandant of the 14th Naval District to deny as, “sufficient huts are not available for their [the Navy's] own requirements.” On February 22, 1945 the Territory instructed the Navy to send a bill in triplicate to the City and County’s Department of Buildings for the five huts. Route Slip 5266 dated February 24, 1945, which transmitted the Department of Instructions payment instructions had at the bottom a hand written note, “This [approval] is deemed a Highly Dangerous precedent as Quonset huts are in short supply for Military purposes. District Supply will not deliver any huts as he has no cognizance. District Supply will bill the Department of Instruction Territory of Hawaii as directed.”

Fig. 5-52 Aerial View of Iroquois Point
(Image Provided by NAVFAC HI)
Above: Fig. 5-54 Chow Hall at Iroquois Point, 1944

Bottom: Fig. 5-55 Interior of Chow Hall, 1944
(Both Images Provided by NAVFAC HI)
Fig. 5-56 Moanalua Facility Boundary Map
(Map from Navy and Army Installations Barbers Point to Oahu Location Plan, 1944)
Other civilian requests for Quonset huts followed. Bishop James J. Sweeney of the Roman Catholic Diocese of Honolulu requested authorization to lease or purchase two Quonset huts to house the student nurses at St. Francis Hospital. District Public Works Officer Wetsel, in an internal memorandum noted, “Dirpacdocks has no complete salvaged huts, but has about two thousand new huts in stock. I recommend loan to St. Francis Hospital due to vital importance to community.” Similarly, the District Medical officer C. B. Camerer also supported such a loan, citing the loan to Kauikeolani Children’s Hospital as a precedent. G. L. Downes, the Assistant Commandant for Logistics also supported the loan, but noted, “It should be pointed out, however, that these quonsets (sic) are loaned in view of the serious nurse shortage, and their probable drafting for the Armed Services, and should not be construed as setting a precedent for housing civilian personnel in the City of Honolulu in Quonset huts.”

Stanley Kennedy, President of Hawaiian Airlines, also requested that the Navy loan or sell a SSAR 40 Utility Building for his company’s use as a passenger and air freight depot, located downtown on Ala Moana Boulevard, near Channel Street, because of Navy instituted security measures on February 1, 1944 restricting public access to John Rodgers Airport (now named Honolulu International Airport), which during the war was designated Naval Air Facility Honolulu. As a result Hawaiian Airlines passengers, at great inconvenience, had to check in at the airlines’ downtown office on Fort Street and depend on public transportation to get them to the airport for their flight. The handling of almost 100,000 passengers a year, plus their baggage, plus the airlines’ freight operations from the Fort Street office was difficult for the airlines and contributed to incredible congestion on Honolulu’s primary retail street, as passengers and their luggage were dropped off and picked up at curbside by private automobiles.

St. Francis Hospital’s request was granted, but W. W. Smith, the Commander of the Pacific Fleet’s Service Force recommended that Hawaiian Airlines’ request be disapproved as,

The stock of 40’ x 100’ buildings on hand at the Advanced Base Construction Depot, Pearl is insufficient at the present time to warrant the release of subject building. Also, the loan of government material is prohibited except when authorized by the SecNav and only when such action is deemed advisable or proper by reason of a public exigency. It is further considered that such action might set a precedent which would prove embarrassing if a number of commercial concerns were to present similar requests.

Others further up the line in the routing of this recommendation noted, “There’s a new man on the desk at Servforce. Call Capt. H. B. Jones, CincPOA and advise this is considered a legitimate loan as Haw Air Lines contributes to the war effort. Also CincPOA has approved other huts.” G. C. Briany, the Chief of Staff of the 14th Naval District’s Naval Air Bases, advised Captain G. L. Downes, the Assistant Commandant for Logistics, that,

In accordance with conversations with you and discussion with Admiral Mason, it is considered that the request of Hawaiian Airlines for the loan of a Quonset hut by the Navy is well justified for the following reasons:
1. Hawaiian Airlines is a commercial airline operator whose hangars and loading zones are within the environs of the Naval Air Station, Honolulu.

2. For security reasons the Navy cannot permit unrestricted traffic through the station to and from Hawaiian Airlines.

3. As a result of the above, Hawaiian Airlines has been deprived of part of its hangars and facility spaces and is not able to process passengers and freight within its area within the environs of the Naval Air Station, Honolulu. Hawaiian Airlines.

4. The loan of a Quonset hut to Hawaiian Airlines is merely compensating them for space of which they have been deprived the use of by the Navy, as they have ample space within the station to do the job of processing passengers if we could permit unlimited traffic to their areas at the airport. As a result of A

On May 1, 1945, the Commandant of the 14th Naval District recommended the loan of one SSAR 40 to Hawaiian Airlines be granted; however, at the end of the month Admiral J. H. Towers, the CINCPAC and CINCPOA Deputy Commander in Chief, disapproved the request:

> While it is to the advantage of the Navy to assist all transportation companies in the expeditious handling of freight and passengers, it is impossible to reconcile the diversion of material to this usage while an urgent military need for this equipment still exists.

Both Captain Downes and Captain Singer contacted Captain Jones to try to reverse this decision, "but the answer is still 'No,' because of the shortage of 40 x 100 Quonset huts. He [Captain Jones] stated, however, that he recommends that the Navy sell them sufficient lumber and other facilities for the construction of a suitable building." The idea of providing Hawaiian Airlines with several small Quonset huts was also floated, but "Jones still insists on wooden construction. He makes the point that every firm indirectly connected with the Navy should not get huts; otherwise the whole community will insist they have equal rights to same." Obviously, in the three years the Quonset huts had been in Hawaii, their value as a form of rapid, economical construction had become ingrained in the civilian as well as military minds.

In July 1945, Stanley Kennedy informed Admiral Bagley the airlines could not accept the Navy’s lumber offer, as,

> We have been unable to secure assurance from any contractors, at the present time, to erect any structures of the kind planned because of the shortage of manpower in the Territory. Everyone knows of this manpower shortage and only today did we further learn that carpenters, presently working on various structures in the city, are to be called off and put to work on the Territory’s housing program.

While attempting to strictly limit the number of Quonset huts provided to the private sector, the Navy did approve some requests for use of Quonset huts by other federal agencies. In April 1945, the Navy authorized the release of two SSAR 40 huts to the Army Corps of Engineers for their Construction Service Headquarters at Pier 2, as this unit was directed by the
Commanding General to vacate their premises at Punahou School.\textsuperscript{113} The Navy also provided the Office of War Information a 20' x 48' Tropical Quonset hut, which was taken from the Waipio Salvage Yard.\textsuperscript{114} In July 1945 three Quonset huts were sold to the U. S. Public Health Service for use as offices, laboratory and storage of equipment connected to the Health Service’s efforts to control Dengue Fever in Honolulu,\textsuperscript{115} and were constructed on the Territorial Department of Health’s land at Queen and Punchbowl streets by the Health Service.

In June 1945, Naval Hospital No. 10 at Aiea (now Camp Smith) was provided 14 SSAR 20 huts, one of which was 150' in length to serve as a recreational hut. The others were used for barracks and latrine purposes.\textsuperscript{116} In addition, the hospital received one SSAR 20 to extend the Occupational Therapy facility, as the current facility only accommodated a dozen patients, while more and more personnel, with a potential of 50 patients at all times, required this treatment.\textsuperscript{117}

Throughout the summer of 1945 40' x 100' Utility Buildings remained difficult to obtain. When the Marines’ 5\textsuperscript{th} Amphibious Corps requested an SSAR 40 to store radio equipment that was presently stored under canvas, they indicated that if none were available they would accept three SSAR 20 huts with extensions.\textsuperscript{118} Their request for the latter, more easily obtained hut, was approved. Approval was also quickly forthcoming for a request by the Wahiawa Radio Station for one Tropical Quonset hut, size 20' x 48', with six flush-type windows, as well as an additional 28 windows to provide existing Quonset huts with more lighting.\textsuperscript{119} The latter approval appears to have been the last authorization for the construction of a Quonset hut in Hawaii prior to the conclusion of World War II on August 14, 1945.
Quonsets in the 14th Naval District Outside Hawaii

The Navy first expanded its Pacific construction activities beyond Hawaii in the fall of 1939 with the establishment of bases on Midway, Wake, Johnston, and Palmyra Islands. The development of these bases resulted from a study undertaken in the fall of 1938 by a five-member Navy Board headed by Rear Admiral Arthur J. Hepburn. Tasked with the assignment to survey the Navy's existing bases and prepare a report on the need for additional Naval bases, the report gave major consideration to the development of Naval Air Stations, and in addition to recommending stations on these four islands, the report also proposed air stations be developed or expanded at Ford Island, Kaneohe Bay, and Guam. In addition, Midway, Wake and Guam were given high priority as Submarine Bases, and Oahu a high priority for a Mine Base.

The initial bases were constructed by a private contractor, Pacific Naval Air Bases, before the Seabees had been established and before the advent of prefabricated advance-base materials, which did not become available in the Pacific until 1942. Originally begun as seaplane bases, with the advent of war Midway, Johnston, and Palmyra were also provided runways for land planes, and waterfront facilities to permit the fueling of submarines. With the exception of Guam and Wake, which was captured by the Japanese on December 10, 1941 and December 24, 1941, respectively, these islands played extensive support roles throughout the Pacific campaign, and the Seabees expanded these bases' facilities from 1942 through 1944, and assisted the Army in building their bases.

Of these islands under American control, Midway Atoll, which is located near the end of the Hawaiian Island chain, received the most intense development both before and during the course of World War II. The Hepburn report had recommended this major development as it found, "From a strategic point of view, an air base at Midway was considered second in importance only to Pearl Harbor." Soon after the Hepburn Report was accepted, the Army Corps of Engineers began constructing a harbor and seaplane shelter at Midway Atoll. Between 1939 and 1940, the Pacific Naval Air Base contractors built various facilities on Midway, with a focus on expanding the harbor and developing a seaplane landing basin. After the outbreak of World War II the Navy intensified its development of Midway, adding runways to augment the seaplane facility. Fifty of the Marines' initial order of Quonset huts for Hawaii were sent to Midway to support the construction efforts. Following the Battle of Midway (June 4-7, 1942) additional effort was placed into developing the base as a submarine refueling point, and at least another 150 Quonset huts were sent to be used in the last half of 1942 and early 1943. By the end of the war 1,631 enlisted men were housed in Quonset huts on Sand Island and another 1,699 on Eastern Island. The last Quonset hut on Sand Island was demolished in 1996, although four Armco huts, which are designated as National Historic Landmarks, still remain on Sand Island. No Quonset huts remain on Eastern Island.

In addition to working on Midway, a detachment of the 5th Construction Battallion worked on the improvement of Tern Island at French Frigate Shoals, which is also part of the northwest chain of Hawaiian islands. Between July 1942 and March 1943. Quonset huts were constructed to house 360 men on Tern Island. At the end of the war there were only 125 military personnel on island, with nine Quonset huts capable of holding 180 men. In addition two huts served as a mess hall, and another as a dry provisions storehouse. From photographs taken over the past 15 years, it does not appear that any of these Quonset huts remain on the island.
Fig. 5-57 Eastern Island, 1943, Quonset Huts are Highlighted in Yellow  
(EG-23-104, Naval Operating Base, Midway Islands, Public Works Department)
Johnston Island in the 1930s was smaller than The Mall in Washington D.C., measuring approximately 3,000' long and 600' wide, but during the course of the war was increased in size through dredging and fill operations. It served as a Naval seaplane station on the eve of World War II. During 1942 and 1943, when the island’s role was expanded to include land based patrol planes and a submarine refueling stop, the 5th and 10th Naval Construction Battalions constructed 90 Quonset huts for housing on the island, primarily on the main island, but also on Sand Island, which was described as, “a small pile of sand and coral reef,” approximately 600' in diameter. After the capture of the Gilbert and Marshall Islands in February 1944, Johnston Island became an important transport air station on the route to the Central Pacific and 20 additional SSAR 20 huts were constructed at that time to house transient officers and to expand the island’s existing hospital facilities. In December 1945, 950 officers and enlisted men were housed in 55 Quonset huts and six Nissen Huts on the main island, and another 133 were in six Quonset huts and four Half Quonset huts on Sand Island. In 1948 the island was placed under the administration of the U. S. Air Force, and Quonset huts, including one serving as the island’s chapel, can be readily observed in photographs from the 1950s. The subsequent fate of these buildings has not been determined.

Palmyra was also developed prior to World War II, and construction activities between January 1940 and the end of 1941 resulted in the presence of a land runway as well as a sea plane base, four 60-man wooden barracks, and 43 other buildings used as offices, shops and storehouses. The onset of World War II brought increased air traffic to the island and a resulting expansion of its facilities. Twenty-six of the Quonset huts initially sent to Hawaii made their way to Palmyra during the first half of 1942, and 10 SSAR 20s were shipped there near the end of 1942. By the end of the war a little over half the personnel were quartered in wood frame barracks; while approximately 800 men called Quonset huts their home. Following the war the air station was decommissioned in 1947. The Nature Conservancy acquired the island in 2000, and no structures remain on the island today other than a few ruins of concrete buildings now enveloped by the jungle.

Canton Island, the largest of the Phoenix Islands in today’s Republic of Kiribati, is an atoll enclosing a 40-square-kilometer lagoon. Approximately nine miles long, it varies in width from 160' to 1,970'. Situated approximately halfway between Hawaii and Fiji, it was claimed by both the United States and Great Britain, who settled their differences in April 1939 by agreeing to place it under joint control for a 40-year period. One month later Pan-American Airways constructed facilities there to service their flights to Auckland, New Zealand. Prior to the war, Canton was developed by the U.S. Army and as a result the Navy did not do any construction on the island until well after World War II was in progress. It was not until the spring and summer of 1943, that the 10th Construction Battalion constructed a 17-hut Quonset village for Marine personnel on the island. In June 1945, Naval records indicate two SSAR 20 Quonset huts and four SSAR 40 Utility Buildings were used for general stor-age and both Quonset huts and wood barracks housed the personnel. Whether any of these Quonset huts remain is unknown.

In addition to developing the Pacific Islands under its administration, the Navy also shipped Quonset huts to a number of other Pacific island locations to support United States forces as they moved westward across the Pacific, with the Seabees being the primary construction force. The United States developed a three-prong attack to carry their forces across the Pacific towards Japan. The northern route extended from Sitka to Kodiak-Dutch Harbor-Adak and Attu. The southern route went from Pearl Harbor to Samoa and Espiritu Santo to Australia, the Solomon Islands and the Indies, while the central path
led from Pearl Harbor to Midway and Guam. In addition to air fields, roads, bridges, docks and buildings, the Seabees constructed countless Quonset huts for military use along all of the three routes to Tokyo, especially in Guam, Micronesia, the Philippine Islands, and Okinawa.

With the capture of Eniwetok in February 1944, control of the Marshall Islands, which had been in Japanese hands since 1914, passed to the United States. Bases were established on Eniwetok, Engebi, Kwajalein, and Parry islands, and Quonset huts and tents were erected for base storage and housing. Kwajalein developed as a staging area for further assaults in the Pacific, but primarily relied upon wood framed barracks and tents to house the military personnel stationed there, with only a few double-decker, two-story Quonset huts used to accommodate 450 enlisted men.126

During July and August 1944, the U.S. military gained control of Saipan, Tinian and Guam, the three largest islands in the Mariana Island chain. With these victories came control over the central Pacific by U. S. forces and all three islands were rapidly developed as important bases to open the door for further offensive attacks to the west and directly upon Japan. The Quonset hut figured prominently in the incredibly fast development of these bases.

Guam had been recommended for base development in the 1938 Hepburn report. However, because of its proximity to Japan, members of Congress were concerned that Japan might view any construction there as a hostile act, which in turn might provoke Japan to enter into war with the United States. As a result, moneys were not appropriated during 1939 or 1940, and construction of a small base on Guam was scarcely underway when the Japanese captured the island on December 10, 1941. The island remained under Japanese control until August 1944 when it was retaken by American forces. Immediately following the United States' victory on Guam, the Seabees and Army Corps of Engineers began to develop the

![Fig. 5-58 Bachelor Officer’s Quarters, Guam](image1)

![Fig. 5-59 Port Director’s Headquarter, Guam](image2)

island as a long-range bomber base and the Navy’s principal base in the central Pacific. The newly organized 5th Construction Brigade oversaw all construction on the island, with both Army Air Force and Navy bases established. The Navy quickly established on Guam an advance base equal in size to Pearl Harbor, with Quonset huts comprising a substantial part of the built environment. Lieutenant Commander Walter A. Lawrence recalled, “In the construction of the great forward-area base on Guam, many thousands of these readily adaptable units [Quonset huts] have been erected in record time to house everything from office personnel to milk cows. Typical usage includes barracks, galleys, mess halls, recreation halls, chapels, office buildings, hospitals, warehouses, repair shops, hangars, radio stations, telephone exchanges, boat houses, power plants, and barns.”

SSAR 20 Tropical Quonset huts were joined together to make wards for the 1,000-bed Fleet Hospital 103, and the chapel at Fleet Hospital 111 employed a cruciform plan using SSAR 20 Tropical Quonset huts. The Barrigada Radio Station also used SSAR Tropical Quonset huts as wings, and SSAR 20 Tropical Quonset huts were again employed in the Dispensary at Guam’s Marianas Headquarters. Naval Supply Depot was comprised of 464 SSAR 40 Utility Buildings. At the end of June 1945, Quonset huts at Guam’s aviation facilities had a capacity for 580 officers and 1,400 enlisted men. In addition, 26 20’ x 50’ Quonsets were employed in ammunition storage and 578 SSAR 40 Utility Buildings functioned as general warehouses. In the post-war reconstruction of the island Quonset huts “became omnipresent.”
Fig. 5-62 Fleet Hospital #111, Guam

Fig. 5-63 Wards of Fleet Hospital #103, Guam

Fig. 5-64 Barrigada Radio Station, Guam

Fig. 5-65 Dispensary at Guam's Marianas Headquarters, Guam

Fig. 5-66 Ordnance Supply Annex of the Naval Supply Depot, Guam

(All images from 5-61 to 5-64 are from “Building the Navy’s Bases in WWII: History of the Bureau of Yards and Docks and the Civil Engineer Corps, 1940-1946 Volume II,” United States Government Printing Office, Washington, 1947)
Saipan was secured by July 1944 and in October 1944 various Seabee battalions arrived on island to undertake the development of the naval base there. Quonset huts provided housing to 1,750 men, and also were used for shop buildings. The island’s supply depot included 64 SSAR 40 Quonset Utility Quonsets, as well as eight SSAR 20 Quonset huts used for administrative offices. In addition, five large steel, arch-rib buildings sheltered the mobile amphibious base repair operations. A large, two-story chapel was also constructed from four SSAR 20 Quonset huts. An industrial area, erected in the spring of 1945, included eight SSAR 20 Quonset huts and 9 SSAR 40s. The 400-bed naval hospital, also constructed in early 1945, included 40 SSAR 20 Quonset huts used for wards, laboratories, mess halls, galleys, quarters, and administrative offices. The Seabees also used Quonset huts in the construction of the island’s General Hospital 148, as well as the Army’s General Hospital 39 and Army Station Hospital 176, each of which had a 600-bed capacity. In addition to the medical facilities, this major hub of activity also utilized 1,706 Quonset huts to house 2,402 officers and 23,600 enlisted men, less than a third of the personnel on the island in June 1945. The majority of the military population resided in tents or prefabricated temporary wooden barracks. In addition, 100 Quonset huts were employed as mess halls and another 149 served as storage warehouses. On Saipan the last of the World War II Quonset huts were destroyed by Typhoon Jean in 1968, and the island’s only known vestige of the once prevalent form dates from the post-World War II era.

Tinian was developed as a large airbase to support the Army Air Force’s B-29 Super Fortress bomber, which was capable of traversing the 1,500 miles separating Tinian from Japan. Here again Quonset huts were extensively employed to provide immediate shelter, including the hospital, housing, warehouses, and mess halls. Following the end of World War II, the Military Government Unit (MGU) Tinian was inactivated in July 1946 and absorbed by MGU Saipan, and in April 1947 the Naval Air Facility Tinian (NAFT) was inactivated. The military disposed of the 69 extended SSAR 20 Quonset huts and eight SSAR 40
utility buildings formerly controlled by MGU Tinian to the Chinese government. On Tinian no Quonset huts are known to remain today, and a 1997 building survey listed only a dozen Armco huts, a number of which were in deteriorated condition.

As the military advanced further westward into Micronesia, the Quonset hut went with them appearing on Espiritu Santo and Efate in Vanuatu, Iwo Jima, the Philippines, Okinawa and other islands. Because of the heavy flooding associated with the monsoon season, Quonset huts on a number of these islands were constructed on elevated frames, as at Naval Hospital Number 3 at Espiritu Santo. Also in response to the hot climate, the SSAR 20 side walls were sometimes flared upward to allow an open wall fitted with screens, as at Carter City on Florida Island in the Solomon Islands and Tolosa on Leyte. Whether any Quonset huts remain on these islands is unknown. However, as late as 2006, several SSAR 40 Quonset huts were still utilized by the Truk Trading Company on Chuuk.

Following the conclusion of World War II, many of the military’s bases were almost completely abandoned and the Quonset huts that had been erected fell into disrepair. On Guam, which during the war housed more than 3,000 men, many of the huts were engulfed by the rapidly growing vegetation. The onset of the Korean War, led to a need to once again man a number of the World War II advance bases. The Barracks Rehabilitation Program started by Captain John Alderman, chief of staff, Fleet Air Guam, resulted in the repair and reconstruction of a number of the abandoned Quonset huts on that island. The rehabilitated SSAR 20 Huts with overhangs, were refurbished to accommodate 112 men, and included a lounge area, “partitioned from the living quarters for the convenience and comfort of the men.” However, following the conclusion of the Korean War, the condition of the Quonset huts on base came to be viewed as hazardous during the typhoon season, and the Commanding Officer of the Naval Station requested authorization to demolish, at no cost to the government, slightly over a hundred Quonset huts, most all of which were SSAR 20s with extensions. Cultural resources surveys undertaken in the late 1990s of Navy properties on Guam recorded 27 Quonset huts still standing; however, as of 2006 only three Quonset huts were known to remain at the Naval Base, Buildings 151, 191, and 1686. In addition, in 1994 David Lotz identified three Elephant Huts and two SSAR20 huts which were in private ownership.

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Fig. 5-72 Seventh Fleet Command Headquarters, Iwo Jima

Fig. 5-73 Hanger Erected by the 8th Seabees, Iwo Jima

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Fig. 5-74 Mess Hall and Galley at CAUS 52 Camp, Iwo Jima

Fig. 5-75 Sea Frontier Headquarters, Leyte, Philippines

Post-War Military Use

Following the conclusion of the war with Japan on August 14, 1945, the United States was “more than ready for peace and the concomitant reshuffling of budgetary priorities.” In Washington D.C., there was an initial call by economic planners for the reduction of the number of ships operated by the U.S. Navy, and the immediate demobilization and disarmament of all armed forces was favored by the American public. As a result, by the end of 1946, the U.S Navy’s “active fleet’s combatant vessels had shrunk by 75 percent, other ships by 94 percent. In personnel, the Navy now mustered a mere 14 percent of its size at war’s end.” In addition, the Navy’s budget was enormously reduced, and within a year of the war’s end “the fleet’s operating budget – the actual money the Navy secured from Congress – went from $16.8 billion to $5.6 billion, then leveled off at a little over $4 billion for the next three years...” Such dramatic reductions eventually resulted in a diminished need for and ability to maintain facilities, including Quonset huts, within the Navy, which in turn led to a reduction of the Navy’s inventory. However, during late 1945 and 1946 these emerging trends did not immediately manifest themselves.

Perhaps the first peacetime Quonset hut to be erected in Hawaii was constructed at the Navy’s Wahiawa Radio Station. Immediately after learning of the cessation of hostilities radio equipment intended to be sent to Okinawa to establish a Communication Security Unit was diverted to Wahiawa. Included in the equipment was an SSAR 20 hut with extensions, which was built to store the equipment at the Wahiawa Radio Station.

In other immediate post-war actions involving Quonset huts, W. C. King, the Commanding Officer at Naval Station Barbers Point, was most likely surprised to read a memorandum in response to his August 14, 1945 request for a 40’ x 125’ Quonset hut for use at the station’s Engine Test Cell and Preservation Building:

> It is recommended that in lieu of erecting a temporary type structure that more permanent materials be utilized inasmuch as this is a permanent station, and this policy, is consistent with post war planning. A concrete block building, 40’ x 146’, similar in type to the adjacent Engine Preservation Building is recommended.

Saddled with the hundred-year-old stigma of corrugated sheet metal being viewed as an unpretentious, cheap, temporary material with utilitarian associations, the Quonset hut went from being a ubiquitous part of the Navy’s World War II landscape to a less than desirable part of that post-war environment. In the absence of the imperatives of war, the Quonset hut was relegated a lower-profile role in the scheme of military construction which emphasized a smaller footprint of permanent facilities.

Just as the Navy viewed NAS Barber’s Point’s needs in terms of permanency, so too a number of requests submitted to convert SSAR 20 barracks into interim housing for enlisted men’s families, were withdrawn as the Bureau of Yards and Docks budget for 1946 included moneys for 1,300 new interim housing units to be constructed at Naval Stations in the 14th Naval District. This substantial appropriation of funds for family housing was in large part motivated by the military’s realization that it needed to improve the living conditions of its enlisted personnel, if they were going to be able to retain them. Soldiers and
sailors with families were viewed as more stable, and an emphasis was placed on accommodating personnel's families. Despite such concerns, the moneys budgeted for this purpose in Hawaii appear to have been insufficient to meet the demand, as a request to convert six former Quonset huts at Iroquois Point's Area B for this purpose was granted in October 1946 to the Commanding Officer of Patrol Squadron 123, with the understanding that the conversion would be undertaken by voluntary labor, as the Navy had no labor or material available. By December 1946, nine Quonset huts at Iroquois Point were used as married officers' quarters, and the Naval Supply Center requested an additional two Quonset huts for this purpose. Also in October 1946, the process was initiated to allow the Submarine Base, which had a need for over 200 family housing units, to use 60 Quonset huts standing vacant at Navy Hospital 128, following a visit to the area by Admiral Hansen. During that time, the Public Works officer at NAS Kaneohe Bay, also put in a request for vacant huts in Section E of the Advance Base Redistribution Depot (ABRD) at Iroquois Point.

The 14th Naval District, while recognizing the expediency of Quonset huts as an immediate, interim solution to the Navy's family housing shortage, appeared to not truly favor the use of Quonset huts for this purpose, claiming the command had no funds for either the conversion or the maintenance of what were considered temporary buildings. Those who desired to pursue such a quick fix solution were impeded by time-consuming paperwork. The office of the Commandant of Naval Base Pearl Harbor informed requesters of Navy Regulations Article 1488(4), which required approval by the Secretary of the Navy to change the prescribed functions of a building. To further complicate the process, requesters were notified that Quonset huts were buildings, and therefore a separate authorization for their erection, or construction, had to be obtained from the Navy Department. Although claiming to have "no objection to Quonset huts being used by the various activities in the area for family quarters," Admiral Hanson had activities individually apply for Secretary of the Navy approvals, rather than attempt through his office to obtain some type of blanket approval. In addition, before any of the many vacant Quonset huts could be considered for housing purposes, they had to be determined surplus and not needed by any other activity in the 14th Naval District. Despite such bureaucratic detours, a number of Quonset huts at Iroquois Point, Moanalua, Red Hill, and McGrew Point were converted to interim family housing units. As late as the end of 1947, Quonset huts were being converted for use as family housing, as at McGrew Point where 28 Quonset huts, formerly used by the hospital, were designated for use by “VMF-322 families” who arrived at Marine Corps Air (MCAS) Ewa from Midway in July 1947. By August 15, 1947, seven units for officers were completed, and the remaining twelve officer units and nine enlisted units were made available at the approximate rate of three a week.

With the conversion of Quonset huts to family residences came other issues. In November 1946, Lt. Col. J. S. Oldfield requested that “the screened-in porch located at the end of hut # 241 (public quarters), Red Hill, be enclosed and fitted with a sufficient number of glass windows to insure adequate ventilation," as his two children used the porch as a bedroom and had to move to some other part of the house when there was inclement weather. The request, which was made despite the fact that the officers on Red Hill had accepted these temporary family quarters in “as-is condition,” was denied as had several similar requests in the past for solid bulkheads. The Navy was not prepared to remodel these Red Hill Quonset huts as costs for maintenance of the six senior officer quarters on Red Hill exceeded by far the moneys expended on 12 to 15 quarters in Area I and II or Hospital 128. Considering the rank of the requester, the Oldfield family was relocated to more suitable quarters.
Fig. 5-76 Floor Plan for Quonset Hut Housing

Fig. 5-77 Inside the Quonset Hut Housing

Fig. 5-78 Bedroom in the Quonset Hut Housing

(All images are from “Quonset,” Commander H.F. Ransford CEC USN as told to J.Duncan Campbell, RG6, Quonset Hut Construction, Unknown date, Port Hueneme)
In addition to family housing, the Navy continued to use Quonset huts during the years immediately following World War II, but frequently for new activities, which usually involved more utilitarian functions such as storage or industrial shop purposes. A number of SSAR 40 Utility Buildings, often with their interior partitions removed, found extended lives as warehouses, such as the 10 SSAR 40 Utility Buildings in the Waiawa Civilian Housing Area which were transferred to the Naval Supply Depot’s Spare Parts Distribution Center. Similarly Building 19, a Quonset hut in the Makalapa Area, was used to store electronic equipment. In a number of instances, the huts provided storage space for activities addressing the post-war de-mobilization efforts, as in the instance of Quonset No. MSR 4, at the former Naval Hospital No. 128, which was assigned for use as the District Central Library, which received and stored books received from decommissioned ships and stations in the 14th Naval District. In other instances vacated Quonset huts, such as Building No. 270, an SSAR 40 Utility Building which served as the Third Fleet Headquarters during the war, were simply declared excess to the needs of the Command and designated surplus property.

Although Pearl Harbor’s main functions of ship repair, refueling, re-provisioning, and providing a place of respite for military personnel and vessels, did not change with the conclusion of the war, an immediate effect of the shrinking size and budget of the Navy was a downsizing of the Navy’s physical plant in Hawaii. Buildings, including Quonset huts, constructed to accommodate the influx of personnel and activities required by the war effort, were now superfluous, and many stood vacant. By April 1947 various activities had shifted into downsize mode, and were requesting authorization to dispose of buildings by sale. A number of these surplus structures were Quonset huts. In February 1947 some of the first huts to receive authorization for disposal were on Waipio Peninsular. A month later authorization was requested to remove the remainder of the buildings at this site, including Building Nos. 20, 21, 22, 41, 58, 59, 60, 61, 62, 63, 64, 65, and 126, all of which were Quonset huts. Three 16’ x 16’-2”, plywood Nissen Huts joined together to form Buildings T59 and T60 were also disposed of at this time. Also in May 1947, a request was submitted for the disposition of two Quonset barracks at Hospital Point (Buildings T-17 and T-20), and the shipyard also disposed of another 16 Quonset huts which were identified as being “no longer required, and constituting a fire hazard and excessive maintenance load.” In August 1947 the MCAS Ewa, disposed of two 20’ x 56’ Quonset huts (Building Nos. 326 and 327) and also one wooden 16’ x 46’ Nissen Hut (Building 346), and a month later the installation requested authorization to demolish and salvage four Quonset huts which were originally designed to serve as a galley, bakery, galley and scullery, and beer hut that were built by the Seabees in 1943. The location of these vacant Quonset huts interfered with the development of new housing, and they were deemed unfit for conversion to family quarters as their, “adaptation to special usage at the time of construction has so altered structure so as to make it unfit for any other purpose. Deteriorated condition of building constitute (sic) a health and safety hazard.”

The downsizing of not only the Quonset inventory, but also the military, continued throughout 1947-1950. Many Washington politicians facing reelection in 1948 were “anxious to [further] scale down the vast outlay of dollars for defense,” which translated into the 1947 national defense budget dropping approximately 60 per cent from the previous year from $53.3 billion to $22.2 billion; the defense budget in 1945 was $93.7 billion. As a result, Pacific naval air stations such as Barbers Point, Midway, Kaneohe Bay, and Kahului, where various wartime activities had been supported by Quonset or Armco huts, faced uncertain futures due to the increased calls for demobilization. The Territory of Hawaii assumed control of NAS Puunene in October 1946 and in October 1948, gained administration over Hilo’s General Lyman Field. In 1948, the Navy and
Fig. 5-79 Waipio Point, Pearl Harbor, December 13, 1965
(VC-1-32118-12-65, Bowfin Submarine Museum Library)
Territory entered into long-term negotiations on a long-term lease for NAS Kahului, with the intention of converting the air station into Maui’s primary commercial airport. The talks finally concluded in December 1956 when the Navy deeded the former NAS Kahului to the Territory of Hawaii. Prior to the start of the discussions, NAS Kahului disposed of 35 SSAR 20 Quonset huts with extensions in 1947. The Station’s Commanding Officer recommended, “Due to local conditions on the Island of Maui it is recommended that sale of these structures be conducted on a basis of single units rather than larger lots. The station can furnish a crane for loading Quonset huts on trailers, providing buyer furnishes a satisfactory crane operator. This would not apply to use of crane for unloading trailers off the station.”

NAS Barbers Point after the war served as a demobilization center for more than 6,000 military personnel who were mustered back into civilian life. The base became the major naval air station in the Pacific region, and as a result, a large number of its Quonset huts were retained and remained in use through the Cold War. NAS Kaneohe Bay was decommissioned in 1949 and then in 1952, in the midst of the Korean War, Marine Corp Air Station Ewa was transferred to Kaneohe Bay. World War II Quonset huts continued in use as family housing and base recreation at the windward base into the 1950s until the advent of the Capehart and Weary housing programs. World War II Quonset huts housing enlisted personnel and dependents were clustered in several large areas of the Air Station. One neighborhood was located along G Street and Lawrence Road. This area began south of Third Street and continued northward past Mokapu Road almost to Building 455, the former gunnery school. This area contained about 73 Quonset huts of different configurations. While just north of Mokapu Road, on the northwest side of Lawrence Road another group of sixteen 20’ x 48’ huts labeled as “Dependent Public Quarters, enlisted personnel” (NAVFAc Archives 1949 and NARA College Park 1953) remained in use until at least March 1956. In the same area, another group of 20’ x 48’ Quonset huts for Dependent Public Quarters, enlisted personnel was located on the east side of G Street between Mokapu Road and Third Street (maps at NAVFAc Archives 1949 and NARA College Park 1953). In 1946 there were 15 Quonset huts here in a single row along G Street. By 1949 the huts had been moved and re-aligned, changing their layout to a double row with eight huts in each row. This group of Quonset huts remained until sometime between October 1953 and March 1956. Another grouping of Quonset huts in this large area of housing included a cluster of thirty 20’ x 48’ huts near the intersection of G Street and Third Street.

Today only one World War II-era Quonset hut remains standing at Marine Corps Base Hawaii, Kaneohe Bay; while three, Vietnam War-era Quonset huts also are in use at this base. Building 620, the extant World War II Quonset hut, is at its original location on Sumner Road on the northwest side of the runway. A 40’ x 100’ Quonset built in 1945 as an Aircraft Engine Salvage Shop, Building 620 was built as part of a group of Ready Magazines, Smoke Drum Storehouses, and Aircraft Revetments in an area between the landing mat and Runway No. 2 (NAVFAc Archives June 30, 1949). The three remaining Vietnam War-era Quonsets huts include Facilities 1278 and 1279, which date from 1965. These are standard 40’ x 100’ huts, and have translucent corrugated fiberglass roof panels for skylights. Facility 320 is the other example of the Vietnam War-era Quonset hut. This 40’ x 100’, self-supporting type Quonset hut also has translucent roof panels to add natural light to the interior space.

The Navy’s building footprint reduction continued throughout the 1940s, and in a memorandum dated June 14, 1949, the 14th Naval District Commandant issued an order to dispose of all unnecessary structures classified as temporary.
1. Incident to the reduction of mission and disestablishment of various Naval activities within the Fourteenth Naval District, all temporary structures for which there is no foreseeable need under the reduced mission and redeployment shall be disposed of in accordance with current directives.

2. All commands are requested to review and survey carefully the facilities available and initiate action for the disposal of facilities. The District Public Works Officer shall advise the Commandant monthly with regard to the progress of action being taken by the respective stations in implementing the above.\footnote{162}

This order accelerated the declining presence of Quonset huts on Naval bases in Hawaii. Anticipating this directive and the closing of U.S. Naval Station Kaneohe Bay, the Commanding Officer of that air station recommended 43 buildings on base for disposal as they “are excess to any foreseeable needs of the station and/or are serious fire hazards to the station in maintenance status.”\footnote{163} Eight of the buildings were identified as Quonset huts. The Station disposed of another five Quonsets in February 1949 again justifying their removal on grounds that they presented a fire hazard and required excessive maintenance. The Quonset huts removed at NAS Kaneohe Bay were those constructed in 1944 in an area just north of Hangar No. 1, including those designated as a “Training & Educational Center.” By June 30, 1949 only eight remained, and by June 1951, only four of the Quonset huts remained in this group.

Besides these three areas which had large concentrations of Quonset huts, historic photos show that more huts were scattered about NAS Kaneohe during the last year of the war and on into the early 1950s. Two of the four Quonset huts which remain on the base were among these huts. Building 584, a 40' x 100' Quonset hut, which is extant and at its original location, is listed in the Navy database as built in 1943 and was described as a General Storehouse in 1949 (NAVFAC Archives June 30, 1949). This Quonset hut was grouped with another Quonset hut storehouse (Building 583, which was used for aircraft parts and is now demolished) near the northeast end of the landing mat when they were constructed.

Another World War II Quonset hut that is extant at its original location on the base is Building 620, a 40' x 100' Quonset hut built in 1945 as an Aircraft Engine Salvage Shop. Building 620 is located on Sumner Road on the northwest side of the runway. This Quonset hut was built as part of a group of Ready Magazines, Smoke Drum Storehouses, and Aircraft Revetments in an area between the landing mat and Runway No. 2 (NAVFAC Archives June 30, 1949).

The fourth Quonset hut that is extant on the base is Building 1198, a 40' x 100' hut which is listed as built in 1961 and is located on the site where it was erected. It is not known if the year built date of 1961 represents the original erection of the Quonset hut or the date of a subsequent reerection after being relocated. Of these four extant Quonset huts at Marine Corps Base Hawaii, Building 620, built on the northwest side of the runway, appears to be the best example of an existing hut. It is on its original location and appears the least altered.

Under the Federal Property and Administrative Services Act of 1949 (Public Law 152, 81st Congress, approved 30 June 1949), six Quonset huts from NAS Kaneohe Bay were transferred to the University of Hawaii on a non-reimbursable basis in the summer of 1950 for use at its Experimental Station in Waimanalo. These included Facility Nos. 913, 914, 915 and 916, which
served as lecture halls at the station, as well as Facility No. 372, a shop and parachute loft housed in an SSAR 40, and Facility No. 386, an Oxygen Shop also housed in an SSAR 40. Also at this time the eight double-decker, two-story Quonset huts, built in 1944 and used as enlisted men barracks, were authorized for disposal by the windward side installation.

During the post-war period, Stran-Steel continued to manufacture and make improvements to the Quonset hut, developing a market for farm utility buildings. They also remained in contact with the military and A. W. Van Leer, who as a young Navy lieutenant worked on the Quonset hut project at its inception in Rhode Island, joined the company. One issue the firm addressed concerned leaking roofs. A number of huts experienced this problem, especially on Guam where severe winds often wracked the buildings and loosened the exterior siding causing rain seepage. To address this problem the Bureau of Yards and Docks in January 1951 recommended loosening the sheets, caulking, and then retightening the corrugated sheets. This solution was too labor intensive, and other alternatives, including spraying some type of waterproof coating on the huts were considered. To address this problem in future huts, Stran-Steel's post-war huts used corrugated metal with greater strength and rigidity, and the horizontal and vertical laps of the sheets were to be sealed with a ¼” bead of mastic, which was now included with the units.

Beginning in 1947, Stran-Steel's dealers also began to experiment with corrugated translucent plastic sheets manufactured by two companies, Alsynite and Corrolux. The sheets were reinforced with fiberglass and would nest with the corrugated metal sheets for ease in shipment. In 1950 Stran-Steel conducted testing on a new Quonset hut design they were developing, and included the plastic sheets as part of the study. The company felt that 24 lineal feet of the plastic siding, applied to each side of the Quonset hut provided more light than the small windows used during World War II. They emphasized that this new, lightweight material would greatly reduce shipping space and costs, and would make for easier and quicker assembly. They also felt the sheets could be hinged to provide ventilation as well as light. Whether this was ever implemented for military use is unknown. Indeed, the whole topic of innovative and new changes which have been made in the basic design of Quonset huts during the past 60 years remains in need of research.
Quonset Huts in the Cold War Period

The coining of the term “Cold War” has been attributed to a number of people. George Orwell used the term as early as October 19, 1945 in his essay, “You and the Atomic Bomb,” in which he warned of a “peace that is no peace,” which he referred to as a permanent “cold war,” an ideological struggle between the communist Soviet Union and western powers.164 Bernard Baruch later used the term in a speech given in South Carolina on April 16, 1947 to describe the geopolitical tensions between the United States and Russia, and Walter Lippmann familiarized the American public with the two words in his 1947 book, Cold War.

