# NAVAL AIR STATION FALLON, NEVADA CULTURAL RESOURCES MANAGEMENT CNO AWARD NOMINATION FY 2010

#### INTRODUCTION

NAS Fallon is located in Churchill County, Nevada, approximately 12.9 kilometers (km) south of the city of Fallon. The installation includes the Main Station and the Fallon Range Training Complex (FRTC) comprising approximately 97 530 hectare (ha). The Main Station includes the bulk of support facilities (headquarters, barracks, classrooms, maintenance areas, and flightline) and is roughly 3 500 ha. The FRTC includes four air-to-ground bombing ranges (B-16, B-17, B-19, and B-20), the Dixie Valley electronic warfare range, and three special use areas. The land managed by NAS Fallon is a mixture of Navy-acquired land and land withdrawn from the Bureau of Land Management (BLM) and the Bureau of Reclamation (BOR). The NAS Fallon Integrated Cultural Resource Management Plan (ICRMP) covers all of the installation; however bombing range B-20 16 600 ha is exempt from Section 106 compliance due to safety concerns. The station's primary mission is to provide integrated air training events in support of carrier air wings, Marine air groups, and joint and multinational exercises. NAS Fallon is home to the Navy's Top Gun program and is the only Navy installation that provides advanced Carrier Air Wing Strike Training. Tenant commands include Naval Strike and Air Warfare Center (NSAWC), Construction Battalion Maintenance Unit (CBMU) 303, Explosive Ordnance Disposal Unit (EOD) 11, and Strike Fighter Weapons Maintenance Detachment Pacific and Fighter Squadron Composite 13 (VFC-13), among others. The base population is approximately 3,000 with 1,130 active duty personnel, 300 civilian Department of Defense employees, and 1,400 contract employees.

The NAS Fallon Main Station is located in Lahontan Valley within the Great Basin cultural and physiographic region. Associated bombing ranges are located nearby in Fairview Valley, Dixie Valley, the Carson Sink, and Rawhide Flats. The environment is characteristic of the high desert, with dry hot summers and cold, wet winters with moderate snowfall. Temperature variation throughout the year can be extreme with summer highs reaching over 38oC and winters lows below -18oC. Vegetation is variable but consists primarily of greasewood community.

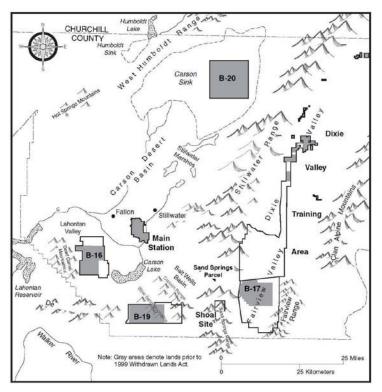
Located at the heart of ancient Lake Lahontan, the Fallon area includes archaeological sites that date as early as 9,000 BP. As is typical of the Great Basin, most archaeological sites are open air artifact scatters located on or near the surface. However, the Fallon area is somewhat unique due to several important sites located nearby. These include prehistorically occupied caves (Salt Cave, Hidden Cave, Spirit Cave, and Lovelock Cave) and the Grimes Point petroglyph site, all of which are managed by the BLM. Several prehistoric burials have also been found in cave and dune sites throughout the Lahontan Valley including on the NAS Fallon Main Station. Significant historic sites are just as abundant in the Fallon area and on the FRTC including ranching and mining sites as well as several important transportation routes (California Emigrant Trail, Pony Express, Overland Trail, and Lincoln Highway). The Lahontan Valley was a major beneficiary of the Newlands Reclamation Act of 1902 and continues to utilize the many irrigation ditches and canals constructed by the Act in the early years of the 20th century. The NAS Fallon Main Station includes several segments of the irrigation features that make up the Newlands National Historic District.

NAS Fallon opened in 1943 as Naval Auxiliary Air Station (NAAS) Fallon. The primary mission of the base was to train Navy fighter pilots. The base included two hangars, a control tower, several barracks, runways, and a headquarters building located at what is now termed the NAS Fallon South Side. Several bombing ranges, many still in current use, were also delineated at that time. At the end of World War II, the base was closed and many of the buildings were disassembled and donated to needy Native American reservations, although the bulk of the flight line buildings remained. With the beginning of the Korean War, the base was reopened as a Naval Auxiliary Air Field and expanded to accommodate the Navy's new jet aircraft including the construction of a longer runway. In 1956, the runway was again lengthened, this time disrupting U.S. Highway 50, forcing the highway to be rerouted to its current alignment. During this time, the main portion of the base was moved approximately 3.2 km northwest to what is now termed the West Side, although the South Side continued to provide housing and support to the base. Throughout the Cold War, the base was continually upgraded (including a return to NAAS status) with new barracks, hangars, and another expansion of the runway. In 1961, the Air Force established a Semi-Automatic Ground Environment Backup Interceptor Control (SAGE BUIC) facility at the south end of the base. Beginning in the 1960s, NAAS Fallon was one of the first Navy bases to incorporate Electronic Warfare training into its mission. The base was given full NAS status in 1972. From its reopening in the early 1950s to the present day, NAS Fallon has been one of the Navy's premier pilot training installations.

