# ENVIRONMENTAL AWARDS

Eglin Air Force Base, Florida / Cultural Resources Management - Individual/Team

#### INTRODUCTION

Eglin Air Force Base, in the Florida Panhandle, is the largest US Air Force installation in the world. The installation manages 464,000 acres of land and 130,000 square miles of water ranges. Eglin is a showcase of historical treasure combined with cutting-edge military air power.

The Air Armament Center (AAC), Eglin's host unit, is responsible for the development, acquisition, testing, deployment, and sustainment of all air-delivered conventional weapons. Eglin's workforce comprises 16,000 active duty and reserve military personnel and 15,300 civilian employees in the AAC and its 46 associate units.

The Cultural Resources Management (CRM) team relies heavily on its Integrated Cultural Resources Management Plan (ICRMP) through a well-structured CRM program. Signed in 2006, the ICRMP establishes procedures to protect and preserve the base's unique cultural resources and comply with preservation laws and regulations.

Since 1941, Eglin's mission has been vital to US security. The installation furthers its historic role as home to the first Integrated Joint Training Center for the new F-35 Joint Strike Fighter (JSF), and to the Army's 7th Special Force Group (7 SFG), providing specialized support to combatant commanders.

#### **FY 2010 ACCOMPLISHMENTS**

- CRM Identified 299 archaeology sites, evaluated 59 sites for National Register eligibility, evaluated 106 buildings, and surveyed 39,068 acres of Eglin range.
- Conducted Section 106 Data Recovery to preserve significant site information and clear over 35 acres for military testing and training. Successful coordination and consultation allows the mission to proceed unrestricted.
- Developed the McKinley Climatic Lab preservation plan to safeguard historical features during routine repairs and maintenance.
- Amended the BRAC programmatic agreement to allow completion of additional F-35 JSF runways, eliminating 24 months from the project timeline.



Eglin's CRM Team conducted 58 archaeological evaluations, surveyed 8,800 acres of land designated for the 7th SFG training range. CRM developed a way to protect valuable cultural resources, installing nearly 19,564 feet of fence and 7,000 resource markers, designed to help soldiers avoid four NRHP listed sites and other eligible resources within the special Army training areas. This innovative idea saved \$650,000 in potential data recovery expenses.

#### **BACKGROUND**

Eglin has a rich cultural heritage that includes 2,584 archaeological sites and 1,333 historic structures. These range from ancient Native American shell middens to the McKinley Climatic Laboratory, which was built in 1947. The latter is a National Register listed hangar, the largest climatic controlled space in the western hemisphere. Archaeological materials on Eglin date back nearly 10,000 years. More than 250,000 artifacts ranging from archaic stone tools to remnants of the Cold War are stored in Eglin's climate controlled curation facility, which is itself located in an adaptively reused building in the Eglin Field Historic District.

#### **PROGRAM SUMMARY**

Eglin's Cultural Resources Management (CRM) is a branch of the 96th Civil Engineer Group's Environmental Management Division. The Base Historic Preservation Officer leads the dedicated team of civil service and contracted archaeologists and information technology experts. Team members ensure the installation's compliance with historic preservation legislation, executive orders, instructions, and policy directives. They leverage modern technology, and consult with the State Historic Preservation Office (SHPO).

The team is accountable for ensuring that cultural resources are adequately addressed according to Section 106 of the National Historic Preservation Act (NHPA), Native American Graves Protection and Repatriation Act, Archaeological Resources Protection Act of 1979, Curation of Federally Owned and Administered Archaeological Collections, 36CFR 79, Executive Orders, and other federal and state regulations. In addition, CRM provides guidance during the NEPA analysis to insure that potential impacts to eligible resources are adequately addressed.