As opposed to their starring role in their debut during World War II, Quonset huts played a less conspicuous and unassuming role during the Cold War, except on those occasions when the cold turned hot in such proxy wars as fought in Korea and Vietnam. At those moments, the Quonset hut again was counted on to do what it did best, i.e., provide comfortable shelter quickly and for a reasonable price. To support the immediate building needs the Naval Construction Battalions were reactivated.

As the 1940s turned into the 1950s, the reality of the Cold War became more apparent and the continued reduction of U.S. Naval forces was reconsidered. Throughout the last half of the 1940s, Pearl Harbor Naval Shipyards was essentially left intact and operational but with a reduced workload, and Quonset hut T15 continued to function as a storehouse,165 although other Quonset huts in the area were removed.166
With North Korea’s military invasion of South Korea on June 25, 1950, Pearl Harbor almost immediately experienced an increase in ships as well as military and civilian personnel. The United States became fully involved in the Korean War by July 1950 as a major part of the United Nation forces, and over the course of the war the federal defense budget increased from $24.2 billion in 1950 to $56.9 billion in 1953,\(^\text{167}\) while the budget of the U.S. Navy increased from $4.3 billion in 1950 to $16.7 billion in 1952.\(^\text{168}\) By September 1951, newspaper accounts indicated that there were 80 ships in Pearl Harbor that included the Navy’s largest Iowa-class battleship. In addition, a number of cruisers and destroyers were in Pearl Harbor either undergoing repairs or being used for training exercises, while the submarine base held 16 submarines with a similar number of submarines engaged in and around Korean waters.\(^\text{169}\) During 1951 the workload at the naval shipyard had doubled from the previous year, and by July of 1953, following the end of hostilities, the shipyard had “tallied nearly 3,000 ship repairs, overhauls, and other yard visits.”\(^\text{170}\)

With the conclusion of the Korean War, a need for more permanent structures to house forces along the DeMilitarized Zone resulted in a number of new Quonset structures being built in Korea. In 1957 a straight-sided version of the Quonset hut, reminiscent of the Quonset Redesign with its more efficient use of interior floor space, re-emerged for use in Korea.\(^\text{171}\)

The mission of Pearl Harbor during the Korean conflict did not deviate from that of World War II, and the base once again was operating as an indispensable ship repair facility, and a refueling and supply center for an overseas war. NAS Barbers Point, which featured four runways and a number of Quonset huts, functioned throughout the Korean War as a “critical staging area for supplies, equipment and forward deploying squadrons,”\(^\text{172}\) while also serving as a main base for patrol plane operations and early warning barrier aircraft patrols that employed radar to track Soviet planes,\(^\text{173}\) and SOSSOS to track Soviet submarines.

As a result of the Korean War, critical support facilities at Pearl Harbor such as U.S. Naval Ammunition Depot, Lualualei were not targeted for closure or substantial budget reductions. During the early 1950s, Lualualei employed more than 1,500 military and civilian personnel, and in 1953 an additional 325 acres adjacent to West Loch were transferred to Lualualei.\(^\text{174}\) Quonset huts at West Loch, such as K-28 and K-29, changed their storage function to serve as storage facilities for weapons, as well as for other purposes. However, despite its comparatively high level of use in the Cold War period, as late as 1958 the Depot disposed of 76 buildings at West Loch which had not been used or maintained since World War II, a number of which were Quonset huts.\(^\text{175}\)

In addition to increased activity at Pearl Harbor, Lualualei, and Barbers Point, NAS Midway, which was deactivated in early 1950 with the removal of all military personnel due to budget cuts and the downgrade of status as a militarily strategic naval base, was reactivated for the duration of the Korean conflict. During this period, the existing Armco huts constructed in 1942 provided needed areas for storage in support of the war. A third reactivation for Midway occurred in July 1953 as Soviet bombers flying over the Pacific led to the expansion of facilities on Sand Island in 1957 for a Pacific Airborne Early Warning wing comprised of three squadrons of “radar constellation” aircraft; the Navy provided services and materials in support of the operation which continued into the 1960s and “became the longest running cold war defense mission at Midway.”\(^\text{176}\)
Fig. 5-81 Quonset Huts at Waipio and West Loch in 1957, Quonset Huts are Highlighted in Yellow
(No. 7974733, NAVFAC PACIFIC)
During the Korean War approximately 30,000 Quonset huts were constructed at bases in the United States and overseas; however, no records have been uncovered to indicate any new Quonset huts were constructed in the 14th Naval District. Following the Korean War, the Army consolidated and relocated at least 57 Quonset huts to its training grounds at Pohakuloa on the island of Hawaii between 1955-1964. These huts came from various installations around the Pacific, but the specific locations from where these huts were obtained has not yet been ascertained.

During the late 1950s, Quonset huts were still in use at Pearl Harbor’s Public Works Center, Naval Shipyard, Naval Ammunition Depot, and Naval Supply Center. Quonset huts at the Public Works maintenance area at Moanalua, including X-18, X-20 and X-21, were still operating as shops; the shipyard’s T15 Quonset hut was still utilized for storage; and the Quonset huts at West Loch still served as ammunition storage. In addition to those at Pearl Harbor, Quonset and Armco huts at NAS Barbers Point and Midway continued to serve the U.S. Navy in accomplishing its core missions, while Quonset huts formerly under the control of the 14th Naval District at Kaneohe and Johnson Atoll certainly proved their durability despite their original temporary status.

Some Quonset huts were upgraded during the Cold War era to a semi-permanent construction type status that allowed funding for their maintenance and upgrades using more permanent materials, such as concrete floors, to extend their use.

Between the end of hostilities in Korea and the United States’ commitment to the Vietnam War in the early 1960s, the U.S. Navy entered into a period of technological transition in which advances in equipment, weapons, and modern naval vessels and aircraft would define Cold War relationships into the 1990s. Prior to 1955, the U.S Navy had developed a “techno-empire” based upon an extensive research and development R&D program that had begun during World War II. The Cold War accelerated technological R&D, and by 1954 the U.S Navy was spending $526 million on R&D altogether, up from only $40 million in 1940. This technological R&D program produced an “electronic revolution” that improved ship proposition systems, radar and communication systems, and projectile weapons such as electronically controlled torpedoes that could be launched from both submarines and surface ships. The Navy’s electronic revolution of the 1950s was also matched, if not topped, by an even greater Cold War technological revolution, nuclear power.

A major shift in the Cold War era at Pearl Harbor occurred with the arrival of the USS Nautilus in July of 1958, which had been assigned to the Pacific Fleet for a two-month tour. The Nautilus was followed to Pearl Harbor by the USS Sargo, the Pacific Fleet’s first nuclear-powered submarine to call Pearl Harbor a home port, and by 1960, nuclear submarines designed to launch guided missiles had arrived at Pearl Harbor with the USS Grayback and George Washington leading the way. The latter possessed the ability to fire the recently developed Polaris guided missiles. The submarine base at Pearl Harbor was now a homeport for two of the first five nuclear submarines built, as well as a homeport for 20 diesel-powered submarines. These modern, nuclear submarines had the capability to use, among other Cold War era weapons, improved electrically-powered torpedoes such as the Mark 37.

West Loch Quonset huts K-28 and K-29 were modified to accommodate electric torpedoes in the latter part of 1961 and early 1962. Floor and detail plans recorded on November 7, 1961 indicate K-29 would serve as an explosive assembly building with a new “conductive deck” throughout. Quonset hut K-28 was to be modified into a sub-assembly building with a
Fig. 5-82 Quonset Huts at Camp Catlin in 1966,
Quonset Huts are Highlighted in Yellow
(No. 794730, NAVFAC PACIFIC)
battery charging room that featured battery platforms, and a gyro shop was added to service the gyroscopes that guided
the Mark 37 torpedo just after being fired. K-28 was also updated with a new crane bridge, trolley and hoist and crane
girders. The only notable damage to both Quonset huts after almost 20 years of service was at the ground ends of the
curved framing ribs, which were scheduled to be repaired.

In addition to the alteration of Quonset huts due to advancements in nuclear technology, Cold War-generated advance-
ments in chemical weapons led to the construction of a new version of the Armco huts at Johnston Atoll in the 1960s and
early 1970s. The atoll, by then a former property of the U.S. Navy, was jointly controlled by the U.S. Atomic Energy
Commission and Joint Task Force 8 between 1962 and 1963, and was used as an above and below ground nuclear test site. The tests
included high altitude atmospheric nuclear tests that were soon halted by the Limited Test Ban Treaty of 1963. After the
treaty, Johnston Atoll functioned as the main overseas readiness-to-test site, and in 1964 open-air biological weapons tests
were held downwind from the atoll. In 1965 and 1966, additional Armco huts were constructed at the southwest corner of
the atoll, and in 1971, 36 Armco huts were built in lined groups south of the West Parallel Taxiway. The construction of Armco
huts in 1971 coincided with the storage of chemical weapons on Johnston Atoll that included “rockets, projectiles, mines,
mortars, and ton containers, containing both nerve & mustard agents.”

The 1965 and 1966 construction of Armco huts at Johnson Atoll occurred as U.S. troop levels in Vietnam reached 184,300 and
385,300, respectively, up from approximately 16,000 at the end of 1963. Various naval facilities throughout the Pacific under
the administration of the 14th Naval District responded to the Vietnam War as they had in World War II and the Korean War.
Pearl Harbor again became the arsenal and staging center, and as the largest Naval harbor fulfilled its “primary
mission[s]...to provide berthing and shore-side support to surface ships and submarines, as well as maintenance and training.”
During this period, Quonset huts at the Public Works Center that included X8, X9, X18, and X20 continued to serve as
shops or storehouses, while West Loch Quonset huts K-19 thru K-24 and K-30 thru 33 maintained their purpose as “inert store-
houses,” and K-28 and K-29 continued to function in the capacity they were converted for in 1962: “torpedo shops.”

Again, no documentation was found to indicate new Quonset huts were built during the war on Oahu; however, Quonset
huts were used in Vietnam for hospitals, administration buildings, offices, shops, warehouses, and after 1967 as housing for
nurses. They also provided quarters for other personnel, and were considered a major step above the plywood Southeast
Asia hut with its canvas top, in which many troops were housed. At Chu Lai, sandbags were stacked along the lower 4’ of
the Quonset to impede any small arms fire; the bulkheads were of wood and windows with hoods extended down the sides.
The huts had concrete floors, masonite interior walls, and air conditioning units were mounted in the rear bulkheads, and
powered from a central base power plant. In addition, after mortar attacks on a hospital near Da Nang, some Quonset
huts were fully encased in sandbags. At advanced bases, back end loaders sometimes covered Quonset huts with earth
for added protection. It is also possible that a heavier steel hut may have been developed in response to this need to
protect against mortar fire. This new hut was sufficiently rigid that it could be used as a form to make a concrete outer shell.

The standard Vietnam Quonset hut retained the traditional 4’ on center spacing for the ribs, while the widths varied accord-
ing to application, ranging from approximately 20’-8” wide for billets to 70’ for Brigade Headquarters and warehouses. They
followed the earlier tropical hut design by having a continuous, elevated ridge ventilator and windows with hoods running
the length of the building on both sides. Twenty-gauge corrugated metal sheets were used for the exterior walls and roof.
During the war, the shipyard at Pearl Harbor, in addition to serving as a repair and maintenance depot, also served as a "staging area for deploying troops and their equipment, as well for ships' provisions." NAS Barbers Point saw, in 1965, the end of its role as the air station for Airborne Early Warning Barrier Squadron, Pacific, which, since 1956, had flown patrols over the Pacific armed with radar for detecting Soviet air and sea presence. However, the air station "provided support to operations in Vietnam, while concurrently supporting the [Cold War defense] patrol community's training and operational readiness." NAS Midway was used as one of the main aircraft and refueling stations during the course of the Vietnam War.  

In 1966, a new facility was added to the 14th Naval District with the transfer of the former Bonham Air Force Base (AFB) to the U.S. Navy. The Navy renamed the almost 1,885-acre area in western Kauai, "Pacific Missile Range Facility, Barking Sands" (PMRF). Prior to the transfer, the Navy had been using 37 acres of Bonham AFB since 1956 for Regulus 1 operations. Developed by the Navy towards the end of World War II, this long-range, strategic nuclear-armed guided missile could be launched from surface ships or submarines and was remotely controlled for its entire flight. The Regulus 1 missile became operational by 1954, and was later replaced by Polaris Submarine-Launched Ballistic Missiles in the early 1960s.  

In 1963 a detachment of PMRF was established at Johnston Atoll, along with several downrange stations under PMRF that included Midway Island. In 1967, the Barking Sands Tactical Underwater Range and Makaha Ridge Instrumentation Site were completed, followed by the establishment of Command Headquarters, Pacific Missile Range Facility, Hawaiian Area in 1968. Improvements and additions to the facility continued into the 1970s, while most of the “downrange” facilities were either closed or transferred for increased management and support efficiency. Quonset hut Q326 was added to the facility in 1998, several years after the collapse of the Soviet Union and the end of the Cold War.  

Following the conclusion of the Vietnam War, the U.S Navy was again reduced in size. As a consequence, the Pearl Harbor submarine base and its support facilities, including the Quonset huts at West Loch, took on a greater Cold War importance as submarines with nuclear missile capabilities "represented the strongest insurance to protect the nation against the danger...of [Soviet] land-based missiles." Other Quonset huts under the responsibility of 14th Naval District continued to provide support for various Cold War activities despite the lack of U.S. naval budget increases throughout the 1970s.
During this period, NAS Barbers Point continued to send air patrols to track Soviet submarines in the Pacific, while also serving as the home for the Fleet Logistics Support Squadron which, from 1949 to 1977, “flew all over the Pacific in long-range transport aircraft and, until 1965, with carrier-onboard-delivery service.” Long-range transport activities would have required ample storage and warehouse space, and various Quonset huts at Barbers Point likely fulfilled that requirement. An index of structures initially submitted to COMPACDIV in March of 1970, and resubmitted each following year up to 1982, lists the function of Quonset huts 1144, 1149, 1150, 1152, 1153, 1545, 1562, and 1570 as general warehouses and 1506 and 1523 as inert storage; these Quonset huts are located just east of runways A thru D. In addition, Quonset hut 1520 was identified in the index of structures as a horse stable, while 1525 as a small-arms magazine.

In contrast to the Quonset huts at NAS Barbers Point, Fac. 17 (Quonset hut, initially used to house photographic intelligence) indirectly supported Cold War activities conducted at the Makalapa Administration Area, Pearl Harbor. By the early 1970s, Makalapa had served as the headquarters for the Commander, U.S. Pacific Fleet (COMPACFLT) for over 30 years, and the Pacific Fleet had played an active role in the conduct of the Cold War. Fac. 17, historically identified as FRUPAC Quonset Storage, was associated with Fac. 251, where Fleet Radio Unit, Pacific Fleet (FRUPAC) was located, and with Fac. 258, which housed Joint Intelligence Center, Pacific Ocean Area (JIPOA). Coinciding with the planning and construction of Fac. 352 - Fleet Intelligence Center, Pacific (FICPAC), “the major Cold War construction project at Makalapa,” plans were approved for the expansion of Fac. 17 with office spaces at the west corner of the north elevation and a connecting annex at the south elevation; the Quonset hut continued to serve as a storage area for Fac. 251 and Fac. 258.

Fig. 5-86 Building 17BE, September 2009
(Fung Associates, Inc.)
In July 1974, as a part of the Navy’s Shore Establishment Reassignment (SER) Program in response to a stagnant U.S. Navy budget, the Lualualei Naval Ammunition Depot, which included Quonset hut 423, was disestablished. The former ammunition depot subsequently took on a new role as a naval magazine that operated as a tri-service facility for the Navy, Air Force and Army.\textsuperscript{197} The Lualualei naval magazine stored various types of ammunition that included fuses, detonators, 5” shells, torpedoes, artillery rounds and perhaps even nuclear weapons.\textsuperscript{198}

National recognition for Pearl Harbor and its command facilities came in January 1964 with Pearl Harbor being designated as a Historic National Landmark. At the time of designation, Quonset huts, for over 20 years, had supported the mission of Pearl Harbor.
TABLE 1 - 14TH NAVAL DISTRICT, HAWAIIAN & OUTLYING ISLANDS – QUONSET HUT CONSTRUCTION:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>WWII INSTALLATIONS &amp; QUONSET HUT USE</th>
<th>CONSTRUCTION GROUP</th>
<th>REFERENCE DRAWING No., Ph#,Fig#</th>
<th>REF. YEAR</th>
<th>WWII #'s</th>
<th>1964 #'s</th>
<th>2014 #'s</th>
<th>LAND MGR(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Aiea</td>
<td>Aiea Naval Hospital (Camp H. M. Smith) Naval Construction Battalion Camp / Medical (Hsg.)</td>
<td>PNAB CBMU: 600</td>
<td>1. OA-N1-1515</td>
<td>1946</td>
<td>20S</td>
<td>1S</td>
<td>0</td>
<td>Marine Corps</td>
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<tr>
<td>2 Aiea</td>
<td>Aiea Naval Cantonment - Receiving Barracks (For 10,000 Navy Interim Housing) Naval Electronics School &amp; Laundry Area &amp; Nimitz Bowl - Open Air Stadium</td>
<td>CB: 94</td>
<td>1. OA-N1-972 2. OA-N1-2089</td>
<td>1944 1950</td>
<td>56S 12ES</td>
<td>2U</td>
<td>2</td>
<td>Excess to State</td>
</tr>
<tr>
<td>3 Aiea Bay Aiea &amp; Halawa, Oahu</td>
<td>Richardson Recreation Center Fleet Barge Birthing (Shops &amp; Storage) Fleet Landing – Halawa Landing</td>
<td>CB: 94th</td>
<td>1. OA-N1-1488</td>
<td>1946</td>
<td>3U</td>
<td>1S</td>
<td>1D 3U</td>
<td>JBP HH</td>
</tr>
<tr>
<td>4 Barbers Point (Kalaeloa) Honouliuli, Oahu</td>
<td>NAS (NAS) (excluding MCAS Ewa areas) + Contractors, Naval Air Bases Pacific - Base Camp NOTE: Portions of former NAS include areas with Quonset huts released under BRAC land transfers, easements and/or managed under FIDPA grants.</td>
<td>PNAB CB: 14th, 16th CBMU 522</td>
<td>1. OA-N1-2190</td>
<td>1951</td>
<td>20D 33U 5EU 45ES 3S</td>
<td>12D 20U 1EU 1S</td>
<td>1EU 1U BRAC 1U Army 1U</td>
<td>JBP HH FIDPA Outgrant &amp; BRAC State</td>
</tr>
<tr>
<td>5 Canton Island Phoenix Island Group</td>
<td>NAS (WWII Seaplane Recon. Base) (WWII Southwest Pacific Air Route to Australia)</td>
<td>CE Army CBs: 10th, 99th CBMU: 588</td>
<td>1. BuY&amp;D WWII History</td>
<td>1947</td>
<td>17S</td>
<td>N/A</td>
<td>N/A</td>
<td>Excess</td>
</tr>
<tr>
<td>6 Camp Catlin Moanalua, Oahu</td>
<td>Marine Encampment Marine 6th Base Ordnance Depot Salt Lake Storage Areas Advance Base Construction Depot (ABCD) &amp; Annex</td>
<td>PNAB CB: 90th</td>
<td>1. OA-N1-544 2. OA-N1-981</td>
<td>1942 1944</td>
<td>10ES 30S</td>
<td>1U 8ES 18S</td>
<td>0</td>
<td>Navy PPV</td>
</tr>
<tr>
<td>7 Damon Tract Moanalua, Oahu</td>
<td>WWII CB Brigade Headquarters with Supply Depot</td>
<td>PNAB CB: 54th90th</td>
<td>1. OA-N1-703 2. OA-N1-1985</td>
<td>1943 1949</td>
<td>4S</td>
<td>4ES</td>
<td>0</td>
<td>Excess</td>
</tr>
<tr>
<td>8 Ewa Honouliuli, Oahu</td>
<td>Marine Corps Air Station, Ewa (MCAS Ewa) NOTE: Former MCAS Ewa, areas since 1952 were transferred to NAS Barbers Point, called Kalaeloa. For this report Quonset huts are inventoried according to their former WWII areas.</td>
<td>PNAB CB: 10th, 14th, 16th, 99th,123th130th</td>
<td>1. SK-301 2. OA-N1-1658</td>
<td>1942 1948</td>
<td>1D 1EU 19U 34S 5A</td>
<td>1D 11U 3S 5A</td>
<td>2U 1A</td>
<td>BRAC FIDPA Outgrant &amp;BRAC</td>
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<td>LOCATION</td>
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<td>CONSTRUCTION GROUP</td>
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<td>9 Ewa Honouliuli, Oahu</td>
<td>Naval Construction Battalion Encampment &amp; Hsg. Quonset Hut Southwest Camp (Dismantled ca.1961) WWII &amp; Earlier Cold War Military Air Transport Services (MATS) Squadron Area - West MCAS Ewa</td>
<td>CB: 14th, 16th,99th 130th</td>
<td>1. OA-N1-1658 2. OA-N1-2190</td>
<td>1948</td>
<td>140S 6U 7EU 10S</td>
<td>3U 5EU</td>
<td>2U 5EU State</td>
<td>JBPVH Outgrant &amp; State</td>
</tr>
<tr>
<td>10 Ewa Honouliuli, Oahu</td>
<td>Late WWII Separated Housing Areas at MCAS Ewa Women Marine Camp – Quonset Hut South Camp (Dismantled c. 1961) FMFAIRPAC Senior Officer Hsg. Area - East Camp Enlisted Men’s Hsg. Area – Southeast Camp</td>
<td>CB: 14th, 130th</td>
<td>1. OA-N1-1658 2. OA-N1-2190</td>
<td>1948</td>
<td>40S 9D</td>
<td>0 0</td>
<td>JBPHH Navy Retained Lands</td>
<td></td>
</tr>
<tr>
<td>11 French Frigate Shoals (FFS) Tern Island T.H.</td>
<td>Naval Air Facility FFS (WWII Staging Area, Emergency Airfield and Radio-Detection Station)</td>
<td>CB: 5th Detachment</td>
<td>1. BuY&amp;D WWII History</td>
<td>1947</td>
<td>18S 1S</td>
<td>N/A</td>
<td>Excess to FWS</td>
<td></td>
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<td>12 Hanapepe Bay, Kauai</td>
<td>Port Allen Navy Wharf Port Allen Wharf Storage (WWII Search and Rescue Station)</td>
<td>WPA PNAB CB:</td>
<td>1. Ph# 30</td>
<td>1963</td>
<td>7U 7U</td>
<td>0 0</td>
<td>Excess to State</td>
<td></td>
</tr>
<tr>
<td>13 Haiku Hamakualoa, Maui</td>
<td>Camp Maul –Ho’okuleana (4th Marine Division Camp) (For 30,000 military personnel &amp; 47 Training Areas)</td>
<td>CB: 48th</td>
<td>1. BuY&amp;D WWII History</td>
<td>1947</td>
<td>22U</td>
<td>0 0</td>
<td>Private Owners</td>
<td></td>
</tr>
<tr>
<td>14 Hilo, Hawaii</td>
<td>NAS (WWII Training and Support) 5th Marine Supply Depot (Dismantled &amp; Relocated Huts)</td>
<td>PNAB CB:</td>
<td>1. HA-N1-126 2. HA-N1-151</td>
<td>1944 1946</td>
<td>6D 13EU 12U 30S</td>
<td>N/A</td>
<td>1U Excess to State</td>
<td></td>
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<tr>
<td>15 Honolulu John Rodgers Air Field Moanalua, Oahu</td>
<td>Naval Air Facility (NAF) Honolulu (WWII Seaplane Base, NATS) NAF Transient Qtrs.</td>
<td>CB: 92th</td>
<td>1. OA-N1-119 2. OA-N1-2196</td>
<td>1948 1951</td>
<td>27D 4U 69S</td>
<td>N/A</td>
<td>1U Excess to State</td>
<td></td>
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<tr>
<td>17 Johnston Island, T. H.</td>
<td>NAS (WWII Perimeter Defensive Airfield) (WWII Middle Pacific Air Route / Recon. Base)</td>
<td>PNAB CB:</td>
<td>1. JN-N1-121 2. JN-N1-128 3. CE Map</td>
<td>1943 1944 1952</td>
<td>1U 44S 60S</td>
<td>1U</td>
<td>0 Excess to FWS</td>
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<td>18 Kahului Wailuku, Maui</td>
<td>NAS (WWII Fleet Training, Support &amp; Housing)</td>
<td>PNAB CB:</td>
<td>1. MA-N1-166 2. Ph# 20</td>
<td>1946 1964</td>
<td>10EU 17U 74S 10EU 3U</td>
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<td>19 Kahului Harbor Wailuku, Maui</td>
<td>4th Marine Division Storage Depot 4th Marine Division Camp</td>
<td>CB: 48th &amp; 127th</td>
<td>1. Ph# 27</td>
<td>1964</td>
<td>40 U 1S</td>
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<td>20 Maalea Bay Kealaloloa, Maui</td>
<td>4th Marine Amphibious Tractor Camp (Combat Training Support Camp)</td>
<td>CB: 48th</td>
<td>1. BuY&amp;D WWII History</td>
<td>1947</td>
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<td>22 Kaneohe, Kaneohe, Oahu</td>
<td>NAS (WWII Seaplane Recon. Base) (WWII Training &amp; Interim Housing Camps)</td>
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<td>1. OA-N1-2198 2. Ph# 32</td>
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<td>3MU 2SU</td>
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<td>WWII #’s</td>
<td>1964 #’s</td>
<td>2014 #’s</td>
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<td>23 Lahaina</td>
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<td>1. OA-N26-3015</td>
<td>1945</td>
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<td>2U</td>
<td>1S</td>
<td>JBPHH</td>
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<td>Naval Ammunition Depot (NAVMAG)</td>
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<td>1953</td>
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<td>Naval Construction Battalion Camps</td>
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<td>1966</td>
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<td>24 Lualualei, Wa’ianae, Oahu</td>
<td>Naval Radio Transmitting Station (RTF)</td>
<td>PNAB</td>
<td>1. OA-N2-402</td>
<td>1947</td>
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<td>2. OA-N1-1650</td>
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<td>COMSERVPAC, COMSERVFOR Housing Area 5 (Senior Officer, JO &amp; WAVES’ Qtrs.)</td>
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<td>25 Lualualei, Waianae, Oahu</td>
<td>Naval Supply Depot (NSD) Personnel Camp</td>
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<td>1. OA-N1-1804</td>
<td>1946</td>
<td>17U</td>
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<td>2. OA-N1-137</td>
<td>1944</td>
<td>24S</td>
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<td>26 Makalapa Crater Halawa, Oahu</td>
<td>Eastern Island (WWII Perimeter Defense Airfield)</td>
<td>PNAB</td>
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<td>1943</td>
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<td>(WWII Initial Navy/Marine Air Field)</td>
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<td>27 Manana</td>
<td>Naval Supply Depot (NSD) Personnel Camp</td>
<td>PNAB</td>
<td>1. OA-N1-1804</td>
<td>1944</td>
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<td>93ES</td>
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<td>28 Midway Islands, T. H.</td>
<td>Sand Island (WWII Perimeter Defensive Airfield)</td>
<td>PNAB</td>
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<td>1944</td>
<td>1U</td>
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<td>(Former Pan-Am Seaplane Base)</td>
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<td>2. OA-N1-1373</td>
<td>1945</td>
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<td>(WWII Middle Pacific Air Route/ Recon. Base)</td>
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<td>29 Midway Islands, T. H.</td>
<td>Eastern Island (WWII Perimeter Defense Airfield)</td>
<td>PNAB</td>
<td>1. OA-N1-1007</td>
<td>1945</td>
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<td>2. OA-N1-1373</td>
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<td>30 Moanalua, Moanalua, Oahu</td>
<td>Naval Supply Depot (Wards for 3000 Patients)</td>
<td>PNAB</td>
<td>1. OA-N1-2177</td>
<td>1951</td>
<td>6EU</td>
<td>7S</td>
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<td>JBPHH</td>
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<td>Moanalua, Oahu</td>
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<td>31 Moanalua Ridge, Moanalua, Oahu</td>
<td>New Naval Hospital (Wards for 3000 Patients)</td>
<td>PNAB</td>
<td>1. OA-N1-709</td>
<td>1943</td>
<td>1D</td>
<td>20U</td>
<td>12U+1E</td>
<td>JBPHH &amp; Navy PPV</td>
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<td>Moanalua Ridge, Moanalua, Oahu</td>
<td>Marine Corps Transient Center (For 10,000 Marines)</td>
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<td>2. OA-N1-1638</td>
<td>1948</td>
<td>0</td>
<td>2U</td>
<td>5U</td>
<td>Excess</td>
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<td>Moanalua Ridge, Moanalua, Oahu</td>
<td>Marine Storage Area on Kamehameha Highway</td>
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<td>0</td>
<td>2U</td>
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<td>CB: 94°°</td>
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<td>Moanalua Ridge, Moanalua, Oahu</td>
<td>CBU: 413</td>
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<td>34 Palmyra Island, T. H.</td>
<td>Naval Construction Battalion Camps (20 CB Camps)</td>
<td>PNAB</td>
<td>1. OA-N1-709</td>
<td>1943</td>
<td>1D</td>
<td>20U</td>
<td>12U+1E</td>
<td>JBPHH &amp; Navy PPV</td>
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<td>(20 CB Camps)</td>
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<td>2. Ph#: 11</td>
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<td>(For 25,000 Seabees)</td>
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<td>3. Ph#: 11</td>
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<td>Navy Yard Public Works Annex (later NAVFAC HI)</td>
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<td>4. Ph#: 39</td>
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<td>2ES</td>
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<td>CB: 92°°</td>
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<td>CBU: 413</td>
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<td>35 Palmyra Island, T. H.</td>
<td>NAS (WWII Perimeter Defensive Airfield)</td>
<td>PNAB</td>
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<td>1944</td>
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<td>2. OA-N1-1638</td>
<td>1948</td>
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<td>(Former 1930’s Pan-Am Seaplane Base)</td>
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<td>CB: 5°°, 76°°</td>
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<td>CONSTRUCTION GROUP</td>
<td>REFERENCE DRAWING No., Ph#,Fig#</td>
<td>REF. YEAR</td>
<td>WWII #'s</td>
<td>1964 #’s</td>
<td>2014 #’s</td>
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<td>36</td>
<td>Pearl City Peninsula, Manana, Oahu</td>
<td>Naval Supply Depot (NSD) Aviation / Provisions NSD Civilian Cantonment Annex NSD Women Housing – Waterhouse Estate Civilian Housing Army MP Camp – Former Girl Scout Camp WWII Prisoner of War Camp - Korean Naval Sub-Section Base – Former Pan-Am Base</td>
<td>Pre-War Civilian Areas Adapted For Military Use By PNAB</td>
<td>1. OA-N1-1542</td>
<td>1944</td>
<td>18S</td>
<td>0</td>
<td>0 JBP HH</td>
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<td>Pearl Harbor Halawa, Oahu</td>
<td>Navy Yard – (Support Areas Outside CIA)</td>
<td>PNAB CB: 92nd</td>
<td>1. I-N1-224 2. Ph# 53</td>
<td>1945</td>
<td>1966</td>
<td>2EU</td>
<td>9U 10S 2EU 9U 3S 1EU JBP HH</td>
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<td>Pearl Harbor Halawa, Oahu</td>
<td>Naval Station and Main Gate “Nimitz” Naval Station Receiving Barracks Bloch Arena and Main Gate</td>
<td>PNAB</td>
<td>1. I-N1-224</td>
<td>1945</td>
<td>9U 5EU 46S 5U 9S 0 JBP HH</td>
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<td>Pearl Harbor Halawa, Oahu</td>
<td>Naval Submarine Base (SUBBASE Shops, Storage and Temporary Camp)</td>
<td>PNAB CB: 62nd</td>
<td>1. I-N1-224 2. Ph# 10</td>
<td>1945</td>
<td>1964</td>
<td>1EU</td>
<td>6U 1ES 8U 0 JBP HH</td>
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<td>Pearl Harbor Halawa, Oahu</td>
<td>Naval Supply Depot (NSD HQ) – Kuahua (WWII Police Station &amp; Barracks)</td>
<td>PNAB</td>
<td>1. I-N1-224 2. Ph# 45</td>
<td>1945</td>
<td>1964</td>
<td>2U</td>
<td>8S 0 JBP HH</td>
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<td>42</td>
<td>Pearl Harbor Halawa, Oahu</td>
<td>Marine Barracks Reservation (WWII Offices &amp; Combat Training Quonset Camp)</td>
<td>Marine Corps</td>
<td>1. I-N1-224</td>
<td>1945</td>
<td>24S</td>
<td>1S</td>
<td>0 JBP HH</td>
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<td>Pearl Harbor Halawa, Oahu</td>
<td>Naval Enlisted Housing Area 1 and Area 2 Block Arena (with Recreation Huts) Elementary School (Class Room Huts)</td>
<td>PNAB</td>
<td>1. OA-N1-1984 2. OA-N1-2200</td>
<td>1949</td>
<td>1951</td>
<td>50S</td>
<td>0 JBP HH &amp; Navy PPV</td>
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<td>Pearl Harbor, McGrew Pt., Kalauao’o, Oahu</td>
<td>Base Hospital No. 8 (Alea Naval Hospital Overflow in Anticipation of the Attack on Mainland Japan) (Quonset Hut Wards for 1,000 Patients)</td>
<td>CB: 92™</td>
<td>1. OA-N1-1372 2. OA-N1-1982 3. Ph# 37</td>
<td>1945</td>
<td>1949</td>
<td>1966</td>
<td>1EU 7U 57ES 33S 0 0 Navy PPV</td>
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<td>Puunene Kula, Maui</td>
<td>NAS (WWII Training Base, Support &amp; Housing) (Dismantled and Relocated)</td>
<td>PNAB, CE Army CB: 48th &amp; 127th CBMU: 575</td>
<td>1. MA-N1-174</td>
<td>1946</td>
<td>1949</td>
<td>7D 12ES 50S</td>
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<td>Red Hill Halawa, Oahu</td>
<td>Naval Construction Regiment Camp Naval Supply Center Quarters Red Hill Miners Camp</td>
<td>PNAB CB: 10th,99th &amp; 3rd Regiment</td>
<td>1. OA-N1-1486 2. SK-649 3. Fig# 21</td>
<td>1946</td>
<td>1949</td>
<td>4U 67ES 79S</td>
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<td>Wahiawa, Waialua, Oahu</td>
<td>Naval Radio Receiving Station (WWII Temporary Quonset Camp)</td>
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<td>1. OA-N1-1254</td>
<td>1945</td>
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<td>2S</td>
<td>0 JBP HH</td>
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<td>Waiauva Waiauwa, Oahu</td>
<td>Naval Construction Battalion Encampment (WWII Temporary Quonset Encampment, DPW Area)</td>
<td>CB: 16th &amp; 130th</td>
<td>1. OA-N1-1671</td>
<td>1948</td>
<td>1948</td>
<td>19U 88ES 102S</td>
<td>0 0 Navy PPV</td>
</tr>
<tr>
<td>LOCATION</td>
<td>WWII INSTALLATIONS &amp; QUONSET HUT USE</td>
<td>CONSTRUCTION GROUP</td>
<td>REFERENCE DRAWING No., Ph#, Fig#</td>
<td>REF. YEAR</td>
<td>WWII #’s</td>
<td>1964 #’s</td>
<td>2014 #’s</td>
<td>LAND MGR(S)</td>
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<tr>
<td>51 West Loch, Honolulu, Oahu</td>
<td>Naval Ammunition Depot (WWII Temporary WWII Quonset Camps) (12 former ABRD EU Huts Transferred to West Loch)</td>
<td>CB: 4” &amp; 43” CBMU: 581</td>
<td>1. OA-N1-1539 2. Ph# 8</td>
<td>1946 1966</td>
<td>5U 7ES 45S</td>
<td>12EU 4U 12S</td>
<td>12EU 1U 3S</td>
<td>JBPPH</td>
</tr>
<tr>
<td>52 Hickam Field, Halawa, Oahu</td>
<td>Army Air Corps (Post-WWII Dismantled and Relocated Navy Huts from Moanalua to Hickam)</td>
<td>1. NAVFAC HI Demo Record</td>
<td>1953</td>
<td>3U 3U 2U</td>
<td>3S 3S 1S</td>
<td>JBPHH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53 Upolu Airport, Hawi North Kohala, Hawaii</td>
<td>Naval Air Facility (WWII Carrier Practice Field &amp; Facility Camp)</td>
<td>PNAB</td>
<td>1. HA-N1-147</td>
<td>1946</td>
<td>18S N/A N/A</td>
<td>N/A Excess</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**QUONSET HUT SUMMARY**

**COMBINED 14” NAVAL DISTRICT INSTALLATIONS**

**APPROXIMATE QUONSET HUT NUMBERS** 4132 236 40 6 12 NAVY MARINE OTHERS

**ABBREVIATIONS:**
- QUONSET HUT TYPES: U: Utility; S: Standard; E: Elongated; D: Double-Decker; SS: Self-Supporting; M: Modern Update; MH: Modified Hut; A: Armco Hut
- ABCD – Advanced Base Construction Depot
- ABRD – Advanced Base Reshipment Depot
- BRAC – Base Realignment and Closure
- CB – Construction Battalion
- CE – US Army Corps of Engineers
- Excess - Declaration of Excess
- DPW – Department of Public Works
- FIDPA - Ford Island Master Development Programmatic Agreement -2001
- FWS – Fish and Wildlife Service
- JO – Junior Officer
- HSG – Housing
- HQ - Headquarters
- NSD – Naval Supply Depot
- MATS – Military Air Transportation Services
- MCAS – Marine Corps Air Station
- NATS – Naval Air Transportation Services
- PNAB – Pacific Naval Air Bases (Contractor)
- PPV – Public Private Venture, Navy Family Housing
- WAVES – Women Accepted for Volunteer Emergency Service
Post-War Civilian Use

Considering the extensive utilization of the Quonset hut during World War II, a number of commentators had high expecta-
tions for this prefabricated building to find widespread application in post-war America. Envisioned as starter homes, 
summer cottages, beach houses, recreational buildings, garages, small storage units, shop buildings, barns, and warehouses, 
many thought the form would be as prevalent in the post-war American landscape as it had been in the World War II military 
camp. Although never achieving the imagined widespread popularity, Quonset huts did find their way into the post-war 
landscape, with their use more often than not confined to that of their original function, the provision of expedient shelter.

With the cessation of hostilities, private sector requests for Quonset huts began to be submitted to the Navy in Hawaii. Reverend Maurice Holmans of Our Lady of Lourdes Roman Catholic Church in Honokaa on the island of Hawaii was one of the first to approach the Navy, requesting one large and two small Quonset huts. The large huts was to be used as a gymnasium, 
and the two small huts were planned to be used as mission churches in Paauhau and Kukuihaele. Within a month, the 
Commandant responded,

Present policies do not permit the sale of Quonset huts to non-governmental agencies. However, with the establis-

hment of the District Material Redistribution Office for the disposition of excess material in the fourteenth Naval District 
the quantity of materials in excess of the 
needs of Naval activities will be determined. 
If it is determined that there are Quonset 
huts in excess of military needs, it is likely that 
a policy will be established providing for the 
sale of these huts.

At such time as they may be made available for your purchase, you will be informed of the procedure required to obtain them.

More requests followed. Kinichi Sakai, the agent for Shell Oil in Honokaa and Kohala, requested a 
Quonset hut be dismantled and delivered to him in Kohala for use as a repair shop, and Harold 
Dillingham wrote to request an additional three 
Quonset huts to house nurses required to staff the hospital, which was expanded by the construction of the two Quonset hut wards during the war. E. Tanner Brown the Rector of St. Clement’s Parish, 
whose son and daughter knew Vice Admiral

"Not Particularly Glamorous..."

Fig.5-88 Illustration of Quonset Hut 
(Drawn by J. Duncan Campbell, Unknown date)
Taffinder’s daughter Connie, desired a Quonset hut for use as a children’s education and activities building. The Vice Admiral’s response to the rector, explained the Navy’s approach with regards to the possible disposal of Quonset huts and other materials:

At the present the Navy is not allowed to give or sell such property until it has been declared surplus. The disposal agency is headed by Mr. Crawford Sloan, representative of the [Territory of Hawaii’s] Department of the Interior.

Section 13(b) of the Surplus Property Act of 1944 states:

Under regulations prescribed by the Board, (Surplus Property), whenever the Government agency authorized to dispose of any property finds that it has no commercial value, or that the cost of its care and handling and disposition would exceed the estimated proceeds, the agency may donate such property to any agency or institution supported by the Federal Government, or any state or local government, or to any non-profit educational or charitable organization.

The foregoing is the only information found in applicable directives in regard to the donation of surplus property.

In view of the fact that the original cost of a Quonset hut is known to be in excess of three hundred dollars ($300.00), and has an apparent commercial value, and that no estimation is available of the cost of its care and handling, it would appear that the Navy is not authorized to donate such material as requested in your letter.

The Commandant also mentioned he would request further guidance from the Navy Material Redistribution and Disposal Administration in New York.

One of the first private sector organizations to receive post-war Quonset huts, was Kalaheo’s Vocational School, which was provided the three Quonset huts at Hanapepe, that were originally requested in February 1945, but were turned down, as the Navy had plans for the buildings.

