

**2020 CNO Environmental Award Nomination
Cultural Resource Management Team – Large Installation
Naval Air Weapons Station China Lake**

When Disaster Strikes

**INTRODUCTION – NAVAL AIR WEAPONS
STATION CHINA LAKE**

Naval Air Weapons Station China Lake’s (NAWSCL) Cultural Resource Team has made significant strides in the management of cultural resources located within the installation boundaries. Located in the California Mojave Desert and spanning 1.2 million acres, NAWS China Lake represents 38 percent of the Navy’s land holdings worldwide. An impressive 85 percent of the Navy’s research, development, acquisition, test, and evaluation (RDAT&E) programs are conducted at NAWS China Lake.

The installation was established as the Naval Ordnance Test Station (NOTS) on November 8, 1943 as a partnership between the Navy and California Institute of Technology for the testing and evaluation of rockets and other aviation ordnance. This partnership and interaction between civilian scientists/engineers and experienced military personnel has made China Lake one of the preeminent RDAT&E institutions in the world.



1. Flight Mission over Naval Air Weapons Station China Lake (NAWSCL). An impressive 85 percent of the Navy’s research, development, acquisition, test, and evaluation programs are conducted at NAWSCL.

In addition to RDAT&E activities, China Lake also hosts a Seabee School, EOD Training Command and energy production facilities that operate as public private ventures.

At least 95 percent of NAWS China Lake’s land holdings (over 1 million acres) remain undisturbed. It is home to the largest collections and concentrations of Native American rock art in the Western Hemisphere and numerous well preserved prehistoric, ethno historic, and historic sites that represent the human experience in North America from over 10,000 years ago to the Age of Rockets.

Since the passage of the National Historic Preservation Act in 1966, 308,617 acres of installation Lands (27%) have been inventoried and 5,823 sites documented. The majority of the inventories and site documentation occurred after 1979 when the Installation’s Cultural Resource Program was founded. Prior to that time inventories and site recordation were completed by Academic institutions conducting private research.

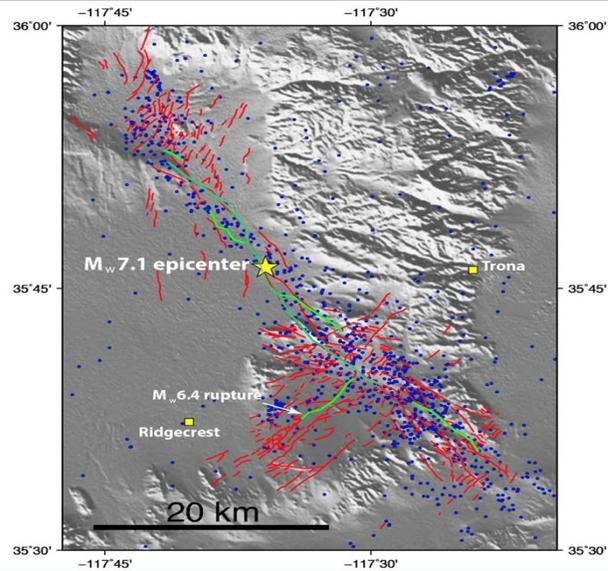
BACKGROUND: MEET THE TEAM

It was once stated that one’s true qualities will reveal themselves during a time of crisis. That statement could never hold truer than within this story that tells the tale of a Cultural Resources Management Team working at a Large Installation called Naval Air Weapons Station, China Lake. The team is comprised of four individuals: Michael McDaniels the Conservation Branch Lead, Tracy Buday a staff Archaeologist, Nancy Pahr a staff Archaeologist, and Elizabeth “Liz” Negrete, the NAVFAC Southwest Region Curation Specialist. Banding together under the greatest of adversity they performed at a level unmatched by any other Cultural Resources (CR) Management Team across the globe. Not only do they expertly manage the largest CR Management Program in the Navy, they do so under the unexpected and difficult circumstances presented by the most powerful earthquake in the state of California in the last 20 years. These quakes rattled the community, as many residents evacuated the area to never return, and untold billions of dollars of damage was done to the local area, not to mention NAWSCL itself.

That is not where this story begins, but the earthquake will reveal itself as the antagonist of this legendary tale at almost every turn. This nomination will focus on a few key aspects of this adventure to include: the NAWSCL Curation Facility and earthquake impacts/recovery; installation wide CR support during earthquake recovery efforts; and a long planned Native American Graves Protection and Repatriation Act (NAGPRA) event at San Nicolas Island.



2. Meet the Team. The photograph shows the Cultural Resources Program Management Team at NAWSCL. From left to right: Elizabeth Negrete, GS-11, Navy Region Southwest Curation Specialist; Michael McDaniels, GS-13, Conservation Branch Lead; Nancy Pahr, GS-12, Staff Archaeologist; Tracy Buday, GS-12, Staff Archaeologist.



