



Cultural Resources

Update

DOD CULTURAL RESOURCES PROGRAM NEWSLETTER

SPRING 2019 Volume 15, Issue No.1



IN THIS ISSUE

- The “Lost Communities” of Fort Drum 1
- The U.S. Air Force CRM Program: A Case Study Using tDAR 3
- RASCL: A Survey Method 4
- Indigenous Land Acknowledgments 5
- The Corps Network 6
- Printed Buildings and Potential Impacts to Cultural Resources Management 8
- White Sands Missile Range Historic Landmark 9
- Upcoming Events, Conferences, Workshops, and Training. 10
- Program Updates and Announcements 12
- Links, Tools, and Preservation Partner Information. 13

FOR MORE INFORMATION

For more information about the DoD Cultural Resources program visit www.denix.osd.mil/cr

For more information about Legacy Resource Management Program visit www.denix.osd.mil/legacy.

If you have an item of interest for the newsletter, please email DoD_CRProgram@bah.com.

The “Lost Communities” of Fort Drum: Stewardship and Training

Adapted from Watertown Daily Times article, “Preserving the ‘lost communities’ of Fort Drum,” by Craig Fox, November 25, 2018; and “10th Mountain Division: Mountain Peak Exercise, Cultural Property Inject,” by Dr. Laurie Rush

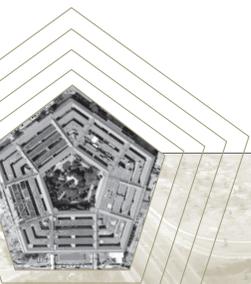
In upstate New York, Fort Drum is home to the U.S. Army 10th Mountain Light Infantry Division, established in the early 20th century. In 1941, DoD used eminent domain to acquire an additional 75,000 acres needed to expand Fort Drum to accommodate military training in preparation for World War II (WWII). About 525 families had to move to accommodate the expansion, abandoning approximately 3,000 buildings, including churches, post offices, and schools. Today, only building foundations remain from these abandoned communities within Fort Drum. The Archaeological Institute of America recently honored Fort Drum Cultural Resources Manager, Dr. Laurie W. Rush, for her public service in cultural resources stewardship and creative pre-deployment cultural property protection training.



Building remains at Fort Drum. Source: Craig Fox, Watertown Daily Times

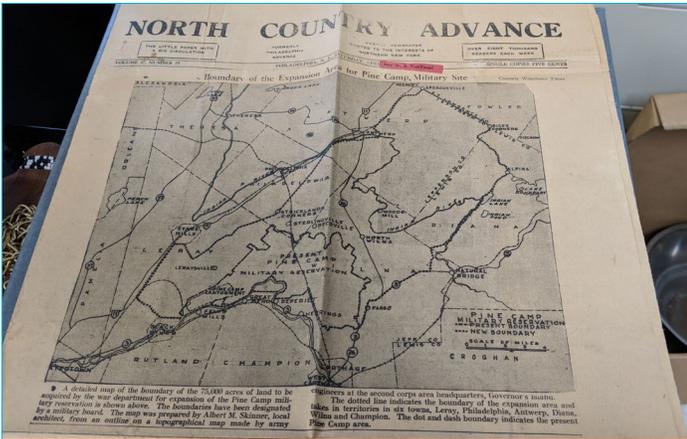
In this land of “lost communities,” the Army still uses Fort Drum for military training. Dr. Rush, works to remember these communities by treating and preserving their remnants as archaeological sites, fulfilling the responsibility of the Federal government to consider and protect cultural resources at our U.S. installations. In addition, Dr. Rush found a creative way to inject training scenarios around Fort Drum’s cultural resources. These real-world emulating training scenarios allow military personnel to learn operational cultural property protection (CPP) procedures as they prepare for future military exercises overseas.

continued on page 2



(The “Lost Communities” of Fort Drum, continued from page 1)

By encouraging training on real and replica archaeological sites on Fort Drum, around the ruins of historic villages and farmsteads, the installation cultural resources team collaborated with pre-deployment exercise planners to develop the training. The exercise scenario revolved around the invasion of the fictitious country of Atropia by insurgents. For the purpose of the exercise, real cultural resources, including the “lost communities,” became Atropian cultural property and sacred sites. Fort Drum’s cultural resources team also built replica archaeological sites and cemeteries, designed to look like the kinds of cultural properties Soldiers would likely encounter in the deployed environment. The cultural resources team made new signage for many of the sites, identifying them with property names that fit the scenario.



A collection of newspapers and articles from the 1940s is informing the Fort Drum Cultural Resources staff of the recorded history of the areas known as the “Lost Communities.” The staff has digitized and archived the information for future research. Source: Michael Strasser, Fort Drum Garrison Public Affairs

In Atropia, field archaeologists taught Soldiers how to read the cultural landscape, an extremely useful skill in the cross-cultural deployed environment, pointing out the indicators of historic farmsteads, including the presence of domestic garden flowers (like day lilies and lilacs), food plants and trees, and tall shade trees along rural roads and trails. The archaeologist also showed Soldiers how to identify features that may have cultural significance to others and how to avoid them if possible. Knowing where the farmsteads are is useful information because their foundation features can offer excellent cover for insurgency role players who act as if they are placing IEDs. These properties also may contain hazards like open wells and rusting barbed wire fences, so the ability to identify them benefits the Soldiers operating in unfamiliar territory. From the exercises, Soldiers learned the importance of protecting of others’ cultural resources. The training prepared them for the extremely complex cultural properties issues they will face overseas.

Dr. Rush established not only effective CPP training for Soldiers at Fort Drum, but last year, she also took the time to educate the public on Fort Drum’s “lost communities.” Through mapping, archaeological excavation, documentation, and education, Dr. Rush’s cultural resources team preserves information from these “lost communities” to help DoD personnel and the public remember them and learn what life was like for American families before WWII. To educate people about life in the “lost communities,” Dr. Rush’s team gave about 100 people, including some descendants of those displaced by Fort Drum’s expansion, a tour of the area this past fall.



Tour of Fort Drum. Source: Craig Fox, Watertown Daily Times

The Archaeological Institute of America recognized Dr. Rush with its Outstanding Public Service Award for her tireless work to protect the cultural heritage of Fort Drum while preparing 10th Mountain Division Soldiers, U.S. Army, and Allied Personnel to identify and respect the cultural heritage of host nation communities. The Outstanding Public Service Award recognizes those who promote public understanding of archaeology and the preservation of the archaeological record. Dr. Rush continues to oversee the Army’s cultural resources on over 100,000 acres of military land and works as an advocate for dialogue between military personnel and the public.