In June 1946, Bishop Sweeney of the Roman Catholic Honolulu Diocese requested a surplus Tropical Quonset hut for use by the priest attending to St. Philomena’s Church. Vice Admiral J. L. Hall responded in June 1946,

I would like very much to be able to assist you in this matter, but public laws and directives concerning the disposal of public property permit no deviations from the expressed manner of disposal. It is very unlikely that any more Quonset huts will be declared surplus because they are in urgent demand in forward areas.
Although huts were in demand in the forward areas in the post-war period, time proved the admiral’s prognostication to be flawed as during the ensuing four to five years a number of the Quonset huts dotting Oahu’s landscape were indeed declared surplus, and sold at government surplus equipment auctions.

As early as February 1945, Quonset huts were being looked at as one solution to Honolulu’s housing shortage. During the course of the war, Honolulu saw an influx of over 100,000 defense workers, while a lack of building materials brought residential construction to a virtual stop, with only 137 building permits issued during 1942 for houses. Evacuation camps, which had been erected in Palolo and Kalihi valleys in case of another attack, were converted into wartime public housing for several hundred families. The housing situation became more acute in 1943, as workers continued to come to the islands, and in 1944 the military further compounded the problem by permitting families to join war workers.

With the start of the war, rents dramatically increased and as a result, rent control was instituted by the City Council in December 1941, rolling back rents to their May 27, 1941 rates. Landlords complained as the roll-back date was in the midst of a low point in the pre-war tourist season when rents were lower than usual. Real estate prices, which were not controlled, escalated tremendously and sellers found ready buyers. In 1939, real estate sales totaled $11 million; in comparison, in 1945 total volume reached $40 million dollars and in 1946 rose to 60 million.

To try to address the housing shortage, the Hawaii Housing Authority developed public housing areas in Palolo, Kapalama, and Lanikila during 1944 and 1945, and the Federal Public Housing Authority opened Kalihi War Homes in February 1945. Even so, members of a Congressional subcommittee which came to investigate Honolulu’s housing situation in March 1945, learned of “hot bed apartments” where as many as 18 men occupied one room in three shifts. The subcommittee found that housing had not been provided for approximately 60,000 of the 107,679 civilian newcomers who came to Hawaii during the war.209

Confronted with the continuing housing crisis, B. F. Rush, the Territorial Housing Executive, sent a letter in February 1945 through Governor Ingram Stainback to Vice Admiral David Worth Bagley inquiring into the possibility of the Territory securing Quonset huts.

At the recent meeting of the Governor’s Advisory Committee on Housing, it was mentioned by one of the members that there might be a possibility of securing some Quonset huts to partially relieve the housing shortage in Honolulu.

Since all such equipment is now under the control of the Military Services, this letter is addressed to you for the purpose of determining whether or not any such Quonset huts may be made available, in what quantities and under what conditions may a number of the units be released to the Territory.210

In response to this request for information, Admiral J. H. Towers, Deputy Commander of CINCPAC and CINCPOA advised Admiral Bagley that “In view of the recent hearings before the Naval Affairs subcommittee it is not felt that the Quonset huts requested in [B. F. Rush’s letter]...will be required inasmuch as it is anticipated that the housing will be of frame construc-
tion." Admiral Bagley communicated this information to Governor Stainback and regretted "that the inadequate supply of quonset (sic) huts for military purposes would not permit allocation for the purpose of the request of your Committee." The frame housing Towers thought was forthcoming, was exceedingly slow in materializing, with most of it never appearing at all, and a number of units in the only completed project, Manoa Housing, not ready for occupancy until well into 1946.

Following the war, Honolulu still faced a significant housing shortage, as did the United States as a whole. It was estimated that the city required approximately an additional 11,000 family units to meet housing needs. As a result the Quonset hut was again looked at as one alternative to ease this situation. In mid-February the Navy released to the Territory’s Department of Interior 152 new Quonset huts as surplus property to help relieve the civilian housing problem. In August 1946, the first large-scale disposal of standing Quonset huts was made by the Navy with the decision to remove and relocate the Quonset huts from Moanalua Ridge for civilian housing. In October 1946, six Quonset huts at Wahiawa Radio Station were also deemed excess to station needs.

When preparing to dispose of their surplus Quonset huts, Naval officers typically requested that "one concern obtained the entire group of buildings in order that the station will not have to supervise several individual concerns." It was rare that one buyer had the capability to purchase, dismantle or move, store, and sell the large number of huts involved in the Navy’s bulk sales, and as a result such concerns as Dan’s Lumber Yard, Kilgo’s Hardware, and Frank Fasi Supply Company banded together to submit one bid and then split the inventory amongst themselves. In instances where it was possible to bid on individual huts, other concerns, in addition to these three, were able to obtain Quonset huts as in the case of the offering of the 139 surplus buildings at Fort Hase at NAS Kaneohe Bay, when Robert Lantis, Y. Yamasaki, T. Tajiri, Ah Chung Dung, Kapalama Building Supply Company, and other individuals obtained a number of the buildings, as did Kilgo’s, Frank Fasi, and Dan’s Lumber.

Frank Fasi Supply Company and Dan’s Lumber Yard acquired the largest number of buildings in the Fort Hase auction, and appear to have been the primary buyers of Quonset huts in the post-war period. Both companies were started after World War II. Frank Fasi (1920-2010) was born in East Hartford, Connecticut and graduated from Trinity College with a BA in history in 1942. He was stationed briefly on Kauai during World War II as a Marine and after the war returned to Hawaii in
1946 to be a clerk in the Army Corps of Engineers. After a few months he quit this position and started his own contracting, building, demolition and salvage business. In the early 1950s he started to become involved with politics, serving as a Democratic National Committeeman. He later was elected to the Territorial Senate in 1958 and then the City Council in 1964. In 1965 he started to wind down his salvage business, and in April 1966, he shut the doors on his Sand Island Surplus Center to devote his time completely to his City Council position. In 1968 he was elected mayor of Honolulu, serving his first of eventually six terms.

Daniel H. Hirahara started Dan’s Lumber Yard in 1948 in Mapunapuna, and in 1955 his brother Ronald Y. Hirahara took over the operation of the business. The building supply operation remained in business until 1986 when Ronald Hirahara and his wife Ruth, who served as the company’s secretary-treasurer, retired.

When acquired from the military, the Quonset huts were sometimes dismantled on site. At the other times were simply jacked up so a flatbed trailer could be moved underneath, and the building transported directly to a new location and placed on a foundation. Dan’s Lumber Yard usually used a crew of four Filipino workers with pneumatic wrenches and screwdrivers when they disassembled the huts. When moving huts, they prepared the building during the daylight hours, but the actual move transpired in the middle of the night, when few automobiles were on the road. Hirahara moved a number of Quonset huts to lands he purchased in Aiea, Maili, and Waianae. Within two weeks of delivery of the building to its new site, he would have the place rented. This proved to be a profitable endeavor and in the long term produced more profit than the lumber business.218

During 1947, the Navy disposed of more of its inventory to the private sector. On April 18, 1947 the Bureau of Yards and Docks authorized the sale of 22 SSAR 20 huts from Pearl City Peninsula,219 and on May 15, 1947 Frank F. Fasi Supply Co. successfully bid on 484 Quonset huts from areas “D”, “E,” “F,” “G,” “H,” “L,” and “M” and 26 structures from the War Camp (POW Camp) at Bureau of Yards and Docks(Y & D), San Diego (SD), Naval Supply Center (NSC), Pearl.220 Business remained brisk, and at the end of July 1947 J. W. Palmer Jr., the Regional Director of the War Assets Administration in Honolulu informed the Commanding Officer at Camp Catlin, who desired to dispose of a number of Quonset huts, that “the demand for this type of structure [Quonset hut] within this Territory appears to be such as to present little or no problem to the owning agencies in making disposition of them at a fair return to the Government.”221

In response to a request for a Quonset hut to be donated to a newly formed non-profit organization that assisted crippled children, J. L. Hall informed the organization, that the Navy could only dispose of buildings that had been declared surplus, and these were sold under sealed bid. “Sales involving separate buildings, as distinguished from buildings sold in large groups, are conducted from time to time.” He then went on to note, “In addition, considerable numbers of buildings have already been sold to various Honolulu contractors, and it is possible that a Quonset hut might be purchased directly from one of the contractors.”222

The new organization, the National Society for Crippled Children and Adults, did obtain two SSAR 40 Utility Buildings, and joined them to form the Sultan School for Handicapped Children on the grounds of Kauikeolani Children’s Hospital. Opening in December 1948, the classroom building followed “the skillful design” of Honolulu architect Cy Lemmon. It featured a very
Fig. 5-91 Interior of Sultan School for Handicapped Children (Hawaii Farm and Home, March 1951)

Fig. 5-92 Exterior of Sultan School for Handicapped Children (Hawaii Farm and Home, March 1951)
modern cantilevered porch at one end, which served as an entry to the administrative office, while ramps along both sides of the building allowed children access to the classroom and the play area. The speech therapy room, kitchen, and bathroom were situated at the core of the building where the two Quonset huts were joined. \textsuperscript{223}

Cy Lemmon was not the only Honolulu architect to work to integrate the Quonset hut into a modern architectural statement, as Vladimir Ossipoff designed a Quonset hut residence overlooking Kaneohe Bay for Harold S. Burr and his family in 1948. Confronted with the problem "of how to achieve individuality with a quonset hut,"\textsuperscript{224} Ossipoff utilized the materials from two SSAR 20 huts. Half of one hut he used for a free standing two-car garage, and with the remainder he extended the second building to allow for a longer living room and a laundry room off the kitchen. The hut was elevated 30" above the ground for more efficient use of space, and in the living room 24' of the side wall was removed, and an I-beam was added to support the cut off ribs and a flat roofed extension, which expanded the room 6' outward. The expanded living room featured large expanses of screened openings which capitalized on the views of Kaneohe Bay and the Koolau mountains, while sliding panels protected the living room in times of inclement weather. As with other Ossipoff houses, the dwelling was meticulously detailed with built-in furniture and storage space maximized. The windows were "artistically placed." Impressed by the house, \textit{Hawaii Farm and Home} found Ossipoff had designed "a home that is attractive, unusual, livable, and very good at withstanding the hard wear of small boys" and even more importantly it was "an exception to the belief that a quonset hut is not very attractive."\textsuperscript{225}

Lemmon and Ossipoff were not the only architects in post-war America to accept the challenge of designing buildings using Quonset huts. Bruce Goff designed a chapel at Camp Parks in Dublin, California (1945) for the SeaBees using three Quonset huts, and painter Robert Motherwell had French architect Pierre Chareau redesign a pair of Quonset huts for his house and studio on Long Island (1947). Other architect designed Quonset houses, such as the Daniel residence in Knoxville, Tennessee (1950) designed by James W. Fitzgibbon, also appeared around the nation.\textsuperscript{226}

However, despite modern architects' willingness to work with the aesthetics of the Quonset hut, other people in Honolulu were not. On April 6, 1950, a half dozen women led by Alice Spalding Bowen, the president of the Outdoor Circle, descended upon the City and County of Honolulu's Board of Supervisors' Public Works Committee and requested the Board to take action to prohibit the relocation of surplus military barracks and Quonset huts into residential neighborhoods. Their request was motivated by the recent relocation of a large, wood, two-story surplus barracks onto a lot at 1711 Bingham Street owned by the Shingon Mission on Sheridan Street, which was intended to be used as a rooming house. Five hundred residents signed a petition in opposition to the placement of the building on the property as they felt it would "serve to detract from the beauty of the area as well as lower property values." Residents in Manoa were also concerned as Jackson College, operated by the First Baptist Church, was preparing to move six Quonset huts for classroom use onto its 9,000-square-foot campus at 2655 Manoa Road. A petition against these "undesirable buildings" was in the process of circulation. The committee was sympathetic to the women's concerns and agreed that "surplus army buildings are not things of beauty," and asked the city attorney to draft an ordinance outlawing Quonset huts in residential zoned areas.\textsuperscript{227}
Fig. 5-93 Floor Plan of Quonset Hut Residence
Designed by Ossipoff

Fig. 5-94 Exterior of Quonset Hut Residence

Fig. 5-95 Interior of Quonset Hut Residence
Fig. 5-96 Interior of Quonset Hut Residence

Fig. 5-97 Interior of Quonset Hut Residence

Fig. 5-98 Cover Page of "Hawaii Farm and Home" Designed by Ossipoff

(All images from Fig. 5-89 to 5-94 are from "Hawaii Farm and Home," February 1951)
Fig. 5-99 Floor Plan of a Chapel, Camp Parks, Dublin, CA, by Bruce Goff, 1945

Fig. 5-100 Schematic View of a Chapel, Camp Parks, Dublin, CA, by Bruce Goff, 1945

Fig. 5-101 Exterior Elevation and Photo of a Chapel, Camp Parks, Dublin, CA, by Bruce Goff, 1945

(All images on this page from http://www.bruce-goff-film.com/de/6_more_movie.html)
Fig. 5-102 Exterior of Robert Motherwell’s Quonset Hut Residence, 1947
(www.artists.parrishart.org/artist/452)

Fig. 5-103 Robert Motherwell at Quonset Hut Residence, 1947
(www.hamptons.com/detail.php?articleID=255)

Fig. 5-104 Window Treatment, 1947
(www.hamptons.com/detail.php?articleID=255)

Fig. 5-105 Exterior Elevation Plan, 1947
(www.hamptons.com/detail.php?articleID=255)
Two months later, the Honolulu Star Bulletin announced, “Quonset Menace Crackdown Bills Voted by Board.” The city attorney prepared three bills to restrict the spread of Quonset huts into residential areas and presented these to the Board of Supervisors for consideration. In October 1950, two of the bills became law. Ordinance 1209 amended the building code to require a relocation permit be obtained from the Superintendent of Buildings prior to moving buildings and structures. The Superintendent was required to deny such applications if the building proposed for relocation was “so dilapidated, defective or in such condition of deterioration or disrepair that its relocation to the proposed site would cause appreciable harm to or be materially detrimental to the property or improvements in the district within a radius of seven hundred fifty feet (750') from the proposed site.” With the passage of this ordinance and the understanding that Quonset huts were deemed sufficiently defective as to detrimentally affect neighboring property values, Quonset huts no longer were built in Honolulu’s residential neighborhoods, and instead were relegated to use only for rural housing and other rural purposes. Ordinance 1210 assured that Quonset huts or other surplus military buildings would not be utilized anywhere on the island of Oahu for hospitals, convalescent homes, day care nurseries, churches, libraries, kindergartens, schools, colleges, universities, clubhouses, auditoriums, lecture halls, orphanages, homes for the aged, or dormitories, by requiring these structures to be of not less than second class construction.

Quonset huts used for housing purposes dotted rural Oahu, and also were employed for various commercial functions in urban Honolulu. The houses were locally known as “kamaboko” (fishcake) houses because of the Quonset hut’s and fishcake’s similar shape. A number of the Quonset huts which were purchased from the government by private parties following the conclusion of World War II still stand in different areas of the islands, with a preponderance of the Quonset huts on Oahu located on the Waianae coast. The student paper written for Bill Chapman’s American Studies class has not been located, and a survey of privately owned extant Quonset huts was beyond the scope of this study. However, readily known Quonset huts located on private lands on Oahu include the following:

**Downtown:**

Nam’s Auto Repair and Body Shop, 1015 Dillingham Blvd.  
(TM: 1-5-015: 008) Six SSAR 40 Quonsets.

Chuck’s Corvette Clinic, 500 Kamani Street  
(TM: 2-1-049: 078) Two SSAR 40 which were acquired from Frank Fasi.

Tropical Lamp & Shade, 977 Queen Street  
(TM: 2-3-002: 069) One SSAR 40, which Tax Office lists as being built in 1943.
Aiea:

98-303 Kaamilo Street
(TMK: 9-8-018: 041) One SSAR 20, moved to the site in 1948 from Pearl City Peninsula by Noe Akiona, who was a carpenter by trade.

Pearl City:

96-141 Kamehameha Highway
(TMK: 9-6-003: 018) One SSAR 20, moved to this site from NAS Barbers Point in 1962.

Nanakuli:

St. Rita Church, 89-318 Farrington Highway
(Tax Map Key: 8-9-005: 001) One SSAR 40.

89-441 Nanakuli Avenue, at the corner of Nanakuli Avenue and Kauwahi Street.
(TMK: 8-9-004: 028) This SSAR 20 was moved to this Department of Hawaiian Homes lot in 1947.

89-104 Haleakala Avenue
(TMK: 8-9-002: 039) This SSAR 20 was moved to this Department of Hawaiian Homes lot in 1947.

87-1740 Farrington Highway
(TMK: 8-7-033: 004) County Tax Records place the year of construction for this SSAR 20 at 1942.

87-1648 and 1634 Farrington Highway and 87-125 Princess Kahanu Avenue
(TMK: 8-7-033: 016, 018, 032) A dozen Quonset huts line a driveway, just west of Princess Kahanu Street. This complex includes SSAR 20, SSAR 20 with extensions and SSAR 20 Tropical Quonset huts. Date of construction: 1947.

Maili:

87-409 Hakimo Road at the corner of Kanahele Road
(TMK: 8-7-022: 007) County Tax Records place the year of construction for this SSAR 20 at 1954.

87-439 Hakimo Road at the corner of Kanahele Road
(TMK: 8-7-022: 017) County Tax Records place the year of construction for this SSAR 20 at 1944. In addition to the primary residence being a Quonset hut, there is also a Quonset hut out buildings on the property.
87-472 Hakimo Road
(TMK: 8-7-022: 041) Two SSAR 20 with extensions, which County Tax Records list as built in 1942-1944.

87-776 Hakimo Road
(TMK: 8-7-019: 052) Two SSAR 20, one with extensions, which County Tax Records list as built in 1942.

87-790 Hakimo Road
(TMK: 8-7-019: 051) Two SSAR 20, which County Tax Records list as built in 1948.

87-910 Hakimo Road mauka corner of Paakea Road
(TMK: 8-7-019: 015) One SSAR 20 with extensions, which County Tax Records list as built in 1943.

87-1082 Hakimo Road
(TMK: 8-7-019: 019) One SSAR 20, which County Tax Records list as built in 1942.

87-1210 Hakimo Road
(TMK: 8-7-019: 022) Seven SSAR 20, which County Tax Records list as built between 1942-1943.

87-1215 Hakimo Road
(TMK: 8-7-019: 002) Three SSAR 20, one with extensions which County Tax Records list as built in 1942 and 1943.

Hakimo Road and McCandless Sub Road
(TMK: 8-7-010: 016) One SSAR 40.

87-1250 Hakimo Road: Affordable Pet Boarding
(TMK: 8-7-019: 022) One SSAR 20 and One Tropical Quonset, which County Tax Records list as built in 1942.

87-1245 Hakimo Road
(TMK: 8-7-010: 016) Hakimo Road at its mauka end forms a loop which is known as the McCandless Subdivision. This includes fifteen SSAR 20 Quonset huts. These Quonset huts and the land they stand on were originally part of a SeaBee encampment immediately outside the Lualualei Naval Ammunition Depot.

87-1530 Kuualoha Road
(TMK: 8-7-021: 006) One SSAR 20, which is used for storage built in 1941.

87-1567 Ulehawa Road
(TMK:8-7-021: 022) One SSAR 20, which is used for storage, but is in poor condition.
87-1610 Ulehawa Road  
(TMK:8-7-021: 020) Three SSAR 20, with Extensions, moved to the site in 1955.

87-1660 Ulehawa Road  
(TMK:8-7-021: 020) One SSAR 20, which is used for storage.

87-260 St. Johns Road  
(TMK:8-7-004: 019) One SSAR 20.

87-127 Liopolo Street  
(TMK: 8-7-014: 011) One SSAR 20, which County Tax Records list as built in 1948, effective date 1950.

87-126 Keliikipi Street  
(TMK: 8-7-012: 010) One SSAR 20.

Walanae:

86-444 Lualualei Homestead Road  
(TMK: 8-6-012: 015) One SSAR 20.

86-842 Lualualei Homestead Road  
(TMK: 8-6-005: 009) One SSAR 20 with overhang, which County Tax Records list as built in 1942.

86-544 Halona Road at mauka corner of Pohakea Place  
(TMK: 8-6-010: 020), One SSAR 20, which County Tax Records list as built in 1942.

86-549 Halona Road  
(TMK: 8-6-003: 023), Four SSAR 20, two with extensions, which County Tax Records list as built in 1945.

86-357 Puhawai Road  
(TMK: 8-6-010: 028), One SSAR 20, which County Tax Records list as built in 1942.

86-327 Puhawai Road  
(TMK: 8-6-010: 003), Five SSAR 20, which County Tax Records list as built in 1941 and 1943.

86-317 Puhawai Road  
(TMK: 8-6-010: 014), Seven SSAR 20, which County Tax Records list as built in 1943.
86-105 Puhawai Road
(TMK: 8-6-019: 016), One SSAR 20 with extensions, which County Tax Records list as built in 1941.

85-444 Waianae Valley Road
(TMK: 8-5-019: 056), One SSAR 20, which County Tax Records list as built in 1941.

85-621 Waianae Valley Road
(TMK: 8-5-021: 002), One SSAR 20, which County Tax Records list as built in 1942, Effective Date 1944.

85-721A Waianae Valley Road
(TMK: 8-5-019: 064), One SSAR 20, which County Tax Records list as built in 1941.

85-1001 Waianae Valley Road
(TMK: 8-5-029: 012), One SSAR 20

85-128 Maiuu Road
(TMK: 8-4-019: 009), One SSAR 20 with Extensions, which County Tax Records list as built in 1953.

85-360 Kaulawaha Road
(TMK: 8-5-002: 038), One SSAR 20.

Makaha:

84-724 Moua Street
(TMK: 8-4-006: 041), One SSAR 20, which County Tax Records list as built in 1943.

84-781 Moua Street
(TMK: 8-4-006: 005), One SSAR 20 with Extension, which County Tax Records list as built in 1943.

84-868 Moua Street
(TMK: 8-4-005: 031), One SSAR 20, which County Tax Records list as built in 1943.

84-818 Fricke Street
(TMK: 8-4-005: 045), One SSAR 20 with Extension, which County Tax Records list as built in 1943.

Fig. 5-106 (top) and 5-107 (bottom) Quonset Huts
Outside of Lualualei (Image Provided by NAVFAC HI)
Endnotes

1 Viets, St. Louis Dispatch, April 21, 1996, page 4.
4 Kuntz memorandum, March 6, 1943.
5 Stran-Steel, “The Improved Military Hut,”unknown date.
7 Stran-Steel, “The Improved Military Hut,” page 1, unknown date.
8 Compton memorandum, May 11, 1942.
9 Yates mailgram, May 12, 1942.
11 Blandy memorandum, May 4, 1942.
12 Depot Quartermaster memorandum, July 23, 1942.
13 Thomas memorandum, July 29, 1942.
14 Huntington memorandum, September 18, 1942.
15 Memorandums, Thomas, August 19, 1942 and Hartung, August 31, 1942.
16 Thomas memorandum, September 10, 1942.
17 Thomas memorandum, September 12, 1942.
18 Depot Quartermaster memorandum, October 19, 1942.
19 Yates memorandum, January 4, 1943.
21 T. A. Hartung memorandum, April 17, 1943.
22 Hartung memorandum, April 15, 1943.
24 Briany memorandum, August 5, 1943, Robertson memorandum, August 14, 1943, and Wetsel memorandum August 17, 1943.
25 Wetsel memorandum, August 20, 1943.
26 Wetsel memorandum, September 14, 1943.
27 Haynes memorandum, September 3, 1943.
28 Delaney memorandum, September 1, 1943 and Hunter memorandum, September 18, 1943.
29 Porter memorandum, December 3, 1943.
30 Wetsel memorandum, December 14, 1943.
31 Briany memorandum, September 1, 1943.
32 Graham memorandum, October 5, 1943.
33 Hunter memorandum, October 14, 1943.
34 Griffin memorandum, September 23, 1943.
35 Gimber memorandum, October 12, 1943.
36 Wetsel memorandum, circa October 1943.
37 Jupenlaz memorandum, November 1, 1943.
38 Whitemarsh memorandum, November 11, 1943.
39 Robertson memorandum, November 18, 1943.
Good memorandum, November 19, 1943.
Hunter memorandum, November 22, 1943.
Hunt memorandum, December 3, 1943.
MacMahan memorandum, January 29, 1944.
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"13th Naval Construction Battalion, Historical Information," page 3 of narrative.
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Overesch memorandum, June 19, 1945.
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Brander memorandum, December 16, 1943.
Aldrich memorandum, December 17, 1943.
Delaney memorandum, November 30, 1943.
Route Slip No. 13471, December 4, 1943.
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Woolley memorandum, January 27, 1944 and Robertson memorandum, January 28, 1944.
Whitemarsh memorandum, January 14, 1944.
Towers memorandum, March 8, 1944.
Jones memorandum, January 6, 1944.
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Troxell memorandum, August 19, 1944.
Whitemarsh memorandum, July 20, 1944.
Robertson memorandum, September 15, 1944.
84 Sharp memorandum, December 10, 1944. This language also had appeared in several previous requests from the Depot as well.
85 Aldrich memorandum, September 28, 1944.
87 Robertson memorandum, September 26, 1944 and Norton memorandum, September 20, 1944.
89 Robertson memorandum, October 30, 1944.
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92 Route Slip 16049, October 16, 1944, and similar language again appears in Robertson memorandum, November 7, 1944.
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94 Robertson memorandum, December 23, 1944.
95 Johnson memorandum, February 3, 1945.
96 Route Slip 2951, February 3, 1945.
97 Robertson memorandum, February 16, 1945.
98 Frank S. Pugh letter, January 31, 1945.
100 Sweeney letter, March 8, 1945.
102 Camerer memorandum, March 8, 1945.
103 Downes memorandum, March 24, 1945.
104 Davis memorandum, April 18, 1945.
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121 Base Facilities Summary, 30 June 1945, page 32.
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143 Whinert memorandum, October 25, 1946.
144 Norton memorandum, October 22, 1946.
145 Hutchinson memorandums, November 4, 1946 and January 27, 1947.
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148 Oldfield memorandum, November 22, 1946.
149 Warford memorandum, December 4, 1946.
150 DeKay memorandum, October 31, 1945.
151 Whelchel memorandum, November 6, 1947.
152 Kinney memorandum, May 10, 1946.
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162 Fitzgerald memorandum, June 14, 1949.
163 Planning Board memorandum, May 9, 1949.
165 14th Naval District, Conditions as of June 30, 1946.
201 Sakai letter, October 1, 1945.
202 Dillingham letter, October 10, 1945, see page 9-37.
203 Brown letter, September 18, 1945.
204 Taffinder letter, October 7, 1945.
205 Overesch letter, September 11, 1945.
206 Sweeney letter, June 3, 1946.
207 Hall letter, June 13, 1946.
211 Bagley letter, April 3, 1945.
214 Bailey, August 5, 1947.
215 Hirahara interview, February 2010.
216 Figert memorandum, January 17, 1950.
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218 Hartung mailgram, April 18, 1947.
219 Route Slip 10065, May 7, 1947.
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224 Ibid., page 2.
QUONSET HUT TYPES
6.0 QUONSET HUT TYPES

The ease of construction and lack of need for carpentry skills made the Quonset hut useful for a variety of purposes throughout the Pacific theater of military operations including Hawaii as well as throughout the United States. The generally accepted standard types from Quonset: Metal Living for a Modern Age are discussed further on pages 6-2 to 6-14.

**T-Rib Quonset Hut**

16' x 36' and 16' x 20'

*Courtesy of National Archives and Records Administration (NARA), Washington, D.C., RG 80-G-7443*

The original, or T-Rib, Quonset hut was modeled closely on the World War I Nissen hut. Both were 16 feet in diameter and utilized almost identical steel arch frames. The principal difference between the two was in the wall system. In the T-Rib Quonset, the interior wallboards were Masonite®. Its exterior was corrugated metal panels lapped and mounted to wood purlins with a core layer of paper insulation. The Nissen hut, on the other hand, had a more complicated system of corrugated metal panels both inside and out and depended solely on the air space between the two for its thermal barrier. T-Rib Quonset huts instantly provided U.S. troops with a greater level of comfort than could be provided by tents with wooden platforms typically used at that time. Because of Hawaii’s temperate climate, tents were frequently used for temporary housing.

Less than three months after initiating the hut design project, the U.S. military had in its arsenal a new demountable structure that could be shipped in twelve crates and put up in one day by ten men. It required no special skills to erect.

By the end of 1941, approximately 8,200 T-Rib Quonset huts were produced. Huts sent to Iceland proved its success in its first winter of use. According to George A. Fuller Company, “A night gale of hurricane proportion that wrecked shipping in the harbor, tossed and crumpled PBYs on the beach like paper hats, and ripped the covering completely off of many British Nissen huts, left the Quonset huts practically undamaged.”1

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1 Fig. 6-1 T-Rib Quonset Hut
(http://www.quonsethuts.org/huts/index.htm)
Quonset Redesign
16' x 36' and 24' x 60'

Since the arch of the Quonset hut extended to the floor, beds, sinks, and washing machines had to be moved inward until they abutted the curve at the top edge of the furniture or appliance. Valuable floor space was being wasted. Reclaiming this space would necessitate changing the overall form of the building.

[Otto] Brandenberger’s team [working for the Fuller Co.] proposed a modified arch with four-foot vertical sidewalls.

Fig. 6-2 Redesign of 16’ x 36’ Quonset Hut, 1941 (http://quonset-hut.blogspot.com/2012/12/us-navy-quonset-hut-product-of-america.html)

Fig. 6-3 1942 Redesign Quonset Huts at MCAS Ewa (Image Provided by NAVFAC HI)
The new arch, assembled in two sections instead of three, reduced erection time and required fewer fasteners. Furthermore, the profile of this arch was changed to a lighter weight “I” section produced by Stran-Steel—a system that was already being utilized for additions added to T-Rib Quonset huts.

The new hut system was thirty-five percent lighter to ship and sixty percent less expensive to produce. Approximately 25,000 Quonset Redesign huts were produced by George A. Fuller Company at West Davisville, Rhode Island. The ones shown in Hawaii are not the typical Quonset Redesign as they have a shallower arch than the standard redesign shown in Figure 6-2 and utilize curved roof beams, unlike the segmented beams of the redesigned huts shown in the drawing. These straight walls were often grouped together as seen in the image of the Navy Facility in Sausalito, no longer extant. The ganged structures in Hilo were more like the Utility Hut in size at approximately 100’ in length and grouped together to form large open warehouse space with a barrel vault roof. Colloquially, the ganged redesigned huts were often called Mae West Huts, like the Multiple Utility Huts.
Stran-Steel Quonset Hut

20' x 48' and 20' x 56'

Courtesy of NARA, Washington, D.C., RG 80-G-347017

The last major redesign of the Quonset hut came in about 1943 when the factory at Quonset Point was phased out and the contract to produce Quonset huts transferred to the Stran-Steel Division of the Great Lakes Steel Corporation [in Michigan]. The new hut had an expanded footprint of 20' x 48' and reverted back to the full arch rib.

Although this was a bigger building than the original 16' x 36' hut, it weighed less and took up less shipping space. The floor system was changed from one-inch floorboards to half-inch plywood, and a lighter gauge galvanized siding was introduced. In addition, the siding layout was modified with the factory-curved panel used only along the ridgeline. The remainder of the hut was sided horizontally, enabling panels to be shipped flat. Stran-Steel also introduced a four-foot overhang at each end of the structure, making the full length 56 feet, but this proved unnecessary in northern climates and was phased out.

By the end of WWII, approximately 120,000 Stran-Steel huts had been produced and shipped to almost every corner of the globe. Designed to serve 86 official uses—and applied to many more—these huts represented a refinement in thinking that spanned two world wars. When Brandenberger’s T-Rib Quonset hut and Quonset Redesign are included in the calculations, there were more than 153,000 lightweight, prefabricated units deployed and erected in support of American troops in WWII.3

According to the manufacturer’s manuals, the small or Stran-Steel Quonset huts were built with a Masonite® interior and insulation. The insulation used was a brand called KIMSUL®. KIMSUL® insulation was developed by Kimberley Clark seeking new ways to introduce its products for consumer use. KIMSUL®, a home insulating product made of creped wadding, impregnated with asphalt, was promoted as the insulation with many-layer construction; unlike the loose bulk insulation typical of the time, KIMSUL® had layers stitched together to form a blanket of uniform thickness. Originally, KIMSUL® began as insulation paneling for refrigerators. Later, the product appeared in automobiles as dashboard insulation. The product was easy to install and was resistant to fire, moisture, fungus, vermin and termites. National advertising for the product urged consumers to “wrap your new home in a blanket of many-layer KIMSUL.”4 Popular in the mid-1930s through the 1950s, KIMSUL® is no longer used as battling insulation has gained popularity. It is not known to contain asbestos and none was found in the inventoried Quonset huts.

In connection with the famous 1948 movie Mr. Blandings Builds His Dream House, starring Cary Grant and Myrna Loy, KIMSUL® was advertised as the insulation used in the dream house.
Fig. 6-7 Quonset Hut Insulation

("Erection Instructions for the 20'-0" x 48'-0" U.S. Navy Steel Arch Rib Hut" by Stran Steel Division, Tropical Design, November 1944)
While Q13 and Q14 on Ford Island have some Masonite® panels, many of the panels have fallen or were removed. The Utility Huts generally had no interior wall system.

The majority of the huts built in the Pacific were this type or the Utility Hut as they were extremely versatile. Commonly used as temporary barracks—as still seen only at Pohakuloa Training Area, island of Hawaii—during the massive build-up prior to and during World War II, most of these have completely disappeared except in photos though many of them have been moved and sold to civilians often to be used as residences. In Hawaii, residential units were often called kamaboko houses after the shape of a common Japanese fishcake found in local markets.

**Other World War II Arched Structures**

By 1941, companies other than original contractors George A. Fuller and Stran-Steel began developing their own versions of the Quonset hut. Some, like Butler and Cowin, developed Quonset-type structures to sell to the Army or anyone else who wanted to buy them. Others created hut designs in response to a special need, such as the wooden Pacific hut, which was created to save metal resources, and the heavy-steel Armco hut, which was intended for ordnance storage and air raid shelters. In addition, Stran-Steel began manufacturing a larger version and a multi-arched version of the Quonset hut. Nicknames abound for various hut types. Some are “official” military nicknames, such as “Elephant Shelter” and “Igloo.”

After World War II, some companies continued to make metal prefabricated buildings, however, few continued in the old arched shape. [The physical construction of huts started to change toward the end of the Cold War where both rigid self-supporting huts were used and later fabric covered huts started to be utilized for deployment to Middle East locations.] The main descendant of the Quonset hut today is the arch-roofed warehouse, now often clad in aluminum, and the tent-like Weather-port®, a direct descendant of the Jamesway hut.®
**Utility Building**

40' x 100'

**Courtesy of the National Archives, Washington, D.C., RG 80-G-246924**

“Utility Building” is a larger version of the Quonset hut. Sometimes nicknamed “elephant hut” (a name also used for Armco Air Raid Shelters), the building evolved over a period of time and could be adapted to tropical climates with the addition with specialized components. [Often used as warehouses, a] total of 11,800 Utility Buildings were fabricated by the end of World War II. A single unit could be erected by a team of ten men in 300 man hours, weighed only 23,381 pounds, could be shipped in twenty-three crates, and required only 383.17 cubic feet of shipping space.⁶ [In Hawaii, these huts were used in a multitude of applications.]

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**Fig. 6-10 Typical Galley and Mess Hall Building Combination**
Used at the Moanalua and Iroquois Point Construction Battalion Cantonments, August 5, 1942
(Image Provided by 14th Naval District Photo Collection)

**Fig. 6-11 Chow Hall - Mess Hall Interior August 5, 1944**
(Image Provided by 14th Naval District Photo Collection)
Multiple Utility Building

82' x 102' (extendable in 61'-6" width increments and 100' length increments)

The “Multiple Building” was a hut that could expand in both directions. It used many of the same parts designed for the Utility Building, but it accomplished larger spans by introducing a rectilinear steel frame upon which arched roof segments were joined one to the other with low, sloping valley gutters. The design allowed for expansion in both directions. According to the Multiple Building manual, it was possible to add an endless number of modules in increments of 61'-6" in one direction and 100' in the other. The largest assemblage of wartime Multiple Buildings was said to have been a 54,000-square-foot warehouse in Guam nicknamed the “Multiple Mae West.” In the years following World War II, National Steel Products exceeded this by constructing their Houston headquarters from an assemblage of units covering more than five full acres.7 [The best extant local example is one located in Hilo and is appropriately used industrially.]
Armco Hut

20' x 50' (also produced in different widths, lengths, and radii)


During World War II, Armco International Corporation of Middletown, Ohio, produced arched corrugated ingot iron bunkers, ammunition magazines and personnel shelters. The heavy steel buildings were modeled on earth-retaining structures such as culverts and storm sewers [which Armco continues to manufacture today]. The heavy iron (8- to 14-gauge) did not require supporting ribs but was curved and corrugated much like a Quonset hut. “Armcos” were strong enough to be completely buried in up to 6 feet of dirt and many were used to store ammunition. [As most “Armcos” were buried, a ventilator, which protruded from the earth, was needed.]
Figure 6-18 Facility 1493 is the largest and best extant Armco hut known in Hawaii. The interior dimension is 50’ x 25’ x 12’. It is located at the Southern point of the former MCAS EWA and is constructed of ten corrugated steel panels bolted together to form its protective arch of steel. Fac. 1493 was used for the storage of aerial Torpedoes. Similar designed shelters were noted to be used in Britain for protection during air battles.

Armcos continued to be built after WWII, and the company thrives today as culvert and pipe manufacturers.

Photo references for the Armco huts come from HABS HI-279-C and HI-279-V.
The huts on pages 6-12 to 6-14 are not known to be built in the Pacific, however, are noted as standard huts.

Emkay Hut

20' x 48'

Morrison-Knudsen Company designed the “Emkay” (M-K) hut to shelter their crews for their large and remote military construction contracts. While they credit the origin of the design—inspired by a chicken shed—to their engineer G. D. Paxson, the similarities to the Quonset and Pacific huts are undeniable. Manufactured in Boise, Idaho beginning in 1943, the Emkay had laminated wood ribs. Its distinct “two-centered arch” appears pointed, or gothic, in profile. All styles were built entirely of wood and wallboard, could be built to any lengths in multiples of twelve feet, and could accommodate different climates.⁹ [The Emkay Hut type was not found in the 14th Naval District, but a similar shape hut utilizing steel frame was in a photograph being constructed by the Seabees.]

Jamesway Hut

16' x 32' (extendable in 4' lengths)

Courtesy of NARA, Washington, D.C., RG 111-SC-324232

James Manufacturing Company of Fort Atkinson, Wisconsin, created a version of the Quonset hut with wooden ribs and an insulated fabric covering for the Army Air Corps. This portable and easy-to-assemble hut was designed for arctic weather conditions when personnel were wearing bulky clothes and mittens but needed shelter construction to proceed quickly. Insulated blankets in four-foot-wide lengths were made with glass fiber insulation faced with flame-proof muslin and enclosed in plastic-treated cotton that was water-, vermin-, and fire-proof. The hardware (nails, fasteners, and connecting bars) was the only metal component, and the whole package weighed 1,200 pounds for a 16’ x 16’ hut. Its wooden packing crates were designed for reuse as the hut floor.¹⁰ [The Jamesway Hut type was not found in historic documents or extant in the 14th Naval District as it was designed for arctic conditions.]
**Butler Hut**

16’ x 48’ (also produced in larger widths and incremental lengths of 4 feet)

*Courtesy of Butler Manufacturing Company, Kansas City, Missouri*

Developed by the Butler Manufacturing Company of Kansas City, Missouri, the “Butler hut” was an all-steel arched hut. With U-shaped arched ribs around an eight-foot radius, its profile was slightly more than a half circle. The end walls were framed with steel, and both end walls and sidewalls were enclosed with 2’ standing seam metal sheets. Not long after World War II, however, Butler abandoned the curved-roof approach, although it is still a popular producer of metal prefabricated buildings with gabled roofs today.¹¹ [The Butler Hut type was not observed within the 14th Naval District.]

**Cowin Hut**

36’ x 60’

*Courtesy of the University of Alaska Fairbanks, Elmer E. Rasmuson Library, Archives, Tom Christensen Collection, Folder 20, Box 1, 79-29-248*

Cowin and Company, Inc. developed large, bloated, semicircular steel warehouses (slightly less than half a circle) for the Army Air Corps. These 36’ x 60’ structures were called “Steeldromes.” To resist thrust on the arch caused by snow loads, Cowin used a truss system of horizontal steel tie rods and vertical steel hangers. Not many Cowin huts were shipped to Alaska after 1943 because they were inadequate for Alaskan snow loads. A number of them collapsed in their first winter of use.¹² [The Cowin Hut type was not observed within the 14th Naval District.]
Modern Quonset Hut

Quonset huts continue to be used mostly for warehouse storage or as open shelters as the arched structure is still recognized as one of the strongest shapes that can be constructed quickly and easily. The ribs are now structurally incorporated into the siding for even greater ease of construction and flexibility. They are available in a wide variety of widths and lengths and can be endlessly extended. The physical construction of huts started to change toward the end of the Cold War where both rigid self-supporting huts were used and later fabric covered huts started to be utilized for deployment to the Middle East locations. SteelMaster, one of the leading manufacturers of modern Quonset huts, developed their version of the modern Quonset hut in the late 1970s.
Endnotes
2 Ibid.
3 Ibid.
5 Chiei, et al., Quonset Hut Metal Living for a Modern Age.
6 Ibid.
7 Ibid.
8 Ibid.
9 Ibid.
10 Ibid.
11 Ibid.
12 Ibid.
USES AND MODIFICATIONS IN THE FORMER 14TH NAVAL DISTRICT
The only types of Quonset huts found remaining in this study were the Stran-Steel Quonset hut and the Stran-Steel Utility Building with modifications and include the following basic types:

- Standard utility (large ones, sometimes called Elephant Hut)
- Tropical Huts (only small huts)
  - Continuous ventilator
  - End extensions
- Extended Huts (large huts joined together for added length)
- Modified Huts
  - Plywood bulkheads (Ford Island)
  - Hut with 3’ high concrete foundations (Makalapa)
  - Double-Decker Huts used for barracks and administration (CINCPAC Boat House [Building 23NS])
  - Huts with side or “peeled” openings for windows or doors
  - Side shed extensions

Storage units, generally the larger Utility Huts, often windowless or bands of hooded windows and often in groups (e.g., West Loch) required very little adaptation as windows and venting were not particularly crucial features. Very little specialized features were done for these units.

