

MINOR PROJECTS AT MOFFETT FEDERAL AIRFIELD, HANGAR 2/HANGAR 3 PRECINCT

Cultural Resources Inventory and Evaluation Report

Prepared for
Planetary Ventures

August 2022



MINOR PROJECTS AT MOFFETT FEDERAL AIRFIELD, HANGAR 2/HANGAR 3 PRECINCT

Cultural Resources Inventory and Evaluation Report

Prepared for
Planetary Ventures

August 2022

Prepared by
Ashleigh Sims, M.A., RPA
Environmental Science Associates

Amber Grady, M.A.
Environmental Science Associates

Reviewed by
Heidi Koenig, M.A., RPA
Environmental Science Associates

Becky Urbano, M.S.
Environmental Science Associates

180 Grand Avenue
Suite 1050
Oakland, CA 94612
510.839.5066
esassoc.com



Bend	Orlando	San Jose
Camarillo	Pasadena	Santa Monica
Delray Beach	Petaluma	Sarasota
Destin	Portland	Seattle
Irvine	Sacramento	Tampa
Los Angeles	San Diego	
Oakland	San Francisco	

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Minor Projects at MFA, Hangar 2/Hangar 3 Precinct Cultural Resources Inventory and Evaluation Report

	<u>Page</u>
Statement of Confidentiality	iii
Summary of Findings	iv
Introduction	1
Project Location and Description	2
Project 1 – Hangar 2 [REDACTED] Communications Conduit	2
Project 2 – Hangar 2 [REDACTED] Conduit	2
Project 3 – California Air National Guard (CAANG) Airside Switch	2
Area of Potential Effects	3
Regulatory Context	3
Federal Regulations	3
Background Context	4
Geological Setting	4
Pre-Contact Setting	4
Ethnographic Setting	5
History	6
Sources Consulted	8
Records Search and Literature Review	8
Native American Contact	11
Archaeological Sensitivity Assessment	11
Expanded NAS Sunnyvale Historic District (formerly the Shenandoah Plaza Historic District)	13
Survey Methods and Findings	20
Survey Results	20
Assessment of Effects	21
Application of Criteria of Adverse Effect	21
Conclusion	25
Recommendations	25
References Cited	26

List of Maps

- Map 1 Project Vicinity
- Map 2 Project Location
- Map 3 APE

Confidential Map

- Map 4 Cultural Resources within 250 feet of the APE

Appendices

- A. Site Records
- B. NAHC Correspondence
- C. ICRMP - SOP 8 and SOP 9: Inadvertent Discovery Procedures (AECOM, 2014)

List of Figures

Figure 1	NAS Sunnyvale Historic District - 1994.....	14
Figure 2	Historic Buildings & Structures within the Expanded NAS Sunnyvale Historic District.....	15
Figure 3	Hangars 2 and 3	18
Figure 4	Looking South between Hangars 2 and 3.....	18
Figure 5	Building 55	19
Figure 6	Building 55	20

List of Tables

Table 1	Previous Cultural Resources Studies within 0.5 Mile of the APE.....	9
Table 2	Built Environment Resources [REDACTED]	10
Table 3	Historic Properties within the NAS Sunnyvale Historic District.....	16

The following content was redacted from this public posting:

Statement of Confidentiality

(Confidential data was redacted)

SUMMARY OF FINDINGS

Environmental Science Associates (ESA) has prepared this Cultural Resources Inventory and Evaluation Report for three projects (undertaking) located at Moffett Federal Airfield (MFA) in Mountain View, California. This study has been completed to comply with the requirements of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The undertaking consist of three minor utility projects in the Hangar 2/Hangar 3 precinct.

In order to determine whether cultural resources are in the project Area of Potential Effects (APE), ESA conducted a cultural resources records search, reviewed previous project permitting and environmental analysis, and conducted a site visit. Four cultural resources, all buildings associated with the MFA, and one historic district were identified within the APE: P-43-002555 (Building 498), P-43-002556 (Building 499), P-43-002618 (Building 540), P-43-002619 (Building 539), and P-43-003511 (NAS Sunnyvale Historic District). P-43-002555 (Building 498), P-43-002556 (Building 499), P-43-002618 (Building 540), and P-43-002619 (Building 539) have been previously determined not eligible for listing on the National Register of Historic Places (National Register). P-43-003511 (NAS Sunnyvale Historic District) was previously determined eligible and is listed on the National Register. Only four contributors to the NAS Sunnyvale Historic District are located within the APE: Hangar 2, Hangar 3, Building 55, and Aircraft Parking Apron (MF1002) (J). Hangars 2 and 3 are located within the APE and are contributors to the NAS Sunnyvale Historic District as well as individually eligible for the National Register. ESA applied the Criterion of Adverse Effect and recommend that no cultural resources will be adversely affected by the project. ESA recommends a finding of No Historic Properties Affected for the undertaking.

While unlikely based on the existing conditions, prior disturbance, and survey results, the unanticipated discovery of archaeological materials or human remains cannot be entirely discounted. Recommendations for the inadvertent discovery of archaeological resources or human remains are provided.

MINOR PROJECTS AT MOFFETT FEDERAL AIRFIELD

Cultural Resources Inventory and Evaluation Report

Introduction

Environmental Science Associates (ESA) has prepared this Cultural Resources Inventory and Evaluation Report for the Minor Projects (undertaking at Moffett Federal Airfield (MFA)). The undertaking would consist of three small utility projects in the vicinity of Hangars 2 and 3 within Moffett Federal Airfield in Santa Clara County, as shown on the United States Geological Survey (USGS) Mountain View 7.5-minute topographic quadrangle (**Map 1, Map 2**). The three projects are within the NAS Sunnyvale Historic District, a National Register-listed historic district.

The undertaking is within Moffett Federal Airfield, a property owned by the National Aeronautics and Space Administration (NASA), and therefore is subject to federal environmental regulations, including the National Environmental Policy Act (NEPA) and the National Historic Preservation Act of 1966 (NHPA). NASA is the lead federal agency for NHPA compliance. The purpose of this report, in accordance with Section 106 of the NHPA, is to:

- identify cultural resources, including pre-contact Native American and historic-period archaeological resources, buildings, structures, and places of importance to Native Americans within the project Area of Potential Effects (APE);
- evaluate cultural resources according to the criteria set forth by the National Register of Historic Places (National Register Criteria A–D);
- determine whether the undertaking would have an impact on National Register-listed or eligible historic properties; and
- recommend procedures for avoidance or mitigation of adverse effects to National Register-listed or eligible historic properties.

Ashleigh Sims, M.A., RPA, and Amber Grady, M.A. completed this study. Ashleigh meets the Secretary of the Interior’s Professional Qualifications Standards for archeology. Amber meets the Secretary of the Interior’s Professional Qualifications Standards for history and architectural history. Heidi Koenig, M.A., RPA, and Becky Urbano, M.S. reviewed the report.

Project Location and Description

The undertaking consists of three small utility projects in the vicinity of Hangars 2 and 3 within MFA (Map 3). Each is described below.

Project 1 – Hangar 2 [REDACTED] Communications Conduit

Project 1 would connect Hangar 2 to the existing telecommunications conduits [REDACTED]

[REDACTED]

Following completion of HDD boring and conduit installation, the hole would be backfilled and repaved to match existing grade and surface.

Project 2 – Hangar 2 [REDACTED] Conduit

Project 2 would be [REDACTED] consisting of four new HDPE conduits [REDACTED]

[REDACTED]

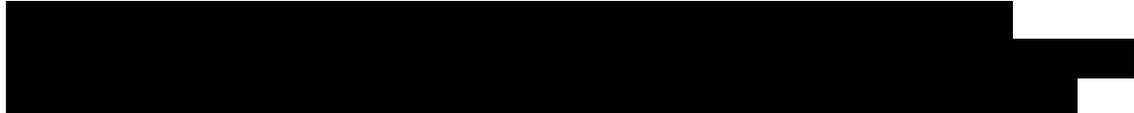
Following completion of HDD boring and conduit installation, the hole would be backfilled and repaved to match existing grade and surface. If dewatering is required at the manholes, water would be tested and would be pumped into the sanitary sewer if quality is acceptable, or off-hauled for safe disposal.

Project 3 – California Air National Guard (CAANG) Airside Switch

Project 3 would install new switchgear [REDACTED] (outside) [REDACTED]

[REDACTED]

Following completion of HDD boring and utility installation, excavations would be backfilled and repaved to match existing grade and surface. [REDACTED]



While the project would occur within the boundaries of the NAS Sunnyvale Historic District no physical alterations to any contributing historic properties are proposed as part of this project.

Area of Potential Effects

The APE is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist” (36 Code of Federal Regulations 800.16[b]).

The APE includes all areas of proposed ground-disturbing activity. This includes the entirety of the three project footprints and 50-foot buffer around those footprints to account for staging and construction access. The APE consists of approximately 2.3 acres. **Map 3** shows the horizontal APE for the undertaking.

Depth of ground disturbance may change as the undertaking is developed, but the majority of trenching will occur to a depth of 3 feet and would not exceed 6 feet.

Regulatory Context

Federal Regulations

Cultural resources are considered through the NHPA of 1966, as amended (54 U.S.C. 306108), and its implementing regulations. Prior to implementing an “undertaking” (e.g., federal funding or issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. Under the NHPA, a property is considered significant if it meets the National Register listing criteria at 36 CFR 60.4, as stated below:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- A) Are associated with events that have made a significant contribution to the broad patterns of our history, or
- B) Are associated with the lives of persons significant in our past, or
- C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
- D) Have yielded, or may be likely to yield, information important in prehistory or history.

Federal review of projects is normally referred to as the Section 106 process. This process is the responsibility of the federal lead agency. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800):

- Identify historic properties in consultation with the State Historic Preservation Officer (SHPO) and interested parties;
- Assess the effects of the undertaking on historic properties;
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the Advisory Council on Historic Preservation; and finally,
- Proceed with the project according to the conditions of the agreement.

NASA Ames Research Center Integrated Cultural Resources Management Plan

In November 2014, NASA Ames Research Center prepared an Integrated Cultural Resources Management Plan (ICRMP) as an internal compliance and management tool that integrated the NASA Cultural Resources Management (CRM) Program with mission activities on site. The ICRMP facilitates efficient compliance with federal laws and regulations and the CRM Program policies by outlining procedures for the identification, evaluation and protection of cultural resources.



Background Context

Geological Setting

The underlying geology of the APE consists of Quaternary alluvial deposits (Dibblee and Minch, 2007). Soil in the APE consists of Urbanland-Hangarone complex, which consists of disturbed and human-transported fill material (USDA, 2021). These soils are heavily disturbed and were likely placed to create a level area during the construction of MFA, which began in 1931 with the construction of Hangar 1.

Pre-Contact Setting

Categorizing the pre-contact period into broad cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given time frame, thereby creating a regional chronology. This section provides a brief discussion of the pre-contact chronology for the APE.

The natural marshland communities along the edges of bays and channels were the principal source for subsistence and other activities during the pre-contact period of the San Francisco Bay region. Many of the original surveys of archaeological sites in the Bay region were conducted between 1906 and 1908 by U.C. Berkeley archaeologist N. C. Nelson. Such surveys yielded the initial documentation of nearly 425 “earth mounds and shell heaps” along the littoral zone of the

bay (Nelson, 1909).



Archaeologists developed individual cultural chronological sequences tailored to the archaeology and material culture of each subregion of California. Each of these sequences is based principally on the presence of distinctive cultural traits and stratigraphic separation of deposits. Milliken et al. (2007) provide a framework for the interpretation of the San Francisco Bay Area. The authors divided human history in California into three periods: the *Early Period*, the *Middle Period*, and the *Late Period*. In many parts of California four periods are defined; the fourth being the *Paleoindian Period* (11500–8000 B.C.), characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during the Paleoindian Period has not yet been discovered in the San Francisco Bay Area. Economic patterns, stylistic aspects, and regional phases further subdivide cultural periods into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

During the Early Period (Lower Archaic, 8000–3500 B.C.), geographic mobility continued from the Paleoindian Period and is characterized by the millingslab and handstone as well as large wide-stemmed and leaf-shaped projectile points. The first cut shell beads and the mortar and pestle are first documented in burials during the Early Period (Middle Archaic, 3500–500 B.C.), indicating the beginning of a shift to sedentism. During the Middle Period, which includes the Lower Middle Period (Initial Upper Archaic, 500 B.C.–A.D. 430), and Upper Middle Period (Late Upper Archaic, A.D. 430–1050), geographic mobility may have continued, although groups began to establish longer term base camps in localities from which a more diverse range of resources could be exploited. The first rich black middens are recorded from this period. The addition of milling tools, obsidian, and chert concave-base projectile points, as well as the occurrence of sites in a wider range of environments, suggest that the economic base was more diverse. By the Upper Middle Period, mobility was being replaced by the development of numerous small villages. Around A.D. 430, a dramatic cultural disruption occurred as evidenced by the sudden collapse of the *Olivella* saucer bead trade network. During the Initial Late Period (Lower Emergent, A.D. 1050–1550), social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments.

Ethnographic Setting

Ohlone

A compilation of ethnohistorical, historical, and archeological data indicates that the San Francisco peninsula, East Bay, and South Bay areas were inhabited by a cultural group known as the Ohlone before the arrival of Europeans (Milliken, 1995). While traditional anthropological literature portrayed the Ohlone peoples as having a static culture, today it is better understood that many variations of culture and ideology existed within and between

villages. While these static descriptions of separations between native cultures of California make it an easier task for ethnographers to describe past behaviors, this approach masks Native adaptability and self-identity. California's Native Americans never saw themselves as members of larger cultural groups, as described by anthropologists. Instead, they saw themselves as members of specific village communities, perhaps related to others by marriage or kinship ties, but viewing the village as the primary identifier of their origins.

Levy (1978) describes the language group spoken by the Ohlone (often referred to as "Costanoan" in the literature). This term is originally derived from a Spanish word designating the coastal peoples of Central California. Today Costanoan is used as a linguistic term that refers to a larger language family that included distinct sociopolitical groups that spoke at least eight languages of the Penutian language group. The Ohlone once occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. The APE is within the specific territory of the Tamien, also known as Tamyen or Santa Clara Costanoan, and the nearest mapped ethnographic village to the APE is Posol-mi (Kroeber, 1925).

In 1770, the Ohlone lived in approximately 50 separate and politically autonomous nations or tribelet. During the Mission Period (1770 to 1835), native populations, especially along the California coast, were brought—usually by force—to the missions by the Spanish missionaries to provide labor. The missionization caused the Ohlone people to experience cataclysmic changes in almost all areas of their life, particularly a massive decline in population caused by introduced diseases and declining birth rate, resulting in large part from colonization by the Spanish missionaries. Following the secularization of the missions by the Mexican government in the 1830s, most Native Americans gradually left the missions and established rancherias in the surrounding areas (Levy, 1978).

Economically, the Ohlone engaged in hunting and gathering. Their territory encompassed both coastal and open valley environments that contained a wide variety of resources, including grass seeds, acorns, bulbs and tubers, bear, deer, elk, antelope, a variety of bird species, and rabbit and other small mammals. The Ohlone acknowledged private ownership of goods and songs, and village ownership of rights to land and/or natural resources; they appear to have aggressively protected their village territories, requiring monetary payment for access rights in the form of clam shell beads, and even shooting trespassers if caught.

After European contact, Ohlone life ways were severely disrupted by missionization, disease, and displacement. Today the Ohlone still have a strong presence in the San Francisco Bay Area, and are very interested in their historic and pre-contact past.

History

Santa Clara Valley

Spanish explorers in the late 1760s and 1770s were the first Europeans to traverse the Santa Clara Valley. José Francisco Ortega, a soldier in the exploring party of Gaspar de Portola and Juan Crespi, made the first recorded crossing of the Guadalupe River in the vicinity of present-day Alviso during November 1769 but no clear record remains of his exact route and his impressions

of the area (Beck and Haase, 1974:16–17). Juan Bautista de Anza and Pedro Font led the next expedition through the area in early 1776, leaving a substantial record of their travels. The explorers commented on the level land and good pasturage, concluding that the area would be an excellent site for settlement. Anza recorded three native villages in the vicinity of his campsite, each reportedly composed of approximately 70 persons. Anza noted some “paths and trails” heading to the south and concluded that the same tribe of Indians dwelled throughout the entire valley (Bolton, 1930).

After an initial period of exploration, the Spanish focused on the founding of presidios, missions, and secular towns with the land held by the Crown. Following the favorable reports by Anza and Font, the Spanish moved to occupy the lands in the Santa Clara Valley founding both Pueblo de San José and Mission Santa Clara de Asis in 1777. The Pueblo of San José de Guadalupe was California’s first civilian settlement, and one of three towns founded to administer and coordinate the missions and presidios of Alta California (Hendry and Bowman, 1940:750). By the late 18th century, the Embarcadero de Santa Clara at the mouth of the Guadalupe River into the San Francisco Bay had developed as a trading port and separate community. Mission Santa Clara provided for the religious needs of the Pueblo and, as one of seven missions located within Ohlone territory, would have been the mission with the greatest impact on the aboriginal population living in the Santa Clara Valley.

After the independence of Mexico and the secularization of the missions in the 1830s, the mission’s property was divided into ranchos and distributed to private citizens. The APE is located within land grant Rancho Posolmi, also known as Rancho Yñigo, and was granted to Lupe Yñigo in 1884 (Ayers, 1886). Yñigo was a Ohlone man who worked in as an alcalde at Mission Santa Clara until it was secularized (Shew, 1903). The Ohlone and other Native Californians gradually left the now-secular missions, with many going to work as wage laborers on the ranchos, in mines, and in domestic positions. There was a partial return to aboriginal religious practices and subsistence strategies, but for the most part, the Ohlone culture was greatly diminished (Levy, 1978). Today, descendants of the Ohlone still live in the area and many are active in restoring their traditions and advocating for Native American issues.

After California became part of the United States in 1848, San José was initially (and temporarily) named the state’s capital. In the 1850s, the Gold Rush led to major changes in San José, which became a supply town for the prospectors who flooded the area (National Park Service, 2008). The population of the Santa Clara Valley expanded as a result of the Gold Rush, followed later by the construction of the railroad to San Francisco (1864) and the completion of the transcontinental railroad in 1869. Former land grants were subdivided and sold to newcomers, with the Rancho Posolmi being split between three owners by 1881 and later was further split and sold to the Navy for use as an air base (Ayers, 1886).

Agriculture became a major industry in the Santa Clara Valley. The town of Alviso, established in 1840 near the Embarcadero de Santa Clara, became a busy shipping port. However, in 1864 the newly opened railroad line from San Francisco to San José bypassed Alviso, and the port soon declined as rail transport became the favored method of transportation over shipping. In the early part of the 20th century, the Bayside Canning Company, the third largest cannery in the

California, brought money and workers to the area. In 1968, Alviso consolidated with the city of San José (City of San José, 1998).

Moffett Field

Naval Air Station Sunnyvale, later renamed Moffett Field, was established in 1933 with the construction of Hangar One as the docking station for the USS Macon, the largest aircraft in the world at that time. The following is an excerpt from the ICRMP:

The land that would become NAS Sunnyvale was purchased with funds raised by San Francisco, Santa Clara, San Mateo, and Alameda Counties in competition with a location in San Diego to host a West Coast naval airfield. The land was sold to the Navy for \$1, and NAS Sunnyvale was officially established on August 2, 1931. Construction began on NAS Sunnyvale in October 1931. Hangar 1, the massive steel-frame structure built to house the dirigible USS Macon, the flagship for NAS Sunnyvale, was completed in April 1933. North and south of Hangar 1, two mooring circles were built to control and secure the dirigible. West of Hangar 1, the Navy Bureau of Yards and Docks built a campus of Spanish Colonial-style buildings (Shenandoah Plaza) to support dirigible operations on the airfield. East of Hangar 1, closer to San Francisco Bay, land was cleared and leveled for a single-runway airfield. Within a short time, the original runway was expanded and two small runways were added. NAS Sunnyvale was formally commissioned on April 12, 1933. [AECOM, 2014:3-5]

Sources Consulted

Records Search and Literature Review

ESA conducted a records search at the Northwest Information Center (NWIC) of the California Historical Resources Information System on December 9, 2021 (File No. 21-0908). The purpose of the records search was to (1) determine whether known cultural resources have been recorded within or adjacent to the APE; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby sites; and (3) develop a context for the identification and preliminary evaluation of cultural resources. The records search consisted of an examination of the following documents:

- NWIC digitized base maps (USGS Mountain View 7.5-minute topographic map), to identify recorded archaeological sites and studies within a 0.5-mile radius of the APE.
- NWIC digitized base maps (USGS Mountain View 7.5-minute topographic map), to identify recorded historic-era resources of the built environment (building, structures, and objects) within a 0.25-mile radius of the APE.
- Resource Inventories: *California Inventory of Historical Resources*, *California Historical Landmarks*, *Built Environment Resource Directory* (BERD) (through March 2020) and *Archaeological Determinations of Eligibility* (as of April 2012) for Santa Clara County.

The NWIC records search results indicates that two cultural resources studies have been completed that included portions of the APE and 17 cultural resources studies have been conducted within 0.5-mile of the APE. **Table 1** provides details on these studies.

TABLE 1
PREVIOUS CULTURAL RESOURCES STUDIES WITHIN 0.5 MILE OF THE APE

Study #	Title	Author	Date	In APE?
S-005317	Archaeological Survey of Building 158 Site (Lockheed Purchase Order JRB8E6970 F) (letter report)	David Chavez	1980	No
S-005318	Archaeological Investigation of the Proposed Construction Site for Lockheed Building 157, Sunnyvale, California.	David Chavez	1980	No
S-008447	Cultural Resources Review for the Ames Research Center Environmental Resources Document, Santa Clara County, California	David Chavez	1981	No
S-008607	Cultural Resources Evaluation for the Moffett Field Storm Drainage Environmental Assessment, Santa Clara County, California	David Chavez	1981	No
S-011950	Cultural Resources Survey Report for Proposed Commissary Building, Naval Air Station, Moffett Field, Santa Clara County, CA., Purchase Order No. N62474-90-M-1403	William Self Associates	1990	No
S-013461	Archaeological Overview and Survey, Naval Air Station Moffett Field, Santa Clara County, California, and Naval Auxiliary Landing Field, Crows Landing, Stanislaus County	Donna M. Garaventa, Rebecca L. Anastasio, Angela M. Banet, Stuart A. Guedon, and Steven J. Rossa	1991	Yes
S-016393	Final Report, Archaeological Test Program, CA-SCL-23 and Vicinity, for the National Wind Tunnel Complex (NWTC), NASA Ames Research Center, Moffett Field, Santa Clara County, California.	Donna M. Garaventa, Stuart A. Guedon, Deborah M. DiPasqua, and Conrad F. Praetzel	1993	No
S-016658	Final Archaeological Monitoring Report, City of Sunnyvale Reclaimed Water Pipeline Through Sunnyvale Municipal Golf Course and Moffett Field Naval Air Station, Santa Clara County, California (letter report)	Sally Morgan and Barb Voss	1995	No
S-019881	NASA - Ames Research Center, Moffett Field, California; Section 110 Survey	NASA Ames Research Center	1995	No
S-035040	Hangar 1, Moffett Field Naval Air Station, Historic American Engineering Record #CA-335	National Aeronautics and Space Administration	2009	No
S-042003	The South Bay Salt Pond Restoration Project: A Cultural Landscape Approach for the Resource Management Plan	Ellen Joslin Johnck	2008	No
S-043660	Cultural Resources Investigation for Anthem Telecom "Lockheed Martin Sunnyvale Campus," H street and Lockheed Martin Way, Sunnyvale, Santa Clara County, California 94089 (letter report)	Carolyn Losee	2010	No
S-045701	Sunnyvale Water Pollution Control Plant Master Plan, Cultural Resources Survey Report	Heidi Koenig	2014	No
S-046328	Submission Packet, FCC Form 621, for proposed Collocation Project, Building N206, NASA Ames Research Center, Mountain View, Santa Clara County, CA 94035, Moffett Field/Ensite #19283 (260463), EBI Project Number: 6114004221	Sarah LeVaun Grauly	2015	No
S-046899	Cultural Resources Assessment, South San Francisco Bay Shoreline Interim Feasibility Study, Contract: W9-12P7-06-D-007	WSA/PaleoWest	2009	No
S-047647	Inventory and Evaluation of Cold War Era Historical Resources, Moffett Federal Airfield, Moffett Field, California, NASA Crows Landing Flight Facility, Crows Landing, California	Alexandra C. Cole	1998	Yes
S-047850	FCC Form 620, New Tower Submission Packet: 18585 B153/B141 Closure, Intersection of 5th Ave. and G Street, Sunnyvale, CA	Mary E. Seagrave	2015	No
S-049251	Archaeological Testing Report: MFA Electrical-Telecommunications Infrastructure Project, Santa Clara County, California	Stacy Kozakavich, Thomas Young, and Nazih Fino	2017	No
S-050887	Cultural Resources Assessment Report, California Air National Guard 129th Rescue Wing Relocation Project, Santa Clara County, California	Stacy Kozakavich, Patrick Allen, and Nazih Fino	2017	No

SOURCE: NWIC, 2021

Landforms that predate the earliest estimated periods for human occupation of the region are considered to have very low potential for the presence of buried archaeological sites, while those that postdate human occupation are considered to have a higher potential for buried archaeological sites. The degree of buried site potential is inversely related to the estimated date range of a landform. Currently, archaeological research indicates that the earliest evidence for human occupation of California dates to the Late Pleistocene, which ended approximately 11,500 years BP. Therefore, the potential for buried archaeological deposits in landforms from or predating the Late Pleistocene is very low (Rosenthal et al., 2004).