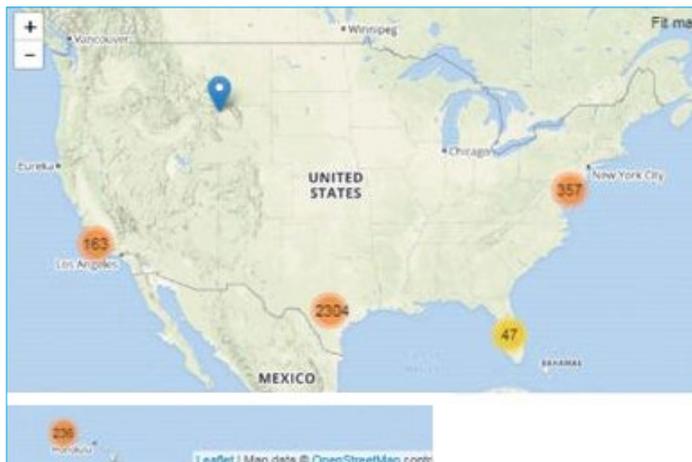
Read about Dr. Rush’s public tour of Fort Drum at: <https://www.watertowndailytimes.com/news03/preserving-the-lost-communities-of-fort-drum-20181125>

Read more about Dr. Rush’s award at: <https://www.archaeological.org/awards/outstandingservice>

The U.S. Air Force CRM Program Meets the Challenge of Digital Data Curation: A Case Study Using tDAR

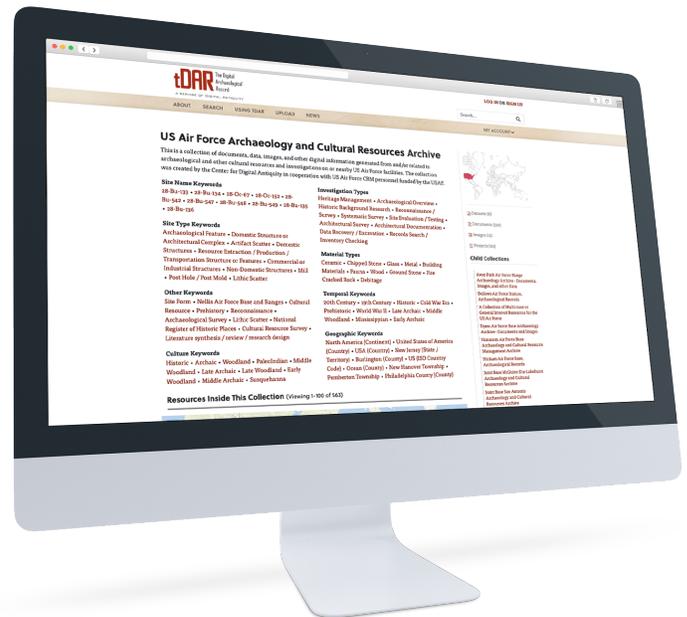
By Dr. Francis P. McManamon, Rachel Fernandez, Leigh Anne Ellison, and Charlene Collazzi, Center for Digital Antiquity, Arizona State University

The Digital Archaeological Record (tDAR; <https://www.tdar.org/>) is a digital repository of archaeological and cultural heritage documents, images, datasets, and other digital files. The Center for Digital Antiquity at Arizona State University (ASU; www.digitalantiquity.org) developed tDAR and maintains it. Users of tDAR can search for data from archaeological and cultural heritage projects throughout the world. Depositing data in tDAR facilitates broader and easier access to data. Many public agencies that curate their cultural resource data in tDAR are able to use the data for resource analysis and evaluation in decision-making, background studies, public interpretation and outreach, project management, research, and other aspects of cultural resource management. The tDAR also allows data owners, such as government agencies, to protect sensitive archaeological information through redaction or access restrictions.



Map showing general distribution of content for USAF Digital Archive in tDAR as of 2018. Source: The Digital Archaeological Record

In 2010, United States Air Force (USAF) archaeologists and subject matter experts, Dr. James Wilde and Dr. Paul Green (now retired), began to consider using tDAR digital repository for data curation, management, and sharing, as required by the National Historic Preservation Act, the Archaeological Resource Protection Act, and the regulations of the National Archives and Records Administration.



Website for USAF Digital Archive in tDAR. Source: The Digital Archaeological Record

The USAF contracted with ASU to create a method and infrastructure to address access to and challenges of using and preserving their data. Cultural resources management (CRM) staffs at three USAF bases: Dyess USAF Base (AFB) in Texas, Shaw AFB in South Carolina, and Avon Park USAF Range in Florida, agreed to host pilot projects to test whether and how the use of tDAR may help the USAF meet its data management needs.

At the beginning of the project, the cultural resources departments, at the bases involved, lacked a coherent archive for their cultural resources inventories or records of past cultural resource investigations. The records, documentation, and data varied in location and format. Most curated documents were hard paper copies, physical media, or in a non-preservation standard software. Through the project, the USAF ultimately determined they needed to establish proper curation methods to maintain essential links between project data and physical collections. The USAF created a digital archive in tDAR for the USAF archaeological and cultural heritage data with sub-collections for each of the bases (<https://core.tdar.org/collection/16304/us-air-force-archaeology-and-cultural-resources-archive>). Since completion of work at the initial three bases, over 20 additional installations now have digital archives in tDAR. Figure 1 schematically displays the distribution and quantities of the USAF digital records in tDAR across the US.

The methods tested in the pilot project serve as a framework and a standard set of procedures for establishing digital archives at other USAF installations. Subsequent work helped refine these procedures.

For example, shortly after the USAF project started, DoD funded Legacy Resource Management Project #13-701, *Evaluating a Cooperative Approach to the Management of Digital Archaeological Data*, to evaluate the best management approaches for digital curation of archaeological data (<https://www.digitalantiquity.org/wp-uploads/2011/07/Evaluating-a-Cooperative-Approach-to-the-Management-of-Digital-Archaeological-Records.pdf>). The project curated the digital records for Army and Navy base collections at the Maryland Archaeological and Conservation Lab and Fort Lee repositories and demonstrated tDAR provides DoD installations with an efficient, cost-effective, and secure option for the curation of archaeological data.