Left: Fig. 7-1 Standard Utility Hut, Building K-19, West Loch, September 2009
Right: Fig. 7-2 Tropical Hut with Roof Vent, Building MQ39, West Loch, September 2009
(Image Provided by Fung Associates, Inc.)
Besides being easy to erect, the Quonset hut was an extremely versatile building form and could be used for almost any function including theaters, hospitals, stores, churches, and barracks. Any building type could be made from a Quonset hut through relatively easy modifications. Selected uses and modifications are illustrated in this chapter, however, due to its versatility not every modification or use can be depicted.

Fig. 7-3 Plywood Bulkheads, Building Q13 and Q14, Ford Island, September 2009
(Image Provided by Fung Associates, Inc.)

Fig. 7-4 Three Feet High Concrete Foundation, Building 17BE, Makalapa, September 2009
(Image Provided by Fung Associates, Inc.)
Groupings

Due to its ease of construction and shipping, Quonset huts were often grouped together to form barracks, warehouses, medical complexes, or workshops. As many of the groupings have been dispersed immediately after World War II, there are only a few groupings that remain intact such as the Army Cantonment at Pohakuloa Training Area. A typical small barracks at the Moanalua Ridge ABCD area illustrates how cramped the conditions were at Enlisted Men’s Barracks. These small Quonset huts had bunk beds which made the top bunk only 30” wide due to the arch of the hut wall.

Fig. 7-5 Ewa CB Camp, 1944
(Image Provided by NAVFAC HI)

Fig. 7-6 Interior of Men’s Barracks, 1944
(14th Naval District Collection Photo: USAR 5992)
Fig. 7-7 Naval Hospital Wards at Moanalua
(Kidder Smith Photo Collection, N-200-1)

Fig. 7-8 Quonset Huts at NAF Honolulu
(Kidder Smith Photo Collection, N-200-5)

Fig. 7-9 Quonset Huts at 20th CB Camp at Red Hill
(Kidder Smith Photo Collection, N-200-9)
Fig. 7-10 Quonset Hut Shops at District Public Works Maintenance Area
(NAVFAC PACIFIC, OA-N5-537)
Fig. 7-11 Utility Huts at 4th Marine Division Storage Department Kahului Harbor, Maui
(Image Provided by NAVFAC HI)
Fig. 7-12 Group of Extended Quonset Huts Used as Warehouses for the Marine Air Transport Services, One of the Last Squadrons that Operated from Former MCAS Works Center Ewa (Image Provided by NAVFAC HI)

Fig. 7-13 Group of Former World War II Quonset Huts Modified into the City of Hilo, Public Works Center (Image Provided by NAVFAC HI)
Common modifications included:

Shed Extensions

Shed extensions, either on two sides or one side along the longitudinal end of the Quonset hut were commonly used to extend the footprint and add covered space. Various industrial shops, such as wood shops or auto mechanic shops, mostly extant at Navy Facilities, showed the greatest degree of adaptation as large openings were often created in various ways extending across the entire length of the Quonset hut. Oftentimes, these modifications utilized concrete walls and the lower parts of the curved steel ribs were cut. As the structure of a Quonset hut relies on its geometry and the semi-circle extending to the floor plate where it is kept from kicking out, the removal of part of the semi-circle requires the installation of tie-rods to keep the steel ribs from flattening as is evident in the interior.

Fig. 7-14 Building A-12, Former Galley Moanalua Ridge, Single Shed with Attached Mess Hall
(Image Provided by NAVFAC HI)
Fig. 7-15 Renovation of Quonset Huts at District Public Works Maintenance Area, 1946
(NAVFAC PACIFIC, OA-N13-317)
Fig. 7-16 Section of Building X-17, 1945
(NAVFAC PACIFIC, OA-N13-304)
Fig. 7-17 Building X-18, Double Shed Quonset Hut at NAVFAC Hawaii Compound (Image Provided by NAVFAC HI)

Fig. 7-18 Interior of Building X-18 (Image Provided by NAVFAC HI)
Fig. 7-19 Foundation Plan and Elevation of Building X-18, 1945
(NAVFAC PACIFIC, OA-N13-305)
Fig. 7-20 Building X-20, Double Shed Quonset Hut at NAVFAC Hawaii Compound
(Image Provided by NAVFAC HI)
Fig. 7-21 Floor Plan, Foundation Plan and Elevation of Building X-20, 1945
(NAVFAC PACIFIC, OA-N13-307)
Double-Decker Huts

Utility and standard Stran-Steel Huts were often constructed at various heights to accommodate desired head room or flat wall space. A modification of the standard Utility Hut with modules based on the Utility Building size of approximately 40' by 100', these Double-Decker Huts were raised by a variety of heights depending on the need. Some were raised just enough for head room clearance on the second floor, some were raised an entire floor level. The following are photos of barracks constructed at Makalapa in 1944 which were two-story barracks created by elevating a Utility Hut onto a 4' high concrete wall which increased the head room on the second deck. The CB's originally constructed three barracks of this type and then added another three at Makalapa.

The CINCPAC Boat House is an example of this modification. Though a second story is only along the front of the building, the height flexibility to accommodate the boats is demonstrated by raising the Utility Hut one story.
Fig. 7-24 (Left) Two-Story Barracks at Makalapa
(Image Provided by NAVFAC HI)

Fig. 7-25 (Right) Two-Story WAVES Barracks at Makalapa Crater Looking East Toward Aliamanu Crater, Photo Taken Shortly After Makalapa Crater was Filled with Dredging Spoils
(Image Provided by NAVFAC HI)

Fig. 7-26 Double-Decker Extended Quonset Hut Used as an Office Building at Wahiawa
(Image Provided by NAVFAC HI)
Fig. 7-27 Building T-29, Double-Decker Hut, No Longer Extant
(Image Provided by NAVFAC HI)

Fig. 7-28 Interior of Building T-29
(Image Provided by NAVFAC HI)
Peeled Wall or Side Openings

Modifications were often based on the need for a straight wall for doors and windows along the longitudinal side of a Quonset hut. One solution used in various ways was to “peel” a curved wall up so that a straight wall could be formed for a door or window. Not literally peeling off the curved wall, the straight extensions would allow for an awning over a row of windows, which was very common for many of the Utility Huts, or a door on the longitudinal side of the Quonset hut. The straightening of the wall was also used to open up a wall to extend to the exterior often forming an open lanai. These side openings kept the ribs intact unlike the shed extensions.
Fig. 7-32 Center Door of Building T15 (Image Provided by NAVFAC HI)

Fig. 7-33 Center Sliding Door Detail of Building T15 (Image Provided by NAVFAC HI)

Fig. 7-34 Building 1520, Currently Used by Barbers Point Riding Club (Image Provided by NAVFAC HI)
Fig. 7-35 Window Detail, 1945  
(NAVFAC PACIFIC, OA-N6-1330)
Vented Huts

Even though Tropical Huts were brought to the Pacific, most extant huts were actually adapted with less tropical features than in the manufacturer’s manuals. The manuals indicate canvas bulkheads, projecting awnings with canvas flaps or louvers and a strip of vent flaps at the bottom of the hut (see Figure 7-36 and 7-37), neither of which were found in the extant Quonset huts. However, the overhang at the bulkheads typical of Tropical Huts and the roof vents or ventilators were utilized in the Hawaii examples. Though the Tropical Hut was a standard modification meant to allow for breezes to vent through a modified Stran-Steel hut, there are none extant in Hawaii. There were numerous Double-Decker Huts and Utility Huts that were vented to allow for air movement vital to habitation in a non-air-conditioned tropical climate. Ford Island and Barbers Point had several until the 1980s and 1990s when most were demolished.
Fig. 7-38 Manufacture’s Manual for Tropical Quonset Huts
(“Erection Instructions for the 20'-0" x 48'-0" U.S. Navy Steel Arch Rib Hut, Stran-Steel Division,” November 1944)

Fig. 7-39 Multi-Vent Quonset Hut
(Image Provided by NAVFAC HI)

1. Floor Framing. Lay the sills first; then the joists, then the channel plate. Level and square the whole assembly. (See pages 2 and 3.)

2. Ribs, Trimmers and Purlins. Fasten the half ribs together, attach purlin spacers and trimmers, locate, raise into position, and screw to channel plate. Erect purlins and plumb entire assembly. (See pages 4 and 5.)

3. Canopy Framing, Wood Sills and Headers. Install steel framing for canopy, and wood sills and headers at screened openings. (See page 6.)

4. Floor Panels. Lay out plywood floor panels on the joists. Install metal splines at longitudinal joints and nail the panels to the joists. (See page 7.)

5. Interior Covering and Screened Openings. Place Masonite sheets at raised ceiling first, then on side walls. Nail Masonite filler strips where ribs are exposed at screened openings. (See pages 8 and 9.)

6. Insulation. Apply insulation to raised ceiling area first, then above and below canopied opening, then in end bays. (See pages 10 and 11.)

7. Exterior Covering. Cover the side walls with flat corrugated sheets, including the hinged ventilator flaps and canopy. Fasten bronze screening and flashings F6 and F7 at raised roof. Nail curved corrugated sheets to purlins. (See pages 12 and 13.)

8. Bulkheads. Frame bulkheads in field from pre-cut lumber. Install door, panels, molding, screen, and canvas curtains. (See pages 14 and 15.)

9. Clean Up. Save all scraps, bands, blocks, nails, screws, and crating material not used. Store and use for further use.
Fig. 7-40 (Left) and Fig. 7-41 (Right) Building 1506 at Ewa, Roof Detail Showing Ventilation Space Detail Between Curved Panels and Side Panels (Image Provided by NAVFAC HI)

Fig. 7-42 Ventilated Monitor (NAVFAC PACIFIC, OA-N5-506)

Fig. 7-43 Illustration Demonstrating the Venturi Effect Created by the Tropical Vent (J. Duncan Campbell, Unknown date)
Unique Modifications for Varying Uses

With any building, human activity often determines the form of the building. Some unique examples of how the Quonset hut was modified for its use within the 14th Naval District include:

- False Front. Building 1177, once located at the Naval Submarine Base Pearl Harbor, featured a false front in the genre of a Main Street store front except for the use of corrugated metal siding and a lack of windows. January 31, 1985, Official U.S. Navy Photograph, L.F. Dow
• Chapels. These chapels are at Barbers Point and Pohakuloa Training Area. The chapel in Pohakuloa includes a steeple. The Army's Pohakuloa Training Area on the island of Hawaii was constructed in the mid-1950s, after World War II from excess Quonset huts moved there from other locations around the Pacific, including huts acquired from former Navy installations. Pohakuloa Training Area currently has numerous intact examples of Quonset huts in various uses and is documented in an inventory survey done by Kenneth Hays, architectural historian at U.S. Army Garrison, Hawaii.
- Medical Clinics. Though the photograph is taken at Pohakuloa Training Area which was constructed in the 1950s, it depicts a typical medical clinic layout used during the Cold War which had very little change from World War II through the Vietnam era.

- Open Quonsets. The Kona Airport was never part of the 14th Naval District, however, the 1950 photo depicts a modification that was likely used a number of times to provide an open-air shaded structure. The CINCPAC Boat House utilizes the open-air concept on the harbor side of the building.
Theaters. Entertainment has always been important to the morale of the soldiers. Though none remain, as a testament to its flexibility of construction, Quonset huts housed the stage for outdoor theaters as shown in these photos.

Fig. 7-49 Open-Air Theatre at Bachelor Officers Training Center, Little Makalapa Junior Officers Housing in Background (RG 10 Hawaii, Box 10, 2 MAR 1945, Port Hueneme)

Fig. 7-50 Navy Entertainment During World War II (Bishop Museum)
• Industrial shops were a vital part of the military. These shops at NAS Barbers Point illustrate how a Quonset hut could be used for numerous industrial purposes. Whether vented along the entire top or providing stacks to ensure dispersion of smoke, dust, or gas, a Quonset hut was easily adapted to the needs of these industrial shops.

Fig. 7-52 Shops at NAS Barbers Point
(“Naval Air Station Barber’s Point,” ca. 1946)
Small raised Quonset huts allow for higher head room as shown at Buildings T-11 and Q1092H, Joint Base Pearl Harbor-Hickam. T-11 was the last small Quonset hut in the Marine Barracks Pearl Harbor area used for a fire training classroom which was demolished in the late 1990s. It was part of an encampment of Quonset huts north of the Marine Parade Grounds used to augment the Senior Noncommissioned Officers (SNCO) housing. The facility was raised on a 4' high concrete base wall with an extended tropical portico entrance way. Unlike Makalapa facility 17BE, the semi-circle of the Quonset sits completely above the 4' high wall. Makalapa 17BE incorporates the concrete wall into the semi-circular shape rather than raising the semi-circle.
• Office buildings were modified in a number of ways, but one of the more unique modifications is the two-story field office that intersects perpendicularly forming a unique corner condition.

• Schools. As noted, any building type could be accommodated and the elementary school at Joint Base Pearl Harbor-Hickam illustrates how the center is ventilated at both the top and with windows. The ends are extended and enclosed, likely for functions other than a classroom.

Refer to Appendix D which features drawings of standard adaptations provided by Quonset hut manufacturers.
EVALUATION OF HISTORIC SIGNIFICANCE
8.0 EVALUATION OF HISTORIC SIGNIFICANCE

Summary of Historic Significance

Based on the criteria set forth by the National Park Service (NPS), the Quonset huts in this study (except for Building 23NS, the CINCPAC Boat House) are all associated within the historic context of the rapid response needed for the build-up and deployment of Navy and Marine forces and support facilities after the attack on Pearl Harbor and other installations in the Pacific. We consider the Period of Significance for the Quonset hut within the 14th Naval District Area of Responsibility (AOR) as spanning the years 1942 to 1979 and ending when this facility type was no longer deployed by the 14th Naval District. Many Quonset huts within the AOR were deployed and constructed by Navy Construction Battalions or Units. By its type of construction, initially designed to be portable, easily constructed and temporary, the Quonset hut demonstrates the significant role of the trend to use mass-produced building products and uniform production techniques. The United States’ ability to mass produce materials had an important effect on the outcome of World War II and thus has the potential to be eligible under Criterion A provided historic integrity is maintained. All Quonset huts that have retained their historic integrity and character defining features are also significant as examples of a unique building type (Criterion C). Note that a property need only be significant in one of the four aspects presented on pages 8-3 to 8-4 to be eligible for listing on the National Register of Historic Places. In addition to most of the Quonset huts meeting Criteria A and C, the quality of each Quonset hut’s historic integrity was taken into consideration in its classification.

Historic integrity should not be confused with physical integrity. Historic integrity is based on seven items of integrity listed on pages 8-5 to 8-9, not on the amount of rust or dents in the corrugated siding. As this was a context study, extensive research of each individual Quonset hut was not conducted. As such, there may be unique historical events that may not be known to the Navy until further research is conducted.

Fig. 8-1 Quonset Huts at West Loch, September 2009

Fig. 8-2 Quonset Huts at Former MCAS Ewa, September 2009
Methodology

National Register of Historic Places Criteria

Utilizing the criteria for eligibility for placement on the National Register of Historic Places, significance is found in four aspects of American history. These four aspects were the guidance for the determination of historic significance. The four aspects include:

A. Association with historic events or activities. As noted previously, since most of the Quonset huts in this study (except for 23NS, the CINCPAC Boat House) were constructed during World War II, they are associated with the rapid build-up of military facilities in Hawaii. Hawaii was a key location during the war and Quonset huts played a major role in the ability to provide shelter and provide for the expanding needs of the U.S. war effort. Some of the changes in the Quonset huts are attributed to U.S. involvement in the Korean and Vietnam Wars and other conflicts within the 14th Naval District AOR (See Fig. 2-1). Adaptation was necessary for the continued use of the Quonset hut following World War II. Rigs for larger missiles used during the Cold War, opening sides for ventilation when more shops than warehouses were needed, and the use of concrete masonry to prolong the use of these once temporary structures are examples of these adaptations through the Korean, Vietnam and Cold Wars. Thus these adaptations have acquired significance in their own right.
B. Association with important persons. As the NPS standards for association with important persons specifically notes that it has to be one of the few sites associated with the important person, no associations with important people were discovered for the extant Quonset huts. Intensive research may discover an important connection with someone, but it was not discovered in the more cursory research for this project.

C. Distinctive design or physical characteristics. Quonset huts are a distinctive design even if it was a prefabricated mass-produced structure. Since there are so few of these structures remaining in Hawaii and especially under Navy purview, compared to what was once built, all the Quonset huts could be considered a rare example of a construction type.

D. Potential to provide important information about prehistory or history. This criterion does not apply to Quonset huts since they are all built within the 20th century and documentation can be found on these buildings.
Historic Integrity

Historic integrity is defined as "the authenticity of a property’s historic identity, evidenced by the survival of physical characteristics that existed during the property’s prehistoric or historic period."1 As such, since the majority of the Quonset huts are associated with both the World War II and Cold War periods, the huts need to portray its essential character defining features in a manner such that a World War II or Cold War veteran would be able to return and easily identify the structure. General character defining features for Quonset huts are enumerated at the start of Chapter 11, Inventory; specific features are noted on the inventory sheets of each Quonset hut. Qualities of integrity include:

- **Location:** Location refers to the physical place where a Quonset hut is sited. Integrity of location refers to whether the property has been moved or relocated since its original construction. In general, a property is considered to have integrity of location if it was moved during its period of significance. Integrity of location is sometimes considered significant enough to preclude listing on the National Register of Historic Places. However, since it is part of a Quonset hut’s character defining feature to be movable and easily built, the original location of each hut was not looked upon as highly significant unless a major event took place on its site. Or in the case of a grouping of Quonset huts, the location of the huts in relationship with each other is part of its character defining feature. Building 23NS, the CINCPAC Boat House is the other Quonset hut where location is crucial to its historic integrity.

Fig. 8-5 Building 23NS, CINCPAC Boat House, September 2009
**Design:** Design is the composition of elements that constitute the form, plan, space, structure, and style of a property. Properties may change through time to accommodate new uses or technologies. Changes made to continue the function of a Quonset hut may acquire significance in their own right. These changes do not necessarily constitute a loss of integrity of design. The design of a Quonset hut is quite distinctive and it is difficult to have small changes affect its overall design integrity. The loss or substantial alteration of the ribs and walls may constitute a significant loss of design integrity. For the 14th Naval District context, the design of Quonset huts are noted below:

- Quonset hut designs and variations as produced from manufacturer’s standardized plans and components and as initially deployed in the AOR to support the military mission.
- Quonset hut design modifications commonly used by NCBs and others in the field and are recognizable as a common design modification or building type using Quonset hut components.
- Quonset hut designs that are unique examples of Quonset hut modifications which are not commonly seen but illustrate the range of design used in deployment and/or reuse of standardized Quonset hut components.

There are certain features important to retaining historic integrity, including the semi-circular shape, use of corrugated sheet metal and use of compatible design features. Many Quonset huts within the 14th Naval District AOR have been modified over time to meet changing mission needs. If the originally constructed plans and design features are so extensively modified that the structure is no longer recognizable as it was during its period of significance, then structures may no longer retain historic integrity.
**Setting:** Setting is the physical environment of a historic property that illustrates the character of a place and the relationship of the surroundings to the historic property. Integrity of setting remains when the surroundings of a Quonset hut has not been subjected to radical change. As many of the Quonset huts were constructed in large groups, integrity of setting has been compromised in some of the huts in the study. However, as significance is also for its unique type of construction and its design ability to be relocated and reused, the setting is not as crucial to the overall historic integrity of a Quonset hut.
- **Materials:** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Almost all of the Quonset huts retained its original materials, but those Quonset huts that were extremely deteriorated lost much of its material and thus much of its historic integrity of materials. It is often difficult to ensure that the original materials of a Quonset hut remain due to the high salt environment in Hawaii. Therefore, loss of material integrity is not crucial to the historic integrity of the Quonset hut.

- **Workmanship:** Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Workmanship is considered important because it can furnish evidence of the technology of the craft, illustrate the aesthetic principles of a historic period, and reveal individual, local, regional, or national applications of both technological practices and aesthetic principles. Since these structures were meant to be built by unskilled labor, there is not a high degree of workmanship on any of the Quonset huts and thus the simplicity of its construction illustrates its workmanship and all intact Quonset huts have retained integrity of workmanship.

Fig. 8-11 Common Rusted Corrugated Metal Wall, Building 1149, September 2009

Fig. 8-12 Bolted Corrugated Metal Wall, Showing Simple Construction, Building T15/T15-A, September 2009 (Image Provided by NAVFAC HI)
- **Feeling:** Feeling is a property’s expression of the aesthetic or historic sense of a particular period of time. This is often the item most properties are judged on as it is based on the intangible ability of a place to evoke a sense of history. Although it is intangible, feeling is dependent upon the property’s significant physical characteristics that convey its historic qualities.

- **Association:** Association is the direct link between an important historic event or person and a historic property. Integrity of setting, location, design, workmanship, materials, and feeling combine to convey integrity of association. As the properties in this study are owned by the Navy and located on military lands, they have all retained their ability to convey their association with a significant event.

With simple buildings, integrity can usually be easily compromised, but a Quonset hut is a very unique building type and can most assuredly be identified by its curved ribs and corrugated metal siding which are very distinctive. The Quonset huts were further evaluated for historic significance based on the NPS guidelines provided on pages 8-10 to 8-11.
Application of the Criteria within a Historic Context

The first step in evaluation is considering how the criteria apply to the particular historic context. This is done by reviewing the previously developed narrative for the historic context and determining how the criteria would apply to properties in that context, based on the important patterns, events, persons and cultural values identified. (See the discussion of the historic context narrative in the Guidelines for Preservation Planning.) This step includes identification of which criteria each property type might meet and how integrity is to be evaluated for each property type under each criterion. Specific guidelines for evaluating the eligibility of individual properties should be established. These guidelines should outline and justify the specific physical characteristics or data requirements that an individual property must possess to retain integrity for the particular property type; and define the process by which revisions or additions can be made to the evaluation framework.

Consideration of property type and integrity: After considering how the criteria apply to the particular historic context, the evaluation process for a [Criterion C] property generally includes the following steps:

1. A property is classified as to the appropriate historic context(s) and property type(s). If no existing property type is appropriate, a new property type is defined, its values identified, and the specific characteristics or data requirements are outlined and justified as an addition to the historic context. If necessary, a new historic context is defined for which values and property types and their integrity requirements are identified and justified.

2. A comparison is made between the existing information about the property and the integrity characteristics or data required for the property type.
   a. If the comparison shows that the property possesses these characteristics, then it is evaluated as significant for that historic context. The evaluation includes a determination that the property retains integrity for its type.
   b. If the comparison shows that the property does not meet the minimum requirements, one of several conclusions is reached:
      1. The property is determined not significant because it does not retain the integrity defined for the property type.
      2. The property has characteristics that may make it significant but these differ from those expected for that property type in that context. In this case, the historic context or property types should be reexamined and revised if necessary, based on subsequent research and survey.
The evaluation should state how the particular property meets the integrity requirements for its type. When a property is disqualified for loss of integrity, the evaluation statement should focus on the kinds of integrity expected for the property type, those that are absent for the disqualified property, and the impact of that absence on the property’s ability to exemplify architectural, historical or research values within a particular historic context.

The integrity of the property in its current condition, rather than its likely condition after a proposed treatment, should be evaluated. Factors such as structural problems, deterioration, or abandonment should be considered in the evaluation only if they have affected the integrity of the significant features or characteristics of the property.²

Endnotes

TREATMENT RECOMMENDATIONS
9.0 TREATMENT RECOMMENDATIONS

Summary

The focus of treatments in this report is for the remaining Quonset huts managed by Navy Region Hawaii, which is only a small representation of what was once a much larger inventory within the former 14th Naval District AOR. When ranking Quonset huts with respect to treatment recommendations, consideration was given to balance each hut's historic significance with its condition and location. Taken into account was how well the Quonset hut fit into the overall historic context and if it was a good example of historic context of a given area. Each hut was looked at as a product of its time and as "an illustration of aspects of heritage that may be unique, representative, or pivotal."

Thus, if the Quonset has unique adaptations, it would be given a higher historic category. Facility X-8 is a good example of a unique adaptation with its historic modifications which capture the flexibility inherent in the design of this facility type. Certain construction battalions and designers excelled at developing very innovative designs using the basic standardized components as packaged by manufacturers combined with using other construction materials available to them.
A representative example would be one that illustrates one of the following:
- An example of mass manufacturing with the Quonset hut appearing very much like the catalog from the 1940s.
- An example of standard manufactured modifications
- An example of common adaptations developed in the field and commonly used by various Naval Construction Battalions or others to meet a variety of mission needs.

A good example of representative mass manufactured Quonset huts that is recommended as high priority for preservation is the complex of 12 huts at West Loch (formerly part of the ABCD Annex) because not only do they display a fairly high degree of historic integrity, they are also in a large group as was once typical of the original setting for many of the World War II period Quonset huts. Thus this group maintains a sense of its historic context better than the setting for many of the other remaining Quonset huts.

A pivotal example would be if a Quonset hut was the first example of a particular type or if the Quonset hut played a role in an important historic event.

In summary, a high priority for preservation is recommended for Quonset huts that possess a unique adaptation or are the best example of a given type (Small, Utility, Tropical or a unique adaptation) and in a fair to good condition for rehabilitation or preservation. Note that these are recommendations based on physical observations and Navy operational and mission needs must be taken into consideration through consultation with preservation partners to determine the ultimate treatment decision.

Treatment recommendation categories:

The following treatment categories, while based on the Secretary of the Interior Standards for Treatment of Historic Property, are explained on pages 9-4 to 9-12 in its application to this study.

**PRESERVATION**

Properties recommended for preservation are ranked high in significance and should be in fair or better condition. Any modifications to the facility should be in accordance with the Secretary of the Interior’s standards as noted on page 9-4. Efforts should be made to continue the facility in its current use or find an alternative, compatible use. Preservation is recommended to keep the current use of the building the same, i.e., keep it in storage use or shop use as trying to bring any of the Quonset huts up to current code would destroy any of its character-defining features on the interior as in Building A12 which has become an office building (Figure 9-1). Alteration of the structure should not require further consultation with the Hawaii State Historic Preservation Division and other preservation partners if it is in accordance with the Secretary of Interior’s standards and the 2003 CNRH PA. Note that replacement of siding and other building components with in-kind materials is in accordance with the Secretary of the Interior’s (SOI) standard. Such repairs should be covered by the 2003 CNRH PA with concurrence of Navy Preservation staff.
Preservation is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.  

The following section (page 9-5 to 9-6) is the Secretary of the Interior’s Standards for Preservation and are the guidelines for the treatment of Quonset huts recommended for preservation.
STANDARDS FOR PRESERVATION

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken. (Thus, uses which take advantage of the wide open space that is possible with a Quonset hut, such as storage units or shop use, are appropriate.)

2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided. (Under the preservation treatment category, alterations such as adding windows or large side openings are not within the purview of this treatment. It would be acceptable under the rehabilitation category.)

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research. (For example, the use of hurricane clips to provide stability for the base of the steel ribs as noted in the Maintenance and Repair section of this report provides good preservation treatment.)

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved. (As the period of significance for the remaining Quonset huts is considered to be the period of 1942 to 1979, research must be undertaken to determine when such things as concrete masonry unit (CMU) additions were added to a Quonset hut and to determine if the additions are detracting or contributing to the historic significance of the hut. A contributing feature will have acquired historic significance in its own right. Future renovation projects should consider removing or minimizing features determined to be detracting.)

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved. (As there are just a few features of a Quonset hut and by its nature is the construction technique, almost all parts of a Quonset hut, should be preserved or if modified should follow the Secretary of the Interior’s Standards for Rehabilitation.)

6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed and recommendations for improvements provided. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match in-kind the old in composition and design. (Selection of color and texture of replacement materials shall
be consistent with the Installation Design Plan (IDP) and have approval from NAVFAC Hawaii, EV5 qualified personnel for compliance with the standards and current IDP information.)

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used. (See the Maintenance and Repair section of this report for recommended methods.)

8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

REHABILITATION

Rehabilitation is recommended when a building has documented outstanding deficiencies, is deteriorated, vacant or a change in use or functional modification is needed for more effective use of the property. Using the SOI’s Rehabilitation Standards, additions and greater changes to meet the needs of a new use can be done with oversight and approval by NAVFAC Hawaii, EV5 II.A personnel. When changing the use of the Quonset hut, the first step should be to identify any character-defining features. While these structures are very simple in form and detail, the features noted in the Inventory section of this report should be retained to a reasonable extent as allowed with NAVFAC Hawaii, EV5 review and approval.

While normally not considered an historic preservation treatment, relocation of the huts may also be an option under this treatment category for Quonset huts. By design, huts are easy to move and re-construct. In cases where a Quonset hut needs to be relocated for functional or mission, needs the preferred approach would be to select a site where huts were previously sited. If flashings are not salvageable, new flashings must replicate the shape, form, and gauge of the original sheet metal flashings. The Navy’s original assembly manuals are available in Chapter 13 Appendices of this report if required for re-construction information.

The Navy has an option to consult with Hawaii State Historic Preservation Division should a facility no longer be able to meet operational or mission needs to consider a treatment other than rehabilitation. The facility should be documented photographically and historically to Historic American Building Survey or Historic American Engineering Record (HABS/HAER) standards.

“Rehabilitation” is defined as “the process of returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values.”
The Secretary of the Interior’s Standards for Rehabilitation states:

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment. (The use of a Quonset hut that requires removal of the ribs or a great amount of space divisions is not the best use to enable rehabilitation.)

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided. (Plan for a longer review time and potential outside consultation effort otherwise.)

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken. (Many of the Quonset huts do have original basic standardized plans and established acceptable modifications thus conjectural features are easier to avoid.)

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved. (This is especially important for Quonset huts that changed to accommodate the Cold War or Vietnam War. For example the alterations in K28 and K29 in 1961 have acquired significance as they are responses to the increase of nuclear submarines at Pearl Harbor.)

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence. (Replacement of the corrugated sheet metal of Quonset huts is often needed and can be replaced in-kind relatively easily, but it is recommended that salvaged or original types of sheet metal flashing be reused where possible. Corrosion of the steel ribs, however, is more problematic and may require replacement with salvaged material or use of custom fabricated material. As much as feasibly possible, structural members should be periodically treated for rust and maintained rather than allowed to deteriorate until expensive material replacement is needed.)
7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible. (See the Maintenance and Repair section of this report for recommended treatment methods.)

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. (The new work shall use the same simple basic materials. Care should be taken in ensuring selection and use of rust resistant materials, finishes and non-ferrous or treated fasteners. The design shall be similar to the old and compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.)

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.  

**DE-CONSTRUCTION FOR SALVAGE OF BUILDING COMPONENTS**

While preservation or rehabilitation are considered the preferred alternative for the remaining facilities, the properties in this category are generally in such poor condition that replacement and maintenance costs may outweigh the monetary value of the structure. However, rather than demolish and dispose, it is recommended building components be salvaged for re-use through a de-construction or careful dismantling process through a company such as Re-use Hawai‘i or a similar company with specialized expertise in dismantling materials for salvage including repackaging for storage and future reuse. All Quonset huts scheduled for demolition need to have a feasibility study done for re-usable materials that can be salvaged. While some of the material may not be suitable for re-use in the remaining buildings, important components are and other material could be used for scrap metal through a salvage company and possible LEED points should the project be seeking LEED certification.

Re-use Hawai‘i or a similar company with specialized training and professional qualifications for salvage and material reuse can provide a feasibility study for each Quonset hut proposed for demolition so that the maximum amount of recyclable material can be salvaged. All remaining Quonset huts that qualify as historic may require photographic documentation to HABS/HAER standards.
NOT ELIGIBLE

This category applies to Quonset huts that do not meet the criteria for listing on the National Registers of Historic Places, mostly due to a lack of historic integrity either because of inappropriate alterations or conditions being so poor it lacks historic integrity items such as material, design and workmanship. In this situation it is not economically feasible to reconstruct the basic building components to bring back sufficient integrity to the structure. Under this category, treatment recommendations other than salvage potential are not a historic issue, thus no treatment recommendations are included in this report. However, if this facility is listed in the Regional PA, notification of its removal to the historic partners will still be required. Also, if any of these Quonset huts are scheduled for demolition, it is recommended that a professional dismantling company, provide a feasibility study to determine which building components can be recycled for future reuse.

CONDITION ASSESSMENT

Many of the extant Quonset huts have deteriorated. Maintenance is crucial to the longevity of a building but especially for a metal building in Hawaii’s sub-tropical climate or if located in humid harbor environments. Metal siding is difficult to maintain near the ocean and without maintenance, rust will develop quickly. Rust is glaringly evident in nearly all the remaining Quonset huts, except for 23NS, the CINCPAC Boat House which is well maintained through replacement siding and periodic paint coatings, however, it should be noted that while corrugated metal siding is very easily and inexpensively replaced, the crucial part of the Quonset hut is the arched metal ribs. Therefore, in rating the condition of these huts, the ribs are the determining factor when these facilities were accessible.

The following is an explanation of the condition classifications.

- **Excellent:** Overall good condition structurally, arched ribs show very little rust; corrugated metal siding appears to need less than 25 percent replacement; windows doors need less than 25 percent replacement; occupied, in active use

- **Good:** Arched ribs show very little rust, or only surface rust, though a few ribs (less than 10 percent) may need replacement or greater repair; corrugated metal siding appears to need 25 percent or greater replacement; doors, windows appear functional, less than 50 percent need replacement; generally occupied and used

- **Fair:** 10-25 percent of ribs need replacement or hurricane ties at the bottom; corrugated metal siding appears to need 25 percent or greater replacement; doors, windows do not appear functional, more than 50 percent need replacement; often unoccupied

- **Poor:** Uninhabitable, structural rib contact with foundation slab are often not tied down properly or have deteriorated rib ends; heavily damaged siding allowing deterioration of the ribs; unoccupied
PAINT COLOR SELECTIONS & GUIDANCE

There is standardized painting guidance for Navy facilities available in the CNRH Installation Appearance Plan (IAP). For painting projects on Quonset huts the general guidance for paint schemes is as follows:

1. Administration Areas: Recommend using paint color in the range of Khaki Tan for body color
2. Storage and Industrial Areas: Recommend using either a Silver Aluminum or Medium Gray for body color
3. Outlying Areas: Recommend using either Khaki Tan or Emerald Green for body color
4. Trim for window sash and personnel doors should correspond to the area trim color provide in the IAP and should be reviewed and approved by NAVFAC Hawaii, EV5 personnel.
5. Interior Structural Steel Framing: Recommend using a rust preventative primer and paint to match the original Dark Iron Oxide Red color typically used on ribs and framing
6. In general review proposed painting plans with NAVFAC Hawaii, EV5 for review and approval.

PREVIOUS RECOMMENDATIONS

Previous treatment recommendations were evaluated in the following: 1. the Appendix B of the 2003 PA, 2. the 2003 Navy Region Hawaii Quonset Hut Survey (QHS), and 3. a letter from the Historic Hawaii Foundation (HHF) in 2004. Both QHS and HHF gave condition a higher consideration.

The evaluation groups are defined in the QHS as:

- **Group A** – The facility is in good condition and is currently being used.
  
  Treatment: The facility should be maintained in accordance with the Secretary of the Interior’s Standards for Historic Buildings as long as the building can be utilized. A reasonable effort should be made to continue to use and maintain the structure, or find an alternative use if the facility is vacated.

- **Group B** – The facility is in fair condition and is currently being used.
  
  Treatment: The facility should be maintained in accordance with the Secretary of the Interior’s Standards for Historic Buildings as long as the building can be utilized. If the facility becomes vacant or if maintenance costs outweigh the value of the structure, the facility should be documented (photos/drawings) and then demolished.

- **Group C** – The facility is in poor condition and is not being used. The building is in such poor condition that it cannot be salvaged. Architecturally the structure has lost its historic integrity.
  
  Treatment: The facility should be documented with photos/drawings and then demolished.
The evaluation groups are defined by HHF as:

- **Group A** – The facility is in good or fair condition and is currently being used or is the best remaining example or is evaluated as a unique remaining example of Quonset hut types.

  Treatment (Category II): Any modifications to the facility should be in accordance with the Secretary of the Interior’s Standards for Historic Buildings. In applying the Standards, replacement of siding and building components with in-kind materials shall be considered a “no adverse effect” and allowed without consultation with concurrence of a qualified Historic Architect. A reasonable effort should be made to continue to use and maintain the structure, or find an alternative use if the facility is vacated. Alteration or demolition of the structure will require consultation with the Hawaii State Historic Preservation Office (SHPO).

- **Group B** – The facility is in fair condition and is currently being used or is a good representation of the Quonset hut types.

  Treatment (Category III or above): Any modifications to the facility should be in accordance with the Secretary of the Interior’s Standards for Historic Buildings and in compliance with the stipulations of the CNRH PA, 2003. Replacement of siding and building components per the Standards shall be considered a “no adverse effect” and allowed without consultation and concurrence of NAVFAC Hawaii, EV5 qualified II.A personnel. If the facility becomes vacant, and another use cannot be found, or if maintenance costs outweigh the value of the structure, the facility may be documented (photos/drawings) and then demolished. Alteration, relocation or demolition of the structure will require consultation with the Hawaii SHPO. If demolition is required, the structure shall be dissembled for salvage of usable building components, including storage for relocation or repair of remaining Quonset huts.

  Treatment (Category IV): Facility is in a physical state where component replacement and maintenance costs outweigh the value of the structure and is in poor condition but the structure is still considered to have salvage value for building components. The facility has been determined not eligible for the National Register of Historic Places. Consultation with the Hawaii SHPO is not required for alteration or demolition of the structure.

- **Group C** – The facility is in poor condition. The building is in such poor condition that it cannot be repaired or salvaged. Architecturally, the structure has lost its historic integrity.