As previously mentioned, the APE is situated on urban land complex fill material soils underlain by Quaternary age alluvium (Dibblee and Minch, 2007; USDA 2021). Based on the age of the soils and bedrock in the APE, the potential for buried pre-contact archaeological deposits in undisturbed portions of the APE is moderate in the Quaternary alluvium and low in the urban land complex soils (Meyer and Rosenthal, 2007). Because the urban land complex fill soils are on the surface, archaeological sites in this geologic context would be below these soils in the Quaternary alluvium, since the surficial fill soils are not formed locally and have been imported. The APE is along the South Bay coastline which does increase the sensitivity of the area for pre-contact archaeological resources. The records search results of the APE suggest that, prior to historic-era, this area was used by indigenous people. Ten pre-contact indigenous habitation sites have been previously identified within 0.5 mile of the APE. The nearest pre-contact resource, P34-000035, was recorded by Nelson on the large-scale shellmound map (Nelson, 1909). In 1912, Berkeley-based anthropologist L.L. Loud transferred Nelson's maps onto Archaeological Site Survey Records, so the locations of the shellmounds recorded by Nelson are very approximate and none of the shellmounds recorded in the vicinity of the APE have been relocated since their mapping by Nelson in 1909. However, Nelson's maps do show that several pre-contact sites were located in the vicinity of the APE prior to modern development. While their exact locations are unknown, the number and proximity of the shellmounds indicates that the area has a moderate to high sensitivity for pre-contact resources. However, the area has been developed and built over with the construction of MFA. This development has likely impacted any pre-contact cultural resources that were present on the surface since the area has been leveled and almost the entirety of the APE is paved over. Therefore, likelihood of encountering undisturbed areas and soils during project construction is extremely low based on the high level of disturbance and development the APE has experienced. Garaventa et al. (1991) conducted a pedestrian survey of the accessible (not paved) portions of MFA and did not identify any cultural material during the survey. In 2016, WSA conducted archaeological coring of 24 locations on the east side of Hangar 3 and along the western edge of MFA to a depth of 20 feet and did not identify any cultural material in any of the cores nor on the surface during the pedestrian survey (WSA, 2017). Garaventa et al. note that:

Development, including the current facilities and especially past subsurface infrastructure improvements appear to have destroyed the integrity of any archaeological resources. The NAS Moffett Field Master Plan provides ample documentation of a number of subsurface impacts since 1931 in the vicinity of the recorded archaeological sites. The likelihood of the existence of pristine archaeological sites is remote as a result of the construction associated with the placement of utility lines. In addition, historic agricultural practices and commercial use of mound sites for topsoil and fill underscore the probable lack of stratigraphic integrity" [1991:2].

Overall, while the APE has a moderate to high sensitivity for pre-contact archaeological resources based on the landform, proximity to water resources, and proximity to known archaeological resources, the high level of previous ground disturbance in the APE and previous subsurface survey results indicate that potential to encounter undisturbed soils with significant archaeological resources is low.

Evidence of historic-era settlement and land-reclamation activities have been documented near and within the APE. Prior to the Navy's purchase of the land in the 1930s, the vicinity of the APE was fairly undeveloped. A small dock (Jagel's Landing) was located around the northern end of the currently extant runways at MFA and a few roads and small farms dotted along to connect the dock to the town of Mountain View (USGS, 2022; NETR, 2022). No mapped features were identified on any topographic maps dating to prior to the MFA. As the Navy developed MFA throughout the 1930s and 1940s, levees were constructed along the northern border, fill was brought in to extend the shoreline to its current extent to make space for the runways, and the historic-era buildings associated with NAS Sunnyvale were constructed. Based on the maps, documented history of MFA, and the known historic-era resources in the APE, which are all mostly built-environment resources, there have been little to no geological or alluvial processes that would bury historic-era resources associated with MFA and there are no documented pre-MFA features in the APE. Additionally, the coring conducted in 2016 did not identify any historic-era cultural material and the disturbances of the soils caused by the construction and use of MFA documented by Garaventa et al. (1991) decrease the potential for buried historic-era archaeological resources in the APE (WSA, 2017). Any such intact historic-era resources would likely be on the surface and have been identified during pedestrian surveys, which have covered the entirety of the APE. Based on this analysis, the potential for presence of unrecorded, or previously unknown, historic-era archaeological resources is low.

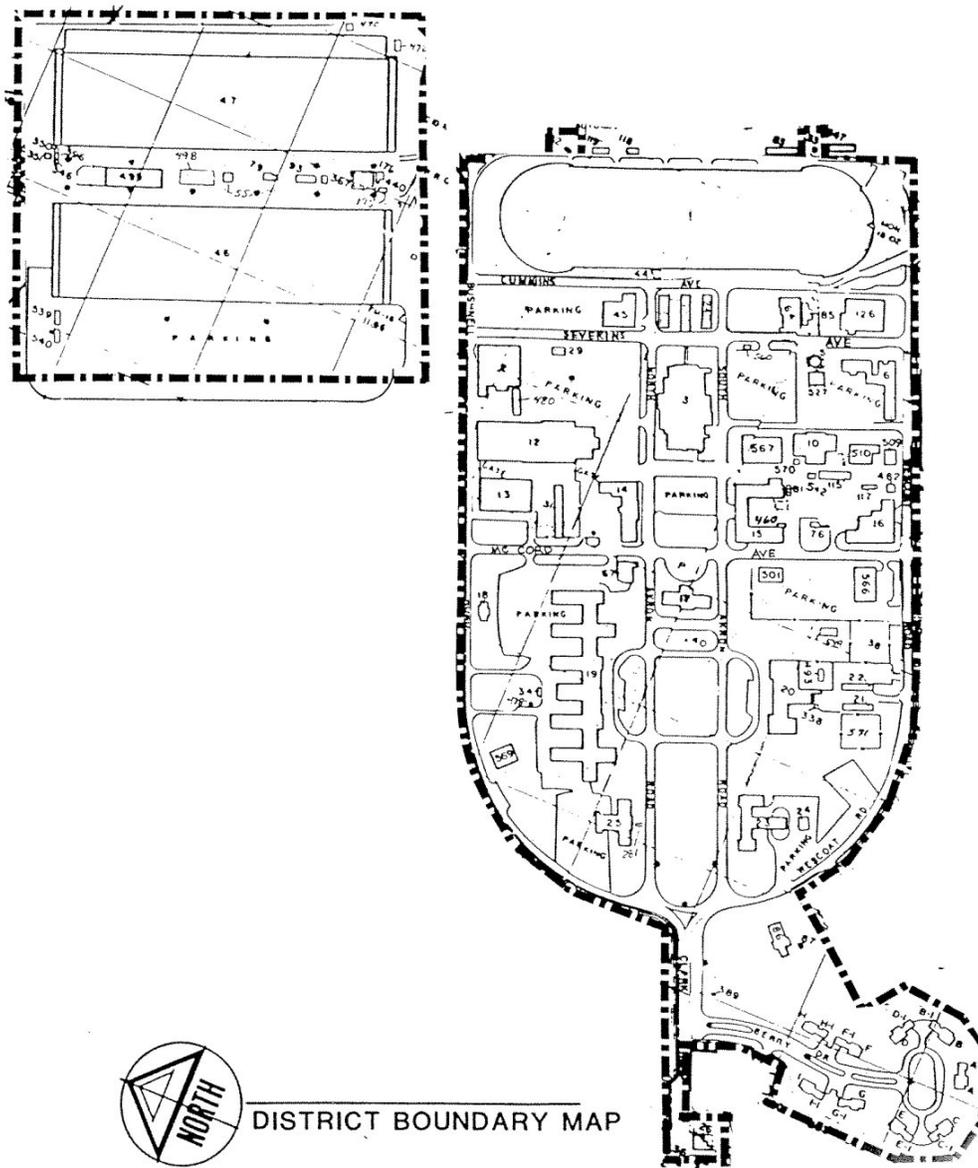
AECOM (2017) prepared an archaeological sensitivity analysis and map based on CHRIS records search data, historical map research, and geotechnical investigations analysis. The archaeological sensitivity map prepared by AECOM (2017) identifies the APE as an area with low archaeological sensitivity.

Therefore, this analysis concurs with AECOM's (2017) sensitivity analysis and concludes that the APE's potential for the presence of previously unknown pre-contact and historic-era archaeological resources is low.

Expanded NAS Sunnyvale Historic District (formerly the Shenandoah Plaza Historic District)

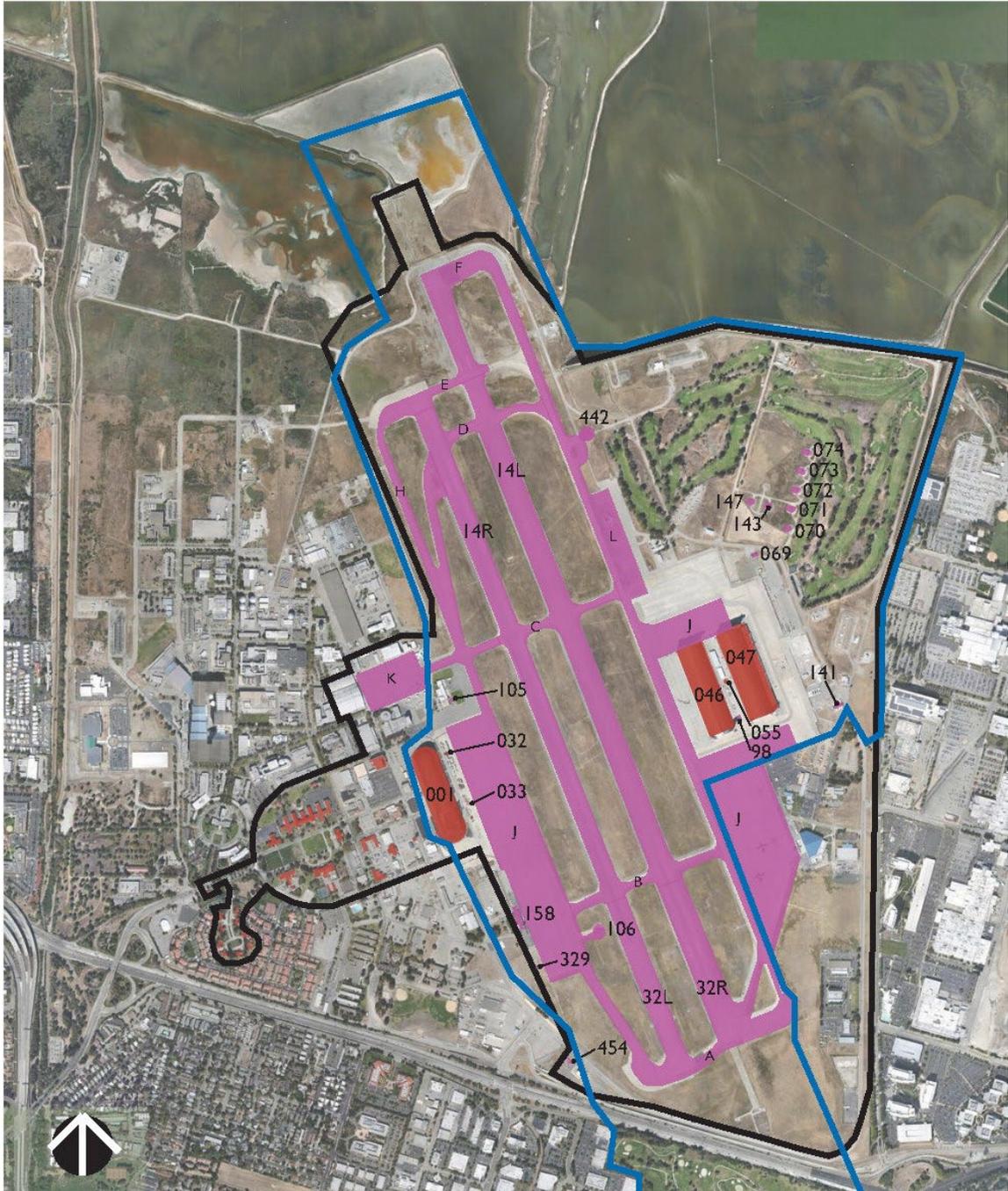
The United States Naval Air Station (NAS) Sunnyvale, California Historic District has been determined eligible for inclusion in the National Register under criteria A and C in the areas of Military History, Architecture, and Engineering. "The discontinuous district represents a rather unique and significant episode in the development of U.S. naval aviation prior to World War II" and "Hangar #1, the later blimp hangars #2 and #3, and their accompanying support buildings all represent excellent examples of early twentieth-century military planning, engineering, and construction" (NRHP Nomination, 1994).

The NAS Sunnyvale, California Historic District, originally consisted of 40 contributing buildings and structures when it was nominated to the National Register in 1994 (Figures 1 and 2, Table 3). The adjoining airfield was surveyed in 2013 and expansion of the district was recommended. The SHPO concurred on expanding the boundary of the district on June 6, 2013 (NASA_2013_0417_001) with a revised period of significance of 1942 to 1961 for the airfield. The expansion was officially recorded in 2015. On June 30, 2016, the SHPO concurred with the re-evaluation of Building 69, Building 439, and the Jet Fueling Facility (DFSP), including all its components as non-contributing properties within the district (NASA_2016_0425_001.) Those remaining contributing properties that are within the APE are described in greater detail below.



Source: Bamberg, 1994

Figure 1
NAS Sunnyvale Historic District - 1994



Source: Page and Turnbull, 2015

Note: Red – Contributing Resources Identified in 1994,
 Pink – Additional Contributing Resources Identified in
 2013-14, Black Boundary – Expanded NAS Sunnyvale
 Historic District Boundary.
 Blue Boundary – Lease boundary (approximate)

Figure 2
 Historic Buildings & Structures within the
 Expanded NAS Sunnyvale Historic District

TABLE 3
HISTORIC PROPERTIES WITHIN THE NAS SUNNYVALE HISTORIC DISTRICT

Building Number	Building Name/Historic Use	Year Built	In APE?
Hangar 1	Hangar 1	1933	No
46	Hangar 2	1943	Yes
47	Hangar 3	1943	Yes
2	Balloon Hangar	1933	No
5	Water Tower	1933	No
10	Heat Plant	1933	No
15	Fire Station/Laundry	1933	No
16	Locomotive Crane Shed	1933	No
17	Admirals Building	1933	No
18	Aerological Center	1933	No
19	Bachelor Enlisted Quarters	1933	No
20	Bachelor Officers Quarters	1933	No
21	Bachelor Officers Garage	1933	No
22	Bachelor Officers Garage	1933	No
23	Dispensary	1933	No
24	Ambulance Garage	1933	No
25	Bowling Alley/Theater	1933	No
26	Gate House/Iron Fence	1933	No
32	Floodlight Tower	1933	No
33	Floodlight Tower	1933	No
37	Scale House	1933	No
40	Flagpole	1933	No
55	Heat Plant for Hangars 2 and 3	1943	Yes
	Anchor		No
	Commons	1933	No
70*	Fuse & Detonator Magazine		No
71-74*	High Explosive Magazines		No
98*	Fire Protection Reservoir		No
105*	Airfield Lighting Vault		No
106*	Aircraft Compass Pad/Rose		No
143*, 147*	High Explosive Magazines	1953	No
158*	Flight Operations Tower	1954	No
329*	UHF/VHF Receiver Building		No
442*	Ordinance Handling Pad	1953	No
454*	Transmission Building		No
J*	Aircraft Parking Apron (MF1002)		Yes
K*	NACA/NANA Taxiway and Apron		No
G*, H*	West/East Parallel Taxiways (MF1016)		No
A-F*	Connecting Taxiways (MF1016)		No
	Runway 32l/14r (MF1000), 32f/14l (MF1001)	Late 1940s	No

NOTE:

* Within expanded historic district

SOURCE: NASA Ames Research Center website, https://historicproperties.arc.nasa.gov/downloads/summary_shenandoah.pdf, accessed December 14, 2021; Julianne Polanco, Letter re: Defense Fuel Support Point Closure, NASA Ames Research Center, Moffett Field, CA (NASA_2016_0425_001) to Keith Venter, NASA Ames Research Center, June 30, 2016.

Hangars #2 and #3 (Buildings 46 and 47)

In addition to Hangars #2 and #3 being contributors to the historic district they are both eligible individually for the National Register.

Hangars #2 and #3 were described in the 1994 nomination form as follows:¹

The site consists of twin hangars that were designed for the blimp fleet during WWII. They are of treated California redwood frame construction, configured on a rectangular plan in a more flattened parabolic form than Hangar #1; and characterized by their immense, moderately pitched porticoes at each of the north and south-facing hangar doors. These dominating entries are supported by very large concrete piers at each of the four corners. The twin buildings are set on a site plan that is directly oriented with the earlier Hangar #1, which is due west. The scale of the structure is exemplified by their dimensions, which at 1,075'x297'x171' (180,518 sq. ft.) make them slightly smaller than their predecessor, but still very impressive on the landscape. The use of wood construction instead of a steel truss system was in response to the war effort. Like more west coast military facilities constructed after 1941, metal was used very sparingly to conserve the resource for use in constructing ships and armament.

The design of these two buildings is in a much more conservative architectural style than the futuristic form of Hangar #1. These later hangars are almost domestic in the gabled porticoes. They definitely lack the daring and ingenuity of the other hangar's form and they are much less a unique design to the area. In fact, four other structures of like design were built on the west coast during World War II, to house the blimps used to patrol the Pacific coastal waters of the United States. Two in Coos Bay, Oregon which are no longer owned by the Federal Government and two on what is now Marine Corps Air Station, Tustin in Southern California. All four of these structures have been nominated for the National Register.

Although not of equal architectural or design merit as Hangar #1, these two like-structures are significant from both an historic perspective (as excellent extant examples of WWII blimp hangars) as well as an architectural/engineering perspective (they are after all buildings of incredible size and stature upon the landscape). The twin structures further add to the important design whole of the best of the original 1933 plan and the just slightly less impressive structures from the 1940's which help in-fill much of the site. They were completed in 1943. The combined visual power of Hangars #1, #2, and #3 form a physical presence upon the urbanscape which still dominates the low horizontal design of the Santa Clara Valley.

The Fire Protection Reservoir is considered a character-defining feature of Hangars 2 and 3.²

¹ Bamburg, Bonnie, *National Register of Historic Places Registration Form for the United States Naval Air Station Sunnyvale, California – Historic District*. 1994.

² Julianne Polanco, Letter re: Remediation and Rehabilitation of Hangars 2 and 3, Core and Shell, Moffett Federal Airfield, NASA Ames Research Center, Moffett Field, CA (NASA_2015_0605_001) to Keith Venter, NASA Ames Research Center, August 27, 2015.



Source: ESA, 2021

Figure 3
Hangars 2 and 3



Source: ESA, 2021

Figure 4
Looking South between Hangars 2 and 3

Building 55

Building 55, the original Boiler House, was built largely according to standardized plans which were developed for the Naval LTA hangars. The building continues to function as the heat plant, with recently replaced equipment. Its function will be retained and the exterior will be rehabilitated according to the Secretary of the Interior's Standards. The Boiler House is listed as a contributing feature of the historic district.

Aircraft Parking Apron (MF1002) (J)



Source: ESA, 2021

Figure 5
Building 55



Source: ESA, 2021

Figure 6
Building 55

Survey Methods and Findings

An ESA architectural historian surveyed the buildings and structures within the APE on December 8, 2021. The area was recorded with digital photography and notes.

Survey Results

Four historic-era built environment resources are within or partially intersect the APE and all are associated with the NAS Sunnyvale Historic District. All have been previously evaluated and are described above. No additional historic-era buildings or structures were identified during the survey effort that required evaluation.

Assessment of Effects

The project APE includes a portion of the NAS Sunnyvale Historic District, which is listed on the National Register. Therefore, it is considered a historic property as defined in NHPA (54 U.S.C. Section 300308). The following are contributing historic properties of the NAS Sunnyvale Historic District in the APE: Hangars 2 and 3, Building 55, and the Aircraft Parking Apron (MF1002.) The following discussion provides an assessment of effects of the three proposed projects on the one historic property identified in the APE, the NAS Sunnyvale Historic District (P-51-003511), using the Criteria for Adverse Effect as outlined in 36 CFR Section 800.5. While all projects were assessed for potential adverse effects, only Project 1 would involve any physical alteration to one of the contributors to the NAS Sunnyvale Historic District. The other two projects involve the addition or upgrading of necessary utilities and most of this work will involve work underground. Therefore, compliance with the Secretary of the Interior's Standards was only included below for Project 1.

Application of Criteria of Adverse Effect

Per 36 CFR Section 800.5, an undertaking is considered to have an adverse effect when it may:

“alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association”. (36 CFR Section 800.5[a][1]).

Also per 36 CFR Section 800.5(a)(2), adverse effects on historic properties include, but are not limited to:

- i. Physical destruction of or damage to all or part of the property;
- ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68) and applicable guidelines;
- iii. Removal of the property from its historic location;
- iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and,
- vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

One (i) of these seven example adverse effects applies to the project and is discussed below for P-51-003511 which is potentially affected by the undertaking. As there are three projects that make up the undertaking, subheadings have been included below to discuss the potential adverse effects of each.

P-43-003511 - NAS Sunnyvale Historic District

The following contributing historic properties of the NAS Sunnyvale Historic District could be impacted by the undertaking: Hangars 2 and 3, Building 55, and the Aircraft Parking Apron (MF1002.) Only Project 1 would involve any physical alteration to one of the contributors to the NAS Sunnyvale Historic District.