To ensure appropriate security, Digital Antiquity curators review the text and illustrations to identify sensitive information, such as specific locations for sites vulnerable to disturbance or looting. When curators encounter sensitive information, they review it with the DoD installation CRM staff and then use Adobe Acrobat Pro's redaction tools to remove confidential information as needed. In most cases, DoD uploads the redacted version of the document and makes it available to registered tDAR users. Curators can also upload the full report; however, they mark it as confidential and restrict access to it because it is an original un-redacted file. No access is granted to other tDAR users without USAF experts authorizing access to the full document.

Use of tDAR to meet digital data curation requirements positions the USAF to comply with the existing United States statutes and regulations regarding archaeological resources and historical properties. The AF digital curation program also complies with broad data sharing requirements of the recently enacted OPEN Government Data Act, found within the Foundations for Evidence-Based Policymaking Act, signed into law in January of 2019 (<https://www.congress.gov/bill/115th-congress/house-bill/4174>). The tDAR can provide CRM programs a means of avoiding the loss of legacy and new digital data, a current problem faced by public agencies and other organizations conducting publicly funded research.

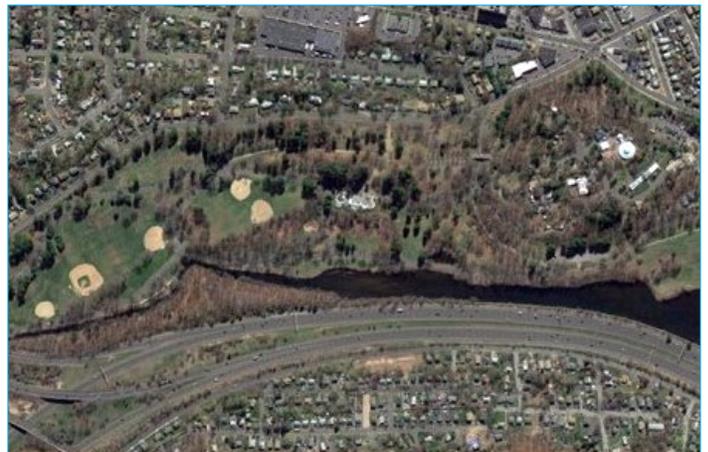
Read the full USAF Digital Data Curation Using tDAR Case Study at: https://www.digitalantiquity.org/wp-uploads/2019/03/20190318-DA-case-study-DoD-CR-Update_USAF-tDAR-archive-final-for-publishing.pdf

The study is also on DENIX at: <https://www.denix.osd.mil/cr/cultural-resources-program-management/archaeology/uploads/the-us-air-force-crm-program-meets-the-challenges-of-digital-data-curation-a-case-study-using-tdar-article-2019/>

RASCL: A Survey Method

Adapted from National Parks Service National Center for Preservation Technology and Training's "RASCL: A Survey Method" (2018-09)

A Remote Assessment & Survey of Cultural Landscapes (RASCL) provides a framework for conducting assessments of cultural landscapes using free and publicly-accessible tools: Google Earth Pro, historical imagery, and a fillable PDF survey form. This framework requires little investment and helps address hurdles to cultural landscape preservation, which include a lack of available staff, resources, and time. Specifically, a RASCL is an adaptation of two methods: the windshield survey typically used to inventory historic buildings and the aerial survey used by archaeologists and natural resource managers to assess sites. A RASCL involves the comparison of historical plans to contemporary aerial imagery. A remote survey can cover a large geographic area in a short time and is tailored to the scale and orientation of landscape-based resources.



RASCL Aerial Survey. Source: National Center for Preservation Technology and Training

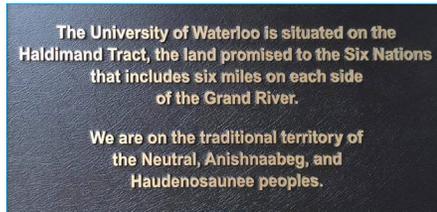
The RASCL method is only useful for observing areas aerially photographed in recent years, unblocked by tree canopies. The RASCL method is well-suited for the assessment of designed landscapes. At least one person involved in the RASCL should understand cultural landscape documentation and cultural resources survey methods and protocols. Nonprofessionals can conduct a RASCL, as long as training and direction are provided by the guiding agency. Nonprofessionals may find it useful to connect with a State Historic Preservation Office, a local preservation group, or other preservation agency when performing a RASCL.

The RASCL survey form and instructional guides can be found at: <https://www.ncptt.nps.gov/blog/rascl-a-survey-method/>

Indigenous Land Acknowledgments

By Christina Tewa, Senior Program Manager, Keres Consulting, Inc., support to the DoD Native American Lands Environmental Mitigation Program

A land acknowledgment is a formal statement that pays tribute to the original inhabitants of the land. It is a longstanding practice in countries with large Indigenous populations, such as Canada, Australia, and New Zealand, and is becoming more common in the United States. The purpose of a land acknowledgment is to show respect to Indigenous peoples, recognize their continuous relationship with the land, and raise awareness of their history.



Land acknowledgment plaque at a public university in Waterloo, Ontario, Canada. Source: University of Waterloo

In December 2018, Colorado State University (CSU) released a Land Acknowledgment Statement to honor the historical and cultural ties that Indigenous people have to the land on which the university is situated.

CSU's Land Acknowledgment Statement:

Colorado State University acknowledges, with respect, that the land we are on today is the traditional and ancestral homelands of the Arapaho, Cheyenne, and Ute Nations and peoples. This was also a site of trade, gathering, and healing for numerous other Native tribes. We recognize the Indigenous peoples as original stewards of this land and all the relatives within it. As these words of acknowledgment are spoken and heard, the ties Nations have to their traditional homelands are renewed and reaffirmed.

CSU is founded as a land grant institution, and we accept that our mission must encompass access to education and inclusion. And, significantly, that our founding came at a dire cost to Native Nations and peoples whose land this university was built upon. This acknowledgment is the education and inclusion we must practice in recognizing our institutional history, responsibility, and commitment.

Native American and other Indigenous students encouraged CSU President, Dr. Tony Frank, to adopt the practice of land acknowledgment at all university events.

Dr. Frank adopted the practice and developed a protocol for using the statement at CSU events. The protocol specifies that the official statement will remain unaltered in speech or print. Furthermore, the protocol specifies the intent of the statement is to educate people on the history of Indigenous people and foster respect and gratitude for them.