  Treatment (Category IV): It has been determined that the facility is not eligible for the National Register of Historic Places. Consultation with the Hawaii SHPO is not required for alteration or demolition.
<table>
<thead>
<tr>
<th>Area</th>
<th>Building No.</th>
<th>Historic Significance</th>
<th>Condition Assessment</th>
<th>Previous Reports</th>
<th>Proposed Category</th>
<th>Treatment Recommendation*</th>
</tr>
</thead>
</table>
| West Loch | K19, K20, K21, K22, K23, K24, K28, K29, K30, K31, K32, K33 | § Should be looked at together as a historic grouping within the PHNHL boundary  
§ Fairly intact  
§ Best example of surveyed Quonset huts in a group  
§ Context fairly intact including remnants of train tracks  
§ Appears to have many original windows and doors at Quonset huts  
§ Good sampling of large Utility Quonset huts, some examples windowless, some examples with hooded windows and some with unique modifications | Fair/Good  
§ Windows in poor condition  
§ Most siding in poor condition  
§ Could not go inside majority of Quonset huts | Not listed in PA  
QHS: Group B  
HHF: Group A | II                | Preservation  
§ Replace siding as needed (many needed)  
§ Brush and clean ribs, paint with marine-grade paint  
§ Replace windows in kind as needed.  
§ Clean and paint |
| West Loch | MQ39 | § Intact, with few modern modifications  
§ One of few examples of the smaller tropical Quonset  
§ Good example of tropical adaptations  
§ Lost most of its context | Fair | Listed in PA  
QHS: Group A  
HHF: Group A | III                | Rehabilitation**  
§ Not publicly visible, may consider moving |
| West Loch | Q353 | § Intact example of Utility Hut | Fair  
§ Vacant | Not listed in PA  
QHS: Group A  
HHF: Group B | III                | Rehabilitation**  
§ Not publicly visible, may consider moving |
<table>
<thead>
<tr>
<th>Area</th>
<th>Building No.</th>
<th>Historic Significance</th>
<th>Condition Assessment</th>
<th>Previous Reports</th>
<th>Proposed Category</th>
<th>Treatment Recommendation*</th>
</tr>
</thead>
</table>
| West Loch    | Q345         | • Exterior remains historically intact  
• CMU ends added later                                                              | Poor  
• Has been used for target practice                                            | • Not listed in PA  
• QHS: Group B  
• HHF: Group B                                                               | IV                | Deconstruction  
• Wood windows may be worth salvaging, but not for other Quonset hut projects as these do not match other Quonset huts |
| Lualualei    | 423          | • One of the best remaining examples of a small Tropical Quonset  
• Only example in Lualualei  
• Intact                                                                         | Good  
• Vacant, but appears in good condition                                           | • Not previously studied                                                        | II                | Rehabilitation**  
• Not publicly visible, may consider moving                                      |
| Aiea Bay     | 23NS         | • Though built later than most of the Quonset huts, unique adaptation over water  
• Very visible to public  
• Some later modifications to dock areas and interior areas                      | Excellent  
• Well kept, in active use                                                       | • Not listed in PA  
• QHS: Group A  
• HHF: Group A                                                               | II                | Preservation                                                                 |
| Makalapa     | 17BE         | • Unique type of Quonset with battered walls supporting the arched ribs.  
• Numerous later modifications, renovated for offices  
• CMU wall on bottom                                                           | Fair to Poor  
• Closed due to hazardous materials                                               | • Listed in PA  
• QHS: Group B  
• HHF: Group A                                                               | III               | Rehabilitation  
• Remove later additions  
• Hazardous material clean up necessary                                            |
<table>
<thead>
<tr>
<th>Area</th>
<th>Building No.</th>
<th>Historic Significance</th>
<th>Condition Assessment</th>
<th>Previous Reports</th>
<th>Proposed Category</th>
<th>Treatment Recommendation*</th>
</tr>
</thead>
</table>
| Shipyard        | T15/15A      | • Fairly intact example of large Quonset hut  
• Only example left in the Shipyard as well as the entire main base area                                                                                      | Good                 | • Listed in PA  
• QHS: Group A  
• HHF: Group A                                                                                                           | III                | Rehabilitation**                                                              |
| NAVFAC X8       |              | • Intact  
• Unique adaptation of opening on side with awning  
• Unique signage  
• Maintains strong associations with the Seabees                                                                                   | Good                 | • Listed in PA  
• QHS: Group B  
• HHF: Group A                                                                                                           | II                 | Preservation                                                                |
| NAVFAC X9       |              | • Intact, but common example found in West Loch district                                                                                                                                                             | Good, but did not enter | • Listed in PA  
• QHS: Group B  
• HHF: Group A                                                                                                           | III                | Rehabilitation**                                                              |
| NAVFAC X24      |              | • Intact  
• Highly visible area  
• Common type                                                                                                                                                                                                     | Good                 | • Listed in PA  
• QHS: Group B  
• Not in HHF Plan                                                                                                          | III                | Rehabilitation**                                                              |
| NAVFAC X21      |              | • Unique modifications  
• New addition not compatible                                                                                                                                                                                     | Fair                 | • Not listed in PA  
• QHS: Group B  
• HHF: Group B                                                                                                           | III                | Rehabilitation**                                                              |
| NAVFAC X20      |              | • Later CMU additions enclose the space and detract from the open feeling of a Quonset hut                                                                                                                         | Good                 | • Not listed in PA  
• QHS: Group B  
• HHF: Group B                                                                                                           | IV                 | N/A                                                                     |
<table>
<thead>
<tr>
<th>Area</th>
<th>Building No.</th>
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<th>Treatment Recommendation*</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVFAC X18</td>
<td></td>
<td>▪ Most additions done within the period of significance</td>
<td>Good</td>
<td>▪ Not listed in PA                   ▪ QHS: Group B ▪ HHF: Group B</td>
<td>III</td>
<td>Rehabilitation**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Maintains its open interior with wood posts</td>
<td></td>
<td></td>
<td></td>
<td>▪ Remove later additions</td>
</tr>
<tr>
<td>NAVFAC A12</td>
<td></td>
<td>▪ Many modifications, renovated for office use</td>
<td>Good</td>
<td>▪ Not listed in PA                   ▪ QHS: Group B ▪ HHF: Group B</td>
<td>III</td>
<td>Rehabilitation**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Interior does not reflect Quonset hut curve at all</td>
<td></td>
<td></td>
<td></td>
<td>▪ Remove interior modifications</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>▪ Remove large additions to most public side of the Quonset hut</td>
</tr>
<tr>
<td>Ewa/Barbers Point 152</td>
<td></td>
<td>▪ In active use as Commissary</td>
<td>Good</td>
<td>▪ Not previously studied</td>
<td>III</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Although modern addition at entrance, only one with unique adaptation in its joining of two Quonset huts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪ Only example under the control of the Navy in this area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa/Barbers Point 1144/741, 1149, 1150, 1152, 1153</td>
<td></td>
<td>▪ Good grouping of Quonset huts</td>
<td>Fair</td>
<td>▪ Listed in PA                     ▪ Not in QHS or HHF Plan</td>
<td>III</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ewa/Barbers Point 725-1570</td>
<td></td>
<td>▪ Representative example of Utility Hut</td>
<td>Poor</td>
<td>▪ Listed in PA                     ▪ Not in QHS or HHF Plan</td>
<td>III</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalaeloa NAS B.P. 713-1562</td>
<td></td>
<td>▪ Representative example of Utility Hut</td>
<td>Poor</td>
<td>▪ Listed in PA                     ▪ Not in QHS or HHF Plan</td>
<td>III</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
</tr>
<tr>
<td>Area</td>
<td>Building No.</td>
<td>Historic Significance</td>
<td>Condition Assessment</td>
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<td>Treatment Recommendation*</td>
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</tr>
<tr>
<td>Kalaeloa NAS BP MCAS EWA</td>
<td>1520 536</td>
<td>▪ Some modern modifications, but maintains open center ▪ Opening along one side may be modern modification</td>
<td>Good ▪ Currently in use as stable</td>
<td>▪ Listed in PA ▪ QHS: Group B ▪ HHF: Group B</td>
<td>III</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
</tr>
</tbody>
</table>

| Ford Island NAS FI CB Camp PNAB | Q14 T5 (1942) | ▪ Fair example of small Quonset hut with tropical adaptations ▪ May be a rare 1942 hut first used by PNAB ▪ Supported crane operations at nearby wharf, Fox 3-1/2 | Poor ▪ Vacant ▪ Close to ocean (rust problem) | ▪ Not listed in PA ▪ QHS: Group B ▪ HHF: Group A | III | Deconstruction |

| Ford Island NAS FI CB Camp PNAB | Q13 T4 (1942) | ▪ Fair example of small Quonset hut with tropical adaptations ▪ May be a rare 1942 hut first used by PNAB ▪ Supported crane operations at nearby wharf, Fox 3-1/2 | Poor ▪ Vacant ▪ Close to ocean (rust problem) | ▪ Not listed in PA ▪ QHS: Group B ▪ HHF: Group A | III | Deconstruction |

**Notes**

CB = Navy Construction Battalion
CMU = Concrete masonry unit
HHF = Historic Hawaii Foundation, 2004 letter
MCAS = Marine Corp Air Station
N/A = Not applicable
NAS BP= Naval Air Station Barbers Point
NAS FI= Naval Air Station Ford Island
NAVFAC = Naval Facilities Engineering Command
PA = Programmatic Agreement
PNAB = Pacific Naval Air Bases (Contractor)
QHS = Navy Region Hawaii Quonset hut Study, 2003

* See definition for: Preservation page 9-1
  Rehabilitation page 9-3
  Deconstruction page 9-4
  N/A page 9-5

** There are several options under this category see Rehabilitation section on page 9-3

*** Recommendation for demolition for not eligible Quonset hut is not a historic preservation issue
Endnotes
5 Ibid.
Figure 9-5: Treatment Map West Loch
Figure 9-6: Treatment Map Lualualei
Figure 9-7: Treatment Map Aiea Bay
Figure 9-9: Treatment Map NAVFAC
Figure 9-10: Treatment Map Shipyard
Figure 9-11:
Treatment Map  Ford Island
Figure 9-12: Treatment Map  Makalapa
MAINTENANCE AND REPAIR RECOMMENDATIONS
 Preservation of Quonset huts through routine maintenance is always less expensive than rehabilitation or restoration due to deferred maintenance. The CINCPAC Boat House, Building 23NS, is a good example of how routine maintenance extends the life of a building indefinitely. The facility is in excellent condition despite its location on the water. The Navy may also consider replacement with more durable materials if the design is compatible with the character of structure and remains in conformance with the Secretary of the Interior’s Standards for Rehabilitation.

**Repair Recommendations**

When considering whether to repair or replace parts of a Quonset hut, it should be noted that these Quonset huts do not have to look like they are new buildings. Dents and imperfections are acceptable, especially if the Quonset hut will be used for storage or as a work shop or another industrial use. The most important element for any structure is to ensure that it is water tight and to inhibit further rust.

A rust inhibitor being used on steel bridges in Hawaii is called "EcoLine Long Term Rust Preventative" by Cortec. Other corrosion inhibitors include Carboline and Ameron. Research on various brands and types of products should be done prior to the specification of a rust inhibitor as new products are constantly evolving.

In general, paint on steel requires a three-coat polyurethane paint system (i.e., prime coat plus two top coats) and is a good system worthy of consideration. However, for any paint system, it is recommended that the product’s technical representative be consulted for application specifications. New technology appears annually and thus must be examined when the project to rehabilitate happens. Possible technology include rust inhibitors (used on bridges), rust converters (used on wrought iron fences and cars). Due to the high cost of rust inhibitors and the challenge of replacing the steel ribs, it is recommended for use on the ribs only.

**Figure 10-1 Ad For Special Paint for Quonset Huts**
("Quonset Huts, Metal Living for a Modern Age")
Steel Ribs

Because of the semi-circular property of the Quonset hut, the tendency for structural failure is that the bottom will want to kick out at the base or try to straighten out rather than the center collapsing. Buckling will only occur if something hits the rib, which occurred in some of the extant Quonset huts. Rust is the greatest challenge with these ribs. Removing existing rust and preventing further oxidation is important as these curved ribs would be difficult to replicate.

- If rust is just on the surface as is the case with most of the Quonset huts, scour it with a wire brush then apply a rust inhibiting primer or rust converter. If there is considerable rust still present, follow with a top coat of marine-grade paint. Prior to treatment, ensure that hazardous materials are not present. If lead-based or lead-containing paint is present, ensure its proper treatment and handling.

- If a rib is corroded such that the loss of material has compromised structural integrity:
  - When corrosion is at the base of the rib, as is often the case, an expeditious solution is to use hurricane clips or holdowns added to tie the rib to the base. A holdown similar to the Simpson Strong Tie HD3B Holdown can be used temporarily or in storage areas. The exact size will depend on a structural engineer's calculations (See Fig. 10-2).
  - Use replacement part from another Quonset hut as fabrication of a new part may be extremely costly. Quonset huts are currently built in many different ways and no longer include the use of the same type of crimped ribs.
  - Refabricate the ribs or portions of it.

![Fig.10-2 Hurricane Clips at Base of Steel Rib, Building 1570, Barbers Point (Image Provided by Fung Associates, Inc.)](image)
Corrugated Metal Siding

If rust is on the surface, scour it with a wire brush, wipe with a clean cloth and rubbing alcohol to remove any remnants of dirt, and then apply a primer and top coat of paint. In general, paint on steel requires a three-coat polyurethane paint system (i.e., prime coat plus two top coats) and is a good system worthy of consideration. However, for any paint system, it is recommended that the product’s technical representative be consulted for application specifications. New technology appears annually and thus must be examined when the project to rehabilitate happens. Possible technologies include rust inhibitors (used on bridges) and rust converters (used on wrought iron fences and cars). Different terminology includes corrosion inhibitors and corrosion coatings.

Spike fasteners should be retained or re-galvanized and reused where practical and economically feasible.

There may be instances when a temporary repair to siding is necessary to ensure a waterproof envelope until a full rehabilitation project can be undertaken. The following steps should provide adequate temporary repair.

- Clean the damaged sections thoroughly before you undertake repair. Scrub with a wire brush. Wipe with a clean cloth and rubbing alcohol to remove any remnants of dirt. Dampen a rag with acetone and wipe the area clean. Allow the corrugated roofing to dry completely before you embark on repair.

- Utilizing urethane roof cement, apply carefully with a putty knife until you’ve sealed the hole completely. Obtain roofing mesh and cut two identical square patches. Press one patch over the roofing cement. Let it conform to the contours on the metal panel. Spread some more roofing cement over the roofing mesh then attach the other square patch. Apply a final layer of roofing cement over the mesh patch. Spread it evenly with a putty knife.
If replacement is warranted, use:

**Corrugated Sheet Metal**
- Corrugation should be 1/2" high by 2-1/2" apart
- Siding of Utility Huts are comprised of 24-gauge galvanized sheets 27-1/2" x 126" placed in an offset running bond brick pattern on the side walls and curved to the top of the Quonset hut
- Bulkheads use 26-gauge galvanized sheets (40" x 100" utility version)
- Heavier gauge of corrugated metal can be utilized as an option
- Signature Stran-Steel nailing groove

Available at local hardware stores or through:
Corrugated Metal, a division of Mechanical Metals
82 Walker Lane
Newtown, PA 18940
Telephone: 800-249-5470, 215-860-3600
Fax: 215-860-2557
Website: www.mechanicalmetals.com or www.corrugatedmetal.com

**Windows/Louvers**

Very few Quonset huts have maintained their original wooden or steel sash windows in good condition, however consideration can be given to leaving openings as metal screens depending on the hut's use. Repair or replace screens with new bronze or stainless steel screens on a demountable frame or expanded stainless steel metal mesh. If stainless steel is not feasible, use galvanized steel and paint for protection.

The steel frame windows (original for Utility Huts) can be replicated by steel window manufacturers such as Hopes Windows and made back into operable awning windows, if economically feasible.

**Steel Sliding Doors**

While many of the doors only need the sliders straightened and dents flattened so that they work properly, a few may need replacement with the same type of door. Many have been replaced with standard roll-up doors, which differ from original sliding doors. If available, use a door salvaged from another Quonset hut.
Concrete Slab Floors

Because Quonset hut ribs do not rely on compressive loads on foundation, slabs on grade do not require special reinforcement or special footings. The foundation must be capable of carrying the load of its contents at a minimum.

- For cracked concrete slabs, the most economical approach is to inject cracks with epoxy or polyurethane, clean, seal. This technique should handle most of the concrete slab issues seen in the Quonset huts.
- Fiber reinforcing the concrete may be possible, if the cracks are beyond the capability of the concrete crack injection process.
- The final alternative would be to re-build the concrete slab.

Interior Masonite® Panels (for small Huts)

Masonite® panels are available at most hardware stores and can be replaced easily. If replacement or repair is needed however, lead paint is likely to be found in one of the layers of paint and thus may need to be abated or encapsulated depending on the treatment. Hazardous materials testing should be done before paint or Masonite® panels are handled.

Quonset Hut Replacement

Should a Quonset hut need to be replaced, such as in a historic district, replacement huts can be found at the companies listed on pages 10-6 to 10-7. Siding may have a different profile, but the size should remain the same and the below companies will make the Quonset hut to the specified size.

American Steel Span
Telephone: 1-800-457-2206
www.americansteelspan.com
Q-Model
20’-100’ wide by unlimited lengths

Fig. 10-6 Military Use Building from American Steel Span
(http://www.americansteelspan.com/military.html)
Maintenance Recommendations

The below should be considered a guide for periodic care to protect the investment of any facility once repaired.

- Preventive maintenance should commence immediately after the rehabilitation or repair project is completed.¹

- Most maintenance activities should occur at least twice annually.² Additional inspections and maintenance may be needed following severe or unusual storms. However, because Hawaii has high humidity and almost all facilities are close to the ocean, maintenance activities should occur more frequently. Amana Buildings (a leading manufacturer of steel buildings throughout the world) recommends monthly maintenance for buildings located within 5 kilometers (3.1 miles) of the ocean (which includes almost all the Quonset huts addressed in the study). Since this may not be economically or logistically feasible, twice a year should suffice.

- Ensure the safety of maintenance personnel by implementing and enforcing Occupational Safety and Health Administration standards.

- Maintenance procedures should include:
  - Checking for debris immediately after any repair or rehabilitation project.
  - Checking bolts, fasteners, etc. are in good repair.
Removing vegetation that has or may encroach on or in a Quonset hut.

Fresh water washing three to four times a year using a regular garden hose under pressure for normal maintenance. Make sure no water is trapped anywhere.

AVOID SOLVENTS, THINNERS OR ANY ABRASIVE TYPE CLEANERS FOR WASHING DOWN ANY PAINTED SURFACE.

To remove heavy dirt and/or mildew or build up of any kind, it is recommended to use a mixture of:

1/3 cup laundry detergent (e.g., Tide)
2/3 cup tri-sodium phosphate (e.g., Soilex)
1 quart sodium chlorite, 5% solution (e.g., Clorox)
3 quarts water

Clean with soft bristle brush/broom with long handle
Clear water rinse should follow

- Caulking compounds, oil grease, tar wax or similar substances can be removed with mineral spirits followed by cleaning with the above-described detergent solution.

- Remove dirt, sand, and shrubs from around the building to ensure it does not retain moisture that may be in contact with metal panels and is a minimum 4" below panel.

- Ensure no moisture build up on or near Quonset hut. Of particular concern are where equipment or landscaping is adjacent to walls.

- Do not allow landscape sprinklers to spray on Quonset huts.

- Lubricate hinges, remove dirt, etc. around doors, sliders, windows, etc.

- Paint every 5-7 years using Sherwin-Williams FluoroKem marine-grade paint or equivalent.

Endnotes

1 “Amana Contracting & Steel Buildings,” amanabuilding.com (September 2013).
11.0 INVENTORY

Character Defining Features

The Quonset huts in this study are all Stran-Steel Huts and generally fall into two categories: Standard Utility Hut or Stran-Steel Tropical Hut. Below are the overall character-defining features that are common for all the Quonset huts in this report. Note in individual descriptions “flush windows” are windows that are angled to match the wall of the Quonset hut wall. “Dormer windows” are those that do not match the slope of the wall; the windows are either vertical or in some cases the windows are angled so that the top of the window is further out.

Note that in the course of the survey, two additional Utility Huts not on the list were found just outside of Navy lands. Photos of the two huts are including at the end of the inventory. These two Quonset huts are currently vacant.

Figure 11-1
Awning and Screen Opening Used in Numerous Quonset Huts
(“U.S. Navy Steel Arch Rib Hut Instructions Booklet for Erecting the 20’-0” by 56’-0” Hut,” Stran-Steel Division, 1944)
General character-defining features of the **Standard Utility Hut** include:

- Semi-circular form
- Exposed structural system for Utility Huts featuring curved steel ribs
- Cross-bracing steel ties between ribs
- Approximately 40' wide and 100' long
- Pattern of corrugated sheets are parallel to the bulkhead at the top of the hut, but run parallel to the ground plane along the sides
- Window fenestration pattern (or lack of windows vary with each hut)
- Window/door pattern at bulkheads vary sometimes, but generally has a large, centered sliding door with steel windows at each side, symmetrically placed
- Triangular steel bracing at bulkheads
- Concrete slab on grade
- Refer to individual survey sheets herein for features of each Quonset hut addressed during this study
- A subcategory to the Standard Utility Hut includes the **Extended Hut** which is basically two standard Utility Huts attached on the bulkhead side of the hut creating a long, approximately 40' x 200' long hut, a partial bulkhead remains in the center.
- Another subcategory is the **Modified Hut** which is a 40' x 100' Utility Hut that has been individually modified. Each inventory sheet will address the modifications.
Figure 11-2 Pattern of Corrugated Sheets
("Stran-Steel Arch Rib Utility Building, Instructions for Erecting the 40'-0" x 100'0" Building," Stran-Steel Division, 1943)
General character-defining features of the Tropical Hut include:

- Semi-circular form
- Approximately 20' wide and 48' long
- Pattern of corrugated sheets are all parallel to the bulkhead
- Interior Masonite® panels
- Bulkhead set back to form overhang
- Top ridge vents or ventilators
- Dormer type windows
- Concrete slab on grade
- Refer to individual survey sheets herein for unique features of each Quonset hut addressed during this study

Figure 11-3
Various Adaptations
(“U.S. Navy Steel Arch Rib Hut Instructions Booklet for Erecting the 20'-0" by 56'-0" Hut,” Stran-Steel Division, 1944)
The following tables summarize the findings from the report. (Gray-shaded facilities are in the proposed district)

### Table 3 Quonset Huts on Navy Managed and Leased Land

<table>
<thead>
<tr>
<th>Facility No. &amp; Previous Fac. No.</th>
<th>Location &amp; Activity Changes</th>
<th>Present Name &amp; Historic Uses</th>
<th>Year Built</th>
<th>Size Sq. Ft.</th>
<th>Quonset Type &amp; Size</th>
<th>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</th>
<th>Proposed Management Category*</th>
<th>Treatment Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>AIEA BAY</td>
<td>CINCPAC Boat House</td>
<td>1955</td>
<td>4,961</td>
<td>Double-Decker Utility Hut 121X72X32 121X41X32</td>
<td>STTTS FAC USE: 15521 FAC ID: 1253234</td>
<td>II</td>
<td>Preservation</td>
</tr>
<tr>
<td>Q13</td>
<td>FORD ISLAND</td>
<td>Boat Shop Crane Hut Contractor Office</td>
<td>1943</td>
<td>1,203</td>
<td>Small Tropical Hut w/ End Overhangs 58X21X11</td>
<td>TTTS FAC USE: 21358 FAC ID: 1252244</td>
<td>III</td>
<td>Deconstruction</td>
</tr>
<tr>
<td>Q14</td>
<td>FORD ISLAND</td>
<td>Boat Shop Crane Hut Contractor Office</td>
<td>1943</td>
<td>1,218</td>
<td>Small Tropical Hut w/ End Overhangs 58X23X11</td>
<td>TTTS FAC USE: 62813 FAC ID: 1252253</td>
<td>III</td>
<td>Deconstruction</td>
</tr>
<tr>
<td>17A</td>
<td>MAKALAPA</td>
<td>CINCPACFLT Admin. Office Mobile Electronic WWII Photo Intel. Unit</td>
<td>1944</td>
<td>5,084</td>
<td>Extended Small Hut w/ 3'-0&quot; High Conc. Foundation 142X53X11 142X21X11 (2) 58X21X11</td>
<td>SSTTS FAC USE: 61010 FAC ID: 527985</td>
<td>III</td>
<td>Rehabilitation</td>
</tr>
<tr>
<td>Facility No. &amp; Previous Fac. No.</td>
<td>Location &amp; Activity Changes</td>
<td>Present Name &amp; Historic Uses</td>
<td>Year Built</td>
<td>Size Sq. Ft.</td>
<td>Quonset Type &amp; Size</td>
<td>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</td>
<td>Proposed Management Category</td>
<td>Treatment Recommendation</td>
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<tr>
<td>X20</td>
<td>MOANALUA 3. J BPHH 2. DPWC 1. NCB CAMP</td>
<td>Admin. Office Paint Shop CMU Walls Added</td>
<td>1944</td>
<td>9,179</td>
<td>Modified Utility Hut w/ Sheds 137X417X21</td>
<td>S S S S</td>
<td>FAC USE: 21910 FAC USE: 61010 FAC ID: 1187510</td>
<td>IV</td>
</tr>
<tr>
<td>Facility No. &amp; Previous Fac. No.</td>
<td>Location &amp; Activity Changes</td>
<td>Present Name &amp; Historic Uses</td>
<td>Year Built</td>
<td>Size Sq. Ft.</td>
<td>Quonset Type &amp; Size</td>
<td>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</td>
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<tr>
<td>X21</td>
<td>MOANALUA</td>
<td>Welding Shop, Storage (Original Plan)</td>
<td>1944</td>
<td>8,300</td>
<td>Modified Utility Hut w/ Sheds 100X85X21</td>
<td>FAC USE: 21910 FAC ID: 1187529</td>
<td>III MAI 2010 NEV 2008</td>
<td>Rehabilitation</td>
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<tr>
<td>T15</td>
<td>PHNSY &amp; IMF</td>
<td>Main. Storage Crane Rigging Electrical DD-4 Support</td>
<td>1943</td>
<td>8,200</td>
<td>Double Extended Utility Hut 200X41X17</td>
<td>FAC USE: 74037 FAC ID: 903221</td>
<td>III NHLC 2008</td>
<td>Rehabilitation</td>
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<tr>
<td>K19</td>
<td>IROQUOIS POINT &amp; WEST LOCH, EWA 1. ABCD Annex</td>
<td>Inert Storehouse General Storehouse</td>
<td>1943</td>
<td>8,000</td>
<td>Double Extended Utility Hut 200X40X20</td>
<td>FAC USE: 42132 FAC ID: 1416773</td>
<td>II NHLC 2008</td>
<td>Preservation</td>
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<td>Quonset Type &amp; Size</td>
<td>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</td>
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<td>K21</td>
<td>IROQUOIS POINT &amp; WEST LOCH, EWA 3. JBPHH 2. NM District 1. ABCD Annex</td>
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<td>8,000</td>
<td>Double Extended Utility Hut 200X40X20</td>
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<tr>
<td>K28</td>
<td>IROQUOIS POINT &amp; WEST LOCH, EWA 3. JBPHH 2. NM District 1. ABCD Annex</td>
<td>Inert Mine Shop General Storehouse</td>
<td>1943</td>
<td>8,000</td>
<td>Double Extended Utility Hut 200X40X20</td>
<td>S S S S FAC USE: 42132 FAC ID: 1416835</td>
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* NHLC 2008: National Historic Landmarks Criteria
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<th>Location &amp; Activity Changes</th>
<th>Present Name &amp; Historic Uses</th>
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<th>Size Sq. Ft.</th>
<th>Quonset Type &amp; Size</th>
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<td>423</td>
<td>LUALUALEI 1. NMD 2. NMC EAD 3. JBPHH</td>
<td>Operational Storage Inflammable Storage &amp; Shipping</td>
<td>1953</td>
<td>960</td>
<td>Small Tropical Hut 48X20X10</td>
<td>FAC USE: 14377 FAC ID: 1416657</td>
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<td>Rehabilitation</td>
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<td>706</td>
<td>EWA-KALAELOA 1. MCAS EWA</td>
<td>(Outgrant) MWR Ready Storage Subsistence Warehouse Ready Issue</td>
<td>1944 Partial ca. 1943</td>
<td>8,200</td>
<td>Double Extended Utility Hut (Oldest of Group) 200X41X21</td>
<td>FAC USE: 74077 FAC ID: 1078674</td>
<td>III MAI 2010 NEV 2008</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
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<td>Facility No. &amp; Previous Fac. No.</td>
<td>Location &amp; Activity Changes</td>
<td>Present Name &amp; Historic Uses</td>
<td>Year Built</td>
<td>Size Sq. Ft.</td>
<td>Quonset Type &amp; Size</td>
<td>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</td>
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<td>Quonset Type &amp; Size</td>
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<tr>
<td>1520 536</td>
<td>EWA MCAS EWA Revetment Area and Barbers Point Riding Club 3. J BPHH 2. NAS BP 1. MCAS EWA</td>
<td>(Outgrant) Horse Stable Break Area General Storehouse</td>
<td>1944</td>
<td>4,100</td>
<td>Standard Utility Hut 100X41X21</td>
<td>FAC USE: 74079 FAC ID: 1079067</td>
<td>III</td>
<td>Treatment Contingent on Pending Lease Agreement</td>
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*MAI 2010 NEV 2008
**Treatment Contingent on Pending Lease Agreement
***ICRMP 2008 CRMP 1985 NREI
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<th>Facility No. &amp; Previous Fac. No.</th>
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<th>Present Name &amp; Historic Uses</th>
<th>Year Built</th>
<th>Size Sq. Ft.</th>
<th>Quonset Type &amp; Size</th>
<th>Changes in Construction Type &amp; Facility Use CCN &amp; Facility ID Number</th>
<th>Proposed Management Category*</th>
<th>Treatment Recommendation</th>
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<tr>
<td>1092H T-51</td>
<td>HICKAM BLOCK 66</td>
<td>Rec. Dive Club. FE Army Hawaiian Dredging</td>
<td>1950 Unkn</td>
<td>1,120</td>
<td>Small Tropical Hut w/ 4’ Concrete Foundation Fac. No. Changed 1950 56X26X16 56X20X16</td>
<td>T S S S FAC USE: 74037 FAC ID: 797069</td>
<td>III</td>
<td>Rehabilitation</td>
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<tr>
<td>2183H T-187</td>
<td>HICKAM BLOCK 61</td>
<td>Base Engineer PWC Paving &amp; Grounds Shop AC Maintenance (Former Navy)</td>
<td>1956 ca. 1944</td>
<td>4,100</td>
<td>Standard Utility Hut Draw: H100/1029 Fac. No. Changed 1960 115X63X18 100X41X21</td>
<td>T S S S FAC USE: 21910 FAC ID: 798512</td>
<td>NEV</td>
<td>Rehabilitation</td>
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<tr>
<td>Facility No.</td>
<td>Location &amp; Agency Changes</td>
<td>Present &amp; Historic Uses</td>
<td>Year Built</td>
<td>Size Sq. Ft.</td>
<td>Quonset Type &amp; Size</td>
<td>Management Status</td>
<td>Holder of Property</td>
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<td>346</td>
<td>KALAELOA 1.NAS BP</td>
<td>General Warehouse Ready Issue</td>
<td>1944</td>
<td>4,100</td>
<td>Standard Utility Hut 100X41X21</td>
<td>NEV</td>
<td>Hawaiian Homelands</td>
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<tr>
<td>537</td>
<td>KALAELOA 2. Hi Nat. Guard 1. NAS BP</td>
<td>(Vacant) Storage Engine Overhaul Facility</td>
<td>1944</td>
<td>4,100</td>
<td>Standard Utility Hut 100X41X21</td>
<td>NREI</td>
<td>Hawaii National Guard</td>
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<tr>
<td>NA</td>
<td>KALAELOA 1.NAS BP</td>
<td>WWII AA Battery Ammo Hut</td>
<td>ca. 1943</td>
<td>500</td>
<td>Armco hut with non-standard Front &amp; no earth cover</td>
<td>State Law Applies PH-II 1997 HABS</td>
<td>State of Hawaii Southwest Kalaeloa West of West Coral Sea Road</td>
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<tr>
<td>521</td>
<td>EWA 2. Barbers Pt. 1. MCAS EWA</td>
<td>Magazine Small Arms</td>
<td>1944</td>
<td>1000</td>
<td>Armco Hut 50X20X12</td>
<td>Ruin (Collapsed) PH-I 1997 NRED</td>
<td>Hawaiian Homelands</td>
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<tr>
<td>S1525</td>
<td>EWA 2. Barbers Pt. 1. MCAS EWA</td>
<td>Pyrotechnics Magazine</td>
<td>1944</td>
<td>1000</td>
<td>Armco Hut 50X20X11</td>
<td>Ruin (Collapsed)</td>
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<td>EWA 2. Barbers Pt. 1. MCAS EWA</td>
<td>Magazine</td>
<td>1944</td>
<td>1000</td>
<td>Armco Hut 50X20X11</td>
<td>Ruin (Collapsed)</td>
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<td>EWA 2. Barbers Pt. 1. MCAS EWA</td>
<td>Magazine</td>
<td>1944</td>
<td>1000</td>
<td>Armco Hut 50X20X11</td>
<td>Ruin (Collapsed)</td>
<td>Hawaiian Homelands</td>
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<td>504</td>
<td>MIDWAY ATOLL 3. USFWS 2. NAF Midway 1. NOB Midway</td>
<td>Magazine High Explosive</td>
<td>1942</td>
<td>1250</td>
<td>Armco Hut (Restored)</td>
<td>Valor in the Pacific Monument</td>
<td>USFWS</td>
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<td>S6194</td>
<td>MIDWAY ATOLL 3. USFWS 2. NAF Midway 1. NOB Midway</td>
<td>Magazine High Explosive</td>
<td>1942</td>
<td>1250</td>
<td>Armco Hut (Restored)</td>
<td>Valor in the Pacific Monument NRED</td>
<td>USFWS</td>
<td></td>
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<tr>
<td>Facility No.</td>
<td>Location &amp; Agency Changes</td>
<td>Present &amp; Historic Uses</td>
<td>Year Built</td>
<td>Size Sq. Ft.</td>
<td>Quonset Type &amp; Size</td>
<td>Management Status</td>
<td>Holder of Property</td>
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| S7124       | MIDWAY ATOLL  
3. USFWS  
2. NAF Midway  
1. NOB Midway | Arms/Pyro Magazine High Explosive | 1942 | 1250 | Armco Hut 50X25X12 | (Stabilized) Valor in the Pacific Monument  
NRED | USFWS |
| S7125       | MIDWAY ATOLL  
2. NAF Midway  
1. NOB Midway | Magazine High Explosive | 1942 | 1000 | Armco Hut 50X20X10 | (Stabilized) Valor in the Pacific Monument  
NRED | USFWS |
| 620         | KANEHOE  
2. MCBH  
1. NAS Kaneohe | Search & Rescue Store House | 1945 | 4100 | Standard Utility Hut 100X41X22 | NREI | U.S. Marine Corps |
| 320         | KANEHOE  
2. MCBH  
1. NAS Kaneohe | Automotive Maintenance Shop | 1989 | 4100 | Self-Supporting (Replaced WWII Hut) 100X41X21 | NEV | U.S. Marine Corps |
| 1278        | KANEHOE  
2. MCBH  
1. NAS Kaneohe | Aviation Warehouse | 1965 | 4000 | Modern Utility Hut 100X40X20 | NEV | U.S. Marine Corps |
| 1279        | KANEHOE  
2. MCBH  
1. NAS Kaneohe | Aviation Warehouse | 1965 | 4000 | Modern Utility Hut 100X40X20 | NEV | U.S. Marine Corps |
| 33          | MANANA  
1. Manana Naval Barracks  
(Note: Galley Area Used by Black Sailors) | General Storehouse Galley Storage | ca. 1943 | 4100 | Standard Utility Hut 100X41X21 | NEV | State of Hawaii, DOT and UH Agriculture Dept. |
<p>| 28          | USMC CAMP TARAWA Island of Hawaii | General Storehouse | ca. 1943 | 4100 | Standard Utility Hut 100X41X21 | NA | Private Party At USMC Camp Tarawa Historic Monument |</p>
<table>
<thead>
<tr>
<th>Facility No.</th>
<th>Location &amp; Agency Changes</th>
<th>Present &amp; Historic Uses</th>
<th>Year Built</th>
<th>Size Sq. Ft.</th>
<th>Quonset Type &amp; Size</th>
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<tr>
<td>NCB CAMP (Outside of Perimeter)</td>
<td>LUALUALEI Naval Magazine, LLL (Former Leased)</td>
<td>General Storehouse &amp; Enlisted Huts</td>
<td>ca. 1943</td>
<td>4100</td>
<td>(1) Standard Utility Hut &amp; (19) Small Tropical Huts</td>
<td>NA</td>
<td>Private Party McCandles Subdivision</td>
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<tr>
<td>Former Supply Depot</td>
<td>HILO 1. NAS Hilo 2. Hilo Airport At City End of Main Runway 1. NAS Hilo</td>
<td>General Storehouses (8) in Row At Hilo City PWC Former Supply Depot</td>
<td>ca. 1944</td>
<td>4100</td>
<td>Standard Utility Huts 100X41X21</td>
<td>NEV</td>
<td>City of Hilo Public Works Division</td>
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<tr>
<td>Former Warehouse</td>
<td>HILO Harbor side of Hilo Airport</td>
<td>Warehouses</td>
<td>ca. 1944</td>
<td>7huts X 3000</td>
<td>Mae West\ Ganged Straight Walled Quonsets</td>
<td>NA</td>
<td>Private Party Industrial Storage</td>
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<tr>
<td>Former Supply Huts</td>
<td>HILO Property Near Hilo Airport</td>
<td>Storehouse</td>
<td>ca. 1944</td>
<td>3 huts X 4100</td>
<td>Ganged Utility Hut</td>
<td>NA</td>
<td>Private Party Commercial Use</td>
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<tr>
<td>Former Supply Huts</td>
<td>HILO Property Near Hilo Airport</td>
<td>Storehouses</td>
<td>ca. 1944</td>
<td>3 huts X 4100</td>
<td>Utility Quonset Huts on 4’ CMU Base</td>
<td>NA</td>
<td>Private Parties Storage and Church</td>
</tr>
<tr>
<td>Relocated Huts</td>
<td>HILO Property Near Hilo Airport</td>
<td>Storehouses</td>
<td>ca. 1944</td>
<td>2 huts X 4100</td>
<td>Standard Utility Huts</td>
<td>NA</td>
<td>Private Parties Aviation &amp; Storage</td>
</tr>
</tbody>
</table>
### Table 5 Quonset Huts and Armco Huts Not Evaluated or Included in Inventory

<table>
<thead>
<tr>
<th>Facility No.</th>
<th>Location &amp; Agency Changes</th>
<th>Present &amp; Historic Uses</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>212</td>
<td>Ford Island</td>
<td>Vacant Torpedo Magazine</td>
<td>Concrete Hardened Armco Hut Note: The study is only including the heavy-duty metal version</td>
</tr>
<tr>
<td>Q326</td>
<td>Kauai</td>
<td>Hangar Constructed 1989 Note: Constructed later than the Period of Significance Considered</td>
<td>Heavy Corrugated Self Supporting Hangar similar to the Quonset huts designed and deployed to Vietnam</td>
</tr>
<tr>
<td>408</td>
<td>SUBMARINE BASE NAVAL SUPPLY CENTER Kuahua</td>
<td>Galley Kitchen Addition 40’ X 50’ Utility Tropical Hut (Note: Formerly Used by Black Sailors)</td>
<td>Demolished 2010</td>
</tr>
</tbody>
</table>

**Acronyms:**
- AA: Anti-Aircraft
- ABCD: Navy Advance Base Construction Depot
- CB: Navy Construction Battalion
- PWC: Public Works Compound
- JBPxH: Joint Base Pearl Harbor Hickam
- NAF: Naval Air Facility
- NAS: Naval Air Station
- NAVFAC HI: Naval Facilities Engineering Command, Hawaii
- NAOB: Naval Amphibious Operating Base
- NCBE: Naval Construction Battalion Encampment
- NSC: Naval Supply Center
- NOB: Naval Operating Base
- MATS: Marine Air Transportation Services
- MCBH: Marine Corps Base Hawaii
- MCAS: Marine Corps Air Station
23NS, AIEA BAY
Historic Facility Survey Form

Identification
1. Facility No: 23NS □ Demolished
   2. Tax Map Key: 9-9-012:011
3. Facility Name: Boat House □
   4. Type: Modified Standard Utility Hut
5. Street Address: Arizona Memorial Dr.
6. Historic Zone: Outside of a Historic Zone
7. Area Location: Aiea Bay

Description
8. Year Built: 1955
9. This Date is from: Drawing #660607 (NAVFAC PACIFIC)
10. Stories: 1
11. Length: 120'-0"
12. Width: 53'-0"
13. Height: 32'-5"
14. S.F.: 6,300 S.F.
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other □ Partially in the water

Exterior:
19. Type & Method of Construction:
   Steel arched ribs with corrugated sheet metal covering open end Hut on metal posts, shed roof extensions with shiplap siding at NW and SW

20. Windows (Material, style, etc.)
   Original: 4- pane window sash, Metal Frame openings remain only at SE
   Replaced: Jalousie windows at SE, awning and siding windows at NE

21. Exterior Doors (Material, style, etc.)
   Original: Metal siding doors with original hardware
   Replaced: Stained wood flush doors at NE shed roof addition

22. Character defining historic features:
   - Typical Standard Utility Hut characteristics
   - Mezzanine at NE end - Z shaped steel posts under mezzanine
   - Board and batten siding remain on interior at mezzanine

23. Non-historic features:
   - New windows, new wood doors, vinyl siding, metal eyebrow at NE elevation
   - 2x6 wood covered walkway at SW - Covered walkway at SW - vinyl siding

24. Note if any unique adaptation:
   - Basic Quonset Hut raised on steel posts to have height for boat
   - One bulkhead end open

25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
   - Added electric shop at SW elevation by 1970
   - Some room functions changed (storage at NW became theatre, lounge became recreation room) at NE shed roof structure by 1981
   - On going renovation/repairs for last 30 years due to the significant use by Admiral - Siding on arched portion reportedly replaced in the 1990s

27. Note if any effect from alterations:
   - Mostly interior renovations of non-character defining spaces
   - Repairs/renovations have not detracted significantly from historic character

28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible

Drawing #660607 (NAVFAC PACIFIC)

Partially in the water

- Basic Quonset Hut raised on steel posts to have height for boat
- One bulkhead end open

- Added electric shop at SW elevation by 1970
- Some room functions changed (storage at NW became theatre, lounge became recreation room) at NE shed roof structure by 1981
- On going renovation/repairs for last 30 years due to the significant use by Admiral - Siding on arched portion reportedly replaced in the 1990s

- Mostly interior renovations of non-character defining spaces
- Repairs/renovations have not detracted significantly from historic character

- Typical Standard Utility Hut characteristics
- Mezzanine at NE end - Z shaped steel posts under mezzanine
- Board and batten siding remain on interior at mezzanine

11-21
### History & Significance

29. Historic Name if known: CINCPACFLT Boat House  
30. Current Use: Boat House  
31. Historic Use: Boat House

32. Architect, Engineer or Construction Battalion if known:

33. ICRMP Category: III  
34. Proposed historical category: Category II

35. National Register Significance Criteria:  
   - A (Events)  
   - B (Person)  
   - C(*)  
   - D (Information)  

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance:  
   - Architecture  
   - Engineering  
   - Recreation  
   - Military  
   - Transportation  
   - Other

37. Integrity:  
   - Location  
   - Design  
   - Settings  
   - Materials  
   - Workmanship  
   - Feeling  
   - Associations

38. Explanation of Significance: Distinct example of the versatility of the Quonset Hut. Only Quonset Hut in the study still extant raised to accommodate greater height and located on the water.