Project 1 - Hangar 2 [REDACTED] Communications Conduit

Project 1 would connect Hangar 2 to the existing telecommunications conduits [REDACTED]

Following completion of conduit installation, the hole would be backfilled and repaved to match existing grade and surface. The creation of these new entry points constitutes a minor physical alteration; one that is necessary to maintain the functionality of the structure. The following provides the SOIS compliance analysis for Project 1.

Rehabilitation Standard 1: a property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

Hangar 2 has not been used for its historical use for some time; however, the undertaking will not introduce any new use to the site. The connection of the existing telecommunications conduit outside of Hangar 2 into the interior of Hangar 2 will result in minimal physical change with the introduction of new entry points. Spaces and spatial relationships will remain unchanged. Therefore, Project 1 will adhere to Rehabilitation Standard 1.

Rehabilitation Standard 2: The historic character of the property will be retained and preserved. The removal of distinctive materials or alterations of features, spaces and spatial relationships that characterize a property will be avoided.

Project 1 will not change the historic character of Hangar 2 or the NAS Sunnyvale Historic District. The connection of the existing telecommunications conduit outside of Hangar 2 into the interior of Hangar 2 will result in minimal physical change with the introduction of new entry points. Spaces and spatial relationships will remain unchanged. Therefore, Project 1 will adhere to Rehabilitation Standard 2.

Rehabilitation Standard 3: Each property will 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 from other buildings, shall not be undertaken.

Project 1 will connect of the existing telecommunications conduit outside of Hangar 2 into the interior of Hangar 2 will result in minimal physical change with the introduction of new entry points. All equipment will be contemporary and will not create a false sense of historical development. Therefore, Project 1 will adhere to Rehabilitation Standard 3.

Rehabilitation Standard 4: Changes to a property that have acquired historic significance in their own right will be retained and preserved.

Project 1 will connect of the existing telecommunications conduit outside of Hangar 2 into the interior of Hangar 2 will result in minimal physical change with the introduction of new entry points. This is a small change given the scale of Hangar 2. Therefore, Project 1 will adhere to Rehabilitation Standard 4.

Rehabilitation Standard 5: Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

No distinctive features, finishes, construction techniques, or examples of craftsmanship will be significantly altered by Project 1. Only the introduction of new entry points into the Hangar 2 will result in a minor alteration the exterior of building. Therefore, Project 1 largely adheres to Rehabilitation Standard 5.

Rehabilitation Standard 6: Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

Project 1 will not involve the replacement of any missing historical features of any property. Additionally, Project 1 does not involve the repair or any other physical treatment of deteriorated historic features. Therefore, Project 1 adheres to Rehabilitation Standard 6.

Rehabilitation Standard 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.

Project 1 will not involve harmful chemical or physical treatments of any of historic materials or features of Hangar 2 or the NAS Sunnyvale Historic District. Therefore, Project 1 adheres to Rehabilitation Standard 7.

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

Potential impacts to archaeological resources are discussed above in the Archaeological Sensitivity Assessment section.

Rehabilitation Standard 9: New additions, exterior alterations or related new construction will not destroy historic materials, features and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

Project 1 does not include any new additions or new construction. It includes minor exterior alterations to Hangar 2 to provide an access point for the new conduit that will primarily be run underground. The addition of the conduit at the access point to Hangar 2 would be a small visual change and in keeping with the industrial nature of the property. All equipment will be contemporary and compatible with the historic materials, features, size, scale and proportion, and massing of Hangar 2. Therefore, Project 1 adheres to Rehabilitation Standard 9.

Rehabilitation Standard 10: New additions and adjacent new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment will be unimpaired.

Project 1 does not include any new additions or adjacent new construction. Therefore, Rehabilitation Standard 10 is not applicable.

Project 1 will adhere to the SOIS for Rehabilitation, as described above.

Project 2 - Hangar 2 [REDACTED] Conduit

Project 2 would be [REDACTED] consisting of four new HDPE conduits [REDACTED]

[REDACTED] Following completion of HDD boring and conduit installation, the hole would be backfilled and repaved to match existing grade and surface. Project 2 would not physically alter any historic properties, would not be located adjacent to any historic properties, and would not alter character-defining features of the NAS Sunnyvale Historic District.

Project 3 - California Air National Guard (CAANG) Airside Switch

Project 3 would install new switchgear, a concrete pad surrounded by concrete bollards, and a [REDACTED] selector switch as well as [REDACTED] new conduit as detailed above in the project description. [REDACTED]

Project 3 would not physically alter any historic properties, would not be located adjacent to any historic properties, and would not alter character-defining features of the NAS Sunnyvale Historic District.

Conclusion

Only Project 1 would involve any physical alteration to one of the contributors to the NAS Sunnyvale Historic District. The physical alterations involved in Project 1 are extremely minor in the overall scale of Hangar 2 and the larger Historic District. The creation of the entry point into Hangar 2 is necessary to maintain the use of the building. The project activities discussed above for the three minor projects would not diminish the significance of NAS Sunnyvale Historic District, and the resource would still adequately convey its significance. ESA recommends a finding of **No Adverse Effect**.

Based on the results of the records search, background research, survey, and assessment of effects, four cultural resources, all buildings associated with the MFA, and one historic district were identified within the APE: P-43-002555 (Building 498), P-43-002556 (Building 499), P-43-002618 (Building 540), P-43-002619 (Building 539), and P-43-003511 (NAS Sunnyvale Historic District). P-43-002555 (Building 498), P-43-002556 (Building 499), P-43-002618 (Building 540), and P-43-002619 (Building 539) have been previously determined not eligible for listing on the National Register. P-43-003511 (NAS Sunnyvale Historic District) was previously determined eligible and is listed on the National Register. Only four contributors to the NAS Sunnyvale Historic District are located within the APE: Hangar 2, Hangar 3, Building 55, and Aircraft Parking Apron (MF1002) (J). Hangars 2 and 3 are located within the APE and are contributors to the NAS Sunnyvale Historic District as well as individually eligible for the National Register. Only Project 1 would involve any physical alteration to one of the contributors to the NAS Sunnyvale Historic District. The physical alterations involved in Project 1 are extremely minor in the overall scale of Hangar 2 and the larger Historic District. The creation of the entry point into Hangar 2 is necessary to maintain the use of the building and the project would adhere to the SOIS for Rehabilitation.

The project activities discussed above for the three minor projects would not diminish the significance of NAS Sunnyvale Historic District, and the resource would still adequately convey its significance. None of three projects would alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Therefore, ESA recommends a finding of **No Adverse Effect** for the undertaking.

Recommendations

There is a low potential to uncover significant buried archaeological resources during ground disturbing activities. While unlikely, there is the potential for the discovery of buried archaeological resources during project construction. The ICRMP includes discovery procedures that will be followed in the event that cultural material and/or human remains are identified

during project construction. In this event, all work will be stopped, and the Cultural Resources Manager will be notified, after which a professional archaeologist will be consulted to evaluate the find and determine appropriate actions, per the procedure outlined in the ICRMP. See **Appendix C** for the text of these measures from the ICRMP (AECOM, 2014).

References Cited

- AECOM, *Integrated Cultural Resources Management Plan: NASA Ames Research Center*, November 2014.
- AECOM, *NASA Ames Research Center: Archaeological Resources Study*, February 2017.
- Ayers, James J. *Report of the Surveyor-General of the State of California from August 1, 1884, to August 1, 1996*. Available at: http://www.slc.ca.gov/wp-content/uploads/2018/08/Willey_1884_1886.pdf, 1886.
- Bamburg, Bonnie, *National Register of Historic Places Registration Form for the United States Naval Air Station Sunnyvale, California – Historic District*. 1994.
- Beck, Warren A. and Ynez D. Hasse, *Historical Atlas of California*. Norman, Oklahoma: University of Oklahoma Press. 1974.
- BERD (Built Environment Resource Directory) for Santa Clara. Available at: <https://ohp.parks.ca.gov/pages/1068/files/SantaClara.csv>. Accessed December, 2021.
- Bolton, H.E., *Anza's California Expeditions*. Berkeley: University of California Press. Volume I: An Outpost of Empire. Volume II: Opening a Land Route to California. Volume IV: Font's Complete Diary of the Second Anza Expedition. 1930.
- City of San José, *Alviso Master Plan: A Specific Plan for the Alviso Community*. City of San José Department of Planning, Building and Code Enforcement. Adopted December 7, 1998.
- Davis, J. T., and A. E. Treganza, “The Patterson Mound: A Comparative Analysis of the Archaeology of Site Ala-328”, *University of California Archaeological Survey Reports* 47:1-92, Berkeley, CA, 1959.
- Dibblee, T.W., and J.A. Minch, *Geologic Map of the Cupertino and San Jose West quadrangles, Santa Clara and Santa Cruz Counties, California*. Dibblee Geological Foundation. Available at: https://ngmdb.usgs.gov/Prodesc/proddesc_83442.htm. 2007.
- Garaventa, Donna M., Rebecca L. Anastasio, Angela M. Banet, Stuart A. Guedon, and Steven J. Rossa, *Archaeological Overview and Survey, Naval Air Station Moffett Field, Santa Clara County, California, and Naval Auxiliary Landing Field Crows Landing, Stanislaus County*, Prepared by Basin Research Associates, Inc., Prepared for Western Division, Naval Facilities Engineering Command, 1991.

- Hendry, George, and Jacob Bowman, *The Spanish and Mexican Adobe and Other Buildings in the Nine San Francisco Counties, 1776 to about 1850*. On file, California Historical Resources Information System, Northwest Information Center, Rohnert Park. 1940.
- Kroeber, A.L., *Handbook of the Indians of California*, Bureau of American Ethnology Bulletin No. 78, p. 465, Washington D.C., 1925.
- Levy, Richard, "Costanoan", In *California*, edited by Robert F. Heizer, pp. 485-495, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C., 1978.
- Meyer, Jack, and Jeffrey Rosenthal, *Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4*. Prepared for California Department of Transportation, District 4, Oakland, CA, 2007.
- Milliken, Randall, *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*, Ballena Press, Menlo Park, CA, 1995.
- Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson, "Punctuated Cultural Change in the San Francisco Bay Area", In *California Prehistory: Colonization, Culture, and Complexity*, edited by Terry L. Jones and Kathryn A. Klar, pp. 99-124, AltaMira Press, Lanham, MD, 2007.
- Moratto, Michael J., *California Archaeology*, 2004 reprinted ed. Coyote Press, Salinas, CA, 1984 [2004].
- National Park Service, *Santa Clara County: California's Historic Silicon Valley, Early History. A National Register of Historic Places Travel Itinerary*. Available at: www.nps.gov/history/nr/travel/santaclara/history.htm. Accessed October 6, 2008.
- Nelson, Nels C., "Shellmounds of the San Francisco Bay Area", *University of California Publications in American Archaeology and Ethnology* 7 (4):310-356, Berkeley, CA, 1909.
- NETR (National Environmental Title Research), *Historic Aerials Viewer*. Available at: <https://historicaerials.com/viewer#>, accessed January 2022, 2022.
- NWIC (Northwest Information Center), Records Search File No. File No. 21-908. On file, ESA, December 9, 2021.
- Polanco, Julianne. Letter re: Defense Fuel Support Point Closure, NASA Ames Research Center, Moffett Field, CA (NASA_2016_0425_001). To Keith Venter, NASA Ames Research Center. June 30, 2016.
- Polanco, Julianne. Letter re: Remediation and Rehabilitation of Hangars 2 and 3, Core and Shell, Moffett Field Airfield, NASA Ames Research Center, Moffett Field, CA (NASA_2015_0605_001). To Keith Venter, NASA Ames Research Center. August 27, 2015.
- Page & Turnbull, *Core & Shell Rehabilitation of Hangars 2 & 3: Scope Narrative*. May 29, 2015.

Rosenthal, Jeffrey S., and Jack Meyer, *Cultural Resources Inventory of Caltrans District 10 Rural Conventional Highways: Volume III: Geoarchaeological Study, Landscape Evolution and the Archaeological Record of Central California*. Prepared by Far Western Anthropological Research Group, Inc., Davis, CA, Prepared for Caltrans District 10, Stockton, 2004.

Shew, William J. *Portrait of Lupe Yñigo*, Santa Clara University Archives and Special Collections. Available at: <http://content.scu.edu/cdm/ref/collection/college/id/99>, 1903.

USDA (U.S. Department of Agriculture), *Natural Resources Conservation Service Web Soil Survey, Version 3.1*. Available at: <http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>, December 13, 2020.

USGS (United States Geological Survey), *TopoView*. Available at: <https://ngmdb.usgs.gov/topoview>, accessed January 2022, 2022.

WSA (William Self Associates), *Archaeological Testing Report, MFA Electrical-Telecommunications Infrastructure Project, Santa Clara County, California*. Prepared by WSA, Prepared for Page and Turnbull, 2017.

The following content was redacted from this public posting:

Maps

The following content was redacted from this public posting:

Confidential Map

Appendix A

Site Records

Prop# 126940

DOE-43-99-0240-0000

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-43-002555
HRI # _____
Trinomial _____
NRHP Status Code 6Z

Other Listings _____
Review Code _____ Reviewer _____ Date / /

Page 1 of 2

*Resource Name or #: 498, Moffett Federal Airfield

P1. Other Identifier: Storage

*P2. Location: Not for Publication Unrestricted a. County Santa Clara

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address Jagels Road City Moffett Field Zip 94035

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 498 is a high one-story gable-roof open storage facility. Large metal trusses, with their legs set on concrete piers, support a ribbed metal roof. It is surrounded by a chain-link fence and houses hazardous materials.

*P3b. Resources Attributes: (List attributes and codes) HP34, Military Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)
Northeast,

April 1998, Roll 3-4A

*P6. Date Constructed/Age and Sources:
 Prehistoric Historic Both
1965

*P7. Owner and Address:
U.S.A. as represented by
National Aeronautics and Space
Administration, Washington, D.C.

*P8. Recorded by: (Name, affiliation, address)
Alexandra C. Cole, SAIC
816 State Street, Suite 500
Santa Barbara, CA 93101

*P9. Date Recorded: 06/29/1998

*P10. Survey Type: (Describe)
Comprehensive Survey for Section
106 Compliance

*P11. Report Citation: (Cite survey report/other sources or "none") Inventory and Evaluation of Cold War Era Historical Resources, Moffett Federal Airfield

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code 6Z

*Resource Name or #: 498, Moffett Federal Airfield

B1. Historic Name: Unknown

B2. Common Name: Unknown

B3. Original Use: Covered Storage

B4. Present Use: Hazardous Materials Storage

*B5. Architectural Style: No Style

*B6. Construction History: (Construction date, alterations, and date of alterations.)
1965

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

B9a. Architect: Unknown

b. Builder: Unknown

*B10. Significance: Theme Cold War Area United States

Period of Significance 1946-1989 Property Type Military Applicable Criteria G

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This Cold War-era building is considered a support building, a type found at any Naval installation regardless of mission. It is therefore not of exceptional national significance and is not considered eligible for the National Register of Historic Places (Criterion G).

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

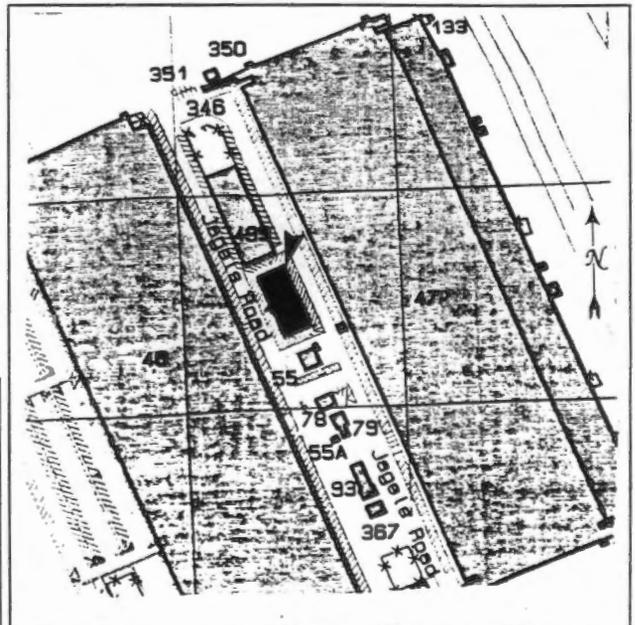
Real Property Form

B13. Remarks:

*B14. Evaluator: Alexandra C. Cole

Date of Evaluation: 05/01/1998

(This space reserved for official comments.)



Prop# 120941

DOE-43-99-0247-0000

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-43-002556

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____

Reviewer _____

Date / /

Page 1 of 2

*Resource Name or #: 499, Moffett Federal Airfield

P1. Other Identifier: Storage

*P2. Location: Not for Publication Unrestricted

a. County Santa Clara

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; 1/4 of _____ 1/4 of Sec _____; B.M. _____

c. Address Jagels Road City Moffett Field Zip 94035

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 499 is a high one-story gable-roof open storage facility. Large metal trusses, with their legs set on concrete piers, support a ribbed metal roof. It is surrounded by a chain link fence and houses vehicles.

*P3b. Resources Attributes: (List attributes and codes) HP34. Military Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)

Northeast,

April 1998, Roll 3-5A

*P6. Date Constructed/Age and Sources:

Prehistoric Historic Both

1966

*P7. Owner and Address:

U.S.A. as represented by

National Aeronautics and Space

Administration, Washington, D.C.

*P8. Recorded by: (Name, affiliation, address)

Alexandra C. Cole, SAIC

816 State Street, Suite 500

Santa Barbara, CA 93101

*P9. Date Recorded: 06/29/1998

*P10. Survey Type: (Describe)

Comprehensive Survey for Section

106 Compliance

*P11. Report Citation: (Cite survey report/other sources or "none") Inventory and Evaluation of Cold War Era Historical Resources, Moffett Federal Airfield

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code 6Z

*Resource Name or #: 499, Moffett Federal Airfield

B1. Historic Name: Unknown

B2. Common Name: Unknown

B3. Original Use: Covered Storage

B4. Present Use: Equipment Storage

*B5. Architectural Style: No Style

*B6. Construction History: (Construction date, alterations, and date of alterations.)
1966

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Cold War Area United States

Period of Significance 1946-1989 Property Type Military Applicable Criteria G

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This Cold War-era building is considered a support building, a type found at any Naval installation regardless of mission. It is therefore not of exceptional national significance and is not considered eligible for the National Register of Historic Places (Criterion G).

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

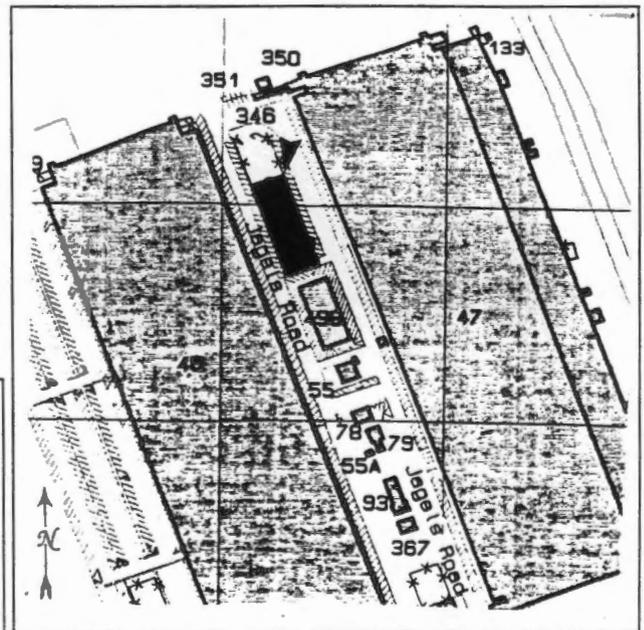
Real Property Form

B13. Remarks:

*B14. Evaluator: Alexandra C. Cole

Date of Evaluation: 05/01/1998

(This space reserved for official comments.)



Prop# 115038

DOE-43-99-02102-0000

State of California -- The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-43-002618

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____ Reviewer _____

Date / /

Page 1 of 2

*Resource Name or #: 540, Moffett Federal Airfield

P1. Other Identifier: Line Shack

*P2. Location: Not for Publication Unrestricted a. County Santa Clara

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; 1/4 of 1/4 of Sec _____; B.M. _____

c. Address NW corner, Hangar #2 City Moffett Field Zip 94035

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 540, adjacent to 539, is a rectangular (20' x 48') pre-fabricated ribbed-metal building on a concrete foundation. The gable roof is of ribbed metal with three vents on the ridge line. Aluminum-frame sliding windows are located on all sides. Single metal doors provide access on the east and west sides.

*P3b. Resources Attributes: (List attributes and codes) HP34. Military Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)
Northeast.

April 1998, Roll 3-12A

*P6. Date Constructed/Age and Sources:

Prehistoric Historic Both

1972

*P7. Owner and Address:

U.S.A. as represented by
National Aeronautics and Space
Administration, Washington, D.C.

*P8. Recorded by: (Name, affiliation, address)

Alexandra C. Cole, SAIC
816 State Street, Suite 500
Santa Barbara, CA 93101

*P9. Date Recorded: 06/25/1998

*P10. Survey Type: (Describe)

Comprehensive Survey for Section
106 Compliance

*P11. Report Citation: (Cite survey report/other sources or "none") Inventory and Evaluation of Cold War Era Historic
Resources, Moffett Federal Airfield

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code 6Z

*Resource Name or #: 540, Moffett Federal Airfield

B1. Historic Name: Unknown

B2. Common Name: Unknown

B3. Original Use: Line Shack B4. Present Use: V-Vacant

*B5. Architectural Style: No Style

*B6. Construction History: (Construction date, alterations, and date of alterations.)
1972

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

B9a. Architect: Unknown b. Builder: Unknown

*B10. Significance: Theme Cold War Area United States

Period of Significance 1946-1989 Property Type Military Applicable Criteria G

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This Cold War-era building is considered a support building, a type found at any Naval installation regardless of mission. It is therefore not of exceptional national significance and is not considered eligible for the National Register of Historic Places (Criterion G).

B11. Additional Resource Attributes: (List attributes and codes) _____

*B12. References:

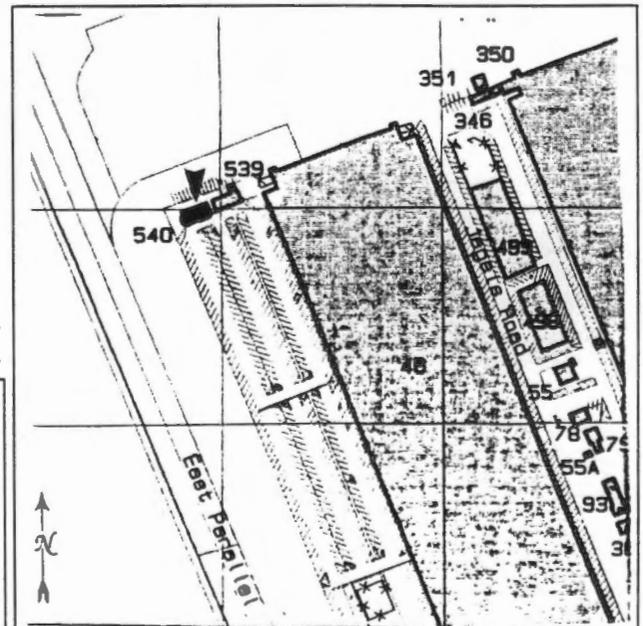
Real Property Form

B13. Remarks:

*B14. Evaluator: Alexandra C. Cole

Date of Evaluation: 05/01/1998

(This space reserved for official comments.)