Land acknowledgments may improve relationships with Federally-recognized tribes and Native Hawaiians. Many military installations across the United States occupy traditional lands of Native Americans and Native Hawaiians.



Keaukaha Military Reservation landscape. Source: 2018 Secretary of Defense Environmental Awards Brochure

There is no one way to write a land acknowledgment. It can be as simple as, "We acknowledge that we are on the traditional lands of the _____ People." Additional elements of an acknowledgment can include honoring elders or alluding to the caring, reciprocal relationship to the land, and making explicit mention of the occupied, unceded nature of the territory in which the gathering is taking place. Some may wish to include suppressed histories of Indigenous people.

In addition to the 573 Federally-recognized tribes in the lower 48 states and Alaska, there are over 100 state-recognized tribes and also Native Hawaiian Organizations that are Indigenous to the U.S. for consideration when crafting a land acknowledgment. While land acknowledgments are small gestures, such acknowledgments may serve to build bridges to greater public awareness of Native sovereignty and cultural rights, promote mutual respect for traditional and current land uses, and enhance important ongoing relationships with Tribal Nations.

The Corps Network: Opportunities to Engage Youth and Veterans in Cultural and Natural Resource Management

By Hannah Traverse, Communications Manager, The Corps Network

Nearly 86 years ago, President Franklin D. Roosevelt established the Civilian Conservation Corps (CCC), a Federal program that put 3 million unemployed young men to work on public lands during the Great Depression. Operating out of camps run by the Army, the “CCC Boys” drastically changed America’s natural landscape, planting a billion trees, and building infrastructure still used today. Though the CCC was disbanded at the onset of WWII, it became a model for modern-day Corps conservation programs. Today, The Corps Network carries on and continues the CCC’s legacy, annually engaging thousands of young people in maintaining Federal, state, and local lands, including properties managed by the Department of Defense.

Corps units are locally-based organizations that engage young adults in service projects to address recreation, conservation, disaster response, and community needs. The Corps Network, the National Association of Service and Conservation Corps, currently has a membership of more than 130 Corps across the country. Unlike the CCC, most 21st Century Conservation and Service Corps are nonprofits, while state or local governments manage others. Corps units are funded through a combination of Federal, state, and local grants as well as through private support. Collectively, The Corps Network enrolls approximately 25,000 participants every year. Most Corps participants – or “Corpsmembers” – are young adults between the ages of 16 – 25, however, some Corps



A Corps member assists in a natural resource project. Source: The Corps Network

enroll veterans up to age 35. Typical Corps projects include conservation of natural resources. In 2018 alone, Corps units restored 1.4 million acres of habitat, planted over a million trees, and treated nearly 68,000 acres of invasive plant species. In addition to their work on natural resources, many Corps engage in projects to preserve historic sites, including important former military sites.

For resource managers, engaging Corps units has a number of benefits. First, these partnerships can help over-burdened agencies address backlogged projects sooner and in a cost-effective manner. Also, Corps units complete high-quality work: a survey of resource managers found more than 90 percent would work with Corps again. Finally, working with Corps gives resource managers the opportunity to engage the next generation of conservation and preservation professionals.

Corps units also partner with public and private managers of historic properties to preserve historically and culturally significant resources. Corps often work with experts from the National Trust for Historic Preservation (National Trust) and the National Park Service (NPS) Historic Preservation staff to educate Corpsmembers in the craft skills necessary to maintain the integrity of historic properties. Most of the Corps work completed on Federal lands is made possible through cooperative agreements. The Corps Network has national cooperative agreements with multiple Federal land management agencies, including the NPS and U.S. Forest Service, under which Accredited Corps can easily partner with local units to complete projects.



New Jersey Youth Corps of Phillipsburg assisting with preservation and restoration efforts at former Commanders Quarters at Fort Hancock, part of Gateway National Recreation Area, NPS. Source: New Jersey Youth Corps of Phillipsburg

A 2012 study on behalf of the NPS Facility Management Division showed: by using conservation crews instead of NPS crews, the NPS “saved 65% with the minimum savings just 3% and the maximum savings 87%.” The study also found “the savings using conservation corps instead of contractor crews were even more significant with average savings of 83% and over \$130,000 per project.”

For larger projects, the Corps hires and provides the conservation crew, which is supervised by the Corps and can also be subject to onsite supervision by the partnering agency. Corps interns are also provided by the Corps but are supervised by the partnering agency. Due to limited access, conservation work conducted on military installations is evolving. For such projects, the Corps units focused on recruiting active military and military dependents. Some Corps units offer opportunities to the children of military families. For instance, Northwest Youth Corps gave Tacoma-area youth and teens from Joint Base Lewis-McChord the opportunity to engage in conservation service and outdoor recreation at Mount Rainier National Park.

A number of other Corps projects occurred on former DoD properties in recent years, in partnership with the National Trust. The National Trust provides preservation expertise, the Corps provides crew participants, and a site-owner provides the historic property in need of preservation. Youth corps act as contractors on such projects and provide the labor, tools, training, room and board, insurance, and materials. For example, in 2015, New Jersey Youth Corps of Phillipsburg restored structures at Fort Hancock, now a NPS property, damaged by Hurricane Sandy. The National Trust provided a preservation advisor and a craft expert for the project. The advisor worked pro-bono and helped guide the project. The craft expert, paid through the project’s budget,



A member of the Northwest Youth Corps Sound to Summit group, uses a pick-axe to loosen dirt along a trail in Mt. Rainier National Park. Source: Jared Wenzelburger, The Chronicle

helped train the Corpsmembers on techniques such as repointing and carpentry. In 2017, members of the Student Conservation Association restored 19th century living quarters at Fort Monroe National Monument in Virginia, also under NPS management. Corps also worked to preserve national cemeteries, overseen by NPS, including Chalmette in Louisiana and Custer National Cemetery at Little Bighorn in Montana. Together, agency personnel and Corpsmembers can work to preserve Federally managed historic properties in an efficient and cost-effective manner.

Resource managers can engage with Corps in a similar fashion to partnering with other outside contractors. Many Corps can provide either crews or individual Corpsmembers (interns) based on project needs. The first step in a partnership is for the resource manager to determine appropriate projects and begin outreach to nearby Corps. The Corps Network can assist resource managers in locating a suitable partner based on project needs. Corps units are fully-insured, provide supervision of Corpsmembers, and typically bring all necessary tools and safety equipment to complete the project at hand. Corps units generally bring at least a 25 percent cost match for funding projects with Federal agencies. By establishing cooperative agreements with Corps, resource managers can see additional savings.