### Comments

- 1954 drawing shows Quonset Huts X-1, X-2, and X-3 were moved from Public Works Center to construct 23NS. Complete Quonset Hut X-3 and front section of X-2 were used for main structure and X-2 and X-1 were used for additional building material to expand X-3.
Oblique View of Southeast and Southwest Side, September 2009

Southwest Elevation, September 2009
Northwest Elevation, September 2009
Northeast Elevation, September 2009
Covered Walkway at Southwest Elevation, September 2009

Original Metal Framing Windows with Awning, September 2009

Metal Post's Concrete Bottom in the Water, September 2009

Metal Sliding Door at Southeast Elevation, September 2009
Q13, FORD ISLAND
Location Map Q13, Ford Island
Historic Facility Survey Form

Identification

1. Facility No: Q13  □ Demolished  2. Tax Map Key: 9-09-001:015
3. Facility Name: Boat Repair Shop  □ Demolished  4. Type: Tropical Hut
5. Street Address: Homet Ave.

Description

8. Year Built: 1943  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other □ By ocean

Exterior:
19. Type & Method of Construction: Steel arched ribs with corrugated metal covering on concrete slab with curb
20. Windows (Material, style, etc.)
   Original: 3 wood frame metal mesh vents with hoods, metal vents at SW bulkhead  Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: Metal mesh swing door at SW, wood double door at NE  Replaced:
22. Character defining historic features:
   - Typical Tropical Hut characteristics - Pattern of corrugated sheets, raised concrete curb at sides with angled flashing
   - Small overhang at each bulkhead, transom vents at SW bulkhead
   - Round roof ventilator, hooded vent windows

23. Non-historic features:
   - Opening for A.C. unit

24. Note if any unique adaptation:
   - Small overhang
   - Roof ventilator

25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
   - Only Q13 and Q14 have plywood at bulkhead, may be change from standard corrugated metal bulkheads used in Hawaii. Plywood was an option in manuals, thus unknown if original, though appears more modern.
   - Interior masonite removed in areas, likely due to poor condition
   - Small overhang - Roof ventilator

27. Note if any effect from alterations: Quonset maintains its historic character.

28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible
History & Significance

29. Historic Name if known: Boat Repair Shop
30. Current Use: Vacant
31. Historic Use: Carpenter shop
32. Architect, Engineer or Construction Battalion if known:
33. ICRMP Category: III
34. Proposed historical category: Category III
35. National Register Significance Criteria: ☑ A (Events) ☑ B (Person) ☑ C (*) ☑ D (Information)
   * Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity
36. Area of significance: ☑ Architecture ☑ Engineering ☑ Recreation ☑ Military ☑ Transportation ☑ Other
37. Integrity: ☑ Location ☑ Design ☑ Settings ☑ Materials ☑ Workmanship ☑ Feeling ☑ Associations
38. Explanation of Significance: Association with the military build up in Hawaii during WWII, good example of a type, period, and method of construction. One of the earliest Quonset huts still extant.

Comments
- In poor physical condition due to its proximity to the ocean.
- Per Navy: This area of Ford Island was used by material handlers supporting activities on Ford Island. A 'three legged' crane at this location used to off-load materials from barges and ships docked at the Foxtrot wharves. Q13 and Q14 were likely used to support this activity. The Quonset huts were two of four small structures supporting the crane operation at that location.
Q13 and Q14 Southwest Bulkhead, September 2009

Oblique View of Northwest Side and Southwest Bulkhead, September 2009

Northeast Bulkhead, September 2009

Wood Frame Hooded Screen Vent at Northwest Elevation, September 2009
Concrete Curb and Overhang at Southwest Elevation, September 2009
Q14, FORD ISLAND
Historic Facility Survey Form

Identification
1. Facility No: Q14 □ Demolished 2. Tax Map Key: 9-09-001:015
3. Facility Name: Boat Repair Shop 4. Type: Tropical Hut
5. Street Address: Homet Ave.

Description
8. Year Built: 1943 9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other □ By ocean

Exterior:
19. Type & Method of Construction: Steel arched ribs with corrugated metal covering on concrete slab with curb

20. Windows (Material, style, etc.)
Original: 3 wood frame metal mesh vents with hoods, metal vents at SW bulkhead
Replaced: ______________________________

21. Exterior Doors (Material, style, etc.)
Original: Wood double swing doors at SE bulkhead
Replaced: Metal mesh double swing door at SW is enclosed

22. Character defining historic features:
- Typical Tropical Hut characteristics - Pattern of corrugated sheets, raised concrete curb at sides with angled flashing
- Small overhang at each bulkhead, transom vents at SW bulkhead, roof ventilator, hooded vent windows - 1/3 of interior wall is covered with masonite

23. Non-historic features:
Enclosure of ______________________________

24. Note if any unique adaptation:
- Small overhang
- Roof ventilator ______________________________

25. Is the structure altered: □ Yes □ No □ Unknown

26. Note when /what alterations:
- Only Q13 and Q14 have plywood at bulkhead, may be change from standard corrugated metal bulkheads used in Hawaii. Plywood was an option in manuals, thus unknown if original, though appears more modern.

27. Note if any effect from alterations: ______________________________

28. Treatment Recommendations:
□ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible

11-40
**History & Significance**

29. Historic Name if known: Boat Repair Shop  
30. Current Use: Exercise Room  
31. Historic Use: Boat Repair Shop

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: III  
34. Proposed historical category: Category III

35. National Register Significance Criteria: ✓ A (Events) □ B (Person) ✓ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ✓ Architecture □ Engineering □ Recreation ✓ Military □ Transportation □ Other

37. Integrity: ✓ Location ✓ Design ✓ Settings □ Materials □ Workmanship ✓ Feeling ✓ Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, good example of a type, period, and method of construction. One of the earliest Quonset huts still extant.

**Comments**

- Identical to Q13, but Q14 has more damage since it is close to the ocean.
- Per Navy: This area of Ford Island was used by material handlers supporting activities on Ford Island. A 'three legged' crane at this location used to off-load materials from barges and ships docked at the Foxtrot wharves. Q13 and Q14 were likely used to support this activity. The Quonset huts were two of four small structures supporting the crane operation at that location.
South-West bulkhead (September 2009).

Oblique view of South-East side (September 2009).

North-East bulkhead (September 2009).
Round vents on roof top (September 2009).

1/3 interior wall covered with masonite (September 2009).
17BE, MAKALAPA
### Historic Facility Survey Form

#### Identification

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility No:</td>
<td>17BE</td>
</tr>
<tr>
<td>Tax Map Key:</td>
<td>9-9-002:004</td>
</tr>
<tr>
<td>Facility Name:</td>
<td>ADMIN/CINCPACFLT</td>
</tr>
<tr>
<td>Type:</td>
<td>Extended Hut with 3'0&quot; high cast concrete foundation</td>
</tr>
<tr>
<td>Street Address:</td>
<td>Close to Makalapa</td>
</tr>
<tr>
<td>Historic Zone:</td>
<td>WWII Command Headquarters Historic District and Landmark</td>
</tr>
<tr>
<td>Area Location:</td>
<td>Makalapa Admin.</td>
</tr>
</tbody>
</table>

#### Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Built:</td>
<td>1945</td>
</tr>
<tr>
<td>Length:</td>
<td>142'-0&quot;</td>
</tr>
<tr>
<td>Width:</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>Height:</td>
<td>13'-6&quot;</td>
</tr>
<tr>
<td>S.F.:</td>
<td>2,840 S.F.</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Stran-Steel</td>
</tr>
<tr>
<td>Condition:</td>
<td>Fair</td>
</tr>
<tr>
<td>Is the structure:</td>
<td>on its original site</td>
</tr>
<tr>
<td>Physical context:</td>
<td>Scattered buildings</td>
</tr>
</tbody>
</table>

**Exterior:**
- Steel arched rib with corrugated sheet metal covering on raised concrete base
- Added openings for A.C. units with wood awnings at NW and SE elevations - Mechanical ducts added at SE elevation
- Wood frame addition at NW elevation - Added awning over doors at SW and NE - Added asphalt sheets over top portion
- Battered concrete base to form straight side walls on interior

**Non-historic features:**
- Added openings for A.C. units with wood awnings at NW and SE elevations - Mechanical ducts added at SE elevation
- Wood frame addition at NW elevation - Added awning over doors at SW and NE - Added asphalt sheets over top portion

**Character defining historic features:**
- Quonset Hut raised on battered cast concrete walls (last of type remaining)
- Original double hung windows set on concrete base is a rare detail - Corrugated metal siding

**Non-historic features:**
- Added openings for A.C. units with wood awnings at NW and SE elevations - Mechanical ducts added at SE elevation
- Wood frame addition at NW elevation - Added awning over doors at SW and NE - Added asphalt sheets over top portion

#### Note if any unique adaptation:
- Battered concrete base to form straight side walls on interior

#### Treatment Recommendations:
- Preservation
- Rehabilitation
- Deconstruct & relocate / salvage
- Deconstruct
- Not Eligible

---

---
**History & Significance**

29. Historic Name if known: ADMIN/CINCPACFLT
30. Current Use: Vacant

31. Historic Use: Photo Intelligence Storage, Human Resources

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: III
34. Proposed historical category: Category III

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☒ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☐ Feeling ☐ Associations

38. Explanation of Significance: 
Associated with expansion of CINCPAC administration area and Bldg. 251 FRUPAC (Fleet Radio Unit Pacific) in WWII, distinctive type of Quonset Hut with 3'-0" high concrete base and connected two 5'-6" Huts plus 30'-0" infill section (see plans). Hut had important use for photo intelligence during WWII. Note: See historical photos of Bldg. 251 and interior of hut located in photo display in basement entrance to Bldg. 250.

**Comments**

- Asbestos and other hazardous materials were found in the building and it has remained vacant for numerous years.

- Treatment Recommendations: Remove or de-construct wooden additions and restore hut back to its earlier configuration. Interior lay-in acoustical ceiling is non-historic and could be removed with repair of original ceiling finishes. Replace solid flush doors with original styled doors with solid or tempered glass panels. Hazardous material abatement is necessary.

- Similar hut Facility 19 (20'-0" x 122'-0") was relocated from adjacent Facility 258 in 1963. Facility 19 did not have a cast concrete base.
Oblique of South-West bulkhead and North-West side
(September 2009).

Remain wood frame addition at the corner of North-West elevation (September 2009).

Oblique of partial North-West side (September 2009).

North-East bulkhead (September 2009).
South-East elevation connection to annex (September 2009).

South-East elevation from the parking lot (September 2009).

Double hung windows at North-West elevation (September 2009).
A12, NAVFAC HI
Historic Facility Survey Form

Identification
5. Street Address: Ross St.
6. Historic Zone: Outside of a Historic Zone  7. Area Location: NAVFAC HI

Description
8. Year Built: 1944  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  Connected to A13

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab, CMU wall addition at SW elevation
20. Windows (Material, style, etc.)
Original: Metal louvers at NE and SE
Replaced: Wood framing jalousie and fixed windows with screens
21. Exterior Doors (Material, style, etc.)
Original: Corrugated steel sliding doors with window at NW
Replaced: Storefront doors at NW, 2 wood panel doors with view glass
22. Character defining historic features:
- Typical Standard Utility Hut characteristics on exterior for central hut area
- Original sliding doors remain at NW bulkhead

23. Non-historic features:
- Large CMU wall addition - New doors
- Interior renovated for office use

24. Note if any unique adaptation:

25. Is the structure altered: □ Yes  □ No  □ Unknown
26. Note when /what alterations:
- Interior is renovated for office use, only one curved side wall shows the shape of Quonset Hut
- Added straight wall bottom at NE side, removing continued curve of Quonset - New window openings for A.C. units and gutters
- Large CMU wall shed roof addition

27. Note if any effect from alterations:
- Interior no longer retains association to Quonset Hut
- Removal of both curved sides of the Quonset and the large addition on most visible side adversely affects the historic integrity

28. Treatment Recommendations:
□ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
**History & Significance**

29. Historic Name if known: ____________________________________________

30. Current Use: Vacant

31. Historic Use: Shop or Storage

32. Architect, Engineer or Construction Battalion if known: ____________________________________________

33. ICRMP Category: IV

34. Proposed historical category: Category III

35. National Register Significance Criteria: □ A (Events) □ B (Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII.

**Comments**

- Treatment Recommendations: Remove interior modifications. Remove large additions to most public side of Quonset Hut.

- Did not enter half of interior space, but was told by occupants that it is similar.

- Located in former WWII encampment site.

- CMU walls likely indicate change from wood / temporary construction to permanent construction type.
South-East bulkhead (September 2009).

Oblique view of CMU wall addition at South-West side (September 2009).

Oblique view of North-West bulkhead (September 2009).
Added straight wall bottom at North-East elevation (September 2009).

Corrugated sliding door and new storefront door at North-West (September 2009).

Curved interior wall (September 2009).
X8, NAVFAC HI
Historic Facility Survey Form

Identification

1. Facility No: X8
2. Tax Map Key: 1-01-010:011
3. Facility Name: Automotive Repair Shop
4. Type: Standard Utility Hut
5. Street Address: Marshall Road, former WWII Navy Construction Battalion encampment site.
6. Historic Zone: Outside of a Historic Zone
7. Area Location: NAVFAC HI

Description

8. Year Built: 1944
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008

10. Stories: 1
11. Length: 100'-0"
12. Width: 49'-0"
13. Height: 21'-0"
14. S.F.: 4,900 S.F.

15. Manufacturer: Stran-Steel

16. Condition: ☑ Excellent ☑ Good ☐ Fair ☐ Poor ☐ Ruin

17. Is the structure: ☑ on its original site ☐ Moved ☐ Unknown

18. Physical context: ☐ Open land ☑ Scattered buildings ☐ Other ☑ Next to X9

Exterior:

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete base

20. Windows (Material, style, etc.)
Original: Flush wood frame 4 lite & 1 fixed windows with metal mesh screens
Replaced:

21. Exterior Doors (Material, style, etc.)
Original: Corrugated sliding, ceiling height metal screen double swing gates at SE
Replaced:

22. Character defining historic features:
- Typical Standard Utility Hut characteristics
- Original, unique sign of the shop
- Original sliding doors - Large openings on SW side with exposed structure

23. Non-historic features:
- Small area with CMU walls, air conditioning and wood canopy

24. Note if any unique adaptation:
- Two large ceiling height openings for metal mesh screen doors with steel awning at SW elevation, ribs cut to accommodate large opening
- Openings on S side have cut off 2 ribs to accommodate large opening

25. Is the structure altered: ☑ Yes ☐ No ☐ Unknown

26. Note when /what alterations:
- Partial CMU wall with wood frame awning at the SW elevation
- CMU wall area has two windows, 1 A.C. unit, CMU laid on side to create vents
- Enclosed window openings with corrugated metal sheets at SE bulkhead

27. Note if any effect from alterations:
- CMU alteration does not have a major effect on the historic character of the facility

28. Treatment Recommendations: ☑ Preservation ☐ Rehabilitation ☐ Deconstruct & relocate / salvage ☐ Deconstruct ☐ Not Eligible
History & Significance

29. Historic Name if known: Store House

30. Current Use: Vacant

31. Historic Use: Automotive repair shop

32. Architect, Engineer or Construction Battalion if known: Modified by Battalion using area during Vietnam War

33. ICRMP Category: IV

34. Proposed historical category: Category II

35. National Register Significance Criteria: ✗ A (Events) □ B (Person) ✗ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ✗ Architecture □ Engineering □ Recreation ✗ Military □ Transportation □ Other

37. Integrity: ✗ Location ✗ Design ✗ Settings □ Materials ✗ Workmanship ✗ Feeling ✗ Associations

38. Explanation of Significance:

Association with the military build up in Hawaii during WWII, unique example of the Standard Utility Hut modified as a workshop during Vietnam War as part of a Navy Construction Battalion site.

Comments

- Setting and positioning of X8 and X9 together is a good representation of this facility type.

- Maintains strong association with Seabees as it maintains its historic integrity as a shop and Quonset hut.
Oblique View of X8 and X9 Southwest Bulkheads, September 2009

Cutouts on Southwest Side, September 2009

Oblique View of Northwest Bulkhead, September 2009

Oblique View of Northeast Side, September 2009
Original Shop Sign at Southeast Bulkhead, September 2009

Partial CMU Wall at Southwest Elevation, September 2009

Awning Framing at Southwest Elevation, September 2009

Enclosed Window Openings Next to Existing Windows, September 2009
X9, NAVFAC HI
Historic Facility Survey Form

Identification

1. Facility No: X9
2. Tax Map Key: 1-01-010:011
3. Facility Name: Warehouse, General
4. Type: Standard Utility Hut
5. Street Address: Marshall Road
6. Historic Zone: Outside of a Historic Zone
7. Area Location: NAVFAC HI

Description

8. Year Built: 1945
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
10. Stories: 1
11. Length: 100'-0"
12. Width: 41'-0"
13. Height: 21'-0"
14. S.F.: 4,100 S.F.
15. Manufacturer: Stran-Steel
16. Condition: ☑ Excellent  ☑ Good  ☐ Fair  ☐ Poor  ☐ Ruin
17. Is the structure: ☑ on its original site  ☐ Moved  ☑ Unknown
18. Physical context: ☐ Open land  ☑ Scattered buildings  ☐ Other  Next to X8

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete base
20. Windows (Material, style, etc.)
   Original: Metal louver vents with metal mesh screens at NE bulkhead
   Replaced: Bulkhead windows replaced with translucent panels
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated metal sliding door
   Replaced:
22. Character defining historic features:
   - Typical Standard Utility Hut characteristics
   - Original vents and sliding doors
   - Has very few windows
23. Non-historic features:
   - Enclosed vent and window openings with metal panel at SW, NW, and SE bulkheads
   - exterior mounted conduits
24. Note if any unique adaptation: None
25. Is the structure altered: ☐ Yes  ☐ No  ☑ Unknown
26. Note when /what alterations:
   - Original four pane wooden sash windows have likely been removed and filled with fiberglass translucent panels at bulkheads
   - Enclosed vent and window openings with metal panel at SW, NW, and SE bulkheads
   - exterior mounted conduits
27. Note if any effect from alterations: Quonset maintains historic character
28. Treatment Recommendations:
   ☑ Preservation  ☑ Rehabilitation  ☐ Deconstruct & relocate / salvage  ☑ Deconstruct  ☐ Not Eligible
History & Significance

29. Historic Name if known: Store House

30. Current Use: Unknown

31. Historic Use: Warehouse, general

32. Architect, Engineer or Construction Battalion if known:

33. ICRMP Category: III

34. Proposed historical category: Category III

35. National Register Significance Criteria: □ A (Events) □ B(Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.

Comments

- Did not enter
North-West bulkhead (September 2009).

Oblique view of South-West side (September 2009).

South-East bulkhead (September 2009).

Oblique view of North-East side (September 2009).
X18, NAVFAC HI
Historic Facility Survey Form

**Identification**

1. Facility No: X18   □ Demolished  2. Tax Map Key: 1-01-010:011
3. Facility Name: Plumbing Metal Shop  4. Type: Modified Standard Utility Hut
5. Street Address: Marshall Rd.
6. Historic Zone: Outside of a Historic Zone  7. Area Location: NAVFAC HI

**Description**

8. Year Built: c. 1945/1944  9. This Date is from: Integrated Cultural Resource Management Plan, 2002/other Quonset huts in area
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  □ Row of shops lined up next to each other

**Exterior:**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering, 1/3 of hut on wood posts and CMU wall bottom, shed roof extensions at NE & SW
20. Windows (Material, style, etc.)
   Original: None existing  □ Replaced: Jalousie windows at CMU wall, may be part of CMU wall addition
21. Exterior Doors (Material, style, etc.)
   Original: No exterior doors/chain link fence utilized as security  □ Replaced: Wood flush door at office
22. Character defining historic features:
   - Quonset Hut ribs and curved covering at top
   - Partial Quonset Hut located at the middle of building and has wood framed flat roof open extensions at sides
   - Installed steel ties to hold Quonset Hut from straightening

23. Non-historic features:
   - Lunch room at SE corner added
   - Jalousie windows - CMU enclosures - Extension along NW side done after 1964

24. Note if any unique adaptation:
   - Open work space, no side walls, has only wood and steel posts with metal fences on sides
   - Not true Quonset Hut, ribs do not extend to complete semi-circle form - Ribs cut and supported by beams to provide open space

25. Is the structure altered: □ Yes  □ No  □ Unknown
26. Note when /what alterations:
   - Between 1946 and 1976 several extensions
   - Lunch room was added at SE corner by 1976 (NAVFAC PACIFIC Drawing #7010926)
   - In 1976 poured new concrete floor to lunch room, bathroom, and office space at SE (see comments)

27. Note if any effect from alterations:
   CMU walls alter historic appearance from temporary materials of Quonset Huts to more permanent type materials

28. Treatment Recommendations: □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
History & Significance

29. Historic Name if known: Hut No. 5
30. Current Use: Sheet metal shop
31. Historic Use: Shop or storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV
34. Proposed historical category: Category III

35. National Register Significance Criteria: [X] A (Events) [ ] B (Person) [X] C(*) [ ] D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity


38. Explanation of Significance: Though its structural system is not a true Quonset Hut, the large shed roof extensions with wood posts were built as modifications of a Quonset Hut in a manner typical to WWII shops and cafeterias. X18, X20 and X21 Quonset Huts support the last of WWII shops area.

Comments

Alterations (continued)
- 1946 plan (OA-N5-537) shows X18, X20, and X21 had underground air distribution system.
- Footprint has changed between 1946 and the 1964 aerial photo, sometime after the 1964 aerial another extension was done along the entire NW side of the Quonset and the Quonset was also extended on the NE bulkhead side of the hut

Recommendations
- Though restoring the bulkheads and open extensions would be a good rehabilitation measure, the CMU walls also show the change in use over time of the versatile Quonset hut. Unclear as to exactly when the CMU walls are added.
- CMU wall lunch room at SE corner should be removed to restore an open interior.
Oblique view of South-East side (September 2009).

Oblique view of North-East side (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of South-West side (September 2009).
Connection of Quonset hut and flat roof at North-West elevation (September 2009).

Quonset hut steel ribs (September 2009).
X20, NAVFAC HI
Historic Facility Survey Form

Identification
1. Facility No: X20  □ Demolished  2. Tax Map Key: 1-01-010:011
3. Facility Name: Paint Shop  4. Type: Modified Standard Utility Hut
5. Street Address: Marshall Rd.
6. Historic Zone: Outside of a Historic Zone  7. Area Location: NAVFAC HI

Description
8. Year Built: 1944  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  Row of shops lined up next to each other

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering, 1/3 of Hut on wood posts and CMU wall bottom, shed roof extensions at NE & SW
20. Windows (Material, style, etc.)
   Original: None existing  Replaced: Wood frame jalousie and fixed windows
21. Exterior Doors (Material, style, etc.)
   Original: None original  Replaced: Steel sliding doors at NW, Wood panel double and single swing doors at SW
22. Character defining historic features:
   - Quonset Hut ribs and curved covering at top
   - Partial Quonset Hut located at the middle of building and has wood framed flat roof extensions at sides

23. Non-historic features:
   - Mushroom roof ventilator
   - CMU wall additions - Jalousie windows - Extension on NW side added between 1952 to 1976

24. Note if any unique adaptation:
   - Not true Quonset Hut, ribs do not extend to complete semi-circular form
   - Ribs cut and supported by beams to provide open space

25. Is the structure altered: □ Yes  □ No  □ Unknown
26. Note when /what alterations:
   - Some window openings are enclosed at SW wall - In 1952 Spray room was moved from SE corner to middle of SW elevation
   - By 1976 old Spray room was renovated to office and lunch room, bathroom was moved to SE corner of SW elevation, added shed roof addition on NE elevation and expanded locker room - Poured concrete floor to lunch room and installed resilient tile to office in 1976

27. Note if any effect from alterations: CMU walls alter historic appearance from temporary materials of Quonset Huts to more permanent type materials

28. Treatment Recommendations: □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible

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History & Significance

29. Historic Name if known: Hut No. 6

30. Current Use: Paint Shop

31. Historic Use: Shop or Storage

32. Architect, Engineer or Construction Battalion if known: Former WWII encampment site

33. ICRMP Category: IV

34. Proposed historical category: Category IV

35. National Register Significance Criteria: □ A (Events) □ B(Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: X20 has numerous additions and enclosures, like X18. However, X18 maintains its open interior and much of its open sides with wood posts. X20 has CMU enclosures around most of the building, taking away from its historic character typical of a WWII shop or cafeteria.

Comments
Oblique view of South-East side (September 2009).

Oblique view of South-West side (September 2009).

Oblique view of North-West side (September 2009).
Mushroom vents on roof (September 2009).

Interior of paint shop (September 2009).

Interior framing (September 2009).
X21, NAVFAC HI
<table>
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<tr>
<td>Tax Map Key:</td>
<td>1-01-010:011</td>
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<tr>
<td>Facility Name:</td>
<td>Welding Shop</td>
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<tr>
<td>Type:</td>
<td>Modified Standard Utility Unit</td>
</tr>
<tr>
<td>Street Address:</td>
<td>Close to Marshall Rd.</td>
</tr>
<tr>
<td>Historic Zone:</td>
<td>Outside of a Historic Zone</td>
</tr>
<tr>
<td>Area Location:</td>
<td>NAVFAC HI</td>
</tr>
</tbody>
</table>

<table>
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<tr>
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<td>Integrated Cultural Resources Management Plan, October 2008</td>
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<td>Height:</td>
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<tr>
<td>S.F.:</td>
<td>8,500 S.F.</td>
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<tr>
<td>Manufacturer:</td>
<td>Stran-Steel</td>
</tr>
<tr>
<td>Condition:</td>
<td>Fair</td>
</tr>
<tr>
<td>Is the structure:</td>
<td>on its original site</td>
</tr>
<tr>
<td>Physical context:</td>
<td>Row of shops lined up next to each other</td>
</tr>
<tr>
<td>Exterior:</td>
<td></td>
</tr>
<tr>
<td>Type &amp; Method of Construction:</td>
<td>Steel arched rib with corrugated sheet metal covering on concrete slab, CMU extension at N and corrugated metal extensions &amp; addition at S</td>
</tr>
<tr>
<td>Windows (Material, style, etc.):</td>
<td></td>
</tr>
<tr>
<td>Original:</td>
<td>Flush wood frame 4 lite window (painted glass) at E</td>
</tr>
<tr>
<td>Replaced:</td>
<td>Wood frame jalousie windows</td>
</tr>
<tr>
<td>Exterior Doors (Material, style, etc.):</td>
<td></td>
</tr>
<tr>
<td>Original:</td>
<td>No exterior doors/chain link fence utilized as security</td>
</tr>
<tr>
<td>Replaced:</td>
<td>Chain link fenced sliding gates</td>
</tr>
<tr>
<td>Character defining historic features:</td>
<td></td>
</tr>
<tr>
<td>- Large opening at W bulkhead cut to make open space and head room</td>
<td></td>
</tr>
<tr>
<td>- Metal awning at W hanging from bulkhead somewhat haphazard, but creative</td>
<td></td>
</tr>
<tr>
<td>- Alternate retention of ribs and siding form interesting pattern on interior at N extension (see photo)</td>
<td></td>
</tr>
<tr>
<td>Non-historic features:</td>
<td></td>
</tr>
<tr>
<td>- Small corrugated sheet metal addition at S</td>
<td></td>
</tr>
<tr>
<td>- CMU wall enclosures and posts - Chain link fence</td>
<td></td>
</tr>
<tr>
<td>Note if any unique adaptation:</td>
<td></td>
</tr>
<tr>
<td>- Open work space, some ribs were cut to enlarge opening</td>
<td></td>
</tr>
<tr>
<td>- Unlike other workshops in area, majority of ribs are retained</td>
<td></td>
</tr>
<tr>
<td>Is the structure altered:</td>
<td>Yes</td>
</tr>
<tr>
<td>Note when /what alterations:</td>
<td></td>
</tr>
<tr>
<td>- By 1976 added small corrugated sheet metal addition at N</td>
<td></td>
</tr>
<tr>
<td>- Installed resilient tiles to office, lunch room and bathroom at S extension in 1976 - CMU wall enclosures</td>
<td></td>
</tr>
<tr>
<td>- Replaced wood posts at extensions with CMU block posts</td>
<td></td>
</tr>
<tr>
<td>Note if any effect from alterations:</td>
<td></td>
</tr>
<tr>
<td>- S side extension hides form of Quonset, unlike N side extension, small additions/alterations have detracted from its overall character</td>
<td></td>
</tr>
</tbody>
</table>

| **Treatment Recommendations:** |  |
| Preservation | Rehabilitation | Deconstruct & relocate / salvage | Deconstruct | Not Eligible |
History & Significance

31. Historic Use: Historic Use: Shop or storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV

34. Proposed historical category: Category III

35. National Register Significance Criteria: A (Events) B(Person) C(*) D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: Architecture Engineering Recreation Military Transportation Other

37. Integrity: Location Design Settings Materials Workmanship Feeling Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, good example of temporary building shop with shed room addition at both ends. Built as a modification of a Quonset Hut in a manner typical to WWII shops and cafeterias, together with X18 and 20, these three Quonset Huts support the last of WWII shops area.

Comments

While this Quonset hut, like X18 and X20 has experienced numerous changes throughout its use, some of its unique adaptations such as the alternate removal of its ribs, remain and its essential form is maintained.

- 1946 plan (OA-N5-537) shows X18, X20, and X21 had underground air distribution system.
Row of Shops X18, X20 and X21, September 2009

East Bulkhead, September 2009
Oblique View of North Side, September 2009
Oblique View of West Side, September 2009
X24, NAVFAC HI
Historic Facility Survey Form

Identification

3. Facility Name:  GENERAL WAREHOUSE  4. Type:  Standard Utility Hut
5. Street Address:  
6. Historic Zone:  Outside of a Historic Zone  7. Area Location:  NAVFAC HI

Description

8. Year Built:  1944  9. This Date is from:  Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer:  Stran-Steel
16. Condition:  Excellent  Good  Fair  Poor  Ruin
17. Is the structure:  on its original site  Moved  Unknown
18. Physical context:  Open land  Scattered buildings  Other  Isolated, on publicly visible corner of Navy land

Exterior:
19. Type & Method of Construction:  Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original:  Flush wood frame fixed windows with metal mesh screens at bulkheads
   Replaced:  
21. Exterior Doors (Material, style, etc.)
   Original:  Corrugated steel sliding doors at N and S bulkheads
   Replaced:  
22. Character defining historic features:
   - Typical Standard Utility Hut characteristics
   - Original windows and doors
23. Non-historic features:
   - Mushroom vent in center
24. Note if any unique adaptation:
   None
25. Is the structure altered:
   Yes  No  Unknown
26. Note when /what alterations:
   No major alterations
27. Note if any effect from alterations:
   Quonset maintains historic character

28. Treatment Recommendations:
   Preservation  Rehabilitation  Deconstruct & relocate / salvage  Deconstruct  Not Eligible

11-104
**History & Significance**

29. Historic Name if known: Material & Telephone Equipment Store House  
30. Current Use: Storage  
31. Historic Use: Storage  
32. Architect, Engineer or Construction Battalion if known:  
33. ICRMP Category: IV  
34. Proposed historical category: Category III  
35. National Register Significance Criteria:  
   - A (Events)  
   - B (Person)  
   - C(*)  
   - D (Information)  
   * Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity  
36. Area of significance:  
   - Architecture  
   - Engineering  
   - Recreation  
   - Military  
   - Transportation  
   - Other  
37. Integrity:  
   - Location  
   - Design  
   - Settings  
   - Materials  
   - Workmanship  
   - Feeling  
   - Associations  
38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.  

**Comments**

- Erosion of concrete slab  
- If demolished, salvage ribs
North bulkhead (September 2009).

Oblique view of East side (September 2009).

Oblique view of South bulkhead (September 2009).

Oblique view of West side (September 2009).
Sliding steel doors at North bulkhead (September 2009).

Fixed windows at South bulkhead (September 2009).

Interior (September 2009).

Erosion of concrete slab (September 2009).
T15-T15A, SHIPYARD
Location Map T15-T15A, Shipyard
Historic Facility Survey Form

Identification
1. Facility No: T15 / T15A ☐ Demolished 2. Tax Map Key: 9-09-001:008
3. Facility Name: Main S/S Storage - X99 4. Type: Extended Hut with doors added to center (along curved side)
5. Street Address: Kean Road
6. Historic Zone: Outside of a Historic Zone 7. Area Location: Shipyard, former PH Naval Hospital

Description
8. Year Built: C. 1945 9. This Date is from: Drawing #7022475 (NAVFAC PACIFIC)
15. Manufacturer: Stran-Steel
16. Condition: ☑ Excellent ☑ Good ☐ Fair ☐ Poor ☑ Ruin
17. Is the structure: ☐ on its original site ☑ Moved ☑ Unknown
18. Physical context: ☐ Open land ☑ Scattered buildings ☐ Other

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: Flush wood frame, no glazing 4-lite fixed with metal mesh screens  Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: Metal frame corrugated sliding door with metal awning at longitude side  Replaced: See comments
22. Character defining historic features:
   - Typical Extended Hut - Entry at center of longitudinal side of Quonset hut

23. Non-historic features:
   - Triangular anchor at the bottom of the ribs is good solution for damaged ribs - Replaced entry sliding doors and new wood frame at NE
   - Replaced sliding doors to roll up door with view window at NW

24. Note if any unique adaptation:
   - Opening at center of NE and SW elevations along curved side of Quonset Hut

25. Is the structure altered: ☑ Yes ☑ No ☐ Unknown
26. Note when /what alterations:
   - Eliminated one set of windows to enlarge opening for roll-up door at NW
   - Replaced NE side entry recently - SW entry was added after 1945, 1945 electrical plan shows no entry on this side
   - Removed all side windows after 1980, 1980 record drawings indicate windows on longitudinal South and North elevations

27. Note if any effect from alterations:
   - Though removal of the windows and enlarging the bulkhead door opening is not in keeping with the SOI, the essential historic characteristics of this extended hut has been maintained.

28. Treatment Recommendations:
   ☑ Preservation ☐ Rehabilitation ☐ Deconstruct & relocate / salvage ☐ Deconstruct ☐ Not Eligible
History & Significance

29. Historic Name if known: 

30. Current Use: Stores diesel/crane engine 

31. Historic Use: Storage 

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV 

34. Proposed historical category: Category III 

35. National Register Significance Criteria: A (Events) B(Person) C(*) D (Information) 

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity 

36. Area of significance: Architecture Engineering Recreation Military Transportation Other 

37. Integrity: Location Design Settings Materials Workmanship Feeling Associations 

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Extended Utility Hut. Last Utility Type hut remaining on the main base. 

Comments 

According to the HABS report, the Navy Data shows facilities completion dates were 1943 for T15 and 1945 for T15A. Neither were shown on 1944 map, though 1945 electrical plan shows both facilities were at the current location. T15 may have moved from original location and T15A was its addition. Demolition of four Quonset huts (Fac. T47, T48, 388A) in Shipyard left T15/15A as the last Utility hut within the Shipyard zone, as well as within the whole Main base area of the PH NHL. During the same time four Quonset huts were demolished at West Loch (Q422, Q334, Q399, Q410) and one at Naval Magazine Lualualei (Q75). The demolition of these Quonset huts increase the interest by the preservation partners in preserving remaining examples of this facility type.
Oblique View of Northeast Side, September 2009

Northwest Bulkhead, September 2009

Oblique View of Southwest Side, September 2009

New Entry at Southwest Elevation, September 2009
Interior of Southwest Entry, September 2009

Triangular Anchor at the Bottom of the Ribs, September 2009
K19, WEST LOCH
Location Map K19, West Loch
**Historic Facility Survey Form**

### Identification

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<th>K19</th>
<th>2. Tax Map Key:</th>
<th>9-01-010:</th>
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<tbody>
<tr>
<td>3. Facility Name:</td>
<td>EODTEU* GEAR STRG 25SH12</td>
<td>4. Type:</td>
<td>Extended Hut</td>
</tr>
<tr>
<td>5. Street Address:</td>
<td>Between 10th and 11th St</td>
<td>6. Historic Zone:</td>
<td>West Loch Historic Zone</td>
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<td>7. Area Location:</td>
<td>West Loch Naval Magazine</td>
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### Description

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<th>9. This Date is from:</th>
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<tr>
<td>15. Manufacturer:</td>
<td>Stran-Steel</td>
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<tr>
<td>16. Condition:</td>
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<td>Good</td>
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<td>17. Is the structure:</td>
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<td>on its original site</td>
<td>Moved</td>
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<tr>
<td>18. Physical context:</td>
<td></td>
<td>Open land</td>
<td>Scattered buildings</td>
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**Exterior:**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab

<table>
<thead>
<tr>
<th>20. Windows (Material, style, etc.)</th>
<th>Original:</th>
<th>Side openings, wood frame dormer screen vents at SW and NE</th>
<th>Replaced:</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Exterior Doors (Material, style, etc.)</td>
<td>Original:</td>
<td>Corrugated steel sliding doors</td>
<td>Replaced:</td>
</tr>
</tbody>
</table>

**Character defining historic features:**

- Typical Extended Hut
- Extended Huts lined up in 2 rows - No windows at bulkheads
- Grouped with 11 other Huts

22. Non-historic features: None

23. Note if any unique adaptation: Row of dormer screen vents at side wall

24. Is the structure altered: Yes

25. Note when /what alterations: Per Navy, sidings was replaced, though appears to have been replaced in kind.

26. Note if any effect from alterations: Quonset maintains historic character

27. Treatment Recommendations: Preservation

28.  | Rehabilitation | Deconstruct & relocate / salvage | Deconstruct | Not Eligible |

---

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History & Significance


32. Architect, Engineer or Construction Battalion if known: ____________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☒ A (Events) ☐ B (Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

Facility Name: * Explosive Ordnance Disposal Training and Evaluation

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military built up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
South-West bulkhead (September 2009).

Oblique view of South-East side (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of North-East bulkhead (September 2009).
West Loch Quonset hut district, K19 to K 24 (September 2009).

Dormer windows at North-West elevation (September 2009).
K20, WEST LOCH
Location Map K20, West Loch
Historic Facility Survey Form

Identification
1. Facility No: K20  □ Demolished  2. Tax Map Key: 9-01-010:
3. Facility Name: INERT STRG 25SH11  4. Type: Extended Hut
5. Street Address: Between 10th and 11th St.

Description
8. Year Built: 1943  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: 
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  In proposed West Loch Quonset Hut district, tracks along one row

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: No windows
   Replaced: 
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated steel sliding doors
   Replaced: 
22. Character defining historic features:
   - Typical Extended Hut
   - Very simple Quonset Hut with no windows
   - Centered sliding doors at bulkheads
   - Grouped with 11 other Huts

23. Non-historic features:
    None

24. Note if any unique adaptation:
    No

25. Is the structure altered:
    □ Yes  □ No  □ Unknown

26. Note when /what alterations:
   Per Navy, siding was replaced, though appears to have been replaced in kind.

27. Note if any effect from alterations:

28. Treatment Recommendations:
   □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
History & Significance


32. Architect, Engineer or Construction Battalion if known: ____________________________________________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria:☒ A (Events) ☐ B (Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military built up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
South-West bulkhead (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of North-East bulkhead (September 2009).

Oblique view of South-East side (September 2009).
Door frame at South-West elevation (September 2009).

Chipped concrete base at South-West elevation (September 2009).
K21, WEST LOCH
**Historic Facility Survey Form**

**Identification**

1. Facility No: K21  
2. Tax Map Key: 9-01-010:  
3. Facility Name: INERT STRG 25SH11  
4. Type: Extended Hut  
5. Street Address: Between 10th and 11th St.  
6. Historic Zone: West Loch Historic Zone  
7. Area Location: West Loch Naval Magazine

**Description**

8. Year Built: 1943  
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008  
10. Stories: 1  
11. Length: 200'-0"  
12. Width: 40'-0"  
13. Height: 20'-0"  
14. S.F.: 8,000 S.F.  
15. Manufacturer: Stran-Steel

16. Condition:  
   - Excellent  
   - Good  
   - Fair  
   - Poor  
   - Ruin

17. Is the structure:  
   - on its original site  
   - Moved  
   - Unknown

18. Physical context:  
   - Open land  
   - Scattered buildings  
   - Other  
   - In proposed West Loch Quonset Hut district, tracks along one row

**Exterior:**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab

20. Windows (Material, style, etc.)  
   - Original: No windows  
   - Replaced:

21. Exterior Doors (Material, style, etc.)  
   - Original: Corrugated steel sliding doors  
   - Replaced:

22. Character defining historic features:  
   - Typical Extended Hut  
   - Very simple Quonset Hut with no windows - Centered sliding doors at bulkheads  
   - Grouped with 11 other Huts

23. Non-historic features: None

24. Note if any unique adaptation: No

25. Is the structure altered:  
   - Yes  
   - No  
   - Unknown

26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.

27. Note if any effect from alterations: Quonset maintains historic character.

28. Treatment Recommendations:  
   - Preservation  
   - Rehabilitation  
   - Deconstruct & relocate / salvage  
   - Deconstruct  
   - Not Eligible
History & Significance

31. Historic Use: Storage

30. Current Use: Storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV

34. Proposed historical category: Category II

35. National Register Significance Criteria: A (Events) B (Person) C(*) D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: Architecture Engineering Recreation Military Transportation Other

37. Integrity: Location Design Settings Materials Workmanship Feeling Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military built up and subsequence use for Cold War
- Former Advanced Base Reshipment Depot
Oblique view of South-Eastside (September 2009).

South-West bulkhead (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of South-Eastside (September 2009).
Concrete base and door frame at North-East elevation (September 2009).