Currently about 18 percent of NAS Fallon has been surveyed for archaeological resources. To date, approximately 420 sites have been recorded, which are located on the Main Station and all bombing ranges with the exception of bombing range B-20. NAS Fallon manages approximately 80 archaeological sites that are eligible for inclusion to the National Register of Historic Places. In addition to archaeological resources, the installation includes nearly 200 buildings and structures that date from World War II (1941-1945) through the Cold War (1946-1989). The majority of buildings are located on the Main Station but bombing range B-16 and the Dixie Valley electronic warfare range also include buildings dating to the Cold War period. Other historic properties include several early 20th century ranches in the Dixie Valley electronic warfare range.

Two historic building inventories have been completed at the NAS Fallon Main Station including one in 1998 and the other in 2007. Following these two studies, the only buildings determined eligible for inclusion to the NRHP were the Air Force SAGE BUIC buildings. A World War II aircraft beacon was cited as a possible significant resource pending additional research. Recently, the Nevada State Historic Preservation Officer (SHPO) has rejected these studies on the basis that they did not adequately assess the base's significance at a state and local level. Because of this, a more comprehensive historic building inventory was funded for Fiscal Year 2010. Although the study is currently on-going, preliminary results suggest that in addition to the NRHP eligible SAGE BUIC facility, Hangar 7 (a World War II-era hangar) and Building 95 (the aforementioned World War II aircraft beacon) may be recommended eligible for the NRHP. The Dixie Valley ranches were recently inventoried under Section 110 of the NHPA. The results of this inventory suggest that individually the ranches are not significant but that as a group they may constitute a Rural Historic Landscape.

## **NAS Fallon Administered Lands**



## **BACKGROUND**

NAS Fallon currently functions under an ICRMP, which was written and approved in 2007. Earlier management plans included a 1993 Cultural Resource Management Plan (CRMP) and a draft ICRMP written in 2000. The current NAS Fallon ICRMP is considered to be one of the best in Navy Region SW and other installations are updating their ICRMPs to its standard.

Since 1996, NAS Fallon has had a Programmatic Agreement (NAS Fallon PA) in place. This document is of direct benefit to both the NAS Fallon cultural resource program and the base as a whole. It streamlines the cultural resource process by allowing small projects that clearly have "no effect" or "no adverse effect" to forego consultation with the Nevada SHPO. Because the majority of projects at NAS Fallon are very small maintenance projects, this document greatly facilitates day-to-day operations. The PA lists several types of Exempt Undertakings that do not require SHPO consultation and concurrence, freeing the cultural resource staff to focus on other projects. The document was revised in 2010 and the new version is currently awaiting approval from the Advisory Council on Historic Preservation.

NAS Fallon has employed one full time archaeologist since 1994. Working under the title of Cultural Resource Program Manager, this individual conducts archaeological surveys under Sections 106 and 110 of the National Historic Preservation Act (NHPA); evaluates properties for the National Register of Historic Places (NRHP); manages the treatment of historic properties; provides guidance to the Public Works Department (PWD), the Installation Commanding Officer (ICO), NSAWC, and various tenant commands; secures funding for cultural resource projects; maintains and updates the cultural resource Geographic Information System (GIS) database; and undertakes consultation with the Nevada SHPO,

the BLM, and interested parties including Native American groups. The NAS Fallon ICRMP lists 10 federally recognized tribal groups who have potential concerns regarding the FRTC and Navy activities. Other interested parties include the BOR, the Oregon-California Trails Association, the Lincoln Highway Association, and the Churchill County Museum.

The Cultural Resource Program Manager attends weekly meetings with the NAS Fallon PWD including the Facility Engineering and Acquisition Division (FEAD) meeting and the Work Induction Board (WIB). The Manager also regularly attends the monthly NSAWC briefing as well as pre-construction meetings, and various other meetings with stakeholders as necessary. Attending these meetings enables the Manager to advise the command of the possible impacts of upcoming projects to cultural resources. Attendance also brings the cultural resource process into the project during the early planning stages as required by Section 106 of the NHPA.