More information about Corps Network can be found at: www.corpsnetwork.org. To find local Corps units, please go to: <https://corpsnetwork.org/members-by-state> Questions about partnering with the Corps Network and its units can be directed to Joshua Tuohy, Government Relations Manager at The Corps Network, jtuohy@corpsnetwork.org, 202-737-6272 x118.



Montana Conservation Corps at Little Bighorn National Battlefield, restoring Custer National Cemetery, NPS. Source: Audrey Hall, the National Trust for Historic Preservation

Printed Buildings and Potential Impacts to Cultural Resources Management

By Ellen R. Hartman, Researcher, U.S. Army Corps of Engineers, Engineer Research and Development Center, Construction Engineering Research Laboratory

Additive manufacturing, or 3D printing, is the process of creating physical objects from digital models. Because of advancements in additive manufacturing, printing small buildings is now becoming feasible. Using programmable robotic arms, 3D printing directs the extrusion of a construction material into layers that form the structure of a building — printing the walls, roof, and interior in this order. The cultural resources community should take note of this evolving technology even though the link between 3D printing and cultural resources management may not be immediately apparent. In less than 50 years, these 3D printed buildings will become architectural resources of an age for routine cultural resources identification and evaluation.



CERL printed concrete building. Source: Ellen Hartman, ERDC-CERL

While the technology to 3D print buildings is still new, there are materials currently available for printing (e.g., concrete, plastics, ceramics, metal alloys). The most common building material is a specially blended concrete. The many benefits of 3D printed buildings include lower production costs, reduced construction waste, rapid construction, and a greater ease in constructing unique and complex designs. Current technologies can print small buildings within 48 hours for \$5,000-10,000. The most immediate application for 3D printed buildings is in areas where housing shortages create a critical need for rapidly constructed habitable structures.

As additive manufacturing technology advances, printed buildings may become a standard construction technique. The technology enables a designer to incorporate curves and other complex geometrical designs into buildings.



The world's largest concrete 3D printer constructs a 500-square-foot barracks hut at the U.S. Army Engineer Research and Development Center. Source: U.S. Marine Corps

Within the last two years, the United States Army Corps of Engineers' (USACE) Construction Engineering Research Laboratory demonstrated a 3D printing device with the capability to rapidly print small concrete barracks huts, or B-Huts. The goal is to ship the printing device to a combat theater to print buildings and infrastructure to support basing requirements. Despite the advantages, there are some limitations to the 3D printing technology. For example, the most commonly available printing technologies limit the height of these buildings to one story.

New construction methods like 3D printing could have a significant impact on cultural resources management. For example, the cultural resources community will have to determine how 3D buildings, which are visually and technically distinct, integrate into military historic districts. The DoD could consider establishing design guidelines to take advantage of the flexibility in printing with the existing standards of military construction and address how those buildings fit into the existing historic facilities on military installations. The USACE is also currently thinking about how to use 3D printing technology to address the need for rapidly constructed utilitarian buildings. As the technology develops, additive manufacturing will likely replace some conventional construction techniques, potentially increasing buildings with unique, and complex designs. An increase in constructing one-off and potentially complex designs may present problems when evaluating the building for the National Register of Historic Places—construction technique novelty may not indicate architectural significance. As 3D printing technologies develop and progress as a method of building construction, their impacts on cultural resource management will hopefully emerge.

Check out the ERDC-CERL video of 3D printing a building at: <https://www.youtube.com/watch?v=LjBS6b7ZeF8> and read previous articles on the ERDC-CERL website at: <https://www.erdcc.usace.army.mil/Media/News-Stories/Article/1281737/3-d-printing-a-building/>

White Sands Missile Range: McDonald Ranch House, Historic Landmark

Adapted from The Corp Environment, Vol. 20, Issue 1, February 2019, "Historic Landmark Receives Long Overdue Restoration, Repair"

In 2017, the Army repaired and restored portions of the historic McDonald Ranch house at White Sands Missile Range (WSMR), New Mexico. The ranch house is a contributing element of the Trinity Site National Historic Landmark, designated in 1975. In July of 1945, Manhattan Project scientists used the ranch house to assemble the plutonium hemispheres of the atomic bomb. Scientists transferred the plutonium core to Ground Zero, approximately 2 miles northwest, where it was placed in the implosion device, referred to as "The Gadget," and detonated on July 16, 1945.

Following the Manhattan Project, the abandoned ranch suffered major deterioration. In 1983, WSMR Garrison fully restored the ranch; however, harsh weather took its toll in subsequent years.

In the mid-1990s, a small-scale restoration occurred, but since that time, only minor repairs followed. Recognizing the need for another restoration, the WSMR Garrison funded additional necessary repairs and restoration efforts beginning in 2017. Bill Godby, archaeologist and cultural resources program project lead, utilized the Cooperative Ecosystem Studies Units (CESU) network, administered by the U.S. Army Corps of Engineers, Fort Worth District, to contract CESU member, Cornerstones Community Partnerships of Santa Fe, New Mexico. Cornerstones' historic restoration expert, Jean Fulton, took on the project with the assistance of Cornerstones' training coordinator, Nicole Kliebert.



McDonald Ranch house, WSMR. Source: U.S. Army



Crew working on repair of perimeter wall. Source: U.S. Army

Highlights of the 2017 repair efforts included executing the drainage plan, window reconstruction, ramp and porch reconstruction, and stucco and wall repair. According to Fulton, challenges of a project like this are multi-fold. She spent many hours going through historic photos and previous restoration records to ensure historic accuracy for repairs, with particular attention to the stucco. In the case of the stucco, Fulton successfully performed many tests to try and find a suitable color and texture match. Future repair efforts will target additional exterior restorations and interior work.

Read the full article at: <https://www.fedcenter.gov/admin/itemattachment.cfm?attachmentid=1174>

UPCOMING EVENTS, CONFERENCES, WORKSHOPS, AND TRAINING

Society for American Archaeology 84th Annual Meeting

Albuquerque, New Mexico; April 10-14, 2019

The Society for American Archaeology's Annual Meeting brings together the archaeological community to share ideas, best practices, and state of the art knowledge. Attendees will meet and network in interest groups, panels, symposia, and committees; and to celebrate their field.