3. Site Location Map Showing the Epicenters of the July 4th and 5th Earthquakes of 2019. These earthquakes were the largest in 20 years in California. This created a large demand for emergency work for the Cultural Resources Program Management Team at NAWSCL.

The immediate impact from these earthquakes was a shift from the day-to-day management of a complex CR Program to a highly dynamic and fast-paced emergency response approach. Some of the CR Program Management highlights that occurred during the post-earthquake time period include the following:

- NAWSCL CR Program Curation Facility earthquake damage assessments and restoration efforts (over 80% of NRSW historic artifacts are contained in this curation facility);
- Renovating the NAWSCL Curation Facility post-earthquake;
- Building a cohesive Navy team comprised of individuals with differing technical expertise across Navy Commands;
- Developing a culturally-sensitive approach to the NAGPRA consultation process;
- Establishing trust with Tribal stakeholders with whom consultative relationships did not exist previously;
- Realizing cost savings by consolidating two of the Navy’s largest archaeological collections in one facility, with one curator;

CULTURAL RESOURCES PROGRAM MANAGEMENT: ACCOMPLISHMENTS

The NAWSCL CR team consistently demonstrates professionalism and courage by promoting effective cultural resources management through proactive stewardship of NAWSCL’s extensive and rich heritage assets; including archaeological sites, cultural items, the historic built environment and cultural landscapes.

The team proactively engages and partners with 10 Native American Tribes to manage this program. On any given day, the NAWSCL CR Program is difficult and cumbersome, add in the largest earthquakes in 20 years and see what happens. On July 4th and 5th of 2019 back to back earthquakes grinded across the Ridgecrest, California area.

- CR Program installation wide earthquake recovery demand for assessments and associated planning efforts;
- Executed an emergency waiver with the State Historic Preservation Officer (SHPO) for expedited emergency project reviews;
- Conducted over 150 cultural resource reviews directly related to earthquake recovery;
- Routine and emergency project locates and surveys;
- Expedited review of 8 different MILCON projects totaling over 5 billion dollars in less than 3 weeks;
- Assisted Regional HQ in initiating SHPO consultation on 11 eligible buildings in the Salt Wells Historic District for 3 different MILCON's; and
- Facilitated a NAGPRA Repatriation Event starting at NAWCL and finishing at San Nicolas Island (3 year joint planning effort).

NAWSCL include the Big Pine Paiute Tribe; Bishop Paiute Tribe; Fort Independence Paiute Tribe; Lone Pine Paiute Shoshone Tribe; Timbisha Shoshone Tribe; Benton Paiute Tribe; Bridgeport Indian Colony; and the Tejon Tribe.

On top of this challenging coordination effort with the tribes, and despite the earthquakes and increased demand for emergency locates and CR surveys for project sites, the team used precise tracking techniques for budgetary data to ensure adequate funding to execute all program requirements. The team showed measurable success by proactively engaging customers prior to initiation of every emergency action.

This proactive engagement included managing a significant workload boost, on top of an already stressed program, while planning for significantly complex renovation and demolition projects. To facilitate this action the team negotiated for expedited SHPO consultation on each cultural resources compliance action using an emergency waiver.



4. The photograph depicts the Curation Facility at NAWSCL. It demonstrates the condition of the curation facility after the earthquakes of July 4th and 5th of 2019. This photograph was taken during the assessment phase of the earthquake recovery.

HISTORIC BUILDINGS AND STRUCTURES

CR installation wide earthquake recovery efforts included coordination across multifunctional teams and multiple commands. The following challenges were faced head on by this dedicated team of individuals:

- Secured a SHPO emergency waiver for expedited emergency project reviews;
- Completed over 150 cultural resources reviews directly related to earthquake recovery;
- Rapidly reviewed 8 different MILCON projects totaling over 5 billion dollars, in less than 3 weeks; and
- Assisted the Regional HQ in initiating SHPO consultation on 11 eligible buildings in the Salt Wells Historic District for 3 different MILCON's.

CR COMPLIANCE

From a CR Program compliance perspective, the NAWSCL team successfully negotiated an emergency waiver with the SHPO for expedited project review on emergency projects related to the July 4th and 5th earthquakes of 2019. Native American tribe consultation requirements on a government-to-government basis with the DoN at

The team ensured that appropriate maintenance and repair was completed in accordance with the Secretary of the Interior's Standards, including the utilization of cost effective measures using detailed economic analysis. The team also

conducted a thorough review to evaluate the coding of historic assets in INFADS.