Prop# 115037

DOE-4399-0241-0000

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary # P-43-002619

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____

Reviewer _____

Date / /

Page 1 of 2

*Resource Name or #: 539, Moffett Federal Airfield

P1. Other Identifier: Line Shack

*P2. Location: Not for Publication Unrestricted

a. County Santa Clara

b. USGS 7.5' Quad _____ Date _____ T _____; R _____; _____ 1/4 of _____ 1/4 of Sec _____; _____ B.M.

c. Address NW corner, Hangar #2 City Moffett Field Zip 94035

d. UTM: (Give more than one for large and/or linear feature) Zone _____, _____ mE/ _____ mN

e. Other Locational Data: (e.g. parcel #, legal description, directions to resource, elevation, additional UTM's, etc. as appropriate)

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries.)

Building 539, adjacent to 540, is a rectangular (20'x 48') pre-fabricated ribbed-metal building on a concrete foundation. The gable roof is of ribbed-metal with three vents on the ridge line. Aluminum-frame sliding windows are located on all sides. Single metal doors provide access on the east and west sides.

*P3b. Resources Attributes: (List attributes and codes) HP34. Military Property

*P4. Resources Present: Building Structure Object Site District Element of District Other (Isolates, etc.)



P5b. Description of Photo: (View, date, etc.)
Northwest,

April 1998, Roll 3-11A

*P6. Date Constructed/Age and Sources:

Prehistoric Historic Both

1972

*P7. Owner and Address:

U.S.A. as represented by
National Aeronautics and Space
Administration, Washington, D.C.

*P8. Recorded by: (Name, affiliation, address)

Alexandra C. Cole, SAIC
816 State Street, Suite 500
Santa Barbara, CA 93101

*P9. Date Recorded: 06/25/1998

*P10. Survey Type: (Describe)

Comprehensive Survey for Section
106 Compliance

*P11. Report Citation: (Cite survey report/other sources or "none") Inventory and Evaluation of Cold War Era Historical Resources, Moffett Federal Airfield

*Attachments: NONE Location Map Sketch Map Continuation Sheet Building, Structure and Object Record
 Archaeological Record District Record Linear Feature Record Milling Station Record Rock Art Record Artifact Record
 Photograph Record Other: (List) _____

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 2

*NRHP Status Code 6Z

*Resource Name or #: 539, Moffett Federal Airfield

B1. Historic Name: Unknown

B2. Common Name: Unknown

B3. Original Use: Line Shack

B4. Present Use: V-Vacant

*B5. Architectural Style: No Style

*B6. Construction History: (Construction date, alterations, and date of alterations.)

1972

*B7. Moved? No Yes Unknown Date: _____ Original Location: _____

*B8. Related Features:

B9a. Architect: Unknown

b. Builder: Unknown

*B10. Significance: Theme Cold War

Area United States

Period of Significance 1946-1989

Property Type Military

Applicable Criteria G

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

This Cold War-era building is considered a support building, a type found at any Naval installation regardless of mission. It is therefore not exceptional national significance and is not considered eligible for the National Register of Historic Places (Criterion G).

B11. Additional Resource Attributes: (List attributes and codes) HP34, Military Property

*B12. References:

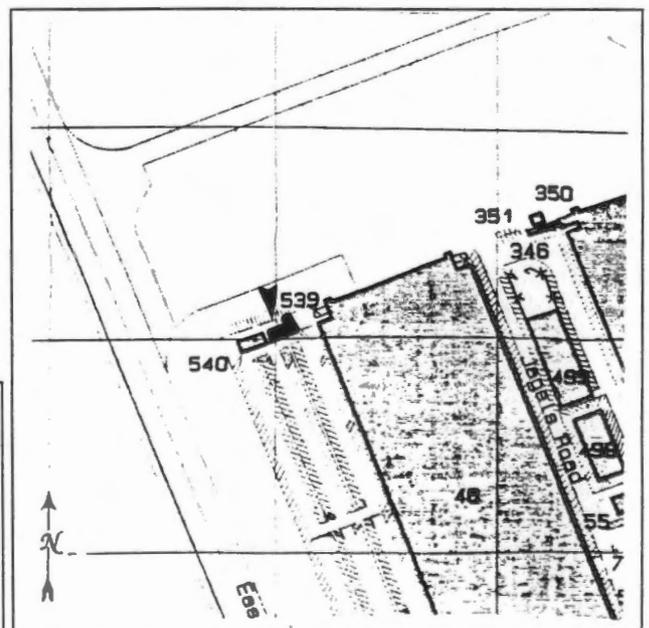
Real Property Form

B13. Remarks:

*B14. Evaluator: Alexandra C. Cole

Date of Evaluation: 05/01/1998

(This space reserved for official comments.)



United States Department of the Interior
National Park Service

National Register of Historic Places
Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property Name

Santa Clara CA
County State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Raf. B. Lujan
Signature of the Keeper

2.24.94
Date of Action

=====
Amended Items in Nomination:

Classification:

The number of previously listed resources is changed to zero (0); Hangar #1 was only determined eligible for listing.

Significance:

Area of Significance:

Architecture is added as an area of significance, defining the district as a good regional example of military design in the Spanish Colonial Revival style.

Significant Person:

The name of Adm. William Adger Moffett is removed from the significant person blank since the district was not nominated under Criterion B.

continued

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property Name

Santa Clara CA
County **State**

N/A
Multiple Name

Amended Items in Nomination:

continued

U.T.M.:

The UTM coordinates are corrected to read:

A	10	582960	4140460
B	10	583240	4140880
C	10	583800	4141120
D	10	583940	4140740
E	10	583140	4140330
AA	10	584640	4141420
BB	10	584880	4141520
CC	10	584760	4141120
DD	10	584990	4141220

This information was confirmed with Navy FPO J. Bernard Murphy.

DISTRIBUTION:

**National Register property file
Nominating Authority (without nomination attachment)**

RECEIVED

45

United States Department of the Interior
National Park Service

JAN 13 1994

RECEIVED

NATIONAL REGISTER

JUL 15 1993

National Register of Historic Places Registration Form

ONP

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name United States Naval Air Station Sunnyvale, California- Historic District
other names/site number U. S. Naval Air Station Moffett Field - Central Historic District

2. Location

street & number Central District not for publication
city, town Naval Air Station Moffett Field vicinity
state California code CA county Santa Clara code CA 085 zip code 94035

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input type="checkbox"/> public-local	<input checked="" type="checkbox"/> district	<u>40</u>	<u>54</u> buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	<u>1</u>	_____ sites
<input checked="" type="checkbox"/> public-Federal	<input type="checkbox"/> structure	<u>2</u>	_____ structures
	<input type="checkbox"/> object	<u>43</u>	<u>54</u> objects
			<u>1</u> Total

Name of related multiple property listing: _____
Number of contributing resources previously listed in the National Register 1

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.
J. J. Murphy Jan 5 / 94
Signature of certifying official Date
Department of the Navy Federal Preservation Officer
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of commenting or other official Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:
 entered in the National Register.
 See continuation sheet.
 determined eligible for the National Register. See continuation sheet.
 determined not eligible for the National Register.
 removed from the National Register.
 other, (explain:) _____
Cal R. Fung 2.24.94

Signature of the

6. Function or Use

Historic Functions (enter categories from instructions)

Defense Naval Facility

Air Facility

Current Functions (enter categories from instructions)

Defense Naval Facility

Air Facility

7. Description

Architectural Classification

(enter categories from instructions)

Late 19th and 20th Century Revivals

Mission/Spanish Colonial Revival

Other: Dirigible Hangar

WW II Blimp Hangar (2)

Materials (enter categories from instructions)

foundation concrete

walls stucco

roof clay tile

other terra cotta panels

Describe present and historic physical appearance.

SITE DEFINITION

The site consists of a large number of buildings that were constructed over an approximately 60 year time frame from the early 1930's until today. The buildings are clustered in a formal campus-like layout that is defined by a western-facing gated entrance and a very well tended landscape which includes mature specimen trees, shrubs, and manicured lawns.

The site can be easily divided into its stylistic components that also define the different eras of construction over the base's lifetime.

The oldest and most historically significant buildings, from an architectural and engineering standpoint that form a coherent core, include the formal cluster of buildings dating from 1933 that lead up to, and include, the imposing Hangar #1 (the original dirigible hangar) and WWII Blimp Hangars. This area of the base is bounded by Bushnell Road on the north, the automobile parking spaces behind Sayre Avenue on the east, Westcoat Road on the south; and the entry, Clark Road, on the west. The central area is laid out in an axial plan in a northeasterly direction with the original buildings symmetrically placed along a grand central greensward. In addition to this very defined central space where the earliest major base buildings are located, there is an equally significant adjunct of 9 officers' residences clustered around Berry Drive just to the south of the main gated entrance in another formally laid out plan with grass medians, a grass island at the end of the southern cul-de-sac, and a characteristically suburban curved residential street. In keeping with the symmetry that was so strong to the original plan, another unbuilt residential complex was originally planned for the northern side of the entrance drive.

These earliest buildings, which were designed by the Navy Department Bureau of Yards and Docks, exemplify California's most popular contemporary architectural style of the 1920's and early '30's. They are constructed in a late Spanish Colonial Revival architectural style (a style that was equally as popular in government construction in the eastern sections of the United States during the 1920's and into the early 1940's), as well as aspects that presage the modern designs of the Internationalist styles which would predominate in American architecture for the next thirty-five years (from approximately 1940 to 1975).

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)

Military
Engineering

Period of Significance

1930-1935
1942-1946

Significant Dates

Cultural Affiliation

Significant Person

Moffett, William Adger; Admiral

Architect/Builder

U.S. Navy Bureau of Yards and Docks

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

In the nation's quest to provide security for the lengthy expanse of its coastlines the opportunity for air reconnaissance was realized by the futuristic Admiral William A. Moffett. Through his efforts, two Naval Air Stations were commissioned in the early 1930's to port the two U.S. Naval Airships (dirigibles) he believed capable of this challenge. The Naval Air Station Sunnyvale was the Pacific Coast location selected, designed and developed to port USS MACON (ZRS 5). The immense structure, Hangar #1, designed to house USS MACON, with its larger counterpart in Akron, Ohio, remain the two largest structures in the United States without internal support. At the onset of WWII, the base was expanded with Hangars #2 and #3 which were designed to accommodate the smaller blimps and balloons used for reconnaissance, until the range of heavier than air aircraft (airplanes) was sufficient to patrol the coast. The significance of the U.S. Naval Air Station Sunnyvale Historic District is attributed to the association with the expanding defense capabilities of the U.S. Navy, the engineering technology found in lighter than air ships, the design of the hangar and system for porting the dirigible and in the plan and architectural style of the station designed to support this defense technology. The significance of Hangar #1, was recognized when it was designated a Naval Historical Monument. It has been designated a California Historic Civil Engineering Landmark, by the San Francisco section, American Society of Civil Engineers, and has been determined eligible for listing in the National Register of Historic Places by the U.S. Navy in consultation with the California State Historic Preservation Officer. The entire historic district is supported for listing in the National Register of Historic Places at the national level of significance under Criterion A for the association with coastal defense and naval technology that has made a significant contribution to the broad patterns of our history; and Criterion C reflecting the distinctive type, period, method of construction and high artistic values that are represented in the 1933 station plan and buildings. In 1942, the station was recommissioned, U. S. Naval Air Station, Moffett Field, in recognition of the significant contribution to naval history by Admiral Moffett, contributions that have gained him the unofficial title, "Father of Naval Aviation."

See continuation sheet

9. Major Bibliographical References

Gragg, Dan The Guide to Military Installations, Harrisburg, PA; Stackpole Books, 1983
Payne, Stephen M., Santa Clara County: Harvest of Change, Santa Clara, CA; Windsor Publications, 1987

Unpublished:

Historic Civil Engineering Landmarks of San Francisco and Northern California, 125th Annual Conference, American Society of Civil Engineers, San Francisco Section, Sponsor, 1977.

Ifft, Jerry. The Era of Dirigibles at Moffett Field, 1987; California Room, Martin Luther King, Jr. Memorial Library, San Jose, CA

Interviews:

Benjamin Mandweiler, NAS, Moffett Field, Public Works Department
Lt. Col. Robert N. Maupin, USAF. Ret.

See continuation sheet

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: _____

10. Geographical Data

Acreage of property 124 Acres (approximately)

UTM References

A

1	0	3	7	7	0	3	6	1	2	2	0	5	9	8
Zone	Easting	Northing												

C

1	0	3	7	6	9	9	9	1	2	2	0	6	2	5
Zone	Easting	Northing												

B

1	0	3	7	6	9	7	5	1	2	2	0	6	0	4
Zone	Easting	Northing												

D

1	0	3	7	7	0	6	3	1	2	2	0	5	3	0
Zone	Easting	Northing												

See continuation sheet

Verbal Boundary Description

The Naval Air Station Sunnyvale includes all of the 1933 original base plan with the addition of the 22.5 acre detached area containing hangars #2 and #3. The boundary line begins at the Main Gate, including the entrance gate and fence, proceeds along Clark Road to Berry Road where the boundary turns south to encircle the quarters A through H, north behind quarter F to Westcoat Road, east to Sayre Ave., north to Bushnell Road and west to Clark Road. A detached area is included in the historic district to incorporate hangars #2 and #3 with a 25 foot band of land around the pair.

Boundary Justification

The boundary includes the limits of development in the 1933 base plan for the Naval Air Station Sunnyvale, as prepared by the Navy Department, Bureau of Yards and Docks, and the area incorporating hangars #2 and #3 that are associated with lighter than air military aircraft.

See continuation sheet

11. Form Prepared By

name/title Bonnie Bamburg
 organization Urban Programmers date November 9, 1991
 street & number 1174 Lincoln Avenue telephone 408-971-1421
 city or town San Jose state California zip code 95125

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

This hybrid style forms a unifying element that not only holds the myriad of architectural uses together, but gives the entire complex a very satisfying central theme. The style is highly ornamented in the most significant buildings (such as the Administration and Bachelor Officers' Quarters) and stripped of ornament, but no less supportive of the whole in the smaller out buildings and garages. Interestingly, the building that is the raison d'être of the entire Naval Air Station, Hangar #1, eschews any historicism in its design, but rather reflects the highest Streamline Moderne forms of modern technology at its finest.

Another slightly newer cluster of buildings is also defined by their distinctive architectural style which reflects the most popular designs of their time. These buildings are those structures which were built in the 1940's and early '50's and that are designed in a very plain International style of architecture defined by the simple stripped geometrical forms of the structures. These interesting examples are located at a few scattered sites within the original plat noted above (i.e. the Post Office, #67, for example), as well as being set in a long row along Dailey Road between the original campus plan and the Bayshore Freeway (#152). Other noteworthy buildings include the Control Tower (#158) at the far eastern edge of the site and the original Chapel Building (#86), which is a reinterpreted hybrid style that exhibits aspects of both a stripped Spanish Colonial Revival design and ornament hinting at more of a Mission Revival style. Additionally, two slightly smaller, but no less impressive hangars (Hangar #2 and #3), were constructed across the runways to the east of Hangar #1. These buildings were designed for the smaller blimps that replaced the huge rigid framed dirigibles of the 1930's for which Hangar #1 was designed. They also were designed in a much more prosaic and conventional architectural style than the metal sheathed futuristic Hangar #1.

A building that provides visual compatibility with the 1930's Spanish Colonial Revival buildings is the Chapel. This is due both to its physical location within the historic district, as well as to its architectural design, which is much more compatible with the older buildings on the base rather than the later International styled buildings. Early photos of the building illustrate a structure whose basic form of rather simply pitched cruciform plan appears to be very standard designed archetype military base chapel of the 1940's. But to this basic form, the designers add very site specific detailing which, though not technically a re-creation of the Spanish Colonial Revivals around it, very handsomely picks up hints of the building characteristics of the older structures. These details include, most importantly, the cupola which mimics the tower on the Administration Building, and the projecting curvilinear portico with its stone-like entry frame which takes directly from the Spanish Colonial Revival interpretations surrounding. The end result is an almost textbook example of a successfully designed new structure sensitive to an established architectural campus. Because the chapel was constructed well after the 1933 period it is not a contributing building to the historic district.

Because the International style buildings are less than 50 years old and are not individually exceptional, they will not qualify for listing in the National Register at this time and will not be discussed in any detail. This group consists of buildings 148-156, 158 and building 67.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 3

In addition to these two major stylistic groupings, there are a number of other buildings on the site that have been constructed over the past approximately 50 years that fill up the site, but do not represent very fine examples of architectural design. These buildings are characterized by their utilitarian function, such as the number of Quonset huts (#111, #118 and #119) found throughout the site, as well as the plethora of small wooden and stucco buildings with little discernible styling that comprise much of the barracks, enlisted housing, shopping and warehousing spaces (#E-52, #E-13, #E-29, #347, #223, #245, and #244).

Thus from a specific design standpoint, the site can be divided into the following five main components that comprise its strongest identifying features:

- A. Original Spanish Colonial Revival Design
- B. Significant Engineering Features (Hangars #1, #2, & #3)
- C. Miscellaneous Supportive Design Features
- D. Post 1935 buildings designed in the Spanish Colonial Revival Style
- E. International Style Buildings from the 40's

Out of these five categories, the proposed historic district from the 1930's will include all those features identified with item "A, B & C" immediately above.

A. ARCHITECTURAL DESCRIPTION OF THE SPANISH COLONIAL REVIVAL-DESIGNED ORIGINAL BASE BUILDINGS.

The original plan of Moffett Field was constructed in an architectural style that had as its antecedent the exuberant and capricious ornamentation applied by the 17th Century architect, Jose Churriguere, and eloquently revived by Bertram Goodhue in the design for the 1915 San Diego Panama Pacific Exposition. The Navy first attempted the style at Chollas Heights Radio Transmission Station in 1916 and followed with Goodhues' Marine Corps Recruit Depot, c. 1920, Naval Air Station North Island, c. 1921, and his sketches for the Naval Training Center in San Diego, a year or so later. This form of Spanish Colonial Revival design reached its zenith at the end of the 1920's and was gradually losing favor to the modern designs of the mid-to-late 1930's. By the 1940's only some very late examples, usually transitional in styling that reflected the rise of both modern schools of architecture (Moderne and Deco styles, as well as the later International or Bauhaus-influenced styles) were being built.

The complex of original buildings that comprise the heart of the Naval Air Station Moffett Field are examples of late Spanish Colonial Revival design reflecting a much more severe example of this style with strong influences of the more modern style precepts, as well as hints of Eastern Colonial designs. The resulting hybrid significantly alters the original architecture of this style.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 4

These buildings are characterized as essentially two-storied white or off-white stucco structures that are capped by very low-pitched Spanish tile roofs, which are punctuated by projecting chimneys, air ducts and, in the case of the true centerpiece building, the Administrative Building (#17), a richly ornamented, roof pavilion where corner columns support a decorated dome. The buildings are all rectangular in plan with either central projecting spaces or corner wings. Wall surfaces are very plain with the major break up of space occurring either in the location of rectangular-shaped windows, slightly projecting stringcourses between the floors, round arched entryways or arcaded ornamentation styled to look like granite around the major entry doors and surrounding significant window spaces.

It is the variation of the above major design elements that define the original base architecture. The two most handsome entrances are the round arched arcades that distinguish both the aforementioned Administration Building and the equally impressive Bachelor Officers' Quarters (#20). Repeated ornamentation include the flattened urn motif, various cartouches, and quarter-foil windows found along the exterior surfaces of all the major structures. The juxtaposition between the flat surfaces of the exteriors contrasting with the florid ornament around the major doors and windows provide the perfect tension that distinguishes the Spanish Colonial Revival style. A notable somewhat stripped example of this style is the impressive original Aircraft Tower (#18).

Some of the minor out-buildings, although stripped of much ornamentation, exhibit sensitive design features such as the low stepped parapets of buildings #22 and #2, the repeated multilight apertures of #10, and the simple, yet distinctive massing of the original portions of #6, which acts to reinforce the common design theme throughout the historic core. All of these original outbuildings significantly reinforce the common design theme of the historic campus.

The second cluster of original buildings, which forms an equally impressive uniform design statement, is found in the earliest residential units of the detached officers housing. In this extremely pleasant space, made so by its luxuriant landscaping and large unbroken lawns, a very simple house plan is repeated with only slight variations. The structures are designed in a very stripped and somewhat severe Spanish Colonial Revival style with two-storied, rectangular plan residences joined to a garage, either a one or two storied garage, by an arcade. The roof lines are low pitched gables that are sheathed in red Spanish tiles and punctuated by end fireplaces. Apertures are symmetrically placed on the structures with the dominant design characteristically reserved for the front entry. Windows are generally rectangular in shape, double hung and 3 over 2 in design. As with the major buildings on the working base section, here two stringcourses and various door surrounds provide the major contrast to the very simple stucco walls. Additionally, a similarly designed structure forms a prominent security building at the front gateway.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 5

B. DESCRIPTION OF THE ORIGINAL ENGINEERING FEATURES (HANGARS #1, #2, AND #3)

Completely separate in design, but of such striking style and size as to warrant separate discussion are the three buildings that form the raison d'être of the entire complex. The three hangars are of such proportions that for this reason alone they warrant the title "landmark". Aesthetically, the original hangar, which was constructed to hold USS MACON, a dirigible, is of such a unique design that it stands apart even from its later sister buildings. Hangar #1 is a metal sheathed behemoth whose rounded shape is both the epitome of the aerodynamically influenced Streamline Moderne style as well as a stylistic cousin to the huge airship that originally berthed inside the mammoth hangar.

Above all other buildings found on the Moffett Field site, Hangar #1 is without question the most significant building both architecturally and historically. It is one of the major buildings of Northern California, and has been recognized as an Engineering Landmark by the American Society of Civil Engineers.

Hangars #2 and #3 are significant more for their size than their unique styling or design. They represent more prosaic attempts at constructing very large military hangars. Similarly designed structures are found on Marine Corps Air Station, Tustin, California and at Coos Bay, Oregon. The more common design does not, however, detract from the sheer magnitude of the two huge buildings side by side. Along with Hangar #1, these two buildings help define the south San Francisco Bay Area from all distant directions.

C. DESCRIPTION OF THE OTHER SUPPORTIVE DESIGN ELEMENTS (I.E. LANDSCAPING, GATEWAYS, ARTWORK AND ITEMS OF INTEREST IN THE LANDSCAPE, STREET LIGHTING, AND SIGNAGE)

The third and final group of elements add immeasurably to the quality of design cohesion that characterizes the Naval Air Station Moffett Field site. These elements support the physical layout of the site plan as well as the quality of the original historical architecture. They also help define the campus-like quality of the base as well as unify the disparate building styles and types.

Most prominent of these supportive elements is the landscaping. The ubiquitous mature trees, the huge green spaces, and the careful placement of plants and shrubs which add immeasurably to the mise-en-scene. The luxuriant and well tended landscape is the first feature which one experiences after passing through the entry gate. Early photos of the site show a very desolate natural landscape which was essentially bay lowlands. Blueprint plans from April 29, 1933 illustrate the importance that a unifying and coordinating landscaping plan for the air station had in forming the basis for today's superlative luxuriant landscape. There could be no doubt that the existing grounds could not have been produced without a well conceived original plan.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 6

Of almost equal importance in differentiating the site from its surroundings is the entry wall and gate itself (#36). Although very restrained in design, the gate forms a physical entrance into the unique area from the very bland surrounds. It should be noted that the wall, gateway, and gatehouse all derive from the original base architectural design plan.

Street furniture, interesting items on the landscape, and street lighting also add to the unique quality of the site. The furniture includes a detached community message board, a sundial and an historic anchor, both in front of building #25, as well as within the central greensward. The street lighting still retains its original bases, but the lamps themselves, from a later '50's design, are somewhat inconsistent with the Spanish Colonial Revival buildings of the historic core. Replacement with a more original form should be encouraged.