# **ACCOMPLISHMENTS**

### **Mid-Bay Bridge Connector**

The Mid-Bay Bridge Connector is a 10 mile highway through the base that will provide more efficient hurricane evacuation for local communities. CRM supported the project by surveying 1,466 acres and evaluating eight sites to determine impacts to cultural resources in the proposed corridor. Highway planners worked with CRM to alter their original concept and adjust the course to avoid five of seven National Register eligible sites.



Archaeologists excavate an historic turpentine industry site on Eglin. The data recovery project is a mitigation effort to support the construction of a 10 mile road stretching across some of the base's ranges. The Mid-Bay Bridge Corridor will improve hurricane evacuation routes for Eglin personnel and local residents.

Two eligible sites could not be avoided and were professionally excavated and studied to mitigate destruction during highway construction. One site contained rate Archaic Period deposits, the other remnants of a turpentine industrial complex. CRM complied with Section 106 of the NHPA by consulting with five tribal governments, the Florida SHPO, the Advisory Council

for Historic Preservation, and the City of Niceville. The consulting parties completed a Memorandum of Agreement in the summer of 2010, and immediately thereafter began data recovery excavations. The CRM team's Section 106 expertise and efficiency allowed Eglin to obtain more than \$30.8 million in payment from the Mid Bay Bridge Authority for their use of Eglin property for the new connector.



Peace is our Profession, The Story of Strategic Air Command at Eglin Air Force Base, was published as a mitigation effort to support the F-35 Joint Strike Fighter training bed down plan. Designed to memorialize their accomplishments, the brochure educates a wide audience. CRM kicked off the publication with a presentation to ex-service members assigned to SAC.

## **Base Realignment and Closure**

The 2005 Base Realignment and Closure Act relocated the Army's 7 SFG, and consolidated F-35 JSF training to Eglin. To meet the 2014 deadline, the base began an extensive Environmental Impact Analysis Process to analyze Eglin's entire range.

CRM supported the analysis by developing a Section 106 programmatic agreement with JSF planners, 7 SFG, Florida and Alabama SHPOs, five federally recognized tribes, and other interested parties. The team initiated direct communications with mission planners that avoided potential impacts to four National Register eligible sites, saving \$750,000 in data recovery contract costs. CRM conducted 58 archaeological evaluations, and surveyed 8,800 acres designated as the 7 SFG training range. They installed 19,564 feet of fence and 7,000 resource markers to help soldiers avoid four National Register listed and

other eligible sites in the Army range. This alternative mitigation, outlined in the Memorandum of Agreement signed by all consulting parties, saved \$650,000 in expected data recovery expenses.

CRM produced, Archaeology on Eglin AFB and Peace Is Our Profession: The Story of the Strategic Air Command (SAC) at Eglin Air Force Base, to facilitate construction of the integrated F-35 JSF training campus. The book highlights accomplishments of SAC and many associated individuals. CRM kicked off publication with a presentation to former SAC service members assigned to the alert wing on Eglin.

CRM supported a supplemental EIS to address new requirements of the \$734 million F-35 military construction project. The team surveyed 629 acres, evaluated 15 archaeological sites, and provided information on other sites in the area. The work will provide vital guidance to future runway placement proposals. CRM also developed an amendment to the BRAC Programmatic Agreement instead of reinventing the proverbial wheel, eliminating a 12-month delay in planning and analysis.

# **Military Housing Privatization Initiative**

The Military Housing Privatization Initiative has challenged Eglin CRM. Public comments expressed concerns about potential damages to the National Register listed Camp Pinchot during construction of new military family homes. In response, the CRM team collected data from 11 alternative sites totaling 1,620 acres of land. Their in-depth analysis quickly provided community planners a clear picture of other parcels available for consideration and selection for housing.



The Camp Pinchot Historic District is significant for its contribution to the history of the U.S. Forest Service between 1910 and 1940. It is comprised of ten buildings originally constructed between 1910 and 1935 as residences and support structures for personnel directing operations at the Choctawhatchee National Forest, which was established in 1908 as one of the eleven original national forests.

CRM led the Camp Pinchot and Eglin Field Historic District Section 106 consultation for Eglin and the Air Force Special Operations Command at nearby Hurlburt Field. Consulting parties included Florida SHPO, the Advisory Council on Historic Preservation, five federally recognized Indian tribes, Florida Trust for Historic Preservation, National Trust for Historic Preservation, and the US Forest Service

Camp Pinchot was built in 1910 as headquarters for the Choctawhatchee National Forest, and is now the home compound for AAC commanders. CRM incorporated historic preservation plans for Camp Pinchot and the Eglin Field Historic District into the Housing Privatization programmatic agreement. This gave developers specific instructions to manage these properties until the developer returns them to the Air Force for adaptive reuse. CRM also reviewed all housing and real estate materials generated during the Environmental Impact process to ensure every other historic property was safeguarded. The Housing Privatization programmatic agreement will be signed by the Florida SHPO by late spring 2011.

#### **Native American Resources**

CRM facilitated government-to-government consultations between Eglin senior leaders and five federally recognized tribes. The tribes met with Eglin senior leaders and CRM staff twice in the last three years to discuss collaborative opportunities and to develop routine consultation protocols for staff-level communications.

"We've demonstrated to the tribes that we're concerned about the same resources they're concerned about," said Mark Stanley, CRM's Archaeology Program manager. "They now trust us enough to allow a streamlined consultation protocol."

#### Curation

The Cultural Resources Interpretative Center, located in the heart of the Eglin Field Historic District, showcases Eglin's finest prehistoric and historic artifacts, and illustrates Eglin's long culture history. The Center is one of few Air Force curation facilities, and has become a "must-see" attraction for base visitors, including Non-Governmental Organization agencies, local civic leaders, and special interest groups. CRM employees conduct tours and provide research and display materials to local museums and universities. They also regularly update exhibits to reflect the most interesting and significant materials recovered during recent investigations.

Eglin CRM team operates two active storage facilities holding 544 cubic feet of artifacts and 470 linear feet of records. A full time collections specialist oversees the Center and these two storage facilities in accordance with 36 CFR 79. CRM also provides curatorial services for both Tyndall and MacDill AFBs.



Inside Eglin's Cultural Resources Interpretive Center, visitors can view rare archaic stone tools to remnants of the end of the Cold War. One of only four curation facilities in the Air Force, the center houses the finest examples of artifacts recovered from the base's reservation. Located in the heart of the Eglin Field Historic District, the center has become a "must-see" attraction for base visitors.

# **Cultural Resources Information Management System**

Eglin CRM created the Cultural Resource Information Management System, which integrates spatial and tabular data with electronic documents and images into a single geographic information system. The system gives users maximum functionality with minimal training. It easily enables users access to all available cultural resources data from the comfort of their own offices. Additionally, the system aids the curation of artifacts, documents, and photographs. The system instantly identified areas of cultural concerns, and eliminates hours of research to support mission planners, range customers, environmental impact analysis, and work requests. The system reduced the Annual Reports to Congress preparation time by three weeks.

The Information Management System is the benchmark for managing cultural resource information. Tyndall AFB and Avon Park Air Force Range adopted the system for their own programs, and five other military installations asked for the system. The Seminole Tribe of Florida also uses the system and CRM is negotiating terms of use with the Muscogee Nation to enhance tribal confidence in consultations



George Cole, Eglin's Cultural Resource Management's information management administrator demonstrates the Cultural Resources Information Management System. Developed at Eglin, CRIMS is the benchmark for managing cultural resource information, integrating bases CR information into one database. It has been shared with several Air Force installations while many others have expressed a deep desire for the system.

# **Natural Resources Land Management**

CRM identified combustible material at more than 106 archaeological sites on the Eglin ranges in support of the DoD's most aggressive prescribed fire plan at Eglin. CRM provided informative mission briefings describing the types of cultural resources and provided cultural resource location maps within the planned burn area to burn bosses and other fire management personnel. Wildland firefighters were able to prepare the sites by raking and cutting vertical fuels away from structural remains. CRM's involvement with the burn plan preserved the integrity of these sites and contributed to the prescribed-fire treatment of 113,955 acres of range.

# **BP Deepwater Horizons Oil Spill**

CRM facilitated the British Petroleum (BP) oil spill cleanup response on Eglin. They coordinated access points, oil boom placement, and travel routes to avoid cultural resource sites on Santa Rosa Island. The team continued to monitor the areas to ensure BP workers were keeping to the established paths.

#### **Predictive Model**

CRM developed an Eglin specific predictive model based on environmental factors such as landform configuration and distance from water for prehistoric sites, historic land claims and uses, and known industrial locations. The model allows the team to locate the largest percentage of sites while surveying the lowest percentage of land, leading to more efficient planning while reducing labor costs.

The effective predictive model contributed to Eglin being one of four bases selected to demonstrate a project for the DoD's Environmental Security Technology Certification Program. The project is to refine archaeological predictive models to better assist mission planners, facilitate decision making, and ensure cultural resources are located and identified.

CRM is validating the project for use in archaeological resource compliance and management. Program models save time and money that would otherwise be spent in inefficient and redundant site investigations. Data is collected and shared through a partnership with URS Inc., Statistical Research Inc., and the SRI Foundation. CRM ensures the research information remains under DoD control through contract monitoring. Ultimately, the revised predictive model will redefine sensitive areas and prioritize site evaluations, effectively reducing data recovery costs. Eglin CRM will continue to play a vital role in preserving US military heritage. As the F-35 Joint Strike Fighter defends the future of the nation, Eglin CRM is defending its past.

#### **Cultural Resources Awareness and Education**

In 2010, CRM began work on a new cultural resources exhibit in the lobby of Eglin's Natural Resources Management building. The display is available to the 17,000 people who enter to purchase annual range permits. The exhibit raises awareness and appreciation of local history and informs base recreational users about protecting cultural resources. The static display is changed every September to highlight a variety of artifacts and resources encountered on the base. The exhibit also underscores that digging recreational fire pits and walking around in restricted areas might cause unintentional damage to valuable artifacts.

CRM employees routinely participate in outreach opportunities at local and base events. They participated in 16 public gatherings in 2010, including Earth Day, Archaeology Month, and the Thunderbird Intertribal Powwow.

Interactive excavation and pottery making exhibits informed 35,000 local students about the importance of archaeological techniques and how prehistoric cultures made and decorated clay vessels. These are extremely popular among event planners, community organizations, and Scout troops. The informative displays depicting Eglin's rich cultural history are displayed for all those attending these events.

The Florida Museum of Natural History at the University of Florida contacted the CRM staff and expressed interest in permanently curating some of the material recovered from one of Eglin's significant sites. The partnership with the research facility allowed CRM to receive valuable information on past cultures at no additional cost to the Air Force, and created additional space for in-house collections. CRM and the Museum recently completed a Memorandum of Agreement that awaits final signature.

#### **Mission Enhancement**

Eglin's mission planners requested the use of a site located on the north shore of the Choctawhatchee Bay for military testing and training. CRM's preferred preservation method is to protect resources through avoidance. However, the unique nature of the mission made this location the only feasible alternative. Therefore, the site could not be avoided and Section 106 data recovery was necessary.

Several previous studies identified the area as the location of a series of large villages dating between 3,000 B.C. to the 1500's. CRM excavated 730 cubic meters of sediment and located a previously undiscovered archaic component at the site in addition to portions of the large villages. Information from the site provided valuable insight into some of Eglin's earliest prehistoric settlements. Radiocarbon (C-14) dates the archaic component to 8900 B.C. indicating that habitation at the site occurred 6000 years earlier than previously thought. The team's success in effective Section 106 consultations with SHPO and tribal partners gave planners unrestricted use of the range.