NPI: NAGPRA and Archaeological Resources Protection Act (ARPA) – Applications and Requirements

Atlanta, Georgia; April 11-12, 2019

Review the historical context and intent of the NAGPRA and ARPA. Learn how these laws apply to the treatment, repatriation, and disposition of Native American cultural items, and to the protection of archaeological resources on Federal and tribal lands. Examine differences in legal definitions, when and how regulations apply, and permit requirements. Discuss practical applications and effective strategies for developing agreements prior to ground-disturbing actions.

Society of Architectural Historians 2019 Annual International Conference

Providence, Rhode Island; April 24-28, 2019

Architectural historians, art historians, architects, museum professionals, and preservationists from around the world will convene to present new research on the history of the built environment and explore the architecture and landscape of Providence and nearby areas. The conference will include 38 paper sessions, roundtable and panel discussions, architecture tours, workshops, networking receptions, special events, and more.

NPI: Landscape Preservation – An Introduction

Anchorage, Alaska; April 29-30, 2019

In this introduction to the basics of cultural landscapes, learn about designed, vernacular, and ethnographic landscapes, and historic sites. Review applicable laws and regulations and discuss how to identify and inventory character-defining features of a landscape. Explore the concepts of preservation planning and documentation, and the development of the cultural landscape report for use in managing historic and cultural landscapes. Case studies illustrate realistic approaches to effective landscape management and preservation.

NPI: Native American Graves Protection and Repatriation Act (NAGPRA) Essentials

Norman, Oklahoma; May 2-3, 2019

Review the compliance process for the NAGPRA for Indian tribes, Native Hawaiian organizations, Federal agencies, and museums. Explore how consultation can inform inventories, summaries, and cultural affiliation, and the resulting notices, repatriations, and dispositions.

DoD Partnership: National Public Lands Day (NPLD)

2019 Announcement: early May

2019 DoD NPLD Application due to NEEF: June 12, 2019

Volunteer Day: September 28, 2019

NPLD is the nation's largest, single day volunteer effort for public lands. Each year, thousands of Americans come together on the fourth Saturday of September to volunteer their time to improve parks, refuges, local waterways, recreation areas, trails, community gardens, and historic sites. The National Environmental Education Foundation (NEEF) has been coordinating NPLD events across the country with Federal, state, and private partners since the event began in 1994.

The Department of Defense (DoD) Legacy Resource Management Program provides funds to NEEF for NPLD partnership projects on military lands that are open to the public for recreation. Funds are available for projects on any DoD installation that supports the goals of NPLD: to improve the quality of public lands and to educate the public about natural and cultural resources management and stewardship. Cultural resources projects under NPLD can vary greatly, so be creative and apply! The 2019 NPLD DoD Award applications are now open! All applications are submitted online and are due by June 12, 2019.

ACHP: Section 106 Practitioners Workshop

Portland, Oregon; May 14-15, 2019

Nashville, Tennessee; July 30-31, 2019

Cheyenne, Wyoming; August 6-7, 2019

Washington, DC; September 10-11, 2019

Anchorage, Alaska; October 8-9, 2019

The Advisory Council for Historic Preservation's Section 106 Practitioners Workshop is a two-day course in which participants explore best practices and build skills in the application of the Section 106 review process to federal undertakings. The course is well-suited to individuals who participate in Section 106 reviews on a routine basis and need to further develop or maintain fluency in the vocabulary and concepts of Section 106 review in complex situations.

continued on page 11

UPCOMING EVENTS, CONFERENCES, WORKSHOPS, AND TRAINING *continued***ACHP: Section 106 Essentials***Portland, Oregon; May 16, 2019**Washington, DC; June 25, 2019**Nashville, Tennessee; August 1, 2019**Denver, Colorado; October 15, 2019*

The Advisory Council for Historic Preservation's Section 106 Essentials is a one-day course for anyone interested in an overview of the Section 106 review process. The course is particularly helpful for managers and early-career cultural resources practitioners from Federal agencies, State and Tribal Historic Preservation Offices, Indian tribes, Native Hawaiian Organizations, applicants in the Section 106 process, and others.

DoD Native Hawaiian Cultural Communications and Consultation Course (NHCCCC)*Fort Shafter, Hawaii; May 16-17, 2019*

The NHCCCC provides valuable information for DoD employees whose work could affect Native Hawaiians and for those already working with Native Hawaiians and Native Hawaiian Organizations. The training will include: Hawaiian history; introduction to Hawaiian concepts and cultures; resources of special importance to Hawaiians; Federal laws, regulations, and policies that impact DoD consultation relationships with Native Hawaiian Organizations; the DoD Native Hawaiian consultation protocol; intercultural communications and relationship building; and strategies and practical steps for consulting with Native Hawaiians.

Preserving U.S. Military Heritage: World War II to the Cold War Symposium (NCPTT)*Fredericksburg, TX; June 4-6, 2019*

The National Center for Preservation and the National Museum of the Pacific War are co-hosting a three-day symposium, June 4-6, 2019, in Fredericksburg, Texas, discussing the preservation of United States military heritage from World War II to the Cold War.

CECOS: National Environmental Policy Act (NEPA) Application*Norfolk, VA; June 11-13, 2019**Webinar; August 20-22, 2019*

The Naval Civil Engineer Corps Officers School (CECOS) NEPA Application Course, presented in a three-day seminar, provides participants with the legal requirements, Navy policy, procedures and techniques for implementing NEPA.

CECOS: Introduction to Cultural Resource Management Laws and Regulations*Monterey, CA; June 18-20, 2019*

This CECOS course provides an integrated overview of all pertinent laws and regulations needed to understand and fulfill cultural resource management responsibilities. This is the first in a series of Cultural Resource courses designed to provide cultural resource tools for Cultural Resources Managers (CRMs), their staffs, and personnel having a direct or indirect impact on cultural resources in support of DoD, Military Service, and Installation's mission.

ACHP: Section 106 Agreements Seminar*Cheyenne, Wyoming; August 8, 2019**Washington, DC; September 12, 2019**Anchorage, Alaska; October 10, 2019*

The Advisory Council for Historic Preservation's Section 106 Agreements Seminar is a one-day course that builds skills in managing consultation and documenting agreed upon steps to resolve adverse effects in a Section 106 review of a federal undertaking. The seminar is designed for cultural resources, environmental, and legal practitioners who are fluent in the Section 106 implementing regulations and the review process.