Signage too helps add to the unifying elements of the site. It is, most prominently in the historic core, understated in blue with gold lettering which is very supportive of original high design standards. Such attention to detail should also be encouraged to continue. For it is in the sum of all of these disparate features that the whole of a unique and memorable built environment results .

INDIVIDUAL SITE DESCRIPTIONS:

The following descriptions define the special design characteristics that distinguish the architecturally significant buildings from the 1933 plan (with two notable exceptions being a description of the 1943 designed Hangars #2 and #3).

HANGAR # 1: BUILDING #1

The site consists of a very large (1140'x308'x194') single-story, dirigible hangar that is constructed with three hinged steel truss arches and "X" cross bracing that is sheathed in large metal plates and set on a huge rectangular-oriented, elliptical shaped, floor plan and designed in a slightly flattened parabolic form. The structure further exhibits four rows of very large rectangularshaped and horizontally-oriented window bands along its two dominating eastern and western facing flanks. These apertures appear flush with the immense metallic skin of the building and greatly add to the very futuristic aerodynamic effect of the design.

Of particular engineering note are the hangar doors that run the full height of both the north and south-facing elevations. These doors are retractable and form a halfdome shape when closed.

The building exhibits a very clean, Streamline Moderne design which perfectly mimics the form of the airships themselves. Located perpendicular to the axis of the station plan this dominate structure provides the focus of the 1933 station plan.

The mammoth structure designed to hold fully inflated giant dirigible airships from the 1930's military fleet (such as USS MACON) was actually constructed in 1932 preceding the buildings of the surrounding base which date from 1933. The structure is important due to its unique use (dirigible hangar), beautifully executed Streamline Moderne architectural design, ingenious

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 7

engineering construction; and for its very size that still dominates a greatly urbanized Santa Clara County in the 1990's. From all aspects of national landmark status criteria, this building qualifies on its own. When added within the context of the surrounding supporting campus plan, the entire ensemble forms a very unique sense of place within the built environment and continues to exhibit national prominence.

HANGAR #2 AND #3: BUILDINGS #46 AND #47

The site consists of twin hangars that were designed for the, blimp fleet during WWII. They are of treated California redwood frame construction, configured on a rectangular plan in a more flattened parabolic form than Hangar #1; and characterized by their immense, moderately pitched porticoes at each of the north and south-facing hangar doors. These dominating entries are supported by very large concrete piers at each of the four corners. The twin buildings are set on a site plan that is directly oriented with the earlier Hangar #1, which is due west. The scale of the structure is exemplified by their dimensions, which at 1,075'x297'x171' (180,518 sq. ft.) make them slightly smaller than their predecessor, but still very impressive on the landscape. The use of wood construction instead of a steel truss system was in response to the war effort. Like most west coast military facilities constructed after 1941, metal was used very sparingly to conserve the resource for use in constructing ships and armament.

The design of these two buildings is in a much more conservative architectural style than the futuristic form of Hangar #1. These later hangars are almost domestic in their gabled porticoes. They definitely lack the daring and ingenuity of the other hangar's form and they are much less a unique design to the area. In fact, four other structures of like design were built on the west coast during World War II, to house the blimps used to patrol the Pacific coastal waters of the United States. Two in Coos Bay, Oregon which are no longer owned by the Federal Government and two on what is now Marine Corps Air Station, Tustin in Southern California. All four of these structures have been nominated to the National Register.

Although not of equal architectural or design merit as Hangar #1, these two like-structures are significant from both an historic perspective (as excellent extant examples of WWII blimp hangars) as well as an architectural/engineering perspective (they are after all buildings of incredible size and stature upon the landscape). The twin structures further add to the important design whole of the best of the original 1933 plan and the just slightly less impressive structures from the 1940's which help in-fill much of the site. They were completed in 1943. The combined visual power of Hangars #1, #2, and #3 form a physical presence upon the urbanscape which still dominates the low horizontal design of the Santa Clara Valley.

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 8**ADMINISTRATION BUILDING: BUILDING # 17**

The site consists of a two-story structure that is constructed on a shallow cruciform rectangular floor plan which is built of wood and sheathed in stucco with red Spanish tile roofing and terra cotta ornamentation, especially notable in the window and door surrounds. The building is the most prominently sited structure within the 1933 campus plan. It is set in the very heart of the open grassy median as a definite center point to the original plan. Its architectural design represents a late example of Spanish Colonial Revival style with some modifications that give it a kinship with Eastern military bases of the same vintage (that were designed in dry formal interpretations of Colonial Revival).

The building is 148'x41 'x37' and contains 18,954 sq. ft. The structure is characterized by the features which define all of the original buildings: the very low pitched, slightly hipped and tiled roofline. Exterior walls are flat and devoid of ornament, save a stringcourse running the entire perimeter of the building and separating the two stories. The eave line is very shallow. Windows are simple, rectangular in plan, vertical in orientation, multi-paned and double hung. Overscaled terra cotta ornamentation define the major front and back entrances, as well as the centered second story window. The main or west-facing entrance projects out from the main structure and exhibits a triple round-arched, recessed entrance.

Ornamental urns, pilasters and floral design (characteristic of Churrigueresque Spanish architecture of the 17th Century) add a much needed ornamental counterpoint to the very simple and severe basic design.

A further feature which distinguishes this structure among all of the others in the original campus plan is the small centered Bell Tower. This small belvedere is capped by a diminutive, red-colored dome and distinguished by very flat arches at each of its four faces. This architectural style is much more characteristic of the colonial designs of the Eastern United States and is a major factor in classifying the overall base design as a modified Spanish Colonial Revival style.

With the nearby Bachelor Officers Quarters and the Married Officers' Residencies, the Administration Building, (which is also historically referred to as the Admirals Quarters) is the most architecturally important building from the original 1933 construction (excluding Hangar #1). This building sets the design criteria that is followed throughout the original campus plan. It acts both as a handsome example of hybrid revivalist architecture which is prominently set at the most important axial juncture of the site and as one of the most lavishly ornamented of Moffett Field's original structures. As such, the Administration Building is a key to the historic fabric of the site.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 9

BACHELOR OFFICERS QUARTERS: BUILDING #20

The site consists of a large, two-storied structure that was constructed on an irregular rectangular shaped site plan which is actually symmetrical in form. The building exhibits a more ornamented interpretation of a hybrid Spanish Colonial Revival architectural design. It is characterized by the same basic features that distinguish all of the original buildings. The roofline is lowpitched and sheathed in red Spanish tile, the eave is fairly shallow, wall surfaces are unadorned white stucco; and window shapes are paired rectangular forms which are double hung, 3 over 2 in form. Major entrances are distinguished by terra cotta facing that emulates granite. Three large round arches provide the building with a very elegant entryway. Flat unadorned pilasters separate these arches. They are further adorned with flat urn detailing. The characteristic stringcourse separates the two floors. A rear wing projects toward the south.

The structure is sited symmetrically across from the equally prominent, but slightly less architecturally impressive, Bachelor Enlisted Quarters (#19) which has been greatly enlarged with a rather bland International Style addition at both ends. The structure is further enhanced by a well conceived and equally well maintained landscape plan.

Along with the cluster of major buildings that are set along the formal axis of North and South Akron Roads, the BOQ helps define the high quality design character that distinguishes the historic core of Moffett Field. The structure is an extremely fine example of historicist architecture of the 1930's and remains a key element in the cohesion of the base's physical form.

GYMNASIUM: BUILDING #2

The site consists of a very large, single-story, plaster-sheathed, steel framed building that is constructed on a slightly irregular rectangular floor plan with a flat roof that is distinguished by slightly projecting stepped parapets that hint at the utilitarian designs of the original campus plan of 1933. The roof is wood sheathing on steel beams. This structure exhibits a ubiquitous projecting stringcourse encircling the building, as well as the very plain beige plaster walls. The major design feature on this essentially utilitarian structure is in the window placement. Here, the structure is characterized by very tall, horizontally-banded, multi-paned apertures which act to break up the surface of the exterior walls either as centered indentations on large expansions of plaster or as repeated forms which act almost like columns along the major side elevations.

This structure avoids, as do all of the original functional outbuildings, the Spanish Colonial Revival design of the major living areas of the base. Interestingly, it provides a handsome architectural bridge between the very futuristic Streamline Moderne design of Hangar #1 and the more historicist styles of the original campus plan.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 10

The site is significant both historically and architecturally. It was originally constructed to be a balloon hangar which justifies its extremely large interior single story space (19,691 sq. ft., 130'x88'x63'). Additionally, the building sets the reserved design criteria for the outbuildings on the base which handsomely support their more ornamental Spanish Colonial Revival contemporaries. Features which characterize these original outbuildings include flat roofs, shallow parapets which are slightly stepped; and severely unadorned exterior walls. Windows are rectangular in form and provide the dominant design ornamentation.

Although these buildings do not provide the obvious ornamentation, stylistic historicism or landscaped surroundings of the more apparently significant original Spanish Colonial Revival structures, they exemplify an extremely sophisticated design criteria of their own which greatly adds to the overall cohesion of the existing campus. In their own right, the Gymnasium, along with similarly designed original 1933 outbuildings such as the Garage (buildings #21 and #22), are major factors from the original 1933 design which make NAS Moffett Field so architecturally distinguished.

BUILDING #23, INSTRUCTION BUILDING

Fronting on Akron Road, the former dispensary is one of the buildings that defines the original architectural design and is symmetrically placed, opposite building #25, to balance the entrance to the base's formal plan. The two story, above grade, building is basically a "T" form executed with the typical elements of the Spanish Colonial Revival architecture, low pitched tile roof, stucco sheathing and terra-cotta ornamentation. The front facade has a central entrance recessed behind three arched openings that form an arcade. Terra-cotta surrounds decorate the three windows above the entry and the doors at the east and west ends. The building, originally the base dispensary, was enlarged by the U.S. Army's Air Corps in 1936, when extensions were added to the rear and the east end. The building is 105 feet by 96 feet and 10,995 square feet of floor space.

Of the original buildings, #23 and #25 are significant because of their representation of the Spanish Colonial Revival design and for their locations at the entrance of the working station. Opposite each other, across the central lawn mall, these buildings provide symmetry to the original plan.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 11

BUILDING #25 THEATER

The theater, two stories over a basement, is a typical example of the significant supporting buildings that define the original architecture. The "T" form is executed with a low pitched tile roof, stucco sheathing and terra-cotta ornamentation. The typical protected entry is behind an arcade that, in this case, is projected forward. The fenestration, again typical of the dominant style, is symmetrical for all floors except those voids above the entrance. Here the pattern changes to a band of windows divided into three elements that balance the three arches of the arcade. The building is 150 feet by 110 feet in an irregular plan that accommodates 7,745 square feet of floor space.

BUILDINGS #21, #22 AND #24 - GARAGES

This group of detached garages are supportive elements in the historic district. Each is one story and is constructed using typical materials and simple forms of the ancillary buildings. Buildings #21 and #22 retain the original use and design, including corner parapets. The buildings, located behind Building #20, are almost identical, 98 feet by 24 feet with garage door openings facing each other. Building #24, located behind Building #23, was the ambulance garage. It is smaller 45 feet by 30 feet. The large garage door openings have been infilled and the interior space modified for administrative offices.

The garages are significant supportive buildings that compliment the architecture of the larger buildings. Building #24 retains the original mass and form but, the alterations have changed its appearance as a garage.

BUILDING #10 - HEAT PLANT

One of the original buildings, the heat plant is a large industrial building of block massing in an irregular "T" form that is two stories in height. A single story element fits into the south west corner. Typical of power plant design, the dominate feature is the fenestration. This building has window banks that extend to the second story. A coursing separates the massing with smaller rectangular windows above the band. In keeping with the dominant architecture, this utilitarian building is decorated with a simple surrounds at the entrances. Flat arches top the tall window banks. The glazing is rectangular pane divided mullions. Most of the first floor windows have transoms that are operable. While the upper rows are all operable. A second coursing divides the lower portion of walls at about four feet, the basement line. Building #10, is sheathed in stucco with a flat roof. This building is a handsome version of a utilitarian industrial design.

The heat plant is one of the original buildings. It is significant as an example of the dominate architectural design stripped to the essence, entrance surrounds and arched windows, for industrial use.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 12

STRUCTURE #5 - Water Tower:

Supported by a tall steel frame, the water tank is topped with a conical roof. The traditional red and white checkered paint defines this classic industrial design. One of the original structures, the water tower is a functional and visually distinctive feature.

BUILDINGS A THROUGH I AND ANCILLARY GARAGES A-1 THROUGH I-1

REPRESENTATIVE SINGLE FAMILY RESIDENCES (COMMANDING, SENIOR AND JUNIOR MARRIED OFFICERS QUARTERS):

The original 1933 detached residential structures are all designed in a like architectural style of which any single building represents an archetype for the whole. The example used here is site #A1, which is referred to in the 1933 landscape plan as the "Commanding Officers' Quarters".

The site consists of a very simple, two-storied, rectangular-planned single family residence that is constructed of wood frame with a low gabled red Spanish tiled roof over a very plain stuccoed exterior (which is punctuated by a formal placement of both windows and doors). A simple chimney adorns the western facade. An attached single-storied, round-arched breezeway connects the residence with a large, two-storied, rectangular-planned garage set slightly behind the main structure.

Stylistically, the residence reflects all of the specific design criteria which unifies all of the original 1933 Spanish Colonial Revival architecture on the base. Windows are almost flush with the plain exterior walls. They are also essentially rectangular in shape, double hung, multi-paned and symmetrically placed along the facades. A colored, projecting stringcourse separates the two stories. The front entry is the most prominent exterior feature with a slightly recessed almost flat arched entry with projecting surrounds. An ornamental sidelight window is balanced by a large wrought iron projecting lamp on both sides of the main entrance.

Landscaping is characteristically both formal and very well maintained. The very large mature trees add immeasurably in setting apart the residential quarter as an oasis amid the functioning base. The open greenswards that distinguish the street directly tie in with the more formal axial plan of the rest of the base. The curved street pattern illustrates the influence of contemporary suburban design on such residential planning even on a military base.

The original 1933 detached residences form a key architectural component in the significant whole that distinguishes the site plan of the naval air station. Along with the verdant landscaping and extra wide spacing, this enclave of buildings helps define all that is special about the site from a design perspective.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 13

CONTROL TOWER: (AEROLOGICAL BUILDING FLIGHT CONTROL TOWER) BUILDING #18

The site consists of a moderately-sized (3590 sq. ft.), two-storied building with a centered third story, hexagonal-shaped Control Tower. The structure is designed on a slightly varied rectangular floor plan with a very minimal attempt at exterior ornamentation. It is another of the utilitarian structures from the original plan that exhibits hints of the Spanish Colonial Revival design of the major buildings (in the centered round arch, the overscaled twin wrought iron Spanish styled lamps on both sides of the entry and the ubiquitous terra cotta surrounds ornamenting the front door). Otherwise, this structure is very simple in its design. Its walls are unadorned plaster. Windows are slightly recessed, rectangular in plan, multi-paned, double hung and symmetrically placed along the exterior facade.

The hexagonal tower is, along with the projecting metal tower above, the most distinguishing feature of the structure. It is characterized by its band of vertically oriented windows on each of the eight faces, as well as the iron railing which caps the flat-roofed tower from above.

The building's significance is due both to its history as the original Control Tower for the air station, as well as to its architectural design which once again exemplifies the sophisticated aspects of the original 1933 plan. The structure provides a transition between the more historically refined Spanish Colonial Revival architecture and the simple, yet equally impressive, more modern styles of the utilitarian outbuildings. It is the cohesion provided by the interaction between these two styles that provide the stylistic excellence of the historic core plan.

TWIN SMALL TOWERS (FLOOR WATCHTOWERS): BUILDINGS #32 AND #33

These two twin sites (#32 and #33) consist of very small, two-storied towers that are distinguished by their very unusual design. They are towers that are distinguished by their very unusual design. They are very small structures (578 sq. ft., 14'x14'x25') that appear to be composed of a standard two-story rectangular tower with flat roof joined to a slightly smaller two-storied rounded tower with like flat roof that is capped with metal railing. The buildings are very simple in form. There are really no specific architectural embellishments. They exhibit all of the standard features of the utilitarian structures on the base without any ornament. Recessed, double-hung, multi-paned windows provide the major characteristic design feature which ties them into the surrounding historic core buildings. A prominent projecting stringcourse characteristically separates the two floors.

The significance of these two small utilitarian buildings is primarily in their unique function and form. They are very site specific and add a distinctive counterpoint to all of the rectangular shaped structures on the base. They are architectural curiosities that add immeasurably to the historic and architectural importance of the site.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 14

INTERIOR SPACES:

Naval Air Station Moffett Field has been in continuous use since it was constructed. During the years the interiors of the buildings were altered to accommodate changes in uses and space requirements. The alterations have redesigned the original interior space plans, removed the original surfaces and changed the spacial feeling of the interiors. Due to the alterations, the interiors do not retain architectural integrity or historic significance.

NON-CONTRIBUTING BUILDINGS

Within the boundary of the historic district the number of non-contributing buildings exceeds the number of significant buildings and structures. This unusual ratio does not diminish the significance or integrity of the district. Most of the non-contributing buildings were constructed after the period of significance and are primarily small utilitarian constructions. The Chapel and heating plant, buildings 86 & 87 were constructed after the period of significance yet are designed in the idiom of the district. Thus, Naval Air Station Moffett Field, despite the imbalance in numbers of contributing and non-contributing buildings, maintains exceptional integrity of the 1933 station plan and architectural design.

The International style buildings were predominately constructed after 1944 and are not 50 years old. Therefore, they are not eligible for listing at this time. The Post Office, building #67, constructed in 1943, one of the finest examples of this style, is not significant as an individual building and should be included with the later International style buildings.

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 7 Page 15SIGNIFICANT AND CONTRIBUTING BUILDINGS

<u>BLDG. #</u>	<u>CURRENT USE</u>	<u>ORIGINAL USE</u>
1	Hangar #1	Hangar #1
2	Gymnasium	Balloon Hangar
5	Water Tank	Water Tank
10	Heat Plant Building	Storehouse
15	PW Shop	Fire Station/Laundry/Garage
16	PW Shop	Locomotive Crane Shed
17	CPWP Administration	Administrative Building
18	NAV RES Administration	Aereological Center
19	BEQ	BEQ/Brig
20	BOQ	BOQ/Mess Hall & Galley
21	BOQ Detached Garage	BOQ Detached Garage
22	BOQ Detached Garage	BOQ Detached Garage
23	Instruction Building	Dispensary E
24	Administrative Office Building	Ambulance Garage
25	Base Theater/Recreation Service/Thrift Shop	Bowling Alley/Recreation Building
26	Gate House/Iron Fence	Gate House/Iron Fence
32	Storage	Tank House
33	Storage	Water Tower
37	Scale House	Scale House
A, A1	Officers Housing and Garages	Housing and Garages
B, B1		
C, C1		
D, D1		
E, E1		
F, F1		
G, G1		
H, H1		
I, I1		
46	Hangar #2	Hangar #2
47	Hangar #3	Hangar #3
55	Heat Plant for Hangars #2 and 3	Heat Plant for Hangars #2 and #3

SIGNIFICANT OBJECTS

40	Flagstaff/Commons Memorial Anchor	Flagstaff and Commons Anchor
----	--------------------------------------	---------------------------------

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 16

NON-CONTRIBUTING BUILDINGS

1930-1933 - Altered (loss of architectural integrity): Buildings # 3, #6, #12, #13, #14,
#29, #31, #36, #501.

1940-1944 - Altered (loss of architectural integrity): Buildings #240, #241, #242, #514,
#515, #516, #517

Assembly Buildings: #45, #85, #115

Quonsets: #81, #117

Sheds: #34, #44, #83, #347

1940 - 1944 (outside period of Significance) Buildings: #67, #64, #86, #87,

All buildings and structures constructed after 1944, including: #76, #77, #123.

All ancillary buildings and structures, in proximity to Hangars #2 and #3, that are very
small, altered or constructed after 1944; #79, #98, #186, #346, #350, #367, #368, #396,
#440, #470, #472, #499, #539, #540.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Several factors contributed to the commissioning of the U.S. Naval Air Station Sunnyvale on April 8, 1933. Of foremost importance was the vision for the future of aircraft and influence of Admiral William A. Moffett. Appointed by President Harding on July 25, 1924, to be the first as Chief of the Naval Bureau of Aeronautics, Admiral Moffett had already established himself the proponent for increased Naval aircraft as an integral component of the Navy's ability to control the seas off the coasts of the United States. In the 12 years that Admiral Moffett lead the bureau, the U.S. Navy was catapulted into the lasting interlocking strategy of Naval presence in the air as well as the sea. But he also spoke of the future in commercial aviation. In the 1920's, he appears fascinated with the lighter than air technology of the dirigibles. The success of the zeppelins in WWI contributed to the development of the larger dirigibles. This was however, marred by the disasters resulting from the flammability of the hydrogen used to fill the chambers. Each country involved in the hydrogen filled dirigibles experienced tragedy. A memorial plaque in Shenandoah Plaza at Moffett Field commemorates USS SHENANDOAH that was lost with a crew of 14 on September 3, 1925. The largest of the dirigibles, HINDENBERG, burst into flames over Lakehurst, New Jersey in 1937, culminating a series of tragic losses involving the dirigibles and hydrogen. Helium, produced only in Texas and Kansas, had been known to be a reasonable replacement for hydrogen, but was prevented from export by the 1925 Helium Export Act. Moffett began a lobbying campaign to have the U.S. Navy use helium filled dirigibles to patrol the coasts. In Moffett's plan, these giant rigid frame airships would provide the long range observation for the surface Navy below. He believed the dirigibles could be fashioned to carry small planes and might even be equipped with bombs. The idea was not far-fetched. The technology of the 1920's allowed dirigibles which could stay aloft for 14 days and fly 10,000 miles. The lobbying proved successful with the 1926 congressional authorization for two Naval dirigibles capable of carrying aircraft and a new aircraft base for the west coast. The dirigibles were to be built by the Goodyear-Zeppelin Corporation in Akron, Ohio. The first to be completed was based at Lakehurst, New Jersey. The selection of the site and construction of a base to service the second would be undertaken on the west coast.

The west coast site appeared to be slated for Camp Kerney near San Diego when the northern California politicians realized the opportunities to be created and forced the federal planners to accept applications from the entire west coast. Applications were received from 997 locations. San Francisco mayor, James Rolph, saw the benefit to the Bay Area even though his city did not have a site suitable for the base. The appeal was for 2,000 acres with unobstructed approaches, clean water, rail access and good flying weather was heard by Mrs. Laura Whipple, a recently established real estate broker from the East Bay. Familiar with the Sunnyvale area, she selected the Rancho Unigo, a former Indian Reservation, that seemed to meet all the criteria. Appointing herself "Chairman of the Landholders Commission", she obtained an option for 1,750 acres at the price of nearly \$500,000. She wired San Jose congressman, Joseph Free, that a perfect site for the dirigible base had been located and optioned. The proposal from San Diego offered free land; in order for the Sunnyvale site to be selected the same offer would have to be made. Under

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Continuation SheetSection number 8 Page 3

the leadership of presidents of the Chambers of Commerce from Mt. View and San Jose, a campaign to raise the funds and solidify the offer went forward. The newspapers, including the San Jose Mercury Herald, were enthusiastically in support of the proposal and offered publicity and public relations material to support the proposal. After three years of study and debate, it was time for a decision. On December 28, 1930, the vote registered by the House Naval Affairs Committee for H.R. 6810, introduced by Congressman Free, selected Sunnyvale by 18 to 1 and Camp Kerney as the auxiliary base. As a member of the West Coast Naval Airship Base Board, Moffett had favored Sunnyvale while the Secretary of the Navy, Charles F. Adams, preferred Camp Kerney.

