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## I. INTRODUCTION

At the request of the Chief, Conservation, 36 CES/CEVN, Unit 14007 at Andersen Air Force Base (AAFB) on the island of Guam, International Archaeological Research Institute, Inc. (IARII) has developed a set of descriptions for cultural resource improvement projects that can be used in preparing a five-year budget for submittal to Pacific Air Forces (PACAF). The area under consideration for projects includes the Main Base and Northwest Field of AAFB at the northern end of the island (Fig. 1), and Harmon and Marbo Annexes in north-central Guam.

The scope-of-work for this project is to identify cultural resource improvement projects for the period from FY 2002 to 2007, with the assumption that a maximum of \$75,000 per fiscal year would be available for the proposed projects and that there would be at most two projects per year. An additional 10 to 12 supplementary projects would be identified for implementation in the event that additional funds become available during a particular budget year.

The primary references for this project include a 1992 Cultural Resources Overview Survey of the installation (Yoklavich et al. 1996), the 1996 Cultural Resources Management Plan (CRMP; Schilz 1996), and a multi-disciplinary study of the Tarague Embayment (Liston 1996; Tomonari-Tuggle 1996). Management recommendations based on an historic resources assessment of proposed training areas on Guam, including portions of Andersen AFB (McNeill and Welch 1998), were also reviewed.

This project is sponsored under Department of the Army Assistance Award No. DAMD17-00-2-0027. The U.S. Army Medical Research Acquisition Activity, 820 Chandler St., Fort Detrick, Maryland 21702-5014 is the awarding and administering acquisition office. The information in this document does not necessarily reflect the position and policy of the Government, and no official endorsement is inferred.

Fourteen proposed projects are listed in the following table by order of priority. They are further detailed on project description forms in Section II.

**Priority 1 projects** are directed toward providing a current inventory of cultural resources. This includes an update of the 1992 Overview Survey of archaeological and historical architectural resources and an initial survey of traditional cultural properties (not done as part of the 1992 work). These projects would then be the basis for completing an Integrated Cultural Resources Management Plan (ICRMP), which is listed as a Priority 2 project. Also included as a Priority 1 project is the preparation of a curation plan to deal with existing materials collections.

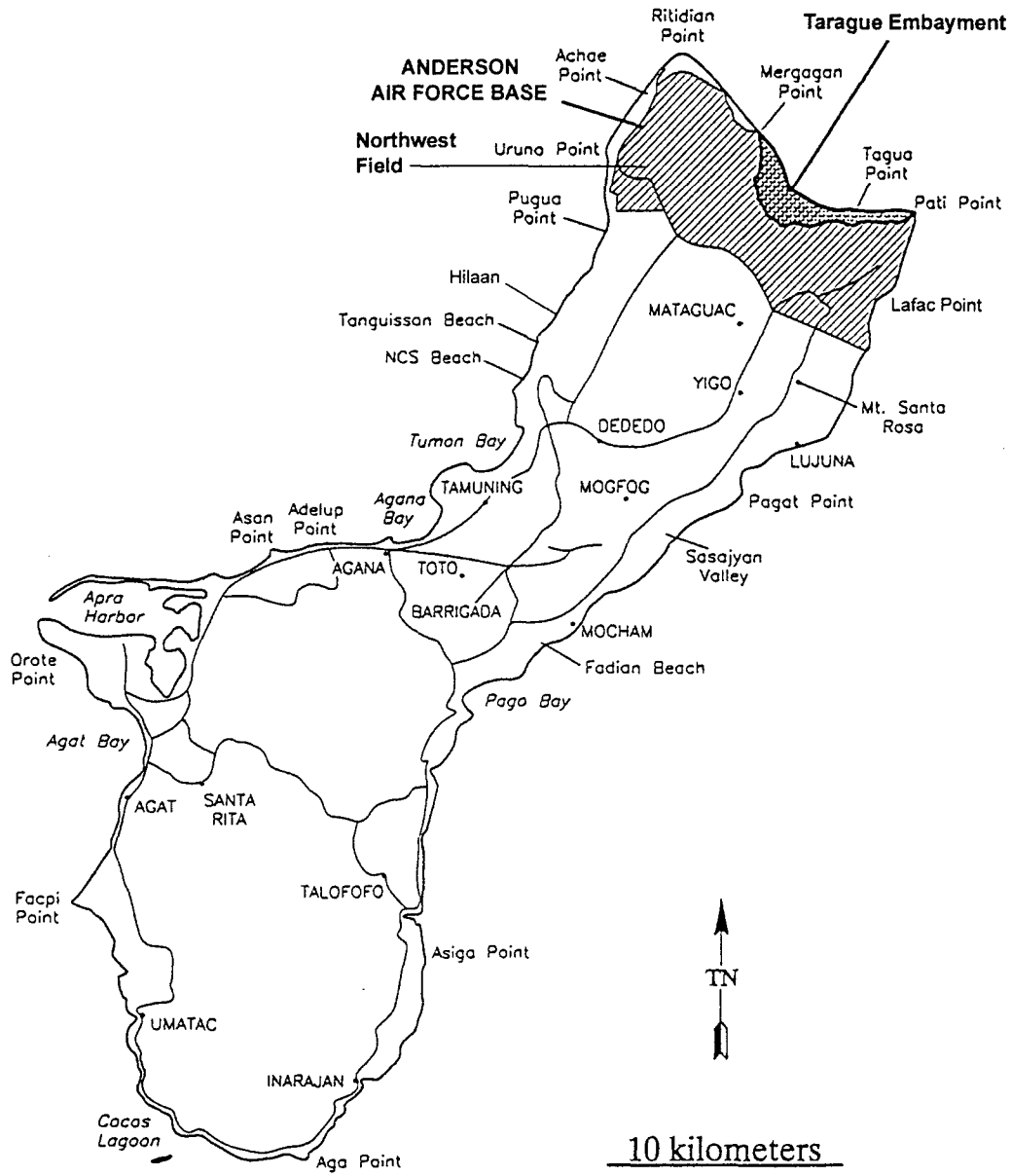


Figure 1. Anderson AFB, Guam.

## Proposed Historic Preservation Projects for Andersen AFB.

Project Priority	PROJECT DESCRIPTION	AUTHORITY	ESTIMATED COST
1a	Update the archaeological component of the 1992 Andersen AFB Cultural Resources Overview Survey	Section 110, NHPA AFI 32-7065	55,000
1b	Update the architectural component of the 1992 Andersen AFB Cultural Resources Overview Survey	Section 110, NHPA AFI 32-7065	22,000
1c	Prepare a traditional cultural properties component to the updated Andersen AFB Cultural Resources Overview Survey	Sections 101, 106, and 110, NHPA	34,000
1d	Update the inventory of artifacts, human remains, and documents that have been collected during archaeological and historical investigations at Andersen AFB and develop a plan for disposition to an appropriate local organization	NHPA, 36 CFR 79	17,000
2a	Develop a military landscape history of Northwest Field that integrates all available archaeological, historical, oral historical, and archival data on this significant portion of Andersen AFB	