ARCHAEOLOGICAL RESOURCES

Not only did NAWSCL recently add 33,096 acres of land with the acquisition of the Cuddeback expansion area that required surveys, the team also surveyed an additional 3% of installation lands totaling 5,823 sites. This additional 3% or roughly 33,000 acres surveyed during this award achievement period resulted in additional space made available for military testing and training. Some of these projects included:

- Paramount Guard Shack, Naval Air Weapons Station, China Lake (NAWSCL), Kern County California
- D4730219 Fiber Optic Cable (FOC) Project Skytop, North Range, San Bernardino County, Naval Air Weapons Station-China Lake (NAWS-CL)
- Southern California Edison (SCE) Power Pole Replacement Naval Air Weapons Station, China Lake (NAWS-CL), Inyo County, California
- PMTC (Point Mugu Test Complex) Target Site Expansion, Naval Air Weapons Station, China Lake, Inyo County, California
- Removal Underground Storage Tank (UST) South Range, San Bernardino County, NAWS-CL WR# D52S0118
- Update and Evaluation of 31 Sites at Airport Lake, NAWS China Lake, Inyo County, CA
- Laydown Near Building 15940 in Salt Wells Pilot Plant Historic District, for the Engineering Build for Facility 13475, NAWS China Lake, San Bernardino County, California
- 3-Inch and 5-inch Impact Target Cultural resource Inventory, NAWS China Lake, Inyo, Kern and San Bernardino County, California

NATIVE AMERICAN OUTREACH

The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), 25 U.S.C. 3001-3013, and its regulations found at 43 C.F.R. 10, sets forth procedures for the repatriation of

certain Native American human remains and cultural items in the possession of Federal agencies and museums, to lineal descendants and Federally-recognized Indian Tribes with cultural affiliation. The DoN has the responsibility to consult with the representatives of Federally-recognized Tribal governments as provided by NAGPRA and its implementing regulations, and to conduct NAGPRA consultation on a government-to-government basis in recognition of the sovereignty of the Tribal governments. NAGPRA identifies the rights of Federally-recognized tribes and lineal descendants with respect to the treatment, repatriation and disposition of Native American human remains and associated funerary objects, sacred objects and objects of cultural patrimony.

A big part of the Native American Outreach effort at NAWSCL is the previously mentioned tribal consulting completed on a government-to-government basis between the DoN and the following tribal organizations: the Big Pine Paiute Tribe; Bishop Paiute Tribe; Fort Independence Paiute Tribe; Lone Pine Paiute Shoshone Tribe; Timbisha Shoshone Tribe; Benton Paiute Tribe; Bridgeport Indian Colony; and the Tejon Tribe. NAWS China Lake coordinates with the Kern Valley Indian Community.

CURATION

The NAWSCL team employs one full time curator assisted by the remainder of the team and volunteer staff. The management of the collections would not be possible without the assistance of a non-profit volunteer organization, Friends of China Lake Archaeology. This volunteer organization was originally formed to stand up the curation facility but has since taken on the responsibility of assisting the curator. Though they have taken on many tasks, they generally assist with the organization and maintenance of the artifacts and records collections housed at the facility. The core group consists of seven volunteers who contribute an average of 350 hours every year.

The primary task of the curator is to improve the organization of the collection and ensure the overall standards of the facility meet the Federal requirements set forth in 36 CFR 79.



5. The photograph depicts another area in the Curation Facility at NAWSCL. It demonstrates the condition of the curation facility after the earthquakes of July 4th and 5th of 2019. This photograph was taken during the assessment phase of the earthquake recovery.

The attention of a full-time curator ensured the San Nicolas Island and NAWS China Lake archaeological collections met federal standards. The management of these vast combined collections co-located at NAWSCL has been approached with care. A significant enabler of archeological collection management is regular consultations with eight Federally-recognized Tribes and coordination with two state of California recognized tribes.

The San Nicolas Island and NAWS China Lake collections are stored within the same repository. The same Federal guidelines must be met for both collections. Therefore, several projects were undertaken at the facility that would benefit both collections. This includes the analysis of the needs of the individual collections, reorganization of the facility, and an update of the GIS database for both collections. Twenty boxes of past collections from China Lake were accessioned, and over 1,000 catalogs for China Lake archaeological collections were updated. Newly accepted collections are promptly accessioned and stored, and artifacts are rehoused to meet curation standards as necessary. As of the end of FY 2018, the China Lake collections including those from San Nicolas Island comprised over 750 cubic feet of collections from over 5,000 archaeological

sites, 685 linear feet of oversized collections, and over 2,500 linear feet of associated records.

When the July 2019 earthquakes struck, the internal damage was extensive but the building shell remained intact with notable damage to the lighting, heating, and water systems. The team did an emergency assessment post-earthquake of the curation facility. Comprised of a cross functional team of experts, they assessed both damage to the building and the curation facility respectively. The team yellow tagged the building noting utility damage and unsafe work conditions.