Once selected, the issue remained to raise the money to purchase the land. Under the leadership of A. M. Mortensen, President of the San Jose Chamber of Commerce, the funds were raised and on August 2, 1931, the Chamber's check for \$476,165.90 completed the purchase of 1000 acres of the Rancho Unigo. Also on August 2, 1931, the land was transferred to the U.S. Navy for \$1.00. This completed a long and arduous partnership between the cities of the Bay Area to gain the prestige, jobs and economic interests that would follow the base.

The budget for constructing the base was \$5,000,000. The U.S. Navy of Yards and Docks would be responsible for the design and coordinate the construction. Lt. Commander Earl Marshall was given the responsibility. Ernest Wolf, an experienced engineer from the Goodrich Zeppelin Corporation, was to be the Associate Engineer. Hangar #1, as it would be called, was the most important building and received the first attention. The design had been refined in Akron by Dr. Hugo Ekener, to form a rounded building that followed the form of the dirigible. Enormous curved doors on each end would slide over the building, rolling on 40 wheels over standard gauge railroad track, and propelled by 150 hp electric motors, thus minimizing the turbulence and problems encountered with past designs. In fact, it was the window patterns that dictated the north-south orientation and siting of Hangar #1; the rest of the base followed. Of the \$2,250,000 budgeted for the hangar, \$1,116,044 was awarded to the Wallace Bridge and Structural Steel Company of Seattle to fabricate the steel for the structure and doors. Seims-Heimers, Inc. of San Francisco bid \$398,937 for the roofing, windows and siding on the airdock that would measure 1,133 feet long, 308 feet wide and 198 feet high. The floor area is just over eight acres. A structural space frame, the design and construction of this hangar remain a feat unparalleled in the engineering of enclosed space.

Railroad tracks ran through the hangar, culminating at the mooring tower. The tower secured the dirigible to the ground by mooring lines. This tower has been removed. The other large structure that was necessary for the dirigible was the helium tank that was located in front of the hangar.

The plan for the base and the design of the buildings was also undertaken by the Naval Bureau of Yards and Docks.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 4

The style for the buildings, Spanish Colonial Revival, is reflective of the popularity of the revival movement and the desire of the local politicians to have the base designed in the "California Style" of white stucco walled buildings with red tile roofs. The plan and building design was very formal, an axial orientation with the bemoth hangar to the east and the base extending west. Following the Spanish influence, a large plaza is the central element with the most ornately decorated building, the Administration Building, at the head of the plaza behind the flag pole and in front of the hangar. On the south side of the plaza were located the dispensary and Bachelor Officers' Quarters. To the north were the recreation building and the barracks. To the southwest on the cul-de-sac were located the nine officers' houses and garages. Extending to the east, and south, behind this formal plaza arrangement were the utilitarian buildings, fire station, garage, laundry boiler plant, locomotive and crane shed, shops, helium storage and water tower. To the north were the commissary, store house, gas station, balloon shed and storage buildings. Directly behind the Administration Building was the cafe (later the Officers' Club), and of course, the Hangar. The base was designed in anticipation of the importance of the automobile. Broad roads, large parking areas and garages were incorporated in the plan.

Landscaping was carefully planned to mature in harmony with the buildings and circulation elements. The area considered the Naval Air Station Sunnyvale Historic District maintain the integrity of the original design and represent one of the finest formal plans for a government facility in California. It was a forward-thinking plan with expansion to occur outside the formal plaza, thus the quality of design has been maintained. The original base is a one-of-a-kind facility in the Santa Clara Valley with great importance in the architectural heritage, facility planning and economic growth of the region.

The primary significance of the historic district is the association with the "lighter than air" dirigible program. The dirigibles, to be the eyes in the sky for the Navy, were in operation for a relatively short time. USS MACON, one of the two dirigibles constructed for the Navy, was christened by Mrs. William Adger Moffett (wife of Admiral Moffett) on March 11, 1933. An article about the landing in Sunnyvale was reported in the October 15, 1933 edition of the San Francisco Chronicle that read, "30,000 Thrilled as the MACON Moors at Home Station." The sister dirigible, AKRON, had been lost on April 13, 1933, making the MACON the last dirigible. For 16 months, USS MACON was a common sight over the Santa Clara Valley as it performed in a number of military maneuvers with the Pacific Fleet. Admiral Moffett had been well aware that the slow moving dirigibles could be of great benefit when assigned as an observatory for the fleet, but were vulnerable if used in maneuvers with the fleet. Shortly after arriving at Sunnyvale, USS MACON was deployed on tactical maneuvers with the Pacific Fleet. Equipped with an internal hangar and steel frame hoist termed a "trapeze", USS MACON carried four small fighter planes. The Sparrowhawks (F9C) were bi-plane fighters developed specifically to be carried in the dirigible by Curtis. Each weighed only 2,500 pounds with a pilot. As an airborne carrier, the dirigible was a hulking target that "failed to demonstrate military usefulness," according to the Commander in Chief of the United States Fleet, Admiral David Sellers. While returning from maneuvers with the fleet on February 12, 1935, USS MACON experienced a structural failure and crashed into the Pacific. Of the 83 crew, only 2 were lost. It was the headline in the San Francisco Chronicle the next day that told the story, "Dirigible Doomed as Defense Factor, Officials Say." The era of dirigibles was over, the only remaining element of the Moffett five year plan was Hangar #1 and the base at Sunnyvale.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 5

During this period, the U.S. Army Air Corps operated a limited number of blimps in conjunction with observation exercises. In September, 1935, seven months after USS MACON went down, the Army assumed control of the base and Hangar #1. The facility was used by the Army for pursuit and observation activities until 1940 when it was converted to the West Coast Air Corps Training Facility. During this period, the dispensary was enlarged and barracks were added.

Shortly after the outbreak of WWII, the base was returned to the U.S. Navy. In April, 1942, the base was recommissioned Naval Air Station Moffett Field.

The return to Naval Command was to provide expanded facilities for small blimps and balloons used for coastal observation. Hangars #2 and #3 were constructed for blimps in 1942. They are included in the historic district because of the use as a lighter than air facility, and for their architectural/engineering importance.

One of the most recognizable landmarks in the San Francisco Bay Area, Hangar #1 and the original base are significant in the history of Naval Aviation, defense and in the development of the Santa Clara Valley. From the original base and because of the facility location and landing field, NASA Ames Research Center is located to the north adjacent to the original plaza boundary and at the north boundary of the historic district. It is far easier to measure the importance of the dirigible in Naval Aviation and defense history than it is to measure the enormous impact upon the growth of the defense and space industry in Northern California because of the original location of this base with the 1000+ acres.

The Naval Air Station Sunnyvale Historic District is recommended for listing in the National Register of Historic Places at the National Level of significance under Criteria A, as the only base designed specifically for the Navy to home port USS MACON, the only dirigible in the fleet, a significant contribution to the broad pattern of our history; and under Criteria C, a facility plan and architectural design that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The landscape plan (Y&D drawing No. 115840) was approved on April 29, 1933. This plan shows the base in its entirety.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 10 Page 2

ZONE 10

E	37.7063	122.0530
A1	37.7095	122.0433
B1	37.7060	122.0421
C1	37.7071	122.0394
D1	37.7105	122.0408

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
INTERAGENCY RESOURCES DIVISION

National Register of Historic Places
Evaluation of Potential National Significance

Property Name: U.S. Naval Air Station Sunnyvale, California Historic District

County and State: Santa Clara County, California

Applicable NHL Criteria and Exception: Criterion 1, Criterion 4

Applicable NHL Theme & Subthemes:

- Theme VII. - Political And Military Affairs, 1865-1939
- Theme VIII. - World War II
- Theme XVIII - Technology/Construction

Explanation of Potential National Significance

The Naval Air Station Historic District at Sunnyvale, California appears to be a candidate for National Landmark consideration in the areas of Military History and Construction Engineering. The discontinuous district represents a distinctive episode in the development of U.S. naval aviation during the period from 1930 to 1945. The Sunnyvale base was one of two Naval Air Stations built to port lighter-than-air dirigibles during the 1920s and 1930s, as part of an innovative Navy program for coastal defense. Beginning in 1920s, with the establishment of Lakehurst Naval Air Station, the Navy promoted the use of lighter-than-air craft to augment sea-borne resources. Ridged-frame dirigibles, which could sustain flight for prolonged periods over an extended distance, were seen as one possible answer to coastal defense and aerial reconnaissance demands. Dirigible Hangar #1 (built in 1932) represents an exceptional example of early twentieth-century military planning, engineering, and construction.

During World War II, the Naval Air Station functioned as one of several west coast lighter-than-air ship facilities, housing non-rigid-frame (blimp) aircraft. Blimps had replaced dirigibles after several fatal disasters soured military and commercial interest in the larger hydrogen-filled aircraft. Air-ship hangars #2 and #3 were built in 1943 and represented excellent examples of naval construction technology from the World War II period.

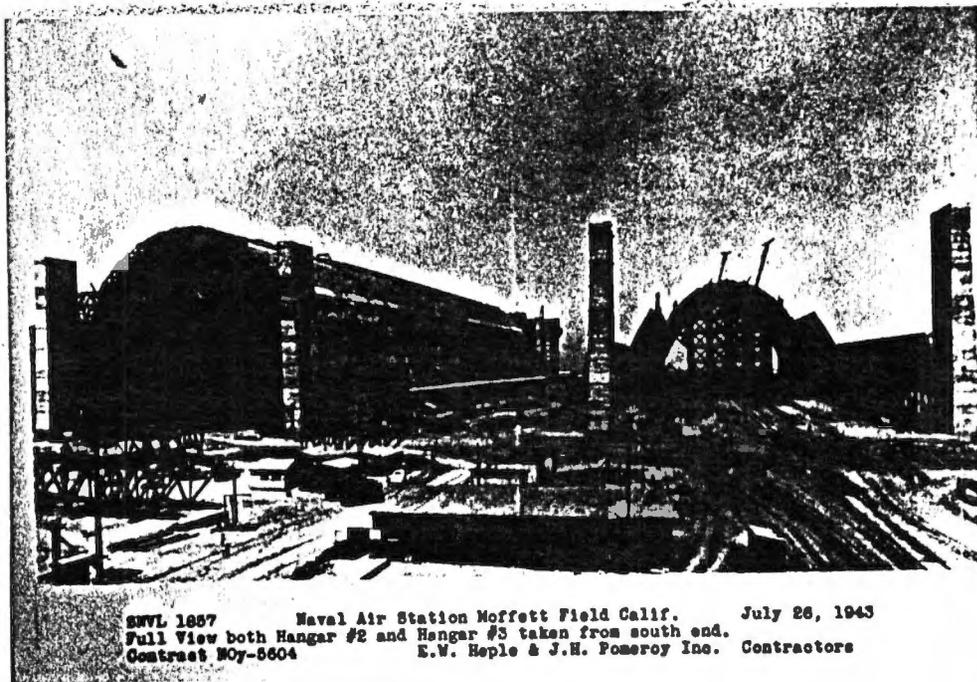
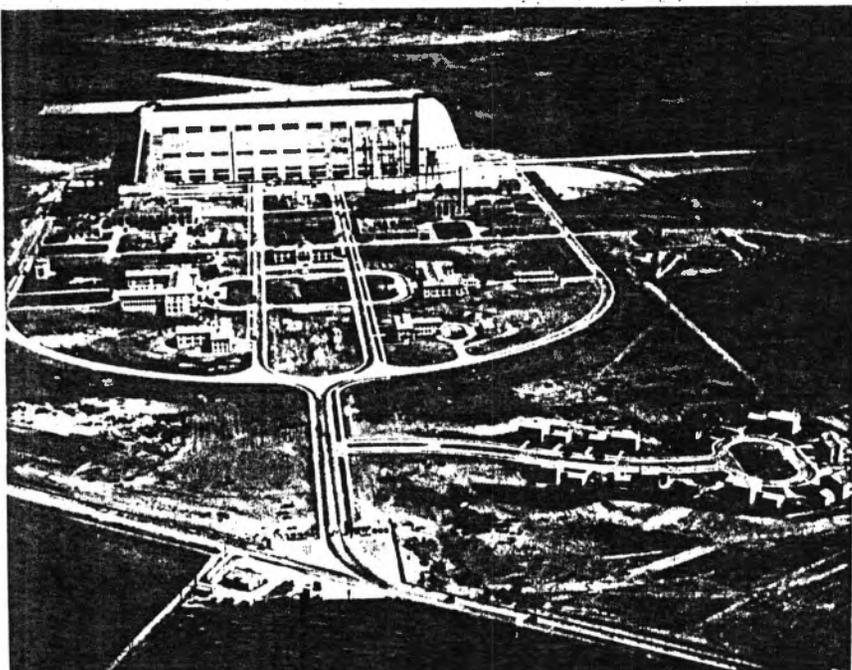
The surrounding military buildings that compose the historic district, while not necessarily of individual significance at the national level, represent essential features of the overall naval air station facility and were built contemporaneously. Hangar #1, the two enormous blimp hangars (#2 & #3), and the surrounding support buildings provide a full picture of lighter-than-air ship

development during the period 1930 to 1945. The three hangars are among only a limited number of historic airship facilities still extant in the United States.

The U.S. Naval Air Station Sunnyvale, California Historic District reflects a unique era in U.S. military development and the three major lighter-than-air ship facilities represent exceptionally rare examples of twentieth-century engineering technology.

Reviewer: Paul R. Lusignan, Historian

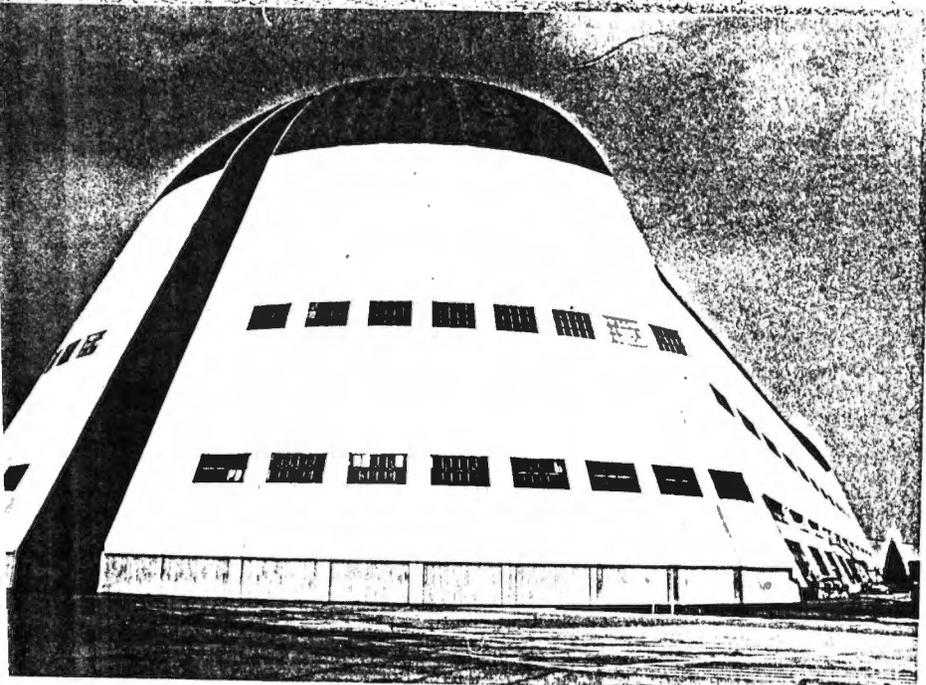
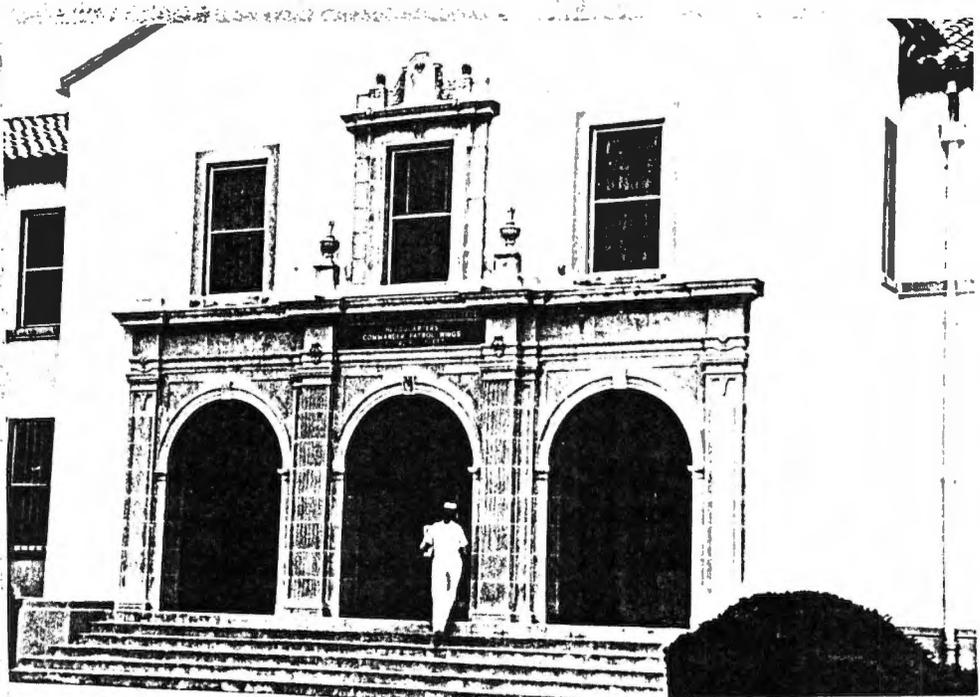
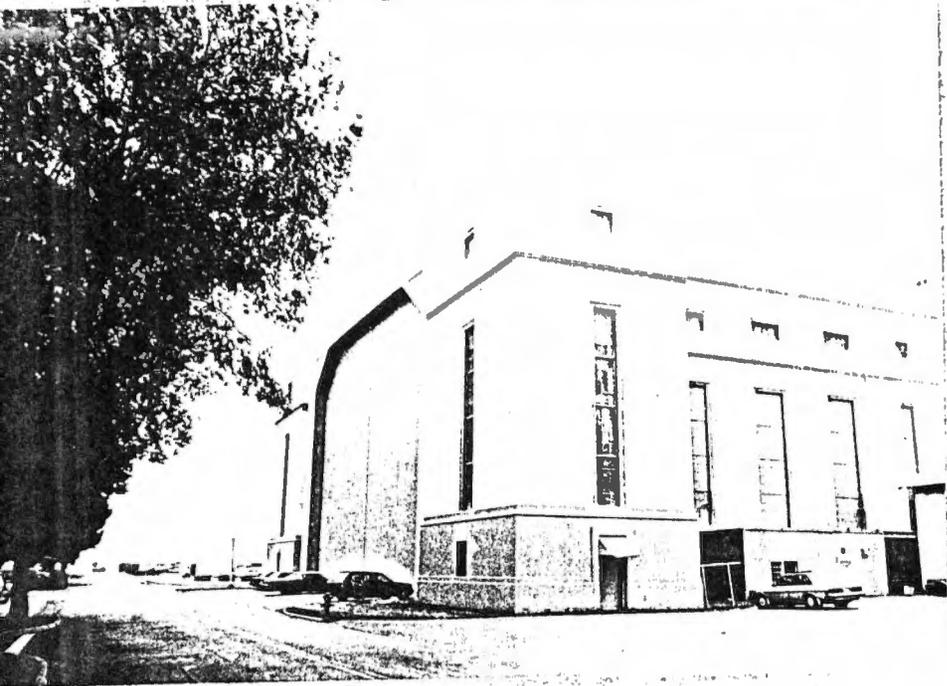
Date: 02/24/94