PROGRAM UPDATES AND ANNOUNCEMENTS

Adapted from “Execution of Programmatic Agreements Covering Routine Training at United States Army Garrison, Hawaii”

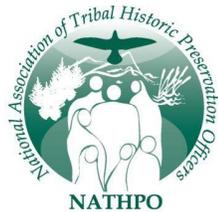
For the past four years, the Department of the Army Assistant Chief of Staff for Installation Management (DAIM-ISE), Army Commands, and installation personnel worked alongside state and Federal regulators and Native Hawaiian organizations to develop programmatic agreements (PA) covering routine military training, operation, maintenance, and support activities on ranges and related infrastructure on the islands of Oahu and Hawaii. On September 27, 2018, the Army executed a PA that governs the implementation of multiple training actions that have been categorized as excluded from further consultation or requiring a streamlined review process. This agreement provides compliance with the National Historic Preservation Act on the routine training and support activities for the next 15 years.

Adapted from Secretary of the Navy (SECNAV) INSTRUCTION 11010.14B

In SECNAV INSTRUCTION 11010.14B, the Department of the Navy (DON) updated its policy, procedures, and responsibilities when consulting with representatives of Federally recognized Indian tribes, including Alaska Native tribe entities, and Native Hawaiian Organizations. The DON is committed to developing and maintaining long-term working relationships of respect, trust, and cooperation with Indian tribes and Native Hawaiian Organizations.

Adapted from National Association of Tribal Historic Preservation Officers (NATHPO) Memorandum

In January, NATHPO hired Dr. Valerie Grussing as permanent [Executive Director](#). Dr. Grussing comes to NATHPO with years of experience in cultural resources consultation, including eight years as the Cultural Resources Coordinator for the National Marine Protected Areas Center, part of the National Oceanic and Atmospheric Administration. She has a PhD in Coastal Resources Management and a Master's degree in Anthropology, and has worked with many Tribes on projects ranging from characterizing cultural landscapes to developing and implementing effective Tribal consultation policies. In the months to come, Dr. Grussing and the NATHPO Board of Directors will be working closely together on strategic planning goals for guiding NATHPO into the future.



Report: Readiness and Environmental Protection Integration (REPI)

The DoD REPI Program is a key tool for combating encroachment that can limit or restrict military training, testing, and operations. The REPI Program's [Annual Report](#) reviews the achievements of the REPI Program through Fiscal Year (FY) 2018. The Report provides an update on critical achievements from the past year that protect military missions by helping remove or avoid land-use conflicts near installations and addressing regulatory restrictions that inhibit military activities. In its 16-year history, the REPI Program has protected 586,665 acres in 106 locations across 33 states.



Marines discuss their individual movements during Marine Expeditionary Unit Exercise at Camp Pendleton, Calif. Source: Cpl. Timothy Valero, U.S. Marine Corps

Strategic Environmental Research and Development Program (SERDP) and Environmental Security Technology Certification Program (ESTCP)

Final reports for three important SERDP and ESTCP research efforts are now available on the [SERDP and ESTCP website](#): “Assessing the Impacts of Climate and Land Use/Land Cover Change on Valley Fever Incidence,” “Integrated Measurement of Naval Sonar Operations,” and “Precise Cetacean Locations.”

Pre-proposals due

Pre-proposals for [ESTCP FY 2020 Solicitation](#) were due March 7, 2019. Pre-proposal topic areas included DoD Infrastructure Resiliency Arctic Engineering Design Tools, Advanced Brown Tree Snake Control Tools, and Innovative Technology Transfer Approaches. ESTCP projects are formal demonstrations conducted at DoD facilities and sites to evaluate and document how innovative technologies are improving efficiency, reducing liability, improving environmental outcomes, and facilitating cost savings.

Project Feature

A SERDP project, [Next-Generation Intensity-Duration-Frequency Curves Considering Spatiotemporal Non-Stationarity in Climate, Intense Precipitation Events, and Snowmelt](#) was recently featured on the American Geophysical Union's Journal, *Geophysical Research Letters*, January 3, 2019. The article, “Observed Spatiotemporal Changes in the Mechanisms of Extreme Water Available for Runoff in the Western United States” outlines the first study to identify, in historical records, regional changes in the mechanisms of extreme water available for runoff.

LINKS, TOOLS, AND PRESERVATION PARTNER INFORMATION

DoD's Cultural Resources Program

The Department's cultural resources are the Nation's heritage, and DoD holds these assets in trust for all Americans. As stewards of the Nation's largest inventory of Federally-managed historic properties, DoD maintains, promotes, and interprets the cultural resources it manages, both to support the Defense mission and to preserve the country's military heritage for future generations. The Cultural Resources Program is managed by DoD's Deputy Federal Preservation Officer, responsible for policy, governance, and oversight of DoD's cultural resources management and stewardship.

DoD's Native American Affairs Program

The DoD's Native American Affairs Program is served by the Senior Advisor and Liaison for Native American Affairs (SALNAA). The SALNAA is responsible for developing and implementing DoD's American Indian, Alaska Native, and Native Hawaiian consultant policies; managing the DoD Native American Lands Environmental Mitigation Program (NALEMP); advises DoD on matters relating to Native Americans and Native Hawaiian Organizations; manages DoD outreach activities to tribal governments on behalf of the Office of the Secretary of Defense; and facilitates tribal nations' contact with DoD offices on matters of concern.

Native American Lands Environmental Mitigation Program (NALEMP)

The DoD NALEMP program addresses environmental impacts on Indian lands and Alaska Native Claims Settlement Act-conveyed properties from former DoD activities with maximum tribal participation, through Government-to-Government consultation.

U.S. Army Corps of Engineers Mandatory Center of Expertise for the Curation of Management of Archaeological Collections (USACE MCX-CMAC)

USACE MCX-CMAC maintains state-of-the-art technical expertise in the curation of archaeological collections and collections management.

Engineer Research and Development Center-Construction Engineering Research Laboratory Cultural Resources Management (ERDC-CERL CRM) Team

The CRM Team is a component of the ERDC-CERL's Land and Heritage Conservation Branch and partners with DoD organizations, individual installations, and other Federal agencies to provide both practical compliance and methodological research.

Advisory Council on Historic Preservation (ACHP)

The ACHP is an independent Federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy. The ACHP offers a variety of free and affordable on-demand, web-based courses, including: *What is Section 106? Successfully Navigating Section 106 Review: An Orientation for Applicants; Coordinating NEPA and Section 106; and Basics of NEPA and Section 106 Integration.*

National Conference of State Historic Preservation Officers (NCSHPO)

NCSHPO is a nonprofit organization whose members are State Historic Preservation Officers (SHPOs). NCSHPO serves as a communications vehicle between SHPOs, Federal agencies and other organizations. It also educates the public and elected officials about the national historic preservation program, legislation, policies and regulations.