Ceramic knobs at North-East elevation (September 2009).
K22, WEST LOCH
Historic Facility Survey Form

Identification

1. Facility No: K22  Demolished  2. Tax Map Key: 9-01-010: 

3. Facility Name: MK46 STRG 25SH9  4. Type: Extended Hut

5. Street Address: Between 10th and 11th St.


Description

8. Year Built: 1943  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008


15. Manufacturer: Stran-Steel

16. Condition: Excellent  Good  Fair  Poor  Ruin

17. Is the structure: on its original site  Moved  Unknown

18. Physical context: Open land  Scattered buildings  Other  In proposed West Loch Quonset Hut district, tracks along one row

Exterior:

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab

20. Windows (Material, style, etc.)

Original: No windows  Replaced:

21. Exterior Doors (Material, style, etc.)

Original: Corrugated steel sliding doors  Replaced:

22. Character defining historic features:

- Typical Extended Hut
- Very simple Quonset Hut with no windows - Centered sliding doors at bulkheads
- Grouped with 11 other Huts

23. Non-historic features: None

24. Note if any unique adaptation: No

25. Is the structure altered: Yes  No  Unknown

26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.

27. Note if any effect from alterations: Quonset maintains historic character.

28. Treatment Recommendations: Preservation  Rehabilitation  Deconstruct & relocate / salvage  Deconstruct  Not Eligible

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History & Significance

29. Historic Name if known: 

30. Current Use: Storage 

31. Historic Use: Storage 

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV 

34. Proposed historical category: Category II 

35. National Register Significance Criteria: ☒ A (Events) ☐ B (Person) ☐ C(*) ☒ D (Information) 

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity 

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other 

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☒ Feeling ☒ Associations 

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut. 

Comments 

West Loch Quonset Hut Historic District Character Defining Feature: 
- Extended Huts are evenly spaced and lined up in 2 rows 
- Each Quonset Hut has small adaptation for use 
- Remnants of train tracks remain 
- Any alterations are minor or in keeping with the Secretary of Interior Standards 

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts. 

West Loch Significance: 
- Best example of Quonset Huts in context 
- Associated with World War II military built up and subsequence use for Cold War 
- Former Advanced Base Reshipment Depot
South-West bulkhead (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of North-East bulkhead (September 2009).
Chipped concrete base at South-West elevation (September 2009).

Rusted corrugated sheet metal covering (September 2009).
K23, WEST LOCH
Location Map K23, West Loch
Historic Facility Survey Form

Identification

1. Facility No: K23 □ Demolished 2. Tax Map Key: 9-01-010: □ Demolished
3. Facility Name: INERT STRG 25SH8 □ Demolished 4. Type: Extended Hut
5. Street Address: Between 10th and 11th St.

Description

8. Year Built: 1943 9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.) □ Original □ Replaced: □ Original □ Replaced:
21. Exterior Doors (Material, style, etc.) □ Original □ Replaced: □ Original □ Replaced:
22. Character defining historic features: - Typical Extended Hut
23. Non-historic features: None
24. Note if any unique adaptation: No
25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.
27. Note if any effect from alterations: Quonset maintains historic character.
28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible
**History & Significance**

29. Historic Name if known: 

30. Current Use: Storage

31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV

34. Proposed historical category: Category II

35. National Register Significance Criteria: □ A (Events) □ B (Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

**Comments**

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military built up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
South-West bulkhead (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of North-East bulkhead (September 2009).

Oblique view of South-East side (September 2009).
K24, WEST LOCH
Historic Facility Survey Form

Identification
1. Facility No: K24  □ Demolished  2. Tax Map Key: 9-01-010:  
3. Facility Name: MK48 SHOP STRG 25SH7  4. Type: Extended Hut
5. Street Address: Between 10th and 11th St.  

Description
8. Year Built: 1943  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  ❑ Good  ❑ Fair  □ Poor  □ Ruin
17. Is the structure: ❑ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  ❑ Other In proposed West Loch Quonset Hut district, tracks along one row

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: Side openings, see comments  Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: See comments  Replaced:
22. Character defining historic features:
   - Typical Extended Hut
   - Exposed interior with original lighting fixtures - Row of dormer windows at NW and SE
   - Grouped with 11 other Huts

23. Non-historic features:
   - Enclosed flush windows at SW

24. Note if any unique adaptation:
   - Side openings and side doors

25. Is the structure altered: □ Yes  □ No  ❑ Unknown
26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.

27. Note if any effect from alterations: Quonset maintains historic character.

28. Treatment Recommendations: ❑ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
History & Significance


32. Architect, Engineer or Construction Battalion if known: _______________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

Original Windows: row of wood frame 4 lite awning dormer windows with metal screen at SE, row of wood frame metal screen dormer vents at NW, wood frame casement dormer window with metal screen at NW.

Original Doors: corrugated steel sliding doors, wood flush panel door at SE, vertical corrugated sheet metal door with hood at SE.

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military built up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
South-West bulkhead (September 2009).

Oblique view of North-West side (September 2009).

Oblique view of North-East bulkhead (September 2009).

Oblique view of South-East side (September 2009).
Wood panel door side entry at South-East elevation (September 2009).

Corrugated metal door side entry at South-East elevation (September 2009).
K28, WEST LOCH
## Historic Facility Survey Form

### Identification

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<table>
<thead>
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<tbody>
<tr>
<td>Facility No:</td>
<td>K28</td>
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<tr>
<td>Tax Map Key:</td>
<td>9-01-010</td>
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<tr>
<td>Facility Name:</td>
<td>ASROC* INERT STRG</td>
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<tr>
<td>Type:</td>
<td>Extended Hut</td>
</tr>
<tr>
<td>Street Address:</td>
<td>Between 10th and 11th St.</td>
</tr>
<tr>
<td>Historic Zone:</td>
<td>West Loch Historic Zone</td>
</tr>
<tr>
<td>Area Location:</td>
<td>West Loch Naval Magazine</td>
</tr>
</tbody>
</table>

### Description

<p>| | |</p>
<table>
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<tr>
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</tr>
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<tbody>
<tr>
<td>Year Built:</td>
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</tr>
<tr>
<td>This Date is from:</td>
<td>Integrated Cultural Resources Management Plan, October 2008</td>
</tr>
<tr>
<td>Stories:</td>
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</tr>
<tr>
<td>Height:</td>
<td>20'-0&quot;</td>
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<tr>
<td>S.F.:</td>
<td>8,000 S.F.</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Stran-Steel</td>
</tr>
<tr>
<td>Condition:</td>
<td>Good</td>
</tr>
<tr>
<td>Is the structure:</td>
<td>on its original site</td>
</tr>
<tr>
<td>Physical context:</td>
<td>Scattered buildings</td>
</tr>
<tr>
<td>Type &amp; Method of Construction:</td>
<td>Steel arched rib with corrugated sheet metal covering on concrete slab with curb, cranes at NE and SW bulkheads</td>
</tr>
<tr>
<td>Windows (Material, style, etc.):</td>
<td>Flush metal screen vents, wood frame dormer vents side openings</td>
</tr>
<tr>
<td>Exterior Doors (Material, style, etc.):</td>
<td>1x6 diagonal board swing doors at bulkheads, wood panel double doors at NW</td>
</tr>
<tr>
<td>Character defining historic features:</td>
<td>Typical Extended Hut, Wood diagonal board swing doors (not original doors, installed in 1961 renovation), Screen transom over doors, Roof ventilator (Installed in 1961 renovation), Grouped with 11 other Huts</td>
</tr>
<tr>
<td>Non-historic features:</td>
<td>Enclosed dormer window at NW, Interior renovations, Small storage shack addition at NW elevation</td>
</tr>
<tr>
<td>Note if any unique adaptation:</td>
<td>Side dormer vents, Roof ventilator</td>
</tr>
<tr>
<td>Is the structure altered:</td>
<td>Yes</td>
</tr>
<tr>
<td>Note when /what alterations:</td>
<td>1961 renovation modified into a sub-assembly building, Enlarged door openings for swing doors at bulkheads</td>
</tr>
<tr>
<td>Note if any effect from alterations:</td>
<td>Alterations have gained significance in its own right and thus contribute to the historic significance of the hut</td>
</tr>
<tr>
<td>Treatment Recommendations:</td>
<td>Preservation</td>
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</table>

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**History & Significance**


32. Architect, Engineer or Construction Battalion if known: __________________________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☑ A (Events) ☐ B(Person) ☑ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☑ Architecture ☐ Engineering ☐ Recreation ☑ Military ☐ Transportation ☐ Other

37. Integrity: ☑ Location ☑ Design ☑ Settings ☑ Materials ☑ Workmanship ☑ Feeling ☑ Associations

38. Explanation of Significance: Contributing building in proposed historic district, 1961 renovation was to correspond with the increase of nuclear submarines at Pearl Harbor and future plans of a Polaris subs operations and is thus also associated with Cold War history.

**Comments**

* Anti-Submarine Rocket Renovation (continue):
  - K28 and K29 was connected by concrete walkway with wood frame flat roof and attached cranes at both bulkheads
  - Installed bathrooms at SW and NE corner ends, Gyro shop at NW corner end, and battery charging room at the middle

West Loch Quonset Hut Historic District Character Defining Features:
  - Extended Huts are evenly spaced and lined up in 2 rows
  - Each Quonset Hut has small adaptation for use - Remnants of train tracks remain
  - Any alterations are minor or in keeping with the Secretary of Interior Standards
  - The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts

West Loch District Significance:
  - Best example of Quonset Huts in group context
  - Associated with World War II military build up and subsequent use for Cold War
  - Former Advanced Base Reshipment Depot

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Oblique view of South-East side (September 2009).

South-West elevations of West Loch Quonset hut district, K28 to K33 (September 2009).

North-East bulkhead (September 2009).

Oblique view of South-East side (September 2009).

Protection masts at South-East side (September 2009).
Cranes at South-West elevation (September 2009).

Protection masts at South-West side (September 2009).

Connected walkway between K28 and K29 at North-West elevation (September 2009).

Addition at North-West elevation (September 2009).
## Historic Facility Survey Form

### Identification

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<td>Tax Map Key</td>
<td>9-01-010</td>
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<tr>
<td>Facility Name</td>
<td>TORPEDO SHOP</td>
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<tr>
<td>Type</td>
<td>Extended Hut</td>
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<tr>
<td>Street Address</td>
<td>Between 10th and 11th St.</td>
</tr>
<tr>
<td>Historic Zone</td>
<td>West Loch Historic Zone</td>
</tr>
<tr>
<td>Area Location</td>
<td>West Loch Naval Magazine</td>
</tr>
</tbody>
</table>

### Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
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<tbody>
<tr>
<td>Year Built</td>
<td>1943</td>
</tr>
<tr>
<td>This Date is from</td>
<td>Integrated Cultural Resources Management Plan, October 2008</td>
</tr>
<tr>
<td>Stories</td>
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<td>Height</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>S.F.</td>
<td>8,000 S.F.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Stran-Steel</td>
</tr>
<tr>
<td>Condition</td>
<td>Good</td>
</tr>
<tr>
<td>Is the structure</td>
<td>on its original site</td>
</tr>
<tr>
<td>Physical context</td>
<td>In proposed West Loch Quonset Hut district, tracks along one row</td>
</tr>
<tr>
<td>Exterior</td>
<td>Steel arched rib with corrugated sheet metal covering on concrete slab with curbs, cranes at NE and SW bulkheads</td>
</tr>
<tr>
<td>Windows</td>
<td>flush metal screen vents, wood frame dormer vents side openings replaced:</td>
</tr>
<tr>
<td>Exterior Doors</td>
<td>flush metal screen vents, wood frame dormer vents side openings replaced:</td>
</tr>
<tr>
<td>Character defining historic features:</td>
<td>Typical Extended Hut</td>
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<tr>
<td>Non-historic features:</td>
<td>Mechanical equipment at SW</td>
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<td>Note if any unique adaptation:</td>
<td>Side dormer vents</td>
</tr>
<tr>
<td>Is the structure altered:</td>
<td>Yes</td>
</tr>
<tr>
<td>Note when /what alterations:</td>
<td>1961 renovation modified into a sub-assembly building</td>
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<td>Note if any effect from alterations:</td>
<td>Alterations have gained significance in its own right and thus contribute to the historic significance of the hut</td>
</tr>
<tr>
<td>Treatment Recommendations:</td>
<td>Preservation, Rehabilitation, Deconstruct &amp; relocate / salvage, Deconstruct</td>
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</tbody>
</table>

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History & Significance


32. Architect, Engineer or Construction Battalion if known: ___________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☒ A (Events) ☐ B (Person) ☒ C(∗) ☐ D (Information)
   * Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☒ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Contributing building in proposed historic district, 1961 renovation was to correspond with the increase of nuclear submarines at Pearl Harbor and future plans of a Polaris subs operations and is thus also associated with Cold War history.

Comments

West Loch Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with Cold War
- Former Advanced Base Reshipment Depot
Remaining railway track at South-West elevation (September 2009).

Original door from 1961 renovation at South-East elevation walkway (September 2009).

North-East bulkhead (September 2009).
Interior (September 2009).

Shed roof addition at South-East elevation (September 2009).
K30, WEST LOCH
Location Map K30, West Loch

Proposed West Loch Quonset Hut Historic District
Historic Facility Survey Form

Identification
1. Facility No: K30  □ Demolished
2. Tax Map Key: 9-01-010:
3. Facility Name: INERT STRG 25SH16
4. Type: Extended Hut
5. Street Address: Between 10th and 11th St.
6. Historic Zone: West Loch Historic Zone
7. Area Location: West Loch Naval Magazine

Description
8. Year Built: 1943
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
10. Stories: 1
11. Length: 200'-0" 12. Width: 40'-0" 13. Height: 20'-0"
14. S.F.: 8,000 S.F.
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other
In proposed West Loch Quonset Hut district, tracks along one row

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
Original: No windows
Replaced:
21. Exterior Doors (Material, style, etc.)
Original: Corrugated steel sliding doors
Replaced:
22. Character defining historic features:
- Typical Extended Hut
- Very simple Quonset Hut with no windows - Centered sliding doors at bulkheads
- Grouped with 11 other Huts

23. Non-historic features: None

24. Note if any unique adaptation: No

25. Is the structure altered: □ Yes  □ No  □ Unknown

26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.

27. Note if any effect from alterations: Quonset maintains historic character

28. Treatment Recommendations: □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
History & Significance

30. Current Use: Storage

31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known: ________________________________

33. ICRMP Category: IV

34. Proposed historical category: Category II

35. National Register Significance Criteria: A (Events) □ B (Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Features:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch District Significance:
- Best example of Quonset Huts in group context
- Associated with World War II military build up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
K31, WEST LOCH
### Historic Facility Survey Form

**Identification**

1. Facility No: K31  
   2. Tax Map Key: 9-01-010:  
   3. Facility Name: INERT STRG 25SH15  
   4. Type: Extended Hut  
   5. Street Address: Between 10th and 11th St.  
   6. Historic Zone: West Loch Historic Zone  
   7. Area Location: West Loch Naval Magazine

**Description**

8. Year Built: 1943  
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008  
10. Stories: 1  
11. Length: 200'-0"  
12. Width: 40'-0"  
13. Height: 20'-0"  
14. S.F.: 8,000 S.F.  
15. Manufacturer: Stran-Steel  
16. Condition:  
   - [ ] Excellent  
   - [X] Good  
   - [X] Fair  
   - [ ] Poor  
   - [ ] Ruin  
17. Is the structure:  
   - [X] on its original site  
   - [ ] Moved  
   - [ ] Unknown  
18. Physical context:  
   - [ ] Open land  
   - [ ] Scattered buildings  
   - [X] Other  
   - In proposed West Loch Quonset Hut district, tracks along one row  

**Exterior**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab  
20. Windows (Material, style, etc.)  
   - Original: No windows  
   - Replaced:  
21. Exterior Doors (Material, style, etc.)  
   - Original: Corrugated steel sliding doors  
   - Replaced:  
22. Character defining historic features:  
   - Typical Extended Hut  
   - Very simple Quonset Hut with no windows - Centered sliding doors at bulkheads  
   - Grouped with 11 other Huts  
23. Non-historic features: None  
24. Note any unique adaptation: No  
25. Is the structure altered:  
   - [ ] Yes  
   - [ ] No  
   - [X] Unknown  
26. Note when /what alterations: Per Navy, siding was replaced, though appears to have been replaced in kind.  
27. Note any effect from alterations: Quonset maintains historic character  

**Treatment Recommendations:**  
- [X] Preservation  
- [ ] Rehabilitation  
- [X] Deconstruct & relocate / salvage  
- [ ] Deconstruct  
- [ ] Not Eligible
History & Significance


32. Architect, Engineer or Construction Battalion if known: ____________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: □ A (Events) □ B (Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Features:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch Significance:
- Best example of Quonset Huts in context
- Associated with World War II military build up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
Missing Eave Flashing, September 2009
K32, WEST LOCH
Historic Facility Survey Form

Identification
1. Facility No: K32
2. Tax Map Key: 9-01-010:
3. Facility Name: INERT STRG 25SH14
4. Type: Extended Hut
5. Street Address: Between 10th and 11th St.
6. Historic Zone: West Loch Historic Zone
7. Area Location: West Loch Naval Magazine

Description
8. Year Built: 1943
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
10. Stories: 1
11. Length: 200'-0"
12. Width: 40'-0"
13. Height: 20'-0"
14. S.F.: 8,000 S.F.
15. Manufacturer: Stran-Steel
16. Condition: Excellent Good Fair Poor Ruin
17. Is the structure: on its original site Moved Unknown
18. Physical context: Open land Scattered buildings Other
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab with curb
20. Windows (Material, style, etc.) Original: No windows
   Replaced:
21. Exterior Doors (Material, style, etc.) Original: Corrugated steel sliding doors
   Replaced:
22. Character defining historic features:
   - Typical Extended Hut
   - Very simple Quonset Hut with no windows - Centered sliding doors at bulkheads
   - Grouped with 11 other Huts - Metal round bottom basket at bulkheads
23. Non-historic features:
   None
24. Note if any unique adaptation:
   No
25. Is the structure altered:
   Yes No Unknown
26. Note when /what alterations:
   Per Navy, siding was replaced, though appears to have been replaced in kind.
27. Note if any effect from alterations:
   Quonset maintains historic character
28. Treatment Recommendations:
   Preservation Rehabilitation Deconstruct & relocate / salvage Deconstruct Not Eligible
History & Significance


32. Architect, Engineer or Construction Battalion if known: ________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: A (Events) B (Person) C(*) D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: Architecture Engineering Recreation Military Transportation Other

37. Integrity: Location Design Settings Materials Workmanship Feeling Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Features:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch District Significance:
- Best example of Quonset Huts in group context
- Associated with World War II military build up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
Metal Basket at Northeast and Southwest Elevation,
September 2009
K33, WEST LOCH
### Historic Facility Survey Form

#### Identification

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility No.</td>
<td>K33</td>
</tr>
<tr>
<td>Tax Map Key</td>
<td>9-01-010:</td>
</tr>
<tr>
<td>Facility Name</td>
<td>INERT STRG 25SH13</td>
</tr>
<tr>
<td>Type</td>
<td>Extended Hut</td>
</tr>
<tr>
<td>Street Address</td>
<td>Between 10th and 11th St.</td>
</tr>
<tr>
<td>Historic Zone</td>
<td>West Loch Historic Zone</td>
</tr>
<tr>
<td>Area Location</td>
<td>West Loch Naval Magazine</td>
</tr>
</tbody>
</table>

#### Description

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year Built</td>
<td>1943</td>
</tr>
<tr>
<td>This Date is from</td>
<td>Integrated Cultural Resources Management Plan, October 2008</td>
</tr>
<tr>
<td>Stories</td>
<td>1</td>
</tr>
<tr>
<td>Length</td>
<td>200'-0&quot;</td>
</tr>
<tr>
<td>Width</td>
<td>40'-0&quot;</td>
</tr>
<tr>
<td>Height</td>
<td>20'-0&quot;</td>
</tr>
<tr>
<td>S.F.</td>
<td>8,000 S.F.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Stran-Steel</td>
</tr>
<tr>
<td>Condition</td>
<td>Good</td>
</tr>
<tr>
<td>Is the structure</td>
<td>on its original site</td>
</tr>
<tr>
<td>Physical context</td>
<td>Other</td>
</tr>
<tr>
<td>Exterior &amp; Method of Construction</td>
<td>Steel arched rib with corrugated sheet metal covering on concrete slab</td>
</tr>
<tr>
<td>Windows (Material, style, etc.)</td>
<td>No windows</td>
</tr>
<tr>
<td>Exterior Doors (Material, style, etc.)</td>
<td>Corrugated steel sliding doors</td>
</tr>
<tr>
<td>Character defining historic features</td>
<td>Typical Extended Hut, very simple Quonset Hut with no windows, centered sliding doors at bulkheads, group with 11 other Huts</td>
</tr>
<tr>
<td>Non-historic features</td>
<td>None</td>
</tr>
<tr>
<td>Note any unique adaptation</td>
<td>No</td>
</tr>
<tr>
<td>Is the structure altered</td>
<td>Unknown</td>
</tr>
<tr>
<td>Note when /what alterations</td>
<td>Per Navy, siding was replaced, though appears to have been replaced in kind.</td>
</tr>
<tr>
<td>Note if any effect from alterations</td>
<td>Quonset maintains historic character</td>
</tr>
<tr>
<td>Treatment Recommendations</td>
<td>Preservation</td>
</tr>
</tbody>
</table>

11-190
History & Significance


32. Architect, Engineer or Construction Battalion if known: ___________________________

33. ICRMP Category: IV 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☒ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☐ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Contributing building in proposed historic district. See below for description of district significance. Association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

West Loch Quonset Hut Historic District Character Defining Features:
- Extended Huts are evenly spaced and lined up in 2 rows
- Each Quonset Hut has small adaptation for use
- Remnants of train tracks remain
- Any alterations are minor or in keeping with the Secretary of Interior Standards

The proposed historic district boundary includes the open area surrounding the Quonset Huts which remain intact without intrusions to the grouping and the relative setting of the Quonset Huts.

West Loch District Significance:
- Best example of Quonset Huts in group context
- Associated with World War II military build up and subsequent use for Cold War
- Former Advanced Base Reshipment Depot
Oblique View of Northeast Bulkhead, September 2009

Oblique View of Northeast Bulkheads of K28 - K33, September 2009

Oblique View of Southwest Bulkhead, September 2009

Corrugated Steel Covering Over the Concrete Base at Northwest Elevation, September 2009
Cracked Concrete Slab, September 2009
MQ39, WEST LOCH
**Historic Facility Survey Form**

**Identification**

1. Facility No: MQ39
2. Demolished
3. Facility Name: MK48 STRG 21SH17
4. Type: Tropical Hut
5. Street Address: 3rd St.
6. Historic Zone: West Loch
7. Area Location: West Loch

**Description**

8. Year Built: 1944
9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
10. Stories: 1
11. Length: 48'-0"
12. Width: 20'-0"
13. Height: 10'-0"
14. S.F.: 960 S.F.
15. Manufacturer: Stran-Steel
16. Condition: ☒ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Ruin
17. Is the structure: ☒ on its original site ☐ Moved ☐ Unknown
18. Physical context: ☒ Open land ☐ Scattered buildings ☐ Other

Concrete slab next to MQ39, may have had another Quonset Hut

**Exterior:**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: See comments
   Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated steel double door at W and single corrugated metal door at E
   Replaced:
22. Character defining historic features:
   - Typical Stran-Steel characteristic
   - Continuous roof vent
   - Original windows and doors
   - Tropical Hut overhang of 2'-9"
23. Non-historic features:
   Small boxes attached to west bulkhead
24. Note if any unique adaptation:
   - Tropical Hut overhang of 2'-9"
   - Low louvers and screen transom vent at bulkhead
25. Is the structure altered:
   ☐ Yes ☐ No ☒ Unknown
26. Note when /what alterations:
   None known
27. Note if any effect from alterations: Quonset maintains historic character
28. Treatment Recommendations:
   ☒ Preservation ☒ Rehabilitation ☐ Deconstruct & relocate / salvage ☐ Deconstruct ☐ Not Eligible
**History & Significance**

29. Historic Name if known: 

30. Current Use: Vacant

31. Historic Use: Torpedo shop storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: IV

34. Proposed historical category: Category III

35. National Register Significance Criteria: ✓ A (Events) □ B(Person) ✓ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ✓ Architecture □ Engineering □ Recreation ✓ Military □ Transportation □ Other

37. Integrity: ✓ Location ✓ Design ✓ Settings □ Materials □ Workmanship ✓ Feeling ✓ Associations

38. Explanation of Significance: Distinct type of Tropical Quonset Hut. Associated with both the military build up in Hawaii during WWII and the Cold War as a storage facility.

**Comments**

*Mark 48 heavyweight torpedo

Mark 48 torpedo was developed, and became operational in the late 1960s and early 1970s

It is unknown if MQ39 stored Mark 48 torpedoes or parts and tools for torpedoes, however the facility was noted on ICRIMP 2008 Data sheet as a Mark 48 storage facility.

Original windows: flush metal louvers, metal frame 4-lite fixed with metal screens, and screen transom vent at E and W bulkheads, flush screen vents with canopy covers at N and S.

Not located in publicly accessible location and not within historic context of other Quonset huts, may consider moving.
West Bulkhead, September 2009

Oblique View of North Side, September 2009

East Bulkhead, September 2009

Oblique View of South Side, September 2009
Detail of Tropical Adaptation Overhang and Continuous Vent at East bulkhead, September 2009

Exposed Interior, September 2009
Q353, WEST LOCH
Historic Facility Survey Form

Identification
1. Facility No: Q353 ___________  □ Demolished  2. Tax Map Key: 9-01-010: ___________
3. Facility Name: SPEC SVC STRG ___________  4. Type: Standard Utility Hut
5. Street Address: 4th St. and D Ave. ___________
6. Historic Zone: Outside of a Historic Zone ___________  7. Area Location: West Loch

Description
8. Year Built: 1945 ___________  9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
15. Manufacturer: Stran-Steel ___________
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: Dormer 4- & 6-lite interior opening awnings with metal screen vents ___________ Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated steel sliding doors at S ___________ Replaced: Wood frame double doors at N and W
22. Character defining historic features:
   - Typical Standard Utility Hut characteristics - Row of dormer windows
   - Windowless bulkheads
23. Non-historic features:
   - Storage shed addition at NW
24. Note if any unique adaptation:
   - Row of dormer awning windows
   - Roof ventilator
25. Is the structure altered: □ Yes  □ No  □ Unknown
26. Note when /what alterations:
   - Small storage shed addition at NW
   - NE bulkhead has small doors and no windows (unclear if original or later alteration)
   - SW bulkhead may have had windows removed as siding appears to be approximate size of standard window

27. Note if any effect from alterations:
   - Small addition and window/door changes are small detractions but does not affect the overall historic integrity of the Quonset hut.

28. Treatment Recommendations: □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible
**History & Significance**


32. Architect, Engineer or Construction Battalion if known: ________________________________

33. ICRMP Category: IV 34. Proposed historical category: Category III

35. National Register Significance Criteria: [ ] A (Events) [ ] B (Person) [ ] C(*) [ ] D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: [ ] Architecture [ ] Engineering [ ] Recreation [ ] Military [ ] Transportation [ ] Other

37. Integrity: [ ] Location [ ] Design [ ] Settings [ ] Materials [ ] Workmanship [ ] Feeling [ ] Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.

**Comments**

In a non-public area and lacks context of other Quonset huts, may consider moving.
Storage Shed at Northwest Elevation, September 2009

Side Door at the Northwest Elevation, September 2009
Q345, WEST LOCH
Historic Facility Survey Form

Identification
1. Facility No: Q345          □ Demolished          2. Tax Map Key: 9-01-010:
3. Facility Name: EODTEUONE* TRNG BLDG          4. Type: Tropical Hut
5. Street Address: By G Ave.
6. Historic Zone: Outside of a Historic Zone          7. Area Location: West Loch

Description
8. Year Built: 1944          9. This Date is from: Integrated Cultural Resources Management Plan, October 2008
10. Stories: 1
11. Length: 48'-0"
12. Width: 20'-0"
13. Height: 10'-0"
14. S.F.: 960 S.F.
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other
Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering and CMU wall bottom on concrete slab
20. Windows (Material, style, etc.)
   Original: Flush wood frame 4-pane double hung windows with hoods, metal louver
   Replaced: 
21. Exterior Doors (Material, style, etc.)
   Original: 
   Replaced: Steel double doors at W end wall
22. Character defining historic features:
   - Typical Stran-Steel characteristics
   - Original windows remain, rare example of the original sloping four-pane window
23. Non-historic features:
   - New lighting fixtures - Partial mechanical duct exposed outside of N covering
   - CMU bulkhead walls
24. Note if any unique adaptation:
   - Side openings with window hoods
   - Tall roof ventilator
25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
   - CMU wall enclosures at bulkheads - Large holes in walls - Physically in poor condition
   - Bulkheads have been replaced with CMU masonry, originally typical construction of plywood or corrugated metal used.
27. Note if any effect from alterations:
   - CMU end walls have diminished the sense of Quonset Hut construction characteristic and its poor condition has diminished its historic character
28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible

Q345 9-01-010: EODTEUONE* TRNG BLDG
Outside of a Historic Zone West Loch By G Ave.
1944 1
Tropical Hut
Stran-Steel
Steel arched rib with corrugated sheet metal covering and CMU wall bottom on concrete slab
Flush wood frame 4-pane double hung windows with hoods, metal louver
Steel double doors at W end wall
- Typical Stran-Steel characteristics
- Original windows remain, rare example of the original sloping four-pane window
- New lighting fixtures - Partial mechanical duct exposed outside of N covering
- CMU bulkhead walls
- Side openings with window hoods
- Tall roof ventilator
- CMU end walls have diminished the sense of Quonset Hut construction characteristic and its poor condition has diminished its historic character
Deconstruct & relocate / salvage
Not Eligible
11-208
History & Significance


32. Architect, Engineer or Construction Battalion if known: __________________________________________________________________________

33. ICRMP Category: IV 34. Proposed historical category: Category IV

35. National Register Significance Criteria: ☐ A (Events) ☐ B (Person) ☐ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☐ Architecture ☐ Engineering ☐ Recreation ☐ Military ☐ Transportation ☐ Other

37. Integrity: ☐ Location ☐ Design ☐ Settings ☐ Materials ☐ Workmanship ☐ Feeling ☐ Associations

38. Explanation of Significance:

________________________________________________________________________

Comments

*Explosive Ordnance Disposal Training and Evaluation Unit One

- Used as target therefore holes in the end walls
- Base of Quonset slipping off wall

*Recommendation for demolition for not eligible Quonset Hut is not a historic preservation issue, however, should deconstruction be chosen, salvage of the windows for other Quonset Huts is recommended.
Oblique View of East Bulkhead, September 2009

Oblique View of South Side, September 2009

Oblique View of North Side, September 2009

Oblique View of West Bulkhead, September 2009
423, LUALUALEI
Location Map 423, Lualualei
Historic Facility Survey Form

Identification

1. Facility No: 423  
2. Tax Map Key: 8-06-002-001
3. Facility Name: Vacant
4. Type: Tropical Hut
5. Street Address: By 17th St.
6. Historic Zone: Outside of a Historic Zone
7. Area Location: Lualualei

Description

8. Year Built: NA
9. This Date is from:
10. Stories: 1
11. Length: 48'-4"
12. Width: 19'-3"
13. Height: 10'-9"
14. S.F.: 930 S.F.
15. Manufacturer: Stran-Steel
16. Condition: 
   - Excellent
   - Good
   - Fair
   - Poor
   - Ruin
17. Is the structure: 
   - on its original site
   - Moved
   - Unknown
18. Physical context: 
   - Open land
   - Scattered buildings
   - Other
   - Only Quonset Hut in the area

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete base
20. Windows (Material, style, etc.)
   - Original: See comments
   - Replaced:
21. Exterior Doors (Material, style, etc.)
   - Original: Steel double doors at S and single door at N
   - Replaced:
22. Character defining historic features:
   - Tropical Hut characteristic - Sloped concrete slab at entry door at S bulkhead
   - Sloped concrete slab at entry door at S bulkhead - Original windows - Overhang at S and N bulkhead
   - 5'-0" overhang - Screen transom vents
   - Enclosed vents at roof top
23. Non-historic features:
24. Note if any unique adaptation:
25. Is the structure altered: 
   - Yes
   - No
   - Unknown
26. Note when /what alterations:
27. Note if any effect from alterations:
28. Treatment Recommendations:
   - Preservation  
   - Rehabilitation  
   - Deconstruct & relocate / salvage
   - Deconstruct
   - Not Eligible

423 8-06-002:001
Vacant
Outside of a Historic Zone
By 17th St.
Lualualei
Tropical Hut
Stran-Steel
Steel arched rib with corrugated sheet metal covering on concrete base
Steel double doors at S and single door at N
- Tropical Hut characteristic - Sloped concrete slab at entry door at S bulkhead
- Sloped concrete slab at entry door at S bulkhead - Original windows - Overhang at S and N bulkhead
- 5'-0" overhang - Screen transom vents
- Enclosed vents at roof top
- Wood shelving affects the open interior, but is easily removed
**History & Significance**


32. Architect, Engineer or Construction Battalion if known: ____________________________

33. ICRM Category: NA 34. Proposed historical category: Category II

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: Location ☐ Design ☒ Settings ☒ Materials ☒ Workmanship ☐ Feeling ☒ Associations

38. Explanation of Significance: Associated with the military build up in Hawaii during WWII, one of two intact examples of the Tropical Hut type.

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**Comments**

Original windows: flush metal frame 6-lite awnings with metal screens and metal louvers at N and S, flush metal screen vents with hood at E and W sides. Rare example of original bulkhead surviving.

- Large crack through center of concrete slab

- Not located in publicly accessible location and not within historic context of other Quonset huts, may consider moving.
Oblique View of South Bulkhead and West Side, September 2009

Oblique View of East Side, September 2009

North Bulkhead, September 2009
Signage at South Elevation, September 2009

Cracked Concrete Slab Through Entire Length of the Quonset Hut, September 2009

Non-contributing Interior Wood Shelves, September 2009
152, BARBERS POINT
Historic Facility Survey Form

Identification
3. Facility Name: Commissary Store 4. Type: Extended Hut and Standard Utility Hut
5. Street Address: Enterprise Ave. and Randolph St.
6. Historic Zone: Outside of a Historic Zone 7. Area Location: Barbers Point

Description
8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  Warehouses around the Quonset Hut

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: Flush metal frame 6 lite awning (no panes) with screen at Standard Hut
   Replaced: All original windows at Extended Hut were removed in 1967 renovation
21. Exterior Doors (Material, style, etc.)
   Original: Steel sliding doors at SW
   Replaced:

22. Character defining historic features:
   - Two Huts (one Standard Utility Hut and one Extended Hut) are connected with flat roof addition
   - Original wood frame with corrugated flat roof mechanical room at NW is still in use
   - Only original windows remain at short Quonset Hut

23. Non-historic features:
   - New large ventilation fan at SW elevation, all original window openings on this elevation were covered with corrugated siding
   - Large addition at NE as entrance - Replaced awning windows with security mesh at NW
   - Replaced awning windows with security mesh at NW
   - Installed woven wire mesh over existing door at SW elevation for both Quonset Huts
   - Installed row of dormer awning windows with security mesh at NW elevation of Quonset Hut 152
   - Installed roof vents

24. Note if any unique adaptation:
   - Roof ventilators

25. Is the structure altered: □ Yes  □ No  □ Unknown
26. Note when /what alterations:
   Renovated in 1967
   See comments
27. Note if any effect from alterations:
   - Both Quonset Huts remain distinctive despite large concrete addition
   - Large commissary addition detracts from north side of Quonset Hut

28. Treatment Recommendations:
   □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible

11-220
History & Significance


32. Architect, Engineer or Construction Battalion if known: ________________________________

33. ICRMP Category: NA 34. Proposed historical category: Category III

35. National Register Significance Criteria: ☑ A (Events) ☐ B(Person) ☑ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☑ Architecture ☐ Engineering ☐ Recreation ☑ Military ☐ Transportation ☐ Other

37. Integrity: ☑ Location ☑ Design ☑ Settings ☐ Materials ☐ Workmanship ☑ Feeling ☑ Associations

38. Explanation of Significance: Intact example of Quonset hut versatility. Association with the military build up in Hawaii during WWII and the subsequent increase in military population in Hawaii during Cold War and Vietnam War.

Comments

1967 Renovation to accommodate growing population of military personnel in Hawaii
- Commissary store area was added at NE elevation, Quonset Hut 152 was extended by 27’-0” at NE to connect with the new store. Office, bathrooms, and produce prep room were installed at extended area.
- Quonset Hut 152 and flat roof addition were the original sales area and short Hut was a warehouse, sales area was converted to storage.
- Original fluorescent lights were relocated to existing location.
Oblique View of Northeast Bulkhead of Standard Quonset Hut, September 2009

Oblique View of Southeast Side of Standard Quonset Hut, September 2009

Original Mechanical Room at Northwest Elevation, September 2009

Original Sliding Door with Wire Mesh Over at Southwest Elevation, September 2009
537, BARBERS POINT
(ON FORMER NAVY LAND)
Historic Facility Survey Form

Identification
3. Facility Name: _______________________________ 4. Type: Standard Utility Hut
5. Street Address: Wright St.
6. Historic Zone: Outside of a Historic Zone 7. Area Location: Barbers Point*

Description
8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: _______________________________
16. Condition: ☑ Excellent ☐ Good ☑ Fair ☐ Poor ☐ Ruin
17. Is the structure: ☑ on its original site ☐ Moved ☐ Unknown
18. Physical context: ☑ Open land ☐ Scattered buildings ☐ Other See plan of larger complex, figure 11-232

Exterior:
19. Type & Method of Construction: _______________________________
20. Windows (Material, style, etc.)
   Original: Historic photograph shows steel sash windows Replaced: _______________________________
21. Exterior Doors (Material, style, etc.)
   Original: _______________________________ Replaced: _______________________________
22. Character defining historic features: - Long side wall vents and distinctive roof vents

23. Non-historic features: _______________________________
24. Note if any unique adaptation: _______________________________
25. Is the structure altered: ☑ Yes ☐ No ☐ Unknown
26. Note when / what alterations: _______________________________
27. Note if any effect from alterations: _______________________________
28. Treatment Recommendations: ☑ Preservation ☐ Rehabilitation ☑ Deconstruct & relocate / salvage ☐ Deconstruct ☐ Not Eligible
Historic Use:

History & Significance


32. Architect, Engineer or Construction Battalion if known: ______________________________________________________________

33. ICRMP Category: ___________________________ 34. Proposed historical category: NA not part of survey scope

35. National Register Significance Criteria: □ A (Events) □ B(Person) □ C(*) □ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: □ Architecture □ Engineering □ Recreation □ Military □ Transportation □ Other

37. Integrity: □ Location □ Design □ Settings □ Materials □ Workmanship □ Feeling □ Associations

38. Explanation of Significance:

Comments

*Former NAS Assemble and Repair complex

- Last remaining Quonset Hut of a larger complex once used for overhaul and repair of Navy/Marine fighter aircraft.
- The facility was transferred to the United States Army
- Currently managed by Hawaii National Guard, "Land Brigade," 29th IBCT, 91-1227 Enterprise Avenue, Kapolei, HI 96707
Oblique View of Southwest Bulkhead and Southeast Side, September 2009

Oblique View of Northwest Bulkhead, September 2009

Overhaul Facility at NAS Barbers Point (Photo Provided by NAVFAC HI)

Oblique View of Southeast Open Space Concrete Slab, September 2009
Row of Wood Frame Screen Vents at Southeast Elevation, September 2009

Large Roof Ventilator, September 2009

Interior, September 2009
1144, BARBERS POINT
Historic Facility Survey Form

Identification


3. Facility Name:  □  □  □ □

4. Type: Extended Hut

5. Street Address: Vinson Rd. and Corregidor St.

6. Historic Zone: MCAS Ewa Historic Zone*  7. Area Location: NAS Barbers Point

Description

8. Year Built: 1944  9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966


15. Manufacturer: Stran-Steel

16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin

17. Is the structure: □ on its original site □ Moved □ Unknown

18. Physical context: □ Open land □ Scattered buildings □ Other Among a row of similar Quonset Huts establishing proposed district

Exterior:

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab

20. Windows (Material, style, etc.) Original: See comments Replaced:

21. Exterior Doors (Material, style, etc.) Original: Corrugated steel sliding doors at NE and SW bulkheads Replaced:

22. Character defining historic features:
   - Typical Extended Hut
   - Interior bulkhead remains where 2 Quonset Huts connect
   - Metal screen side opening

23. Non-historic features:
   - Partially enclosed window openings with corrugated sheet at NE
   - New double doors at SE - New standing seam flat roof was added between 1144 and 1149

24. Note if any unique adaptation:
   - Metal screen side openings

25. Is the structure altered: □ Yes □ No □ Unknown

26. Note when /what alterations:
   - New standing seam flat roof open addition was added between 1144 and 1149 - Addition blocks out part of Quonset Hut, but arched form of Quonset Hut is not significantly impaired

27. Note if any effect from alterations:

28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible
**History & Significance**

29. Historic Name if known: General Warehouse

30. Current Use: Storage

31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: NA

34. Proposed historical category: Category III

35. National Register Significance Criteria:

- A (Events)
- B (Person)
- C (*)
- D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance:

- Architecture
- Engineering
- Recreation
- Military
- Transportation
- Other

37. Integrity:

- Location
- Design
- Settings
- Materials
- Workmanship
- Feeling
- Associations

38. Explanation of Significance:

Contributing building in the Ewa/Barbers Point Quonset Hut District part of the MCAS Ewa Historic Zone, association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

---

**Comments**

Ewa/Barbers Point Quonset Hut Historic District Character Defining Feature:

- Extended Huts are evenly spaced and lined up in a row
- Only 1144 and 1153 have evidence of connection of 2 Quonset Huts

Original windows: Flush wood frame 4 lite fixed windows with metal screens at NE and SW bulkhead, flush wood frame metal screen vents with window hoods at NW. Seems 1150, 1144, 1149, 1152, and 1153 were all constructed from 2 Quonset Huts. Only 1144 and 1153 had evidence of connection.