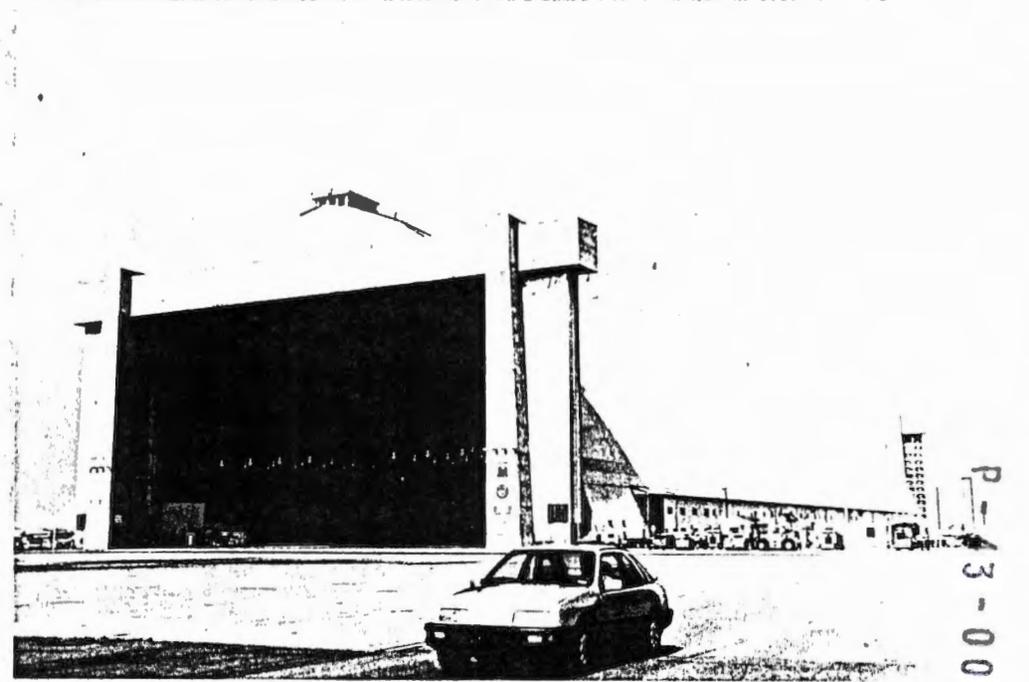
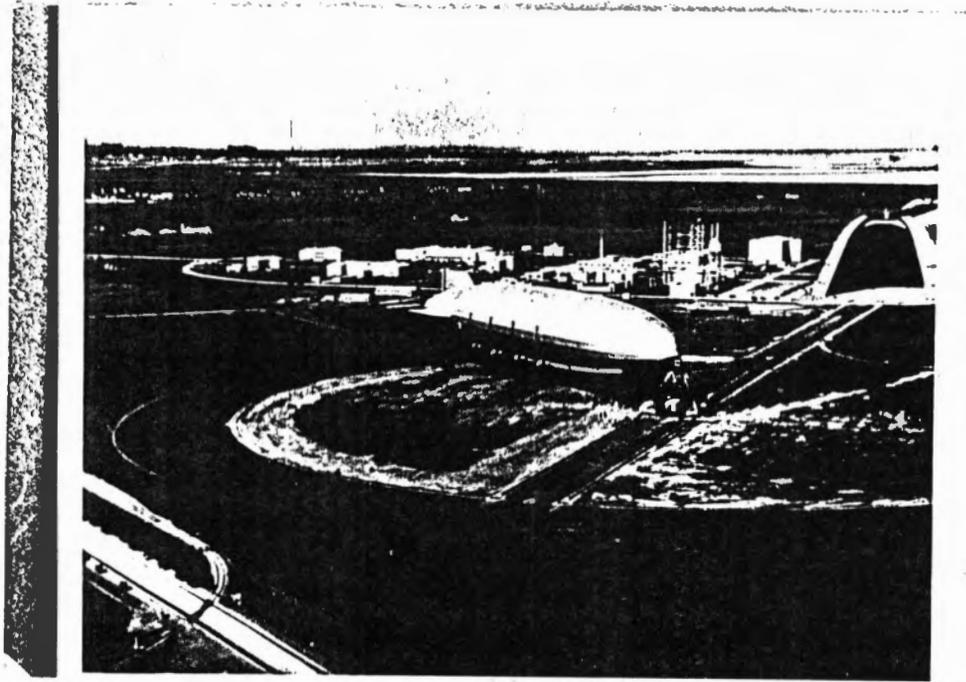
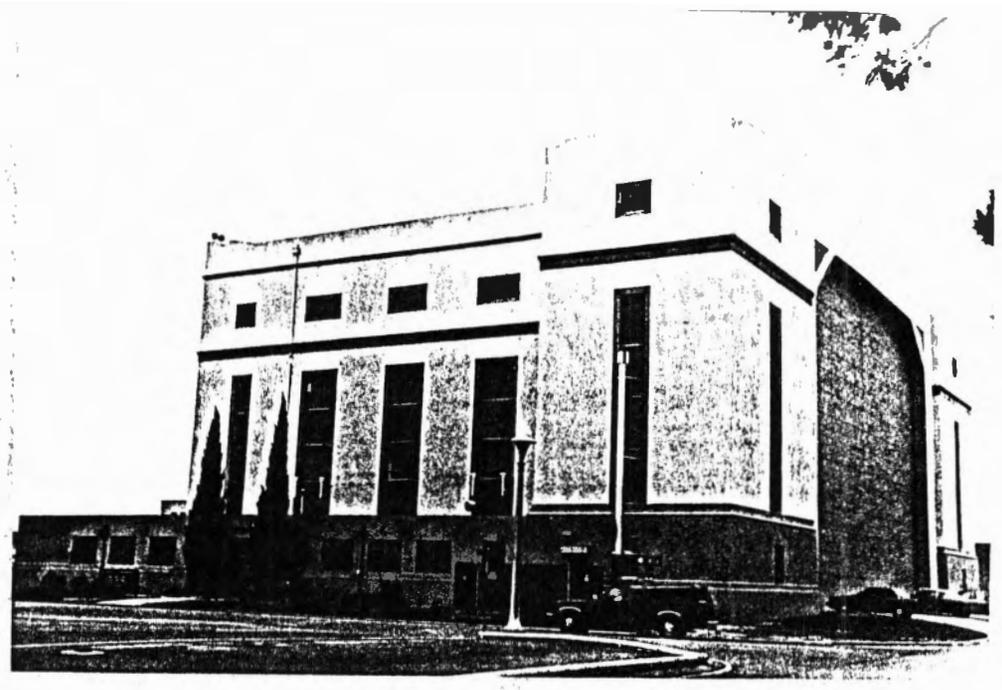
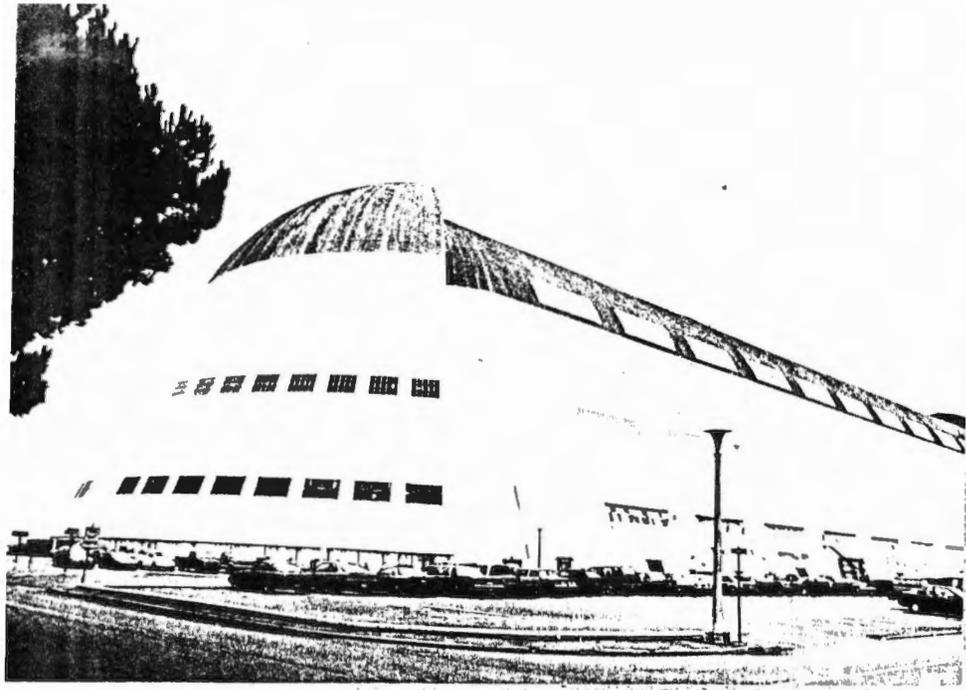
SNVL 1887 Naval Air Station Moffett Field Calif. July 26, 1943
Full View both Hangar #2 and Hangar #3 taken from south end.
Contract NOy-5604 E.W. Heple & J.H. Pomeroy Inc. Contractors

P - 43 - 003511

a.

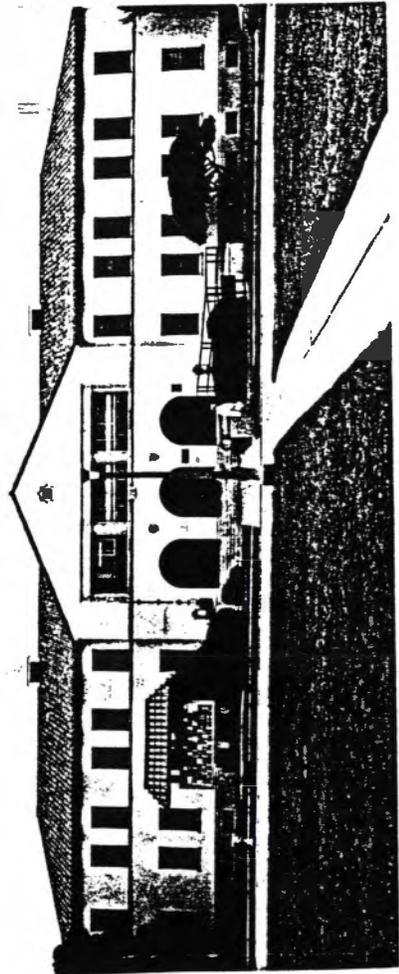
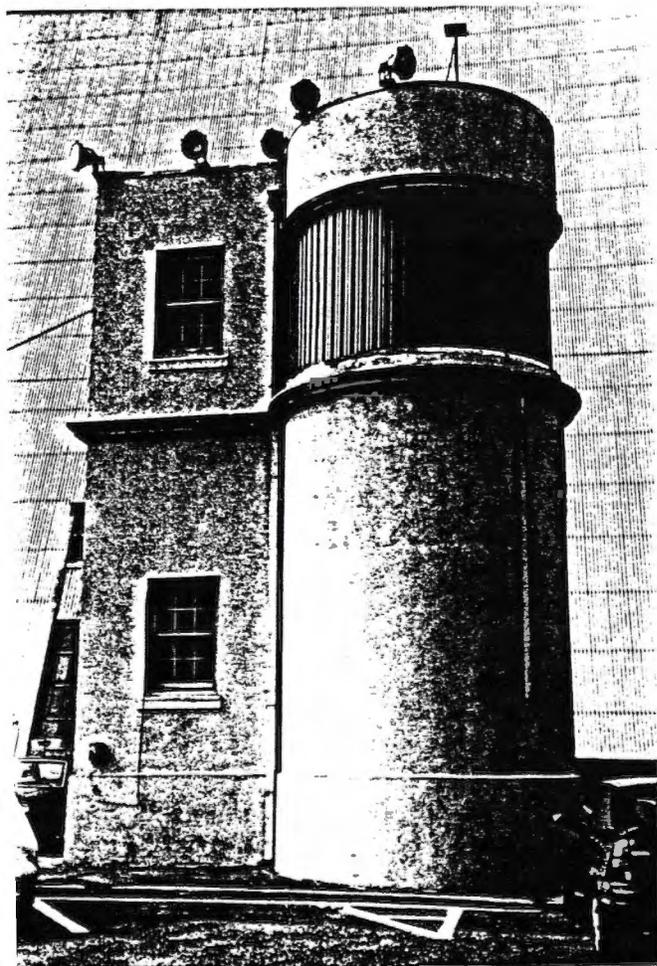
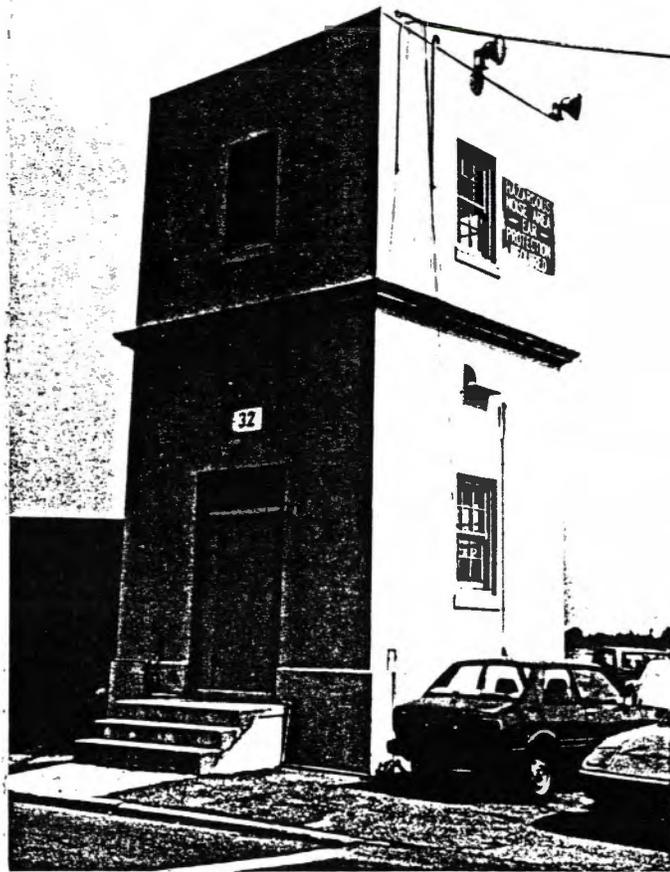


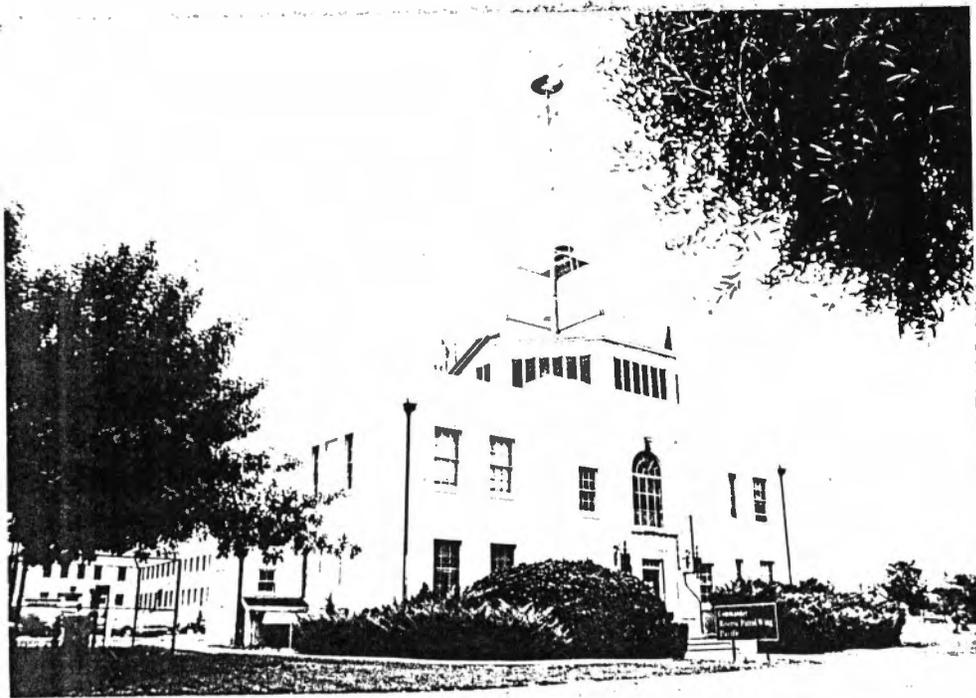
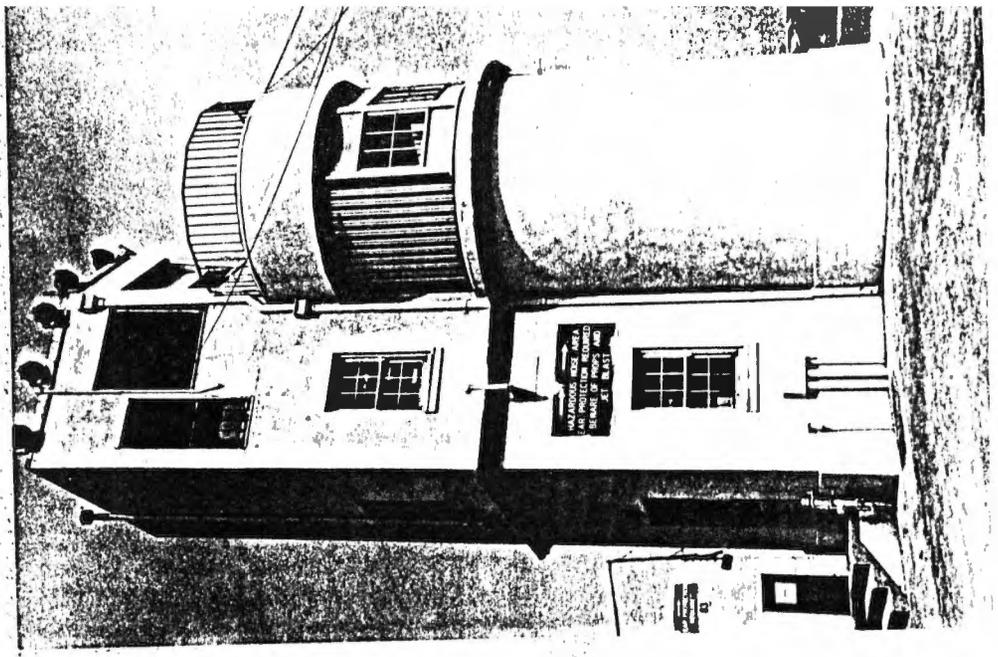
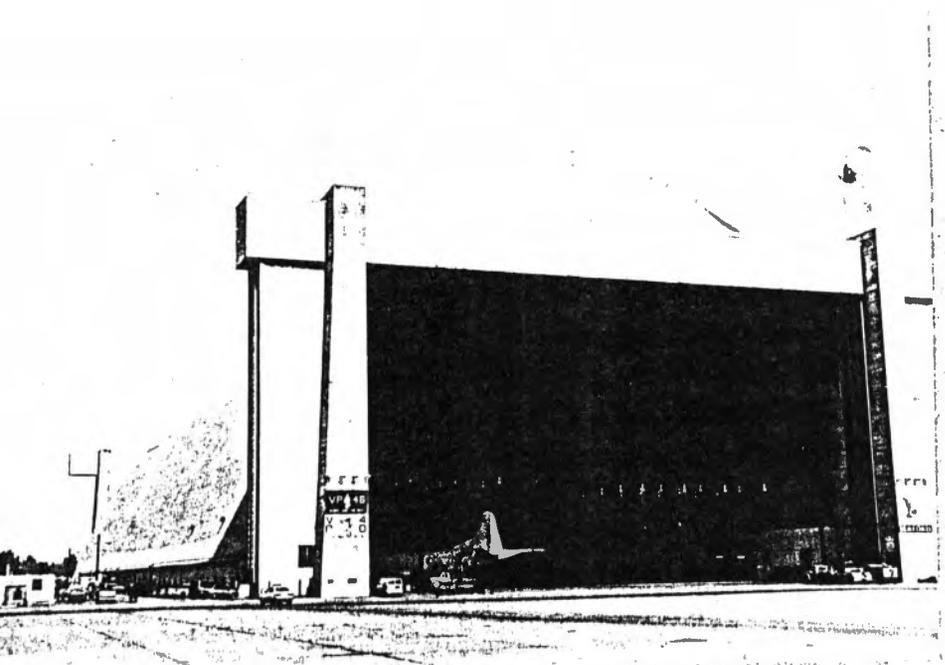
P - 43 - 003511



P-43-003511

a.

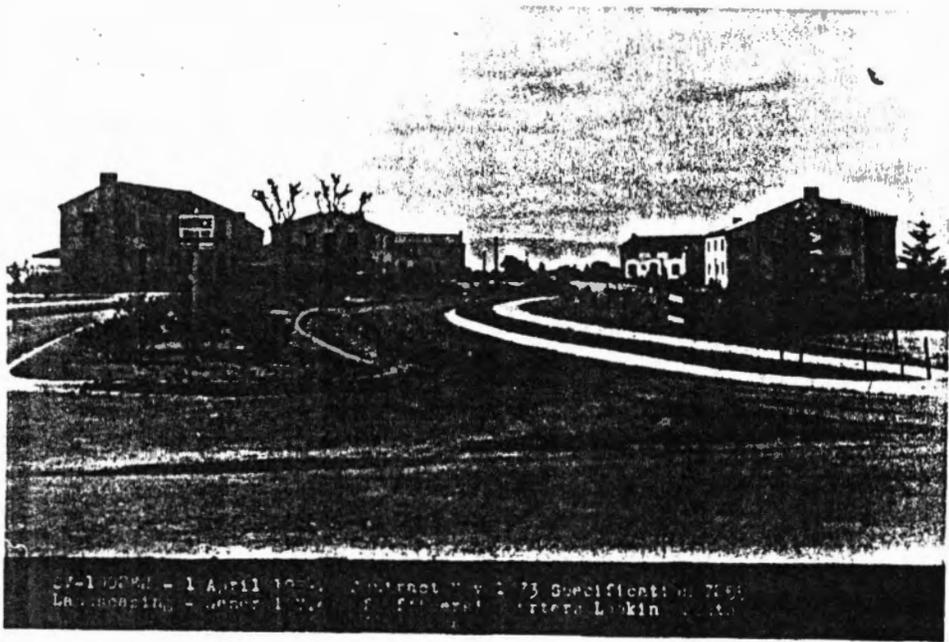




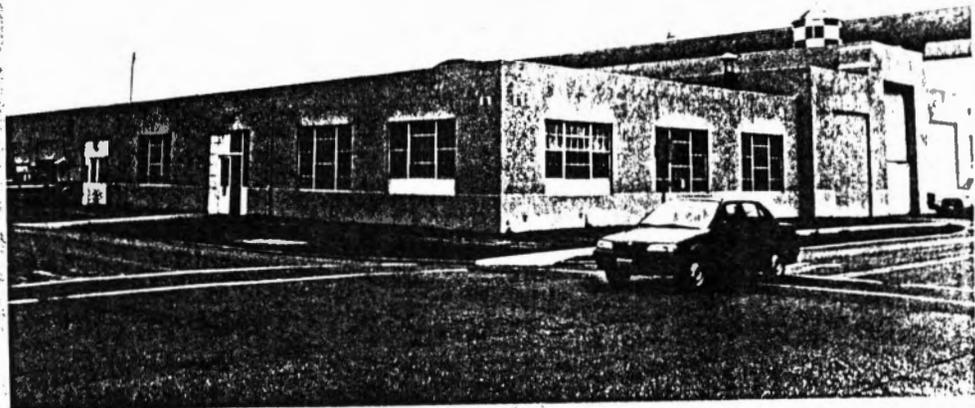
P - 43 - 003511



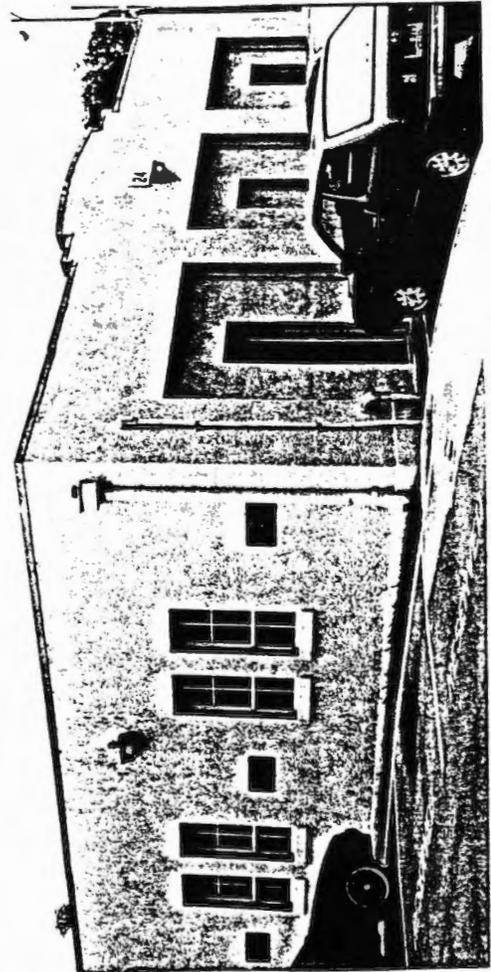
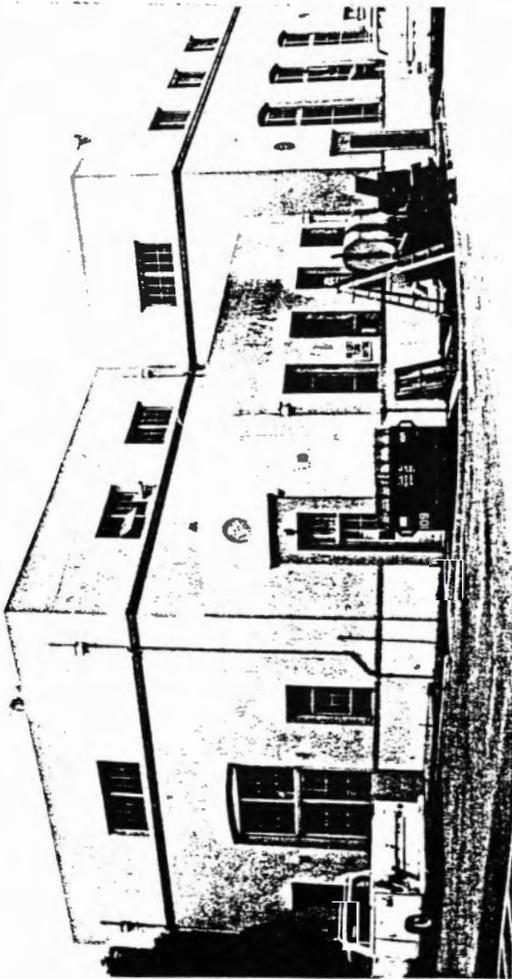
P - 43 - 003511