Because approximately 85 percent of land managed by NAS Fallon was withdrawn from the BLM and the BOR, the cultural resource staff works closely with these agencies when conducting undertakings in those areas. The *Nevada State Protocol Agreement between the BLM Nevada and the Nevada State Historic Preservation Office* and the NAS Fallon PA require that BLM cultural resource protocols are followed when projects are conducted on land withdrawn from the BLM. There are no management requirements on land withdrawn from the BOR but data is shared with this agency as a courtesy. The below table lists the management documents currently used by NAS Fallon.

DOCUMENT AND PURPOSE	DATE	DURATION
NAS Fallon Integrated Cultural Resources Management Plan for 2007-2012. Outlines NAS Fallon's responsibilities regarding federal historic preservation laws and regulations as well as Navy and Department of Defense policies.	2007	5 years
Programmatic Agreement Among NAS Fallon, the Nevada State Historic Preservation Office, and the Advisory Council on Historic Preservation regarding the Identification, Evaluation, and Treatment of Historic Properties on Lands Managed by NAS Fallon.	1996	Reviewed yearly
Nevada State Protocol Agreement Between the BLM Nevada and the Nevada State Historic Preservation Office for Implementing NHPA. Provides guidance for cultural resources managed on BLM land, including military land withdrawn from the BLM	2010	Indefinite
Memorandum of Understanding on Native American Human Skeletal Remains and Associated Artifacts among NAS Fallon, Fallon Paiute-Shoshone Tribe, Nevada State Historic Preservation Officer, US Fish and Wildlife Service, and the Nevada State Museum	1991	Indefinite
Memorandum of Agreement for Curation Services between the Nevada State Museum and NAS Fallon.	1995	Reviewed yearly

## PROGRAM SUMMARY FY 2009-2010

Fiscal Years 2009 and 2010 presented some unique cultural resource management challenges. A top priority these years has been the management of historic buildings and structures. The NAS Fallon ICRMP lists a comprehensive building inventory as a major follow-on action for the base. As mentioned previously, the Nevada SHPO recently rejected earlier historic building studies because they failed to evaluate properties based on their state and local significance. Additionally, these studies did not examine properties of all time periods. For example, the 1998 study specifically examined Cold War-era properties and did not include older properties. The 2007 study was a focused assessment of specific buildings, which were scheduled for demolition as part of a footprint reduction project. In response to SHPO's rejection of these studies, a more comprehensive base-wide historic building inventory was undertaken in FY 2010. Fieldwork for the building inventory was completed in summer 2010 and the advanced draft report was submitted to the Navy in September 2010. A comprehensive study of the base will be invaluable as a management document. Once Nevada SHPO has agreed with the NRHP eligibility recommendations for the buildings at NAS Fallon, Section 106 consultation need only occur for those buildings that have been determined eligible.

Another follow-on action listed in the NAS Fallon ICRMP is management of the historic ranches in the Dixie Valley electronic warfare range. The Dixie Valley area was settled in the 1920s and remnants of the first ranches still exist including adobe buildings, irrigation features, road systems, and fence lines. The Navy acquired the land in Dixie Valley from private landowners in the mid 1980s and NAS Fallon has cultural resource management responsibilities for the now abandoned ranch properties. Several of the original adobe buildings still exist but have never been formally evaluated as architectural resources. An architectural survey was funded for fiscal year 2010 to determine the properties' integrity and to provide management and preservation recommendations. A second study has also been funded for fiscal year 2011 to evaluate the properties as a possible Rural Historic Landscape.

A new challenge for NAS Fallon has been an increase in the amount of ground training that is being proposed by both Navy Special Warfare (NSW or SEALs) and the U.S. Marine Corps. Two areas have been the focus of ground training studies: bombing range B-16 and the Bell Canyon area of bombing range B-17, neither of which have undergone comprehensive archaeological inventory. Because the Bell Canyon area has been the focus of ground training for both the SEALs and the Marines, the NAS Fallon cultural resource program contracted a 2 023 ha survey for FY 2010. The survey identified over 100 historic and prehistoric archaeological sites that could be damaged by training. A complete inventory of the area has been an invaluable tool in the management of these resources and in providing guidance for the SEALs and Marines.

Similarly, the Navy's Geothermal Program Office (GPO) has also increased its interest in exploring the FRTC for possible geothermal energy sources. Throughout fiscal years 2009 and 2010, the cultural resource program at NAS Fallon has been supporting the GPO by providing archaeological inventories for over 100 exploratory drill pad sites, project oversight, and technical advice.