National Association of Tribal Historic Preservation Officers (NATHPO)

NATHPO is a national, non-profit corporation comprised of Tribal Historic Preservation Officers and associate member tribes. NATHPO's overarching purpose is to support the preservation, maintenance, and revitalization of the culture and traditions of Native peoples of the United States.

National Native American Graves Protection and Repatriation Act (NAGPRA) Program

The NAGPRA addresses the rights of lineal descendants, Indian tribes, and Native Hawaiian Organizations to Native American cultural items, including human remains, funerary objects, sacred objects, and objects of cultural patrimony.

Department of Interior Tribal Leaders Directory

The Tribal Leaders Directory provides contact information for each Federally recognized tribe.

U.S. Department of Housing and Urban Development (HUD) Tribal Directory Assessment Tool (TDAT)

HUD developed TDAT to help users identify tribes that may have an interest in the location of a HUD-assisted project and provide tribal contact information to assist users with initiating Section 106 consultation under the National Historic Preservation Act.

National Center for Preservation Technology and Training (NCPTT)

NCPTT helps preservationists find better tools, materials, and approaches to conserving buildings, landscapes, sites, and collections.

continued on page 14

LINKS, TOOLS, AND PRESERVATION PARTNER INFORMATION *continued***Managing Archaeological Collections**

This web-based, on-demand course covers all aspects of caring for archaeological collections. The information provided is designed to assist those who are interested in or need to learn more about preserving and managing archaeological collections over the long term.

National Register of Historic Places (NRHP)

The NRHP is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's NRHP is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources.

National Register of Historic Places Bulletins

The National Register Bulletin series provides guidance on evaluating, documenting, and listing different types of historic places.

National Archives and Records Administration (NARA)

Explore U.S. history through the NARA's documents, photos, and records.

Library of Congress

The Library of Congress is the nation's oldest Federal cultural institution, and it serves as the research arm of Congress. It is also the largest library in the world, with more than 162 million items. The collections include books, sound recordings, motion pictures, photographs, maps, and manuscripts.

Strategies for Sustainable Historic Preservation

Offered as part of the Whole Building Design Guide Continuing Education Courses, this web-based, on-demand course provides an introduction to the Historic Preservation process. Specifically, it focuses on how to balance sustainability goals and operations and maintenance practices with preservation solutions.

Working Effectively with Tribal Governments

This web-based, on-demand course helps develop an understanding and awareness of tribal issues and concerns. The course teaches how the unique status of Indian tribes and their historical relationship with the Federal government affects government programs, responsibilities, and initiatives.

National Preservation Institute (NPI)

The NPI offers continuing education and professional training for those involved in the management, preservation, and stewardship of cultural heritage. NPI serves individuals and groups from the government and private sectors by providing seminars in historic preservation and cultural resource management.

FedCenter Training

This page contains links to FedCenter-sponsored on-demand training courses; Federally-sponsored and non-profit training course announcements; and links to various other Federal, State, local and private training providers' websites.

Planning for Cultural Resources Special Environmental Concerns and Making the National Environmental Protection Act (NEPA) Finding

This on-demand webinar will assist United States Department of Agriculture Natural Resources Conservation Services conservation planners, partners, and technical service providers understand the importance of cultural resources and how to properly analyze and document existing conditions and the effects of planned conservation actions to properly document the NEPA finding.

Society for American Archaeology (SAA)

The SAA is an international organization dedicated to the research, interpretation, and protection of the archaeological heritage of the Americas. The society represents professional, student, and avocational archaeologists working in a variety of settings including government agencies, colleges and universities, museums, and the private sector.

Society for Historical Archaeology (SHA)

The SHA is the largest scholarly group concerned with the archaeology of the modern world. The society is concerned with the identification, excavation, interpretation, and conservation of sites and materials on land and underwater.

Society of Architectural Historians (SAH)

The SAH promotes the study, interpretation, and conservation of architecture, design, landscapes, and urbanism worldwide for the benefit of all.

DoD Cultural Resources Program

Enhancing Mission Capabilities through Cultural Resources Stewardship

The Department of Defense (DoD) maintains thousands of historic and cultural resources that form an integral part of mission support and readiness. The Department's cultural resources are the Nation's heritage and the Department holds these assets in trust for all Americans. As stewards of the Nation's largest inventory of Federally-owned historic properties, DoD strives to maintain and interpret those resources it manages to support the defense mission and to preserve military and cultural heritage for future generations. Cultural resources are mission enhancing assets, connecting our fighting men and women with their proud history and traditions. The Department continues to use and maintain some of the Nation's most treasured cultural resources as an integral part of mission support and readiness.

The DoD historic property portfolio includes 43 individual National Historic Landmarks, 2,742 National Historic Landmark contributing properties, 1,874 individual and contributing historic structures listed in the National Register of Historic Places, and over 28,000 historic properties, including more than 13,000 archaeological sites and nearly 15,000 historic structures that are considered eligible for inclusion in the National Register of Historic Places. These cultural resources are managed at the installation level by the Military Services and other DoD Components, who work closely with public stakeholders, including American Indian and Alaska Native tribes, Native Hawaiian Organizations, State Historic Preservation Officers, and the Advisory Council on Historic Preservation. Sound cultural resources stewardship ensures DoD's compliance with applicable historic preservation Federal laws, Executive Orders, and regulations in support of the defense mission.

Visit the Cultural Resources Program website at www.denix.osd.mil/cr/ for more information.



Deputy Federal Preservation Officer and Senior Editor
Michelle Volkema

Editors and OSD Program Support
Kelly Hallett and Courtney Williams

www.denix.osd.mil/cr/

The *DoD Cultural Resources (CR) Update* is sponsored by the DoD Cultural Resources Program, OASD(Sustainment).
All written information contained in the *CR Update* is public and not copyrighted.

If you would like to subscribe to the newsletter, please email DoD_CRProgram@bah.com and put "Subscribe CR Update" in the subject line. If you would like to unsubscribe, please put "Unsubscribe CR Update" in the subject line.
If you have an item of interest for the *CR Update* or have any feedback, please email DoD_CRProgram@bah.com.