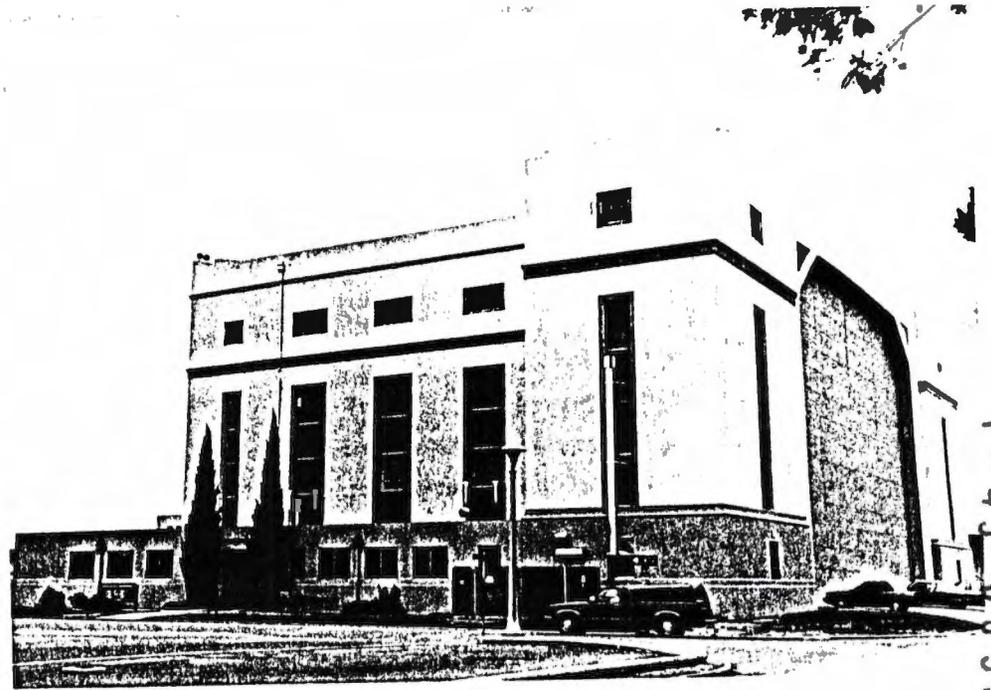
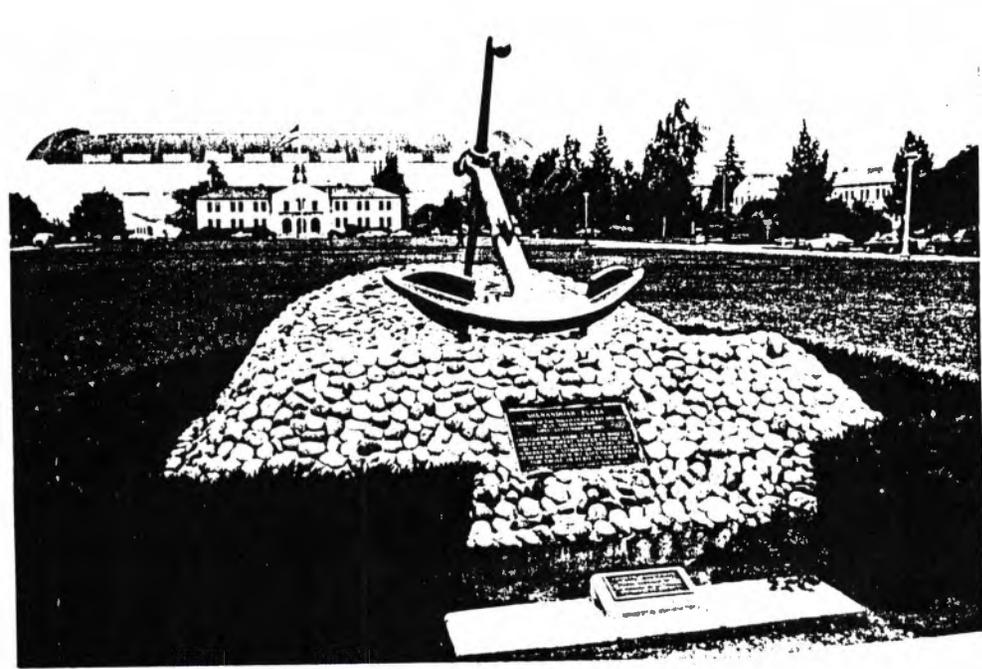


37-10044 - 1 April 1964 - District # 1 73 Specifications: 700
La. Shopping - Jones 1 1964 - General - Cartera Linkin



P-43-003517





P-43-003511



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

P.O. Box 37127

Washington, D.C. 20013-7127



P - 43 - 003511

H3415(418)

AUG 8 1994

Memorandum

To: Chief, Interagency Resources Division
From: Acting Chief Historian *Ben Levy*
Subject: US Naval Air Station, Sunnyvale California

While I believe that this site may qualify for designation as a National Historic Landmark, the existing nomination is not adequate to support a finding of national significance. The evidence needed to support such a claim is not here. Indeed, the nomination is almost devoid of documentation in this area.

The nomination claims three areas of significance--military history, architecture and engineering. In the area of military history Historian Harry Butowsky notes that the nomination fails to mention that the site was established and selected by Rear Adm. William A. Moffet who was killed on April 4, 1933, when the giant dirigible AKRON, which he was commanding, crashed off the New Jersey coast.

The nomination fails to mention that the Ames Research Center was established by NACA in 1939 within the boundaries of the Naval Air Station to develop and test new generations of military aircraft for the armed forces. We already have an NHL at Ames--the Unitary Plan Wind Tunnel.

The nomination fails to discuss the complex history of this site in WW II involving the research and testing of new generations of American aircraft and the defense of the West Coast of the United States against possible Japanese naval or air attack.

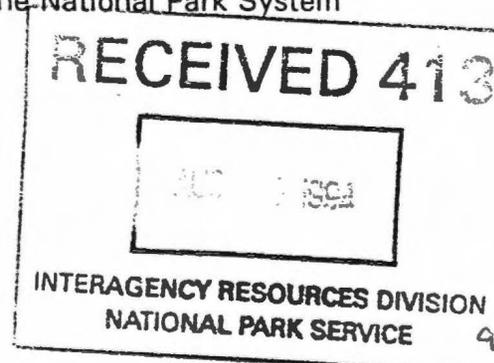
The nomination fails to mention that the site was turned over the Army in 1937 and operated as an aircraft training facility until 1942 turning our hundreds of American fighter pilots desperately needed in the early days of World War II.

In addition, there are no footnotes or references in the bibliography to indicate that a careful consideration and evaluation of this site was made by the drafter of the nomination. The bulk of the material presented here is simply an architectural description of the naval air station and does not support a finding of national significance.

Finally, Historian Carolyn Pitts believes that the complex is only regionally significant for architecture and Historian Robie Lange questions the engineering significance of the site. I am including copies of their specific memos on this matter for your information.

In summary, this nomination, as it now stands, is too weak to support a finding of national significance and will have to be rewritten before it can be sent the National Park System Advisory Board.

Attachments





DEPARTMENT OF THE NAVY

P - 43 - 003511

OFFICE OF THE ASSISTANT SECRETARY
(INSTALLATIONS AND ENVIRONMENT)
WASHINGTON, D.C. 20360-5000

January 5, 1994

Ms. Carol D. Shull
Chief of Registration
National Register of Historic Places
National Park Service
P.O. Box 37127
Washington, DC 20013-7127

RECEIVED

JAN 13 1994

NATIONAL
REGISTER

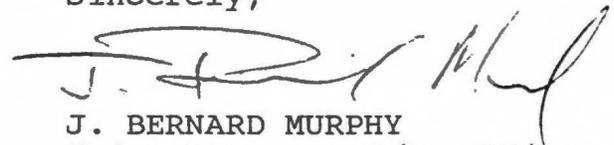
Dear Ms. Shull:

I am enclosing the National Register nomination form and pictorial enclosures for the historic Naval Air Station Sunnyvale, at the Naval Air Station Moffett Field, Santa Clara County, California.

This nomination package was transmitted to the California State Historic Preservation Officer (SHPO) for review and certification in July, 1993. It was at the same time provided for comment to three neighboring communities. The SHPO subsequently acknowledged receipt and requested an extension of comment time to the end of September. The Navy agreed to the request for extension, but neither the SHPO nor any of the neighboring communities have commented. I am therefore submitting the nomination package to you without the usual SHPO certification.

Please keep me advised of the nomination's progress through your screening process for listing on the National Register. If you have questions, please phone me at (703) 325-7353.

Sincerely,


J. BERNARD MURPHY
Federal Preservation Officer

RECEIVED 413

JAN 12 1994

ACTION:

NATIONAL REGISTER INFORMATION SYSTEM

Id 94000045 LI 02/24/94 CA Santa Cla> US Naval Air Station Sunnyvale, Cali>
01 More

Historic Name US Naval Air Station Sunnyvale, California, Historic
District
Other Name US Naval Air Station Moffett Field Central Historic District
Address Naval Air Station Moffett Field
City Sunnyvale Vicinity Restrict Address
State CALIFORNIA County Santa Clara
Status LISTED IN THE NATIONAL REGISTER Date 02/24/94
Resource Type DISTRICT
Owner FEDERAL
Multiple

RECEIVED

MAR 23 1998

OHP

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY US Naval Air Station Sunnyvale, California, Historic Distric
NAME: t

MULTIPLE
NAME:

STATE & COUNTY: CALIFORNIA, Santa Clara

DATE RECEIVED: 1/13/94 DATE OF PENDING LIST: 1/26/94
DATE OF 16TH DAY: 2/11/94 DATE OF 45TH DAY: 2/27/94
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 94000045

NOMINATOR: FEDERAL #1-94

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: Y PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: Y NATIONAL: Y

COMMENT WAIVER: N

ACCEPT RETURN REJECT 2/24/94 DATE

ABSTRACT/SUMMARY COMMENTS:

The U.S. Naval Air Station Sunnyvale, California Historic District is eligible under NR criteria A and C in the areas of Military History, Architecture, and Engineering. The discontinuous district represents a rather unique and significant episode in the development of U.S. naval aviation prior to World War II. The Sunnyvale base was one of two Naval Air Stations built to port lighter-than-air dirigibles during the 1930s. Dirigible Hangar #1, the later blimp hangars #2 and #3, and their accompanying support buildings all represent excellent examples of early twentieth-century military planning, engineering, and construction.

The three enormous airship hangars represent significant engineering accomplishments and they are among a limited number of extant historic airship facilities in the United States. The core of the historic Naval Air Station--centered on a landscaped "common" and dominated by the looming airship hangars--remains largely intact and includes fine regional examples of Spanish Colonial Revival design.

RECOM./CRITERIA Accept A+C
REVIEWER PAUL R. LUSIGNAN
DISCIPLINE HISTORIAN
DATE 2/24/94

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

United States Department of the Interior
National Park Service

P - 43 - 003511

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property Name

Santa Clara
County

CA
State

N/A
Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Paul R. Lugin

Signature of the Keeper

2.24.94

Date of Action

=====
Amended Items in Nomination:

Classification:

The number of previously listed resources is changed to zero (0); Hangar #1 was only determined eligible for listing.

Significance:

Area of Significance:

Architecture is added as an area of significance, defining the district as a good regional example of military design in the Spanish Colonial Revival style.

Significant Person:

The name of Adm. William Adger Moffett is removed from the significant person blank since the district was not nominated under Criterion B.

continued

P - 43 - 003511

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 94000045

Date Listed: 2/24/94

US Naval Air Station Sunnyvale,
California Historic District
Property Name

Santa Clara
County

CA
State

N/A
Multiple Name

=====
Amended Items in Nomination:

continued

U.T.M.:

The UTM coordinates are corrected to read:

A	10	582960	4140460
B	10	583240	4140880
C	10	583800	4141120
D	10	583940	4140740
E	10	583140	4140330
AA	10	584640	4141420
BB	10	584880	4141520
CC	10	584760	4141120
DD	10	584990	4141220

This information was confirmed with Navy FPO J. Bernard Murphy.

DISTRIBUTION:

National Register property file
Nominating Authority (without nomination attachment)

Appendix B

NAHC Correspondence

Ashleigh Sims

From: Ashleigh Sims
Sent: Friday, December 10, 2021 3:17 PM
To: nahc@nahc.ca.gov
Subject: Sacred Lands Request - Minor Projects at Moffett Federal Airfield
Attachments: Fig1_Minor_Projects_MFA_NAHC.pdf; D202100663_NAHC_Request_20211210.pdf

Hi NAHC,

Attached is a Sacred Lands File & Native American Contacts List Request and map for the Minor Projects at Moffett Federal Airfield in Santa Clara County, California. Please let me know if you have any questions.

Thank you,
Ashleigh

Ashleigh Sims M.A., RPA (*she/her*)
Archaeologist

ESA | Environmental Science Associates
1425 N. McDowell Boulevard, Suite 200
Petaluma, CA 94954

direct/mobile: 916.595.5539
asims@esassoc.com | esassoc.com

Stay in Touch: [Join Our Newsletter](#)

The following content was redacted from this public posting:

Sacred Lands File & Native American Contacts List Request
Figure 1: Project Area

Ashleigh Sims

From: Campagne, Cody@NAHC <Cody.Campagne@nahc.ca.gov>
Sent: Monday, February 28, 2022 12:50 PM
To: Ashleigh Sims
Subject: Minor Projects at Moffett Federal Airfield Project
Attachments: SLF All Minor Projects at Moffett Federal Airfield Project 2.28.2022.pdf; Minor Projects at Moffett Federal Airfield Project 2.28.2022.pdf

Categories: Projects

Good Afternoon,

Attached is the response to the project referenced above. If you have any additional questions, please feel free to contact our office email at nahc@nahc.ca.gov.

Regards,

Cody Campagne

Native American Heritage Commission
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Cody.Campagne@nahc.ca.gov
Direct Line: (916) 573-1033
Office: (916) 373-3710

NATIVE AMERICAN HERITAGE COMMISSION

February 28, 2022

Ashleigh Sims
Environmental Science Associates

Via Email to: asims@esassoc.com

Re: Minor Projects at Moffett Federal Airfield Project, Santa Clara County

Dear Ms. Sims:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for more information. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Cody.Campagne@nahc.ca.gov.

Sincerely,

Cody Campagne

Cody Campagne
Cultural Resources Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

PARLIAMENTARIAN
Russell Attebery
Karuk

SECRETARY
Sara Dutschke
Miwok

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Isaac Bojorquez
Ohlone-Costanoan

COMMISSIONER
Buffy McQuillen
Yokayo Pomo, Yuki,
Nomlaki

COMMISSIONER
Wayne Nelson
Luiseño

COMMISSIONER
Stanley Rodriguez
Kumeyaay

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

The following content was redacted from this public posting:

Native American Heritage Commission
Native American Contact List
Santa Clara County
2/28/2022

May contain personally-identifiable information

Appendix C

ICRMP - SOP 8 and SOP 9: Inadvertent Discovery Procedures (AECOM, 2014)

6.1.8 SOP No. 8: Inadvertent Discovery of Archaeological Resources

Regardless of whether an archaeological inventory has been completed and regardless of whether a planned undertaking has been assessed for its effect on known historic properties, every undertaking that disturbs the ground surface has the potential to discover buried and previously unknown archaeological deposits. NPR 8510.1 requires an SOP for responding to inadvertent discovery of archaeological resources. This SOP outlines the policies and procedures to be followed in such cases.

Applicable Laws/Regulations/Procedural Requirements

- National Historic Preservation Act
- National Environmental Policy Act
- Archaeological and Historic Preservation Act
- Archaeological Resource Protection Act
- Native American Graves Protection and Repatriation Act
- NASA Procedural Requirements 8580.1 and 8510.1

Policy

- The HPO in the Facilities Engineering Division is designated as the point of contact for the Section 106 process, including those projects proposed by organizations that are subject to the Section 106 process.
- EMD, as delegated by the HPO, implements the CRM Program for archaeological resources, and coordinates with external regulatory agencies that regulate environmental and cultural resource programs in regard to Tribal properties and resources, and to archaeological resources (e.g., sites, artifacts, features, or other archaeological indications of past human activities).
- Archaeological deposits that are newly discovered during any undertaking will be evaluated for their NRHP eligibility.
- Until NASA has determined an archaeological site is ineligible, all known sites will be treated as eligible and will be avoided insofar as possible.
- In the event that an archaeological deposit is inadvertently discovered, work must cease, the HPO must be notified, and a professional archaeologist must be consulted. Prehistoric archaeological material may include flaked stone tools (projectile point, biface, scraper, etc.), debitage (flakes), groundstone milling tools and fragments (mortar, pestle, handstone, millstone, etc.), faunal bones, fire-affected rock, and midden deposits. Historic archaeological material may include cut nails and other metal hardware, glass fragments, ceramic or stoneware fragments, milled or split lumber, structural remains, and trash dumps.

- If the professional archaeologist and NASA recommend that the archaeological deposit is eligible, the HPO will consult with SHPO and federally recognized Tribes on the need for further testing and/or data recovery.
- If the planned undertaking(s) may affect properties having historic value to any federally recognized Tribes with which NASA consults, the HPO will consult with the federally recognized Tribes and give them an opportunity to participate as interested persons during the consultation process.
- In the event that human remains are inadvertently discovered, work must cease in the area of the discovery and the HPO and EMD must be notified. If remains are determined to be human, federally recognized Tribes will be notified and SOP No. 9, Treatment of Human Remains and Funerary/Sacred Objects, will be followed.

Procedure

- I. Workers will notify the EMD immediately upon the discovery of possible archaeological deposits. (Standard language will be placed in contracts requiring contractors to notify the HPO/EMD immediately upon discovery of possible archaeological deposits.)
- II. When notified of the possible discovery of unexpected buried archaeological material, the EMD will arrange to have a professional archaeologist evaluate the site. Work will cease and the site will be protected pending the results of the evaluation.
 - A. If fossils, natural stones, concretions, or other such items that are sometimes mistaken for archaeological materials are recovered, then the EMD may allow the excavation to proceed without further action.
 - B. If disturbances to the deposit have been slight and the project can be relocated to avoid the buried site, the EMD will determine if recordation with DPR 523 forms is warranted. If warranted, the DPR forms will be submitted to SHPO, in a routine manner, having avoided further adverse impact through relocation of the proposed undertaking.
 - C. If the location of the project cannot be changed, the EMD will contact SHPO by telephone or email, to report the discovery and initiate emergency consultation.
 1. If the deposits are evaluated as ineligible for inclusion in the NRHP by a professional archaeologist, the EMD will have the site recorded and DPR 523 Inventory forms submitted to SHPO for concurrence. Upon concurrence by SHPO that the deposits are ineligible for the NRHP, NASA may allow the excavations to proceed and will advise the excavation foreperson(s) of the possibility and nature of additional discoveries that would require immediate notification of the EMD.
 2. If, in the opinion of the professional archaeologist, the existing information is deemed insufficient to make a determination of eligibility, then an emergency-testing plan will be developed by NASA in coordination with SHPO and federally recognized Tribes. Further excavation in the vicinity of the site will be suspended

until an agreed upon testing procedure has been carried out and sufficient data have been gathered to allow a determination of eligibility.

- a) If SHPO and the EMD agree after testing that the site is ineligible for listing in the NRHP, then work on the project may resume.
- b) If the site appears eligible for listing in the NRHP, or if NASA and SHPO cannot agree on the question of eligibility, then NASA will implement the following alternative actions, depending on the urgency of the action being delayed by the discovery of cultural material.

3. NASA may relocate the project to avoid adverse effect.

4. NASA may proceed with a data recovery plan under an MOA with ACHP, SHPO, and federally recognized Tribes. The MOA will specify the scope and level of effort of data recovery required to mitigate the adverse impact of the project on the site in question.

5. NASA may request comments from ACHP and may develop and implement actions that take into account the effects of the undertaking and the comments of SHPO, federally recognized Tribes, and ACHP. Interim comments must be provided to NASA (as soon as possible) and formal comments within 30 days.

III. If examination by a professional osteologist indicates the materials are of human origin, an archaeologist must make a field evaluation of the primary context of the deposit and its probable age and significance, record the findings in writing, and document the materials.

- A. If at any time human remains, funerary objects, or Native American sacred objects are discovered, the EMD will ensure that the provisions of NAGPRA and/or AIRFA are implemented.
- B. The EMD will begin consultation with federally recognized Tribes in accordance with NAGPRA.

6.1.9 SOP No. 9: Treatment of Human Remains and Funerary/Sacred Objects

NAGPRA requires the inventory of human remains, funerary objects, sacred objects, or objects of cultural patrimony recovered from federal lands that may be subject to claim by Native American tribal groups. NAGPRA also requires active consultation with such groups to determine the disposition of such remains and objects. No Native American human remains or sacred/funerary objects are currently known to exist on ARC property; however, previously undocumented excavations may have encountered human remains and/or sacred/funerary objects and future undertakings may inadvertently encounter these materials. NPR 8510.1 requires an SOP for the treatment of human remains and funerary objects. This SOP outlines the policies and procedures to be followed to ensure future compliance with NAGPRA.

Applicable Laws/Regulations/Procedural Requirements

- Native American Graves Protection and Repatriation Act
- American Indian Religious Freedom Act Policy
- NASA Procedural Requirement 8510.1

Policy

- The HPO in the Facilities Engineering Division is designated as the point of contact for the CRM Program.
- EMD, as delegated by the HPO, implements the CRM Program for archaeological resources, and coordinates with external regulatory agencies that regulate environmental and cultural resource programs in regard to Tribal properties and resources, and to archaeological resources (e.g., sites, artifacts, features, or other archaeological indications of past human activities).
- No Native American human remains, funerary objects, or sacred objects will be knowingly kept in government possession without preparation of an inventory and initiating consultation.
- Consultation regarding the disposition of Native American human remains, funerary objects, or sacred objects will be initiated in accordance with NAGPRA.

Procedure

The EMD will ensure that ARC complies with NAGPRA requirements and the implementing regulations (43 CFR Part 10).

- I. The EMD will review all records to determine whether any human remains, funerary objects, sacred objects, or objects of cultural patrimony originating on ARC property are known to exist.
 - A. If no such objects are found, no consultation is required.

- B. If any such objects are found to be not inventoried, the EMD will prepare an inventory of all such objects and will initiate consultation procedures with the Archaeological Assistance Division, National Park Service (Post Office Box 37127, Washington, D.C. 20013; telephone 202-343-4101; facsimile 202-523-1547) and federally recognized Tribes to determine appropriate disposition.
- II. If human remains or artifacts that are not currently in government possession but that are suspected to be from ARC property are returned to the government, the EMD will arrange to have a qualified professional examine and evaluate them.
- A. If the remains are not of human origin, then no further action by the EMD is necessary.
 - B. If the remains are not of Native American origin, then they will be treated as an inadvertent discovery of archaeological deposits (see SOP No. 8).
 - C. If the remains are of Native American origin, then the EMD will prepare an inventory of the remains and initiate consultation procedures with the Archaeological Assistance Division, NPS.
- III. If human remains are discovered during the course of any undertaking, the following procedures will apply:
- A. Work will immediately cease in the vicinity of the human remains.
 - B. The site supervisor will immediately notify NASA Law Enforcement/Center Protective Services and the EMD.
 - 1. If NASA Law Enforcement/Center Protective Services officers determine that the remains are of recent origin, then no further action by the EMD is necessary.
 - 2. If the remains are not recent, the EMD will arrange to have a professional archaeologist visit the site in a timely manner to examine and evaluate the recovered material.
 - a) If the remains are not of human origin, then they will be treated as an inadvertent discovery of archaeological deposits (see SOP No. 8).
 - b) If the remains are not of Native American origin, then the site will be treated as the discovery of inadvertent archaeology deposits. However, it should be noted that, although all human remains are to be treated with dignity, not all human remains, cemeteries, etc., are NRHP properties.
 - c) If the remains are of Native American origin, then further work in the vicinity will be suspended for 30 days to allow for consultation, as required by NAGPRA. If any photographs are taken of the undertaking, only general photographs of the site area are to be taken. Prior to removal of any remains, the HPO will prepare an inventory of the remains and will immediately initiate

emergency consultation procedures with the Archaeological Assistance Division, NPS, and federally recognized Tribes.

3. If consultation allows the remains to be removed, then the EMD will cause the remains to be treated and disposed in accordance with the consultation.
4. Notwithstanding the results of consultation, the EMD will ensure that Section 106 procedures are adhered to with regard to evaluating sites.