NAS Fallon has had a cultural resources GIS database since the late 1990s. The NAS Fallon Cultural Resource Information System (NASFCRIS) was the first database of its kind in the state of Nevada and other databases have been modeled after it, including the one used by the Nevada SHPO. NASFCRIS was last updated in 2007 when all archaeological sites and project areas on NAS Fallon were digitized and included as a searchable digital map. It is a critical planning tool in management of cultural

#### ACCOMPLISHMENTS FY 2009-2010

During the past two fiscal years, numerous projects have been funded by CNO and Naval Facilities Engineering Command Southwest (NAVFAC SW) for building renovations, demolitions, green energy projects, and utility upgrades, many of which involved older buildings. Nevada SHPO's rejection of earlier architectural studies meant that, with the exception of the SAGE BUIC facility, the National Register eligibility of all buildings at NAS Fallon was unknown. Buildings which had previously been considered non-significant were now unevaluated pending the results of the base-wide study. Discussions with Nevada SHPO resulted in a consultation process that would assess each project on a case-by-case basis. Rather than argue the building's significance, each building was treated "as though it were significant" – erring on the side of caution while the results of the inventory were pending. By doing this, the Cultural Resource Program Manager avoided making eligibility arguments for individual buildings and instead asked Nevada SHPO to review the project from an "adverse effect/no adverse effect" standpoint. Throughout the past year, the Cultural Resources Program Manager has worked closely with the Nevada SHPO and the NAS Fallon PWD to mitigate the impacts of projects on the base's Main Station with the intention of receiving a "no adverse effect" determination from Nevada SHPO. This effort has been highly successful and PWD projects in the amount of over \$3.9 million were allowed to proceed with minimal delay. Projects included: solar hot water heating for several historic barracks; solar "day lighting" for an early Cold War-era hangar; solar hot water heating for the galley; improvements to lightning protection on the base's SAGE BUIC facility; exterior improvements (roofing, windows, and exterior doors) to the base chapel; demolition of Buildings 305, 306, 310; and emergency repairs to Building 95, the World War II aircraft beacon.

Nellis Air Force Base (AFB) in Las Vegas, Nevada has recently funded a base-wide historic building inventory. The Nevada SHPO has been very pleased with the arrangement made with NAS Fallon and has recommended that the cultural resource staff at Nellis AFB follow the Navy's example in managing resources while the study is on-going. The NAS Fallon Cultural Resources Program Manager, working from "lessons learned" during the NAS Fallon inventory, has been helping Air Force staff to design their study and to implement a similar consultation process.

The Dixie Valley historic ranches are another success story. Although the properties and their associated adobe structures are not in immediate danger from Navy-sponsored projects, they have suffered from the elements for several years. The Navy has the responsibility to manage these properties and the first step in management is to understand the properties' significance. A 1999 study evaluated the properties as archaeological resources but did not consider them for their architectural merit. Because of this, an architectural inventory was funded and completed in fiscal year 2010. This study found that although the ranches are not significant as individual properties, they may prove to be significant when evaluated as a group. The results of the inventory have prompted an additional study that has been funded for fiscal year 2011 during which the properties will be examined as a potential Rural Historic Landscape. Further studies will also address what preservation efforts are necessary. Preserving the ranches may not have a tangible effect on NAS Fallon operations but it fulfills our mandate to be a good steward of the cultural resources under our management.

The transfer to a secure server and the repair of NASFCRIS has also been major achievements of the period. Since 2008, the combined issues of reduced functionality, slow server speed, and outdated

software had greatly reduced the utility of the program. The NASFCRIS GIS program was intended to be a planning and management tool, allowing cultural resource data to be saved, modified, and shared. During the period when the program was not fully functional, retrieving and modifying data was a time consuming process and sharing data was nearly impossible. The program has since been updated to the newest version of ArcGIS and now resides on a secure server that allows for data retrieval and manipulation that requires a fraction of the time it had previously. Work has now begun to identify the data that was lost in 2008. A fully functional and up-to-date GIS is essential to efficient management of cultural resources.

During the summer and fall of 2010, the Cultural Resource Program Manager provided cultural resource management training to the NAS Fallon PWD. Over 40 members of the PWD attended the training sessions. The intention of the class was to introduce the major cultural resource management laws and to explain how they can affect PWD projects. During the classes, the Cultural Resources Program Manager encouraged the PWD to consider the possible impacts of projects on cultural resources including historic buildings and archaeological sites.

Through continuing cooperative efforts with the NV SHPO and the BLM, the NAS Fallon Cultural Resources Program has proven to be an effective historic preservation partner in the state of Nevada. While pilot training remains NAS Fallon's primary mission, the cultural resource management program has clearly demonstrated that historic preservation and the Navy's mission can co-exist. Preservation projects such as the historic building inventories benefit both the Navy and the community at large by tangibly tying the past to the present.