Oldest Quonset Hut of this grouping was extended from a single hut and other extended huts were added.

Ewa/Barbers Point Historic Significance:

MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement

Also refer to HABS No. HI-279-E
Ewa/Barbers Point District, 1144, 1149, 1150 and 1152, September 2009

Interior Bulkhead, September 2009

Flush Wood Frame Screen Vents with Window Hoods, September 2009
1149, BARBERS POINT
Historic Facility Survey Form

Identification
3. Facility Name: ____________________________ 4. Type: Extended Hut
5. Street Address: Vinson Rd. and Corregidor St.
6. Historic Zone: MCAS Ewa Historic Zone* 7. Area Location: Barbers Point

Description
8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other Among a row of similar Quonset Huts establishing proposed district

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
Original: ____________________________ Replaced: ____________________________
21. Exterior Doors (Material, style, etc.)
Original: Corrugated steel sliding doors at NE and SW bulkheads Replaced: ____________________________
22. Character defining historic features:
- Typical Extended Hut
- Original windows at bulkheads and NW

23. Non-historic features:

24. Note if any unique adaptation:
- Metal screens side openings
- Roof ventilator

25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
- Enclosed single door opening at SW bulkhead
- Some corrugated sheets were replaced
- New standing seam flat roof open addition was added between 1144 and 1149

27. Note if any effect from alterations:
- New corrugated sheet covering are not in historic brick pattern
- Addition blocks out part of Quonset Hut, but arched form of Quonset Hut is not disturbed

28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible

11-244
Historic Name if known: General Warehouse

30. Current Use: Storage
31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known:

33. ICRMP Category: NA
34. Proposed historical category: Category III

35. National Register Significance Criteria:
- Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance:
- Architecture
- Engineering
- Recreation
- Military
- Transportation
- Other

37. Integrity:
- Location
- Design
- Settings
- Materials
- Workmanship
- Feeling
- Associations

38. Explanation of Significance:
Contributing building in the Ewa/Barbers Point Quonset Hut District part of the MCAS Ewa Historic Zone, association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

Ewa/Barbers Point Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in a row
- Only 1144 and 1153 have evidence of connection of 2 Quonset Huts

Original windows: Flush wood frame 4 lite fixed windows with metal screens at NE and SW bulkhead, flush wood frame metal screen vents with window hoods at NW. Seems 1150, 1144, 1149, 1152, and 1153 were all constructed from 2 Quonset Huts. Only 1144 and 1153 had evidence of connection.

Oldest Quonset Hut of this grouping was extended from a single hut and other extended huts were added.

Ewa/Barbers Point Historic Significance:
MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement

Also refer to HABS No. HI-279-E
Flush Wood Frame Screen Vents and New Corrugated Metal Sheets at Northwest Elevation, September 2009
1150, BARBERS POINT
Historic Facility Survey Form

Identification
3. Facility Name: ___________________________ 4. Type: Extended Hut
5. Street Address: Vinson Rd. and Corregidor St.
6. Historic Zone: MCAS Ewa Historic Zone* 7. Area Location: NAS Barbers Point

Description
8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other Among a row of similar Quonset Huts establishing proposed district

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: See comments Replaced:
   Original: See comments Replaced:
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated steel sliding doors at NE and SW bulkheads Replaced:
   Original: Corrugated steel sliding doors at NE and SW bulkheads Replaced:
22. Character defining historic features:
   - Typical Extended Hut
   - Original windows at bulkheads and NW
23. Non-historic features:
   - Interior office space
   - New large ventilator
24. Note if any unique adaptation:
   - Side openings (screen vents)
25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
   - Interior office spaces were added at middle of Quonset Hut, insulated office spaces have 12x12 ceiling tiles with fluorescent lights
   - Remaining mechanical pipe projected from office area
27. Note if any effect from alterations:
   - Interior modification for office area adversely impacts open interior of typical Utility Hut, exterior historically intact

**28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible
Storage

NA Category III

Contributing building in the Ewa/Barbers Point Quonset Hut District part of the MCAS Ewa Historic Zone, association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Ewa/Barbers Point Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in a row
- Only 1144 and 1153 have evidence of connection of 2 Quonset Huts

Original windows: Flush wood frame 4 lite fixed windows with metal screens at NE and SW bulkhead, flush wood frame metal screen vents with window hoods at NW. Seems 1150, 1144, 1149, 1152, and 1153 were all constructed from 2 Quonset Huts. Only 1144 and 1153 had evidence of connection.

Oldest Quonset Hut of this grouping was extended from a single hut and other extended huts were added.

Ewa/Barbers Point Historic Significance:
MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement

Also refer to HABS No. HI-279-E
1152, BARBERS POINT
Historic Facility Survey Form

Identification
3. Facility Name: ________________________________  4. Type: Extended Hut
5. Street Address: Vinson Rd. and Corregidor St.
6. Historic Zone: MCAS Ewa Historic Zone*  7. Area Location: NAS Barbers Point

Description
8. Year Built: 1944  9. This Date is from: Detail Inventory of Naval Shore Facilities – Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent  □ Good  □ Fair  □ Poor  □ Ruin
17. Is the structure: □ on its original site  □ Moved  □ Unknown
18. Physical context: □ Open land  □ Scattered buildings  □ Other  Among a row of similar Quonset Huts establishing proposed district

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
   Original: None existing  Replaced: Glass jalousies
21. Exterior Doors (Material, style, etc.)
   Original: Corrugated steel sliding doors at NE and SW bulkheads  Replaced: ________________________________

22. Character defining historic features:
   - Typical Extended Hut
   - No windows at side elevations

23. Non-historic features:
   - Some new anchors are attached at the bottom of ribs to secure
   - New fluorescent light

24. Note if any unique adaptation: None

25. Is the structure altered: □ Yes  □ No  □ Unknown

26. Note when /what alterations:
   - Window replacement

27. Note if any effect from alterations: No significant effect

28. Treatment Recommendations:
   □ Preservation  □ Rehabilitation  □ Deconstruct & relocate / salvage  □ Deconstruct  □ Not Eligible

11-256
**History & Significance**

29. Historic Name if known: General Warehouse

30. Current Use: Storage

31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known:

33. ICRMP Category: NA

34. Proposed historical category: Category III

35. National Register Significance Criteria: * Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: Architecture, Engineering, Military, Transportation

37. Integrity: Location, Design, Settings, Materials, Workmanship, Feeling, Associations

38. Explanation of Significance:

Contributing building in the Ewa/Barbers Point Quonset Hut District part of the MCAS Ewa Historic Zone, association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

**Comments**

Ewa/Barbers Point Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in a row
- Only 1144 and 1153 have evidence of connection of 2 Quonset Huts

Original windows: Flush wood frame 4 lite fixed windows with metal screens at NE and SW bulkhead, flush wood frame metal screen vents with window hoods at NW. Seems 1150, 1144, 1149, 1152, and 1153 were all constructed from 2 Quonset Huts. Only 1144 and 1153 had evidence of connection.

Oldest Quonset Hut of this grouping was extended from a single hut and other extended huts were added.

Ewa/Barbers Point Historic Significance:
MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement

Also refer to HABS No. HI-279-E
Oblique View of Northeast Bulkhead, September 2009

Oblique View of Southeast Side, September 2009

Oblique View Northwest Side, September 2009
1153, BARBERS POINT
Historic Facility Survey Form

Identification

3. Facility Name: _____________________________ 4. Type: Extended Hut
5. Street Address: Vinson Rd. and Corregidor St.
6. Historic Zone: MCAS Ewa Historic Zone* 7. Area Location: NAS Barbers Point

Description

8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other - Among a row of similar Quonset Huts establishing proposed district

Exterior:

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.) Original: None existing Replaced: Glass jalousies
21. Exterior Doors (Material, style, etc.) Original: Corrugated steel sliding doors at NE and SW bulkheads Replaced:

22. Character defining historic features:
- Typical Extended Hut
- No windows at side elevations

23. Non-historic features:
- Some corrugated sheet covering at the bottom were replaced
- "Oil/ Hazardous Substance Pollution Incident Notification" sign on SE elevation indicating possible different use

24. Note if any unique adaptation: None

25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations: - Window replacement

27. Note if any effect from alterations: No significant effect

28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible
History & Significance

29. Historic Name if known: General Warehouse
30. Current Use: Storage
31. Historic Use: Storage

32. Architect, Engineer or Construction Battalion if known:

33. ICRMP Category: NA
34. Proposed historical category: Category III

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☐ Design ☒ Settings ☒ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance:

Contributing building in the Ewa/Barbers Point Quonset Hut District part of the MCAS Ewa Historic Zone, association with the military build up in Hawaii during WWII, typical example of the Extended Hut.

Comments

Ewa/Barbers Point Quonset Hut Historic District Character Defining Feature:
- Extended Huts are evenly spaced and lined up in a row
- Only 1144 and 1153 have evidence of connection of 2 Quonset Huts

Original windows: Flush wood frame 4 lite fixed windows with metal screens at NE and SW bulkhead, flush wood frame metal screen vents with window hoods at NW. Seems 1150, 1144, 1149, 1152, and 1153 were all constructed from 2 Quonset Huts. Only 1144 and 1153 had evidence of connection.

Oldest Quonset Hut of this grouping was extended from a single hut and other extended huts were added.

Ewa/Barbers Point Historic Significance:
MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement

Also refer to HABS No. HI-279-E

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11-263
Northeast Elevation, September 2009

Southeast Elevation, September 2009

Oblique View of Southwest Bulkhead, September 2009

Oblique View of Northwest Side, September 2009
1562, BARBERS POINT
# Historic Facility Survey Form

## Identification

<table>
<thead>
<tr>
<th>1. Facility No:</th>
<th>1562 (formerly 713)</th>
<th>□ Demolished</th>
<th>2. Tax Map Key:</th>
<th>9-1-13:043</th>
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<tr>
<td>3. Facility Name:</td>
<td></td>
<td></td>
<td>4. Type:</td>
<td>Standard Utility Hut</td>
</tr>
<tr>
<td>5. Street Address:</td>
<td></td>
<td></td>
<td>6. Historic Zone:</td>
<td>MCAS Ewa Historic Zone*</td>
</tr>
<tr>
<td>7. Area Location:</td>
<td></td>
<td></td>
<td>8. Year Built:</td>
<td>1944</td>
</tr>
<tr>
<td>9. This Date is from:</td>
<td>Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Description

| 10. Stories: | 1 |
| 11. Length: | 100'-0" |
| 12. Width: | 40'-0" |
| 13. Height: | 21'-0" |
| 14. S.F.: | 4,100 S.F. |
| 15. Manufacturer: | Stran-Steel |

| 16. Condition: | □ Excellent | □ Good | □ Fair | □ Poor |
| 17. Is the structure: | □ on its original site | □ Moved | □ Unknown |
| 18. Physical context: | □ Open land | □ Scattered buildings | □ Other | Next to 1570, Isolated area |

Exterior:

| 19. Type & Method of Construction: | Steel arched rib with corrugated sheet metal covering on concrete slab |
| 20. Windows (Material, style, etc.) | Original: Row of flush wood frame screen vents with window hood at S | Replaced: Metal louvers at NE and SW bulkheads |
| 21. Exterior Doors (Material, style, etc.) | Original: Corrugated steel sliding doors at NE and SW bulkheads | Replaced: |

| 22. Character defining historic features: | - Typical Standard Utility Hut characteristic - Row of screen vents |
| 23. Non-historic features: | - Metal louvers have replaced windows |

| 24. Note if any unique adaptation: | - Screen vents side openings |

| 25. Is the structure altered: | □ Yes | □ No | □ Unknown |

| 26. Note when /what alterations: | - Installed metal louvers at NE and SW bulkheads - Installed bathroom at interior of SE corner - Stainless steel louvers in place of windows |

| 27. Note if any effect from alterations: | Alterations do not effect the essential characteristics of a Quonset Hut |

| 28. Treatment Recommendations: | □ Preservation | □ Rehabilitation | □ Deconstruct & relocate / salvage | □ Deconstruct | □ Not Eligible |

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**
History & Significance

29. Historic Name if known: 

30. Current Use: Vacant


32. Architect, Engineer or Construction Battalion if known: 

33. ICRMP Category: NA

34. Proposed historical category: Category III

35. National Register Significance Criteria: A (Events) B (Person) C(*) D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: X Architecture X Engineering X Recreation X Military X Transportation X Other

37. Integrity: X Location X Design X Settings X Materials X Workmanship X Feeling X Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.

Comments

One of the Quonset huts that supported the Trans-Pacific, Marine Air transport Services (MATS) in the late war through to the end of the 1940's before MCAS EWA property was transferred to NAS Barbers Point. In 1951 NAS Barbers Point was supporting war efforts in Korea. U.S. Marine expeditionary forces withdrew from their efforts at three air bases in Northern China in the late 1940's before FMF AIR PAC squadrons were transferred to NAS Kaneohe in 1952. Facility 713, Office Air Freight and Inspection for MATS in 1948 became Facility 1542 Paint Shop for the NAS in 1951.

- Used as warehouse in 1966 but installed shower & bathroom, indicates use may have changed

Treatment Recommendation: Pending Lease Agreement

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon
Oblique View of Northeast Bulkhead and Northwest Side, September 2009

Southwest Bulkhead, September 2009

Southeast Side, September 2009

Quonset Huts 1562 and 1570, September 2009
Flush Wood Frame Screen Vents at South Elevation, September 2009

Shower at Southwest, September 2009
**Historic Facility Survey Form**

### Identification

1. Facility No: 1570 (former 725) □ Demolished  
2. Tax Map Key: 9-1-13:043  
3. Facility Name:  
4. Type: Standard Utility Hut  
5. Street Address: Vinson Rd.  
6. Historic Zone: MCAS Ewa Historic Zone*  
7. Area Location: NAS Barbers Point  

### Description

8. Year Built: 1943  
9. This Date is from: Detail Inventory of Naval Shore Facilities - Real Property, 30 June 1966  
10. Stories: 1  
11. Length: 100'-0"  
12. Width: 40'-0"  
13. Height: 21'-0"  
14. S.F.: 4100 S.F.  
15. Manufacturer: Stran-Steel  
16. Condition: ☑ Excellent ☐ Good ☐ Fair ☑ Poor ☐ Ruin  
17. Is the structure: ☑ on its original site ☐ Moved ☐ Unknown  
18. Physical context: ☑ Open land ☐ Scattered buildings ☐ Other Next to 1562, isolated area  

**Exterior:**

19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab  
20. Windows (Material, style, etc.)
   - Original:  
   - Replaced: Metal louvers at NE  
21. Exterior Doors (Material, style, etc.)
   - Original: Corrugated steel sliding doors at NE and SW bulkheads  
   - Replaced:  
22. Character defining historic features:
   - Typical Standard Utility Hut characteristics  
23. Non-historic features:
   - New anchors attached to some bottom ribs  
   - Replaced metal louvers at NE - Enclosed SW window openings  
24. Note if any unique adaptation: None  
25. Is the structure altered: ☑ Yes ☐ No ☐ Unknown  
26. Note when /what alterations:
   - New anchors attached to some bottom ribs  
   - Replaced metal louvers at NE - Enclosed SW window openings  
27. Note if any effect from alterations: No significant effect  
28. Treatment Recommendations:
   - Preservation ☐ Rehabilitation ☑ Deconstruct & relocate / salvage ☑ Deconstruct ☐ Not Eligible
History & Significance


32. Architect, Engineer or Construction Battalion if known: ________________________________

33. ICRMP Category: NA 34. Proposed historical category: Category III

35. National Register Significance Criteria: ☒ A (Events) ☐ B(Person) ☒ C(*) ☐ D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☒ Architecture ☐ Engineering ☐ Recreation ☒ Military ☐ Transportation ☐ Other

37. Integrity: ☒ Location ☒ Design ☒ Settings ☒ Materials ☒ Workmanship ☒ Feeling ☒ Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.

Comments

MCAS Ewa Marine Air Transport Services (MATS) huts used to support transport aircraft that became essential to replenishing supplies at forward operating bases. By 1947 the older fleet of transport planes was replaced with a new 30 air transport squadron that flew military personnel and supplies from Mainland USA to Ewa and then flying over the "Hump" in Burma to forward Marine air bases located in Northern China in the late 1940's.

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon

Treatment Recommendation: **Pending Lease Agreement
New Anchor Attached to Bottom Ribs, September 2009

Southwest Side of Quonset Hut 1570 and 1562 Behind, September 2009
1520, KALAELOA
Historic Facility Survey Form

Identification
1. Facility No: 1520 □ Demolished 2. Tax Map Key: 9-1-12:069
3. Facility Name: Barbers Point Riding Club 4. Type: Standard Utility Hut
5. Street Address: Within Barbers Point Golf Club
6. Historic Zone: MCAS Ewa Historic Zone* 7. Area Location: NAS Barbers Point

Description
8. Year Built: 1944 9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer: Stran-Steel
16. Condition: □ Excellent □ Good □ Fair □ Poor □ Ruin
17. Is the structure: □ on its original site □ Moved □ Unknown
18. Physical context: □ Open land □ Scattered buildings □ Other

Exterior:
19. Type & Method of Construction: Steel arched rib with corrugated sheet metal covering on concrete slab
20. Windows (Material, style, etc.)
Original: Only flush wood framing remain Replaced: New flush wood frame screen vents with window hoods, jalousie windows
21. Exterior Doors (Material, style, etc.)
Original: Steel sliding doors at E and W (no longer in use) Replaced: Installed wood frame single door at N elevation
22. Character defining historic features:
- Typical Standard Hut characteristic - Original industrial light fixture, see photo
23. Non-historic features:
- Fluorescent lights - Installed bathroom - Paint scheme (blue on lower half) inconsistent with historical paint schemes - All windows have been replaced, new flush wood frame screen vents with window hoods at N and jalousie windows at E
24. Note if any unique adaptation:
Side opening for extended lanai
25. Is the structure altered: □ Yes □ No □ Unknown
26. Note when /what alterations:
- Installed CMU wall bathroom at interior of W end corner - Cut bottom covering to connect shed roof addition at S elevation, open to exterior - Windows on W bulkhead are not symmetric, different heights
27. Note if any effect from alterations:
Bathroom takes away from open interior. However overall historic characteristics of a Quonset hut with a unique adaptation remains.

**
28. Treatment Recommendations: □ Preservation □ Rehabilitation □ Deconstruct & relocate / salvage □ Deconstruct □ Not Eligible

11-280
History & Significance

29. Historic Name if known: 
30. Current Use: Clubhouse/office for stable 
31. Historic Use: Horse stable 
32. Architect, Engineer or Construction Battalion if known: 
33. ICRMP Category: NA 
34. Proposed historical category: Category III 
35. National Register Significance Criteria: * Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity 
36. Area of significance: Architecture Engineering Recreation Military Transportation Other 
37. Integrity: Location Design Settings Materials Workmanship Feeling Associations 
38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut. 

Comments

Historic Zone: *Per 2009 SHPD letter signed by Nancy McMahon 
Treatment Recommendation: **Pending Lease Agreement 
Also refer to HABS No. HI-279-B
Interior of South Elevation, September 2009

Flush Wood Frame Screen Vents, September 2009

Original Light Fixture, September 2009
1506, BARBERS POINT
(On Former Navy Land)
Historic Facility Survey Form

Identification
1. Facility No: 1506 (not in survey scope) [ ] Demolished          2. Tax Map Key: 9-1-12:069
3. Facility Name:                                      4. Type: Standard Utility Hut
5. Street Address: Behind 1520
6. Historic Zone: MCAS Ewa Historic Zone          7. Area Location: NAS Barbers Point*

Description
8. Year Built: 1944          9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
15. Manufacturer:           
16. Condition: [ ] Excellent [ ] Good [X] Fair [ ] Poor [ ] Ruin
17. Is the structure: [X] on its original site [ ] Moved [ ] Unknown
18. Physical context: [X] Open land [ ] Scattered buildings [ ] Other
Exterior:
19. Type & Method of Construction: 
20. Windows (Material, style, etc.)
   Original: Retains some historic four-pane sash windows at bulkhead Replaced: 
21. Exterior Doors (Material, style, etc.)
   Original: 
   Replaced: 
22. Character defining historic features: 

23. Non-historic features: 

24. Note if any unique adaptation: 

25. Is the structure altered: [ ] Yes [ ] No [ ] Unknown
26. Note when /what alterations: 

27. Note if any effect from alterations: 

28. Treatment Recommendations: [ ] Preservation [ ] Rehabilitation [ ] Deconstruct & relocate / salvage [ ] Deconstruct [ ] Not Eligible

11-286
History & Significance


32. Architect, Engineer or Construction Battalion if known: ____________________________________

33. ICRMP Category: ______________________ 34. Proposed historical category: NA, not in survey scope

35. National Register Significance Criteria: ☐ A (Events) ☐ B(Person) ☐ C(*) ☐ D (Information)
* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance: ☑ Architecture ☐ Engineering ☐ Recreation ☑ Military ☐ Transportation ☐ Other

37. Integrity: ☑ Location ☑ Design ☑ Settings ☑ Materials ☑ Workmanship ☑ Feeling ☑ Associations

38. Explanation of Significance:

________________________________________________________________________________________

Comments

Per real property tax records, Quonset Hut is on land owned by Hawaiian Home Lands.

* Former Marine Corps Air Station Area

Also refer to HABS No. HI-279-B
1545, BARBERS POINT
(ON FORMER NAVY LAND)
Historic Facility Survey Form

Identification
1. Facility No: 1545 (former 607, U.S. Navy) ☐ Demolished
2. Tax Map Key: 9-1-13:043
3. Facility Name: ☐
4. Type: Standard Utility Hut
5. Street Address: Corregidor St.
6. Historic Zone: MCAS Ewa Historic Zone*
7. Area Location: NAS Barbers Point

Description
8. Year Built: 1941
9. This Date is from: Detail Inventory of Naval Shore Facilities- Real Property, 30 June, 1966
10. Stories: 1
11. Length: 100'-0"
12. Width: 40'-0"
13. Height: 21'-0"
14. S.F.: 4,100 S.F.
15. Manufacturer: Stran-Steel
16. Condition: ☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ Ruin
17. Is the structure: ☒ on its original site ☐ Moved ☐ Unknown
18. Physical context: ☐ Open land ☐ Scattered buildings ☐ Other

Exterior:
19. Type & Method of Construction:

20. Windows (Material, style, etc.)
Original: ☐ Replaced:

21. Exterior Doors (Material, style, etc.)
Original: ☐ Replaced:

22. Character defining historic features:

23. Non-historic features:

24. Note if any unique adaptation:

25. Is the structure altered: ☐ Yes ☐ No ☐ Unknown
26. Note when /what alterations:

27. Note if any effect from alterations:

28. Treatment Recommendations: ☐ Preservation ☐ Rehabilitation ☐ Deconstruct & relocate / salvage ☐ Deconstruct ☐ Not Eligible

11-291
History & Significance


29. Historic Name if known: ____________________________

32. Architect, Engineer or Construction Battalion if known: ____________________________

33. ICRMP Category: ____________________________ 34. Proposed historical category: ____________________________

35. National Register Significance Criteria:

A (Events) B (Person) C (*) D (Information)

* Distinctive type, period, or method of construction, work of a master, high artistic values or distinguishable entity

36. Area of significance:  □ Architecture  □ Engineering  □ Recreation  □ Military  □ Transportation  □ Other

37. Integrity:  □ Location  □ Design  □ Settings  □ Materials  □ Workmanship  □ Feeling  □ Associations

38. Explanation of Significance: Association with the military build up in Hawaii during WWII, typical example of the Standard Utility Hut.

Comments

The land Quonset Hut is on was transferred to City and County of Honolulu.
Interior, September 2009

Gap at the Ridge, September 2009
BIBLIOGRAPHY
12.0 Bibliography


Hawthorne, Daniel, “Curved Roofs and Coral Atolls,” uncited magazine article at the CB Archives, in Record Group 6.


Rogers, J. David, “Quonset Huts,” Rolla, Missouri: University of Missouri-Rolla, no date (circa 1964-2008).


Stran-Steel Division, “Erection Instructions: 20’-0” x 48’-0” U.S. Navy Steel Arch Rib Hut, Including 2-4 Ft. Overhangs, Tropical Design,” Detroit, Michigan: Great Lakes Steel Corporation, November 1, 1944.

Stran-Steel Division, “Erection Instructions: 40’-0” x 100’-0” Single Building, 100’-0” x 102’-0” Multiple Building, U.S. Navy Steel Arch Rib Hut,” Detroit, Michigan: Great Lakes Steel Corporation, November 1944.

Stran-Steel Division, “Erection Instructions: 20’-0” x 48’-0” U.S. Navy Steel Arch Rib Hut, Northern Design,” Detroit, Michigan: Great Lakes Steel Corporation, November 1, 1944.

Stran-Steel Division, “Stran-Steel Arch Rib Hut, Instruction Booklet for Erecting the 20’-0” x 56’-0” Hut, with Six Flush Type Windows,” Detroit, Michigan: Great Lakes Steel Corporation, no date.

Stran-Steel Division, “Strand Steel Arch Rib Utility Building, Instructions for Erecting the 40’-0” x 100’-0” Building,” Detroit, Michigan: Great Lakes Steel Corporation, 1943.

Stran-Steel Division, “U.S. Navy Steel Arch Rib Hut, Instructions for Erecting the 20’-0” x 56’-0” Hut,” Detroit, Michigan: Great Lakes Steel Corporation, January 1944.

Stran-Steel Division, “U.S. Navy Steel Arch Rib Utility and Storage Building, Erection Instructions for the 40’-0” x 100’-0” Building,” Detroit, Michigan: Great Lakes Steel Corporation, August 15, 1944.

“Stran-Steel House, Chicago World’s Fair, 1933,” Architectural Record, January 1934.


Internet Resources


United States Navy Seabee Museum, Viewed on December 9, 2012 at: http://www.history.navy.mil/museums/seabee/UnitHistoricalInformation.htm

Oral Interviews


Ron Hirahara, son of Ronald Hirahara, owner of Dan’s Lumber Yard. Interviewed by Tonia Moy and Don Hibbard on February 2010.


Archival Resources

Historic photograph collections at the CB Archives located in “Records Group 10: Photo Collection – Hawaii,” as well as at the Hawaii State Archives, proved to be invaluable for understanding the number and types of Quonset huts erected on Oahu during World War II. Germane photographs were found in Boxes 3, 7, 9, 10, and 11 at Port Hueneme.

Original drawings, plans, and maps also proved to be a useful source of information. These included:

Camp Catlin Map, February 4, 1946, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence 1947, folder: N19/ND14.


Correspondence files at the CB Archives and at the National Archives and Records Administration in San Bruno, California proved to be extremely valuable. Exceptionally pertinent documents included the following correspondence:

February 21, 1942, memorandum from Seth Williams by direction of the Commandant, U.S. Marine Corps, to Chief of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.

May 4, 1942, memorandum from W.H.P. Blandy, Chief of the Bureau of Ordnance to Chief of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence, Box 318913, folder: N4-2/NT1-11, Barracks, Huts etc.

May 11, 1942, memorandum from H. B. Compton, Public Works Officer, 14th Naval District, to Commander R. R. Yates, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.

May 12, 1942, mailgram from R. R. Yates to Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.

July 11, 1942, memorandum from R. E. Thomas, by direction of Commandant, 14th Naval District, to Officer in Charge, Contracts NOy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.

July 15, 1942, memorandum from R. E. Thomas, by direction of Commandant, 14th Naval District, to Officer in Charge, Contracts NOy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.

July 17, 1942, memorandum from R. E. Thomas, by direction of Commandant, 14th Naval District, to Officer in Charge, Contracts NOy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2(KP75, Quonset Huts, 1942-1943.
July 23, 1942, memorandum from Depot Quartermaster to Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

July 29, 1942, memorandum from R. E. Thomas by direction of the Commandant, 14th Naval District to Chief of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

August 19, 1942, memorandum from R. E. Thomas by direction of the Commandant, 14th Naval District to Officer in Charge, Contracts Noy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

August 31, 1942, memorandum from T. A. Hartung by direction of the Commandant, 14th Naval District to Officer in Charge, Contracts Noy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 10, 1942, memorandum from R. E. Thomas by direction of the Commandant, 14th Naval District to Officer in Charge, Contracts Noy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 12, 1942, memorandum from R. E. Thomas by direction of the Commandant, 14th Naval District to Officer in Charge, Contracts Noy-3550 and 4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 18, 1942, memorandum from E. S. Huntington by direction of the Chief of the Bureau of Yards and Docks, to Resident Officer-in-Charge, Advance Base Depot, Port Hueneme, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

October 19, 1942, memorandum from Depot Quartermaster to Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

October 24, 1942, memorandum from Paul F. Keim, to Captain T. A. Hartung, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.
November 24, 1942, memorandum from Commandant, 14th Naval District to Chief of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 25, 1942, memorandum from H. M. Martin, Commandant, U. S. Naval Operating Base, Midway Island, to Officer in Charge Contracts 4173 and 3555, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 31, 1942, mailgram from the Bureau of Yards and Docks to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

January 3, 1943, memorandum from J. H. Strother, Depot Quartermaster, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

January 4, 1943, memorandum from R. R. Yates by direction of the Commandant, 14th Naval District, to the District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

January 14, 1943, memorandum from W. D. Chandler, Assistant Commandant, 14th Naval District, to Depot Quartermaster, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

March 6, 1943, memorandum from W. E. Kuntz, Pacific Fleet Radar School, to District Public Works Officer, March 6, 1943, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

March 11, 1943, N. J. Drusuf by direction of the District Public Works Officer to Officer-in-Charge, District Maintenance Shop 08, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

March 18, 1943, memorandum from N. J. Drusuf by direction of the District Public Works Officer, to Officer-in-Charge, Third Construction Regiment, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.
April 14, 1943, memorandum from J. S. Dowell, Inspector of Ordnance in Charge, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

April 15, 1943, memorandum from T. A. Hartung by direction of the Commandant, 14th Naval District to Depot Quartermaster, Marine Barracks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

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May 22, 1943 memorandum from T. A. Hartung by direction of the Commandant, 14th Naval District to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

July 5, 1943, memorandum from Earl H. Phillips, office of the Depot Quartermaster to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910, folder: N4-2/KP75, Quonset Huts, 1942-1943.

August 5, 1943, memorandum from G. G. Briany, District Aviation Aide to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

August 14, 1943, memorandum from M. C. Robertson, Chief of Staff, to Director of Pacific Division, Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

August 17, 1943, memorandum from G. D. Wetsel, by direction of the Commandant, 14th Naval District, to Director of Pacific Division, Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

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September 1, 1943, memorandum from G. G. Briany, District Aviation Aide to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

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September 3, 1943, memorandum from Commander P. L. Haynes, Commanding Officer, Kahului NAS, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 3, 1943, memorandum from Captain G. D. Wetsel by direction of District Public Works Officer to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 16, 1943, memorandum from Commander L. S. Melsom, Naval Air Facility, to the Commandant, Navy No. 128, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 18, 1943, memorandum from Commander A. D. Hunter by direction of District Public Works Officer to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

September 23, 1943, memorandum from J. H. Griffin, Pacific Fleet Radar Center, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

October 5, 1943, memorandum from Roy W. M. Graham, Office of the Commandant, 14th Naval District, to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

October 12, 1943, memorandum from Lt. Cmdr. H. M. S. Gimber, Office in Charge of Pacific Fleet Schools, to the Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.
October 14, 1943, memorandum from Commander A. D. Hunter by direction of the District Public Works Officer to District Communications Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

circa October, 1943, memorandum from G. D. Wetsel by direction of Commandant 14th Naval District to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 1, 1943, memorandum from Wilfred Jupenlaz by direction of the Director of Pacific Division of the Bureau of Yards and Docks to Chief of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 3, 1943, memorandum from Captain John L. Murphy Commanding Officer, Puunene NAS to Commandant 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

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November 10, 1943, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 11, 1943, memorandum from Ross P. Whitemarsh, Commander Service Squadron Six, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 18, 1943, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 19, 1943, memorandum from H. H. Good by direction of CNO, to the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.
November 22, 1943, memorandum from Commander A. D. Hunt by direction of the District Public Works Officer, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 29, 1943, memorandum from G. D. Wetsel, Officer in Charge of Contracts NOy-3550 and NOy-4173, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

November 30, 1943, memorandum from J. J. Delaney by direction of , Director of Pacific Yards and Docks to Officer-in-Charge of ABCD, Pearl, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 2, 1943, memorandum from Commander A. D. Hunter by direction of the District Public Works Officer, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 3, 1943, memorandum from C. W. Porter, Second Naval Construction Brigade to District Officer of Public Works, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 4, 1943, memorandum from G. D. Wetsel, District Office of Public Works, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

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December 16, 1943, memorandum from Stanley A. Brander by direction of the Chief of the Bureau of Yards and Docks, to Officer-in-Charge of Construction Contract NOy-4173, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.
December 16, 1943, memorandum from Commander A. D. Hunter by direction of the District Public Works Officer, to the Director of Pacific Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 17, 1943, memorandum from C. E. Aldrich, Commanding Officer of the Submarine Base to the Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

December 20, 1943, memorandum from Commander A. D. Hunter by direction of the District Public Works Officer, to the Director of Pacific Division of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, Box 318910 (B21), folder: N4-2/KP75, Quonset Huts, 1942-1943.

January 6, 1944, memorandum from Commander M. C. Jones, Engineering Officer, U. S. Coast Guard to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

January 10, 1944, memorandum from G. D. Wetsel by direction of the Commandant, 14th Naval District to Director Pacific Division of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

January 14, 1944, memorandum from Ralph P. Whitemarsh, Commander Service Squadron Six to Director Pacific Division of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

January 27, 1944, memorandum from Logan H. Woolley by direction of, Director Pacific Division of Bureau of Yards and Docks, to Advance Base Construction Depot, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

January 28, 1944, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District to Director Pacific Division of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

January 29, 1944, memorandum from D. S. MacMahan, Commanding Officer, NAS Barbers Point, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.
February 11, 1944, memorandum from Logan H. Woolley by direction of , Director Pacific Division of Bureau of Yards and Docks, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

February 17, 1944, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District to Commanding Officer NAS Barbers Point, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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February 26, 1944, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District to District Public Works Officer, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

March 1, 1944, memorandum from M. C. Robertson, Chief of Staff, 14th Naval District to Director of Pacific Division of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

March 1, 1944, memorandum from Captain N. M. Kindell, NAS Kaneohe Bay, to Director of Pacific Division of the Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

March 3, 1944, memorandum from C. H. Cotter, Director Pacific Division, Bureau of Yards and Docks, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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March 27, 1944, memorandum from W. S. Housel, by direction of the Director of the Pacific Division of the Bureau of Docks and Yards, to Commanding Officer, U. S. Navy Sub Base, Pearl, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

April 11, 1944, memorandum from W. S. Housel, by direction of the Director of the Pacific Division of the Bureau of Docks and Yards, to Commanding Officer, U. S. Navy Sub Base, Pearl, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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May 11, 1944, Route Slip 6064, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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June 8, 1944, memorandum from C. H. McMorris, Chief of Staff, U. S. Pacific Fleet to Director Pacific Division of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

July 19, 1944, letter from Harold G. Dillingham to Rear Admiral Robert L. Ghormley, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

July 20, 1944, memorandum from Ralph P. Whitemarsh, Commander Service Squadron Six to Director Pacific Division of Bureau of Yards and Docks, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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November 16, 1944, memorandum from G. D. Wetsel to District Logistical Board, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1944, Box 318924, folder: N4-2/ND14, Quonset Huts.

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January 12, 1945, memorandum from F. C. Nyland by direction of Public Works Office Commandant, to the Files, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

January 31, 1945, letter from Frank S. Pugh, Principal, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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February 2, 1945, memorandum from D. W. Bagley, Commandant 14th Naval District, to J. H. Towers, CinCPOA, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

February 3, 1945, memorandum from Lucius W. Johnson, District Medical Officer, to Commandant 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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February 20, 1945, letter from B. F. Rush, Territorial Housing Executive to Admiral Bagley, Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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March 8, 1945, letter from Bishop Sweeney to Admiral Bagley, Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

March 8, 1945, memorandum from C. S. Camerer, District Medical Officer Assistant, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

March 24, 1945, memorandum from O. L. Downes, Assistant Commandant for Logistics, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

March 29, 1945, memorandum from Captain Wetsel to Chief of Staff, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

March 30, 1945, memorandum from J. H. Towers, Deputy Commander Cinpac and Cinpoa, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

April 3, 1945, letter from D. W. Bagley Commandant, 14th Naval District, to Governor Stainback, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

April 5, 1945, memorandum from Major General H. T. Burgin, to Commander-In-Chief, Pacific Ocean Area, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.
April 18, 1945, memorandum T. L. Davis, Acting Director Pacific Division, Bureau of Yards and Docks, to Officer-in-Charge, ABCD, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

May 1, 1945, memorandum from C. J. Parrish, Chief of Staff, 14th Naval District, to CinCPAC, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

May 19, 1945, memorandum from W. W. Smith, Commander Service Force, Pacific Fleet, to Commander in Chief, U. S. Pacific Fleet, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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May 26, 1945, memorandum from G. C. Briany, Chief of Staff, Naval Air Bases, 14th Naval District, to Captain O. L. Downes, Assistant Commandant for Logistics, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

May 28, 1945, memorandum from J. H. Towers, Deputy Commander Cinpac and Cinpoa, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

May 30, 1945, memorandum from Captain W. T. Singer, Contractors Pacific Naval Air Bases, to Captain Downes, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

June 6, 1945, memorandum from Captain Downes to Chief of Staff, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

June 6, 1945, memorandum from H. E. Overesch, Chief of Staff, 14th Naval District to Cincpac and Cincpoa, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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June 13, 1945, memorandum from Lt. Cmdr. L. D. Lotz, to Captain Wetsel, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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July 13, 1945, letter from Stanley Kennedy, President, Hawaiian Airlines, to Vice Admiral D. W. Bagley, Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

July 13, 1945, memorandum from Lieutenant A. B. Haley, Mobile Explosive Investigation Unit # 4, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

July 28, 1945, memorandum from G. D. Wetsel, District Public Works Officer, to Assistant Commandant for Logistics, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

August 1, 1945, memorandum E. W. Hanson to Cincpoa, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

August 2, 1945, memorandum from H. E. Overesh, Chief of Staff, to Commander in Chief, Pacific Fleet and Pacific Ocean Areas, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.
August 19, 1945, memorandum from D. F. Clark, to Commanding Officer Naval Radio Stations, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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September 11, 1945, letter from Commodore H. E. Overesch, Chief of Staff, 14th Naval District, to Frank S. Pugh, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

September 12, 1945, letter from E. Tanner Brown, St. Clement's Mission, to Vice Admiral S. A. Taffinder, Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

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October 1, 1945, letter from Kinichi Sakai to Assistant Commandant for Logistics, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

October 10, 1945, letter from Harold G. Dillingham, Kauikeolani Hospital, to Vice Admiral S. A. Taffinder, Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

October 31, 1945, memorandum from C. G. DeKay, Navy Supply Depot, to Commandant, 14th Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1945, Box 318960 16/45, folder: N4-2/ND14, Quonset Huts.

November 4, 1946, memorandum from M. W. Hutchinson, Chief of Staff, 14th Naval District, to Chief of the Bureau of Medicine and Surgery, Planning Section, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1946, Box 15/319105, folder: N4-2/ND14, Quonset Huts.

December 12, 1946, memorandum from E. W. Hanson, Commandant, U. S. Naval Base, Pearl Harbor, to Medical Officer in Command, located at National Archives and Records Administration, San Bruno, California, Record Group 181: General Correspondence, 1946, Box 15/319105, folder: N4-2/ND14, Quonset Huts.

December 17, 1946, memorandum from J. H. Skillman, Supply Officer in Command of Naval Supply Center, to Commandant, Fourteenth Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence 1947, Box 17/319206, folder: N4-2/ND14.

January 24, 1947, letter Vice Admiral J. L. Hall, Commandant, Fourteenth Naval District, to Mr. Arthur W. Hudson, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence 1947, Box 17/319206, folder: N4-2/ND14.

January 31, 1947, memorandum from T. J. Hedding, Commanding Officer, NAS Kahului, to Commandant, Fourteenth Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence 1947, Box 18/319207, folder: N19/ND14, Buildings, January-March 31.

March 4, 1947, five Survey Request, Report and Expenditure forms from P.H. Jones, NAS Kahului, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence 1947, Box 18/319207, folder: N19/ND14, vol. 2 April-May 31.

March 20, 1947, memorandum from W. R. Randig by direction of Commander Pearl Harbor Naval Shipyard, to Commandant, Fourteenth Naval District, located at National Archives and Records Administration, San Bruno, California, Record Group 181: Fourteenth Naval District Commanding Officer, General Correspondence 1947, Box 18/319207, folder: N19/ND14, Buildings, January-March 31.

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