Once diagnosed, the team turned to planning to quickly get the curation facility back up and running. This herculean effort included working with the Public Works shops and program management team to execute some expedited projects to restore the facility to an operational condition. The team was able to get the facility up and running in a few short months.

The team used this as an opportunity to replace the wooden shelving with steel reinforced shelving lag bolted to the walls. This shelving is much more suitable to hold and maintain the curation facility artifacts. They also reorganized the collections and the topographic map cabinet which had fallen over, bringing things back to a state of order that facilitated further analysis and processing.



6. The photograph shows the steel reinforced replacement shelving at the NAWSCL Curation Facility. These shelving units keep artifacts stable and in place for curation.

With a repatriation event planned for late October 2019, the earthquake placed things in a state of flux, so this quick recovery at the curation facility was key to resuming operations. To ensure that the Navy could satisfy the requirements of the San Nicolas Island NAGPRA consultation, the task of cataloging collections, and creating preliminary lists of artifact types necessary for the NAGPRA summary process was the primary goal of the curator. The curator worked closely with Navy personnel comprising the interdisciplinary team across several Navy Commands committed to coordinating with the consulting Tribes as they finalized the NAGPRA repatriation process for San Nicolas Island. The combined efforts of personnel working at Naval Base Ventura County, NAWS China Lake, NAVFAC Southwest, NAVFAC Headquarters, the Consulting Native American Tribes, and the Ridgecrest Community have produced significant achievements in the consultation process.

The culturally-sensitive consultation approach and trust developed between the DoN and Tribes has allowed both groups to focus on resolving critical issues and move forward with the NAGPRA consultation.

In October of 2019, the team was able to successfully execute the San Nicolas Island Repatriation Event. By all accounts, this was a highly successful event.

COMMUNITY RELATIONS THROUGH AWARENESS AND EDUCATION

The CR Program Management Team takes full advantage of community relation opportunities while promoting awareness and education regarding CR Program initiatives.

Whether it's taking advantage of Family Fun Day at NAWS China Lake with a "Atlatl Toss Event" or one of the biannual Tribal Leadership Meetings where the team interacts with tribal members to update them on important progress, the NAWSCL CR Program Management Team always puts their best foot forward and really make everyone feel at home and part of the team. The tribes really took interest in the program post-earthquake trying to

understand the impacts if any of this catastrophic event.

The team uses these outreach events to educate the public about historic sites and artifacts. At Family Fun Day, the team of archaeologists held simulated excavation events to show the kids how to uncover artifacts for future procurement. The children always seem amazed by the care and detail it takes to handle these prized artifacts. Everyone seems to have a great time while learning about ancient and recent history.

Training and education is also critical to educating contractors prior to various projects so they are aware of what may be encountered in the field at NAWSCL. They are taught to not disturb objects they may encounter but instead report their findings for further investigation to the NAWSCL CR Program Management Team.

The team really enjoys promoting this program at every opportunity, so they never miss a chance to educate someone about the latest and greatest progress in the NAWSCL CR Program.

MISSION FOCUS

One may ask how this is all tied to the Navy's overall mission. At NAWSCL the focus is on supporting the Navy's RDAT&E of cutting edge weapons systems for the warfighter. Out of the 1.2 million acre facility, 1.1 million of those acres are dedicated ranges for direct support of RDAT&E operations. The CR Program efforts described in this narrative clearly demonstrate how they enable usage of range space for both training and RDAT&E efforts that are directly tied to the warfighter, their dependents and the civilian community. Every effort is made by this team to ensure range availability and enable the mission.

CONCLUSION

The CR Program Management Team at NAWSCL worked hard over the award period to accomplish many key objectives in line with the Integrated Cultural Resources Management Plan (ICRMP) and other program objectives.

The interdisciplinary team forged relationships and developed consultation approaches that

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assisted with the completion with not only the San Nicolas Island NAGPRA repatriation, but also with future NAGPRA consultations that will be required as the same tribal partners will be involved.

The team successfully completed the many accomplishments discussed in this brief to include: the NAGPRA San Nicolas Island Repatriation Event, the routine and emergency project support required post-earthquake, Native American Outreach, the renovation of the Curation Facility damaged during the earthquake, assessments of historic buildings and structures, archaeological resource assessments and determinations,

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numerous expedited SHPO consultations, and educational and community relation oriented program initiatives. All of this was mission focused in an effort to enable important objectives.

Through hard work and determination, the firm foundation set by these efforts will continue to enable even greater achievements in the years to come. One thing is for sure, if a challenge presents itself, this team is standing by ready to face the challenge head on and to succeed by whatever means it takes to accomplish the task at hand. During this time of crisis, this team could have looked for an easy way out or folded up in the face of adversity. Instead, they chose success!