OCONUS Data Layer for Cultural Resources
DoD Legacy Resource Management Program

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A Feasibility Study to Develop an OCONUS Data Layer for Cultural Resources

Carla R. Van West, Ph.D., SRI Foundation, Rio Rancho, NM
Clay Mathers, Ph.D., Statistical Research, Inc., Albuquerque, NM

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OCONUS Data Layer for Cultural Resources

• Problem
• Feasibility Study to Develop an OCONUS Data Layer for Cultural Resources
  • Sample OCONUS Regions and Resources
  • Literature Review: DoD and USAF
  • Methods: Data Acquisition, Storage, Display
  • Results: Central America and Balkans
  • Recommendations
Problem

• No comprehensive and validated data layers for OCONUS cultural resources currently exist
• DoD units working in OCONUS contexts need information to avoid or reduce negative impacts to sensitive cultural resources
• Geospatial data on cultural resource locations can be retrieved and viewed during planning for:
  • Deployments
  • Beddown operations
  • Training Events
  • Contingencies
  • Nation-Building Efforts
  • Military Operations Other Than War
Feasibility Study to Develop a Cultural Resource Layer

GOALS:

• Develop and partially populate a database and a GIS data layer for OCONUS regions where DoD personnel are deployed

• Assess the depth, breadth, and availability of needed OCONUS culture resource information

• Make recommendations concerning how to efficiently and effectively develop these OCONUS cultural resource data layers in future efforts
OCONUS Regions selected for the Feasibility Study
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Literature Review on DoD OCONUS Cultural Resources

- EO 12114: Environmental Effects Abroad of Major Federal Actions and 32 CFR 187: Environmental Effects Abroad of Major Department of Defense Actions
- DoDI 4715.5: Management of Environmental Compliance at Overseas Installations
- DoD 4715.5_G: Overseas Environmental Baseline Guidance Document (OEBGD)
- DoDD 4715.1E: Environment, Safety, and Occupation Health (ESOH)
Literature Review on USAF OCONUS Cultural Resources

AFPD 32-70: Environmental Quality (EQ)

- AFI 32-7006: Environmental Program in Foreign Countries


- AFI 32-7062: Air Force Comprehensive Planning
Literature Review Results: Policy, Directives, and Instructions

- Use qualified professional staff to manage cultural resources within the EQ program (Conservation Domain)

- Consult with host-nation authorities on host-nation environmental standards, including cultural resources, and obtain copies of host-nation laws and regulations

- Obtain a list of sites inscribed on the World Heritage List (WHL) and an inventory of sites listed in host-nation cultural heritage registers comparable to the U.S. National Register of Historic Places (NRHP)
• Comply with AFI 32-7062, which requires the preparation of planning documents, including cultural resource inventories and maps of cultural resource locations

• Comply with AFI-7006, which requires adherence to instructions in the OEBGD if Final Governing Standards (FGSs) are not available

• Comply with AFI-7061, which requires consideration of impacts to cultural resources when planning substantial land-modifying projects in foreign nations
Feasibility Study Methods

• Identify existing sources of information on OCONUS cultural resources for selected foreign nations

• Organize a small sample of cultural resources in a version of the extant Military Cultural Resources Analysis Database (mCRAD)

• Acquire digital and geo-referenced imagery for each nation as input into GIS software
Feasibility Study Methods, continued

• Obtain location information for cultural resources

• Digitize the plotted locations of cultural resources, if existing digital data unavailable

• Produce ArcGIS data files for each nation with data contained in an mCRAD-like database
Results: An Example for Central America

Honduras-01: Ancient Maya Site of Copan
Results: An Example for Central America

Panama-06: Panama Viejo

Panama-07: Portebelo-San Lorenzo
Sample OCONUS Data Layers for Central American Nations
Results: An Example for the Balkan Region of southeastern Europe

Albania-01: Ancient City of Butrint
Results: An Example for the Balkan Region of southeastern Europe

- Fortified Churches
- Dacian Fortress
- Bran Castle
- Sighisoara
- Horezu
- Painted Churches

Map showing locations in Romania.
Sample OCONUS Data Layers for Balkan Nations
Sample OCONUS Data Layers for Balkan Nations, continued

Montenegro

Slovenia

Serbia
Results: Addressing Goals

Is it possible to develop and partially populate a database and a GIS data layer for OCONUS regions where DoD personnel are deployed?

YES!
Results: Addressing Goals

What are the depth, breadth, and availability of OCONUS cultural resource data?

Data are variable from nation to nation…

- Generally considered “cultural heritage resources” and held in high regard by most nations
- Often protected by international agreements and national laws
- Typically maintained by the host-nation’s Ministry of Culture

Language and orthography can present formidable barriers to gathering data

Working with host-nation Subject Matter Experts (SMEs) is essential for efficient and effective data collection
Recommendations

1. Populate a GIS-compatible mCRAD with OCONUS cultural resource data

2. Create DoD-wide Guidance that describes the steps used to develop an effective and cost-efficient OCONUS cultural resource data layer that will:

   • Facilitate the creation of FGSs for cultural resources in foreign countries
   
   • Provide critical information for DoD planners and decision-makers at all levels of DoD organization
Recommendations, continued

3. Comply with multilateral and bilateral agreements signed by the United States, including:

• Prohibitions against illegal excavations

• Prohibitions against illegal collection and exportation of artifacts and other material remains associated with protected cultural heritage sites

• Avoidance of direct impacts to heritage properties identified by the host-nation as protected sites, including WHL properties
Recommendations, continued

4. Respect the laws of other nations and their regard for the protection of their cultural heritage in order to:

   • Gain respect for the actions of the United States and its military

   • Gain cooperation from host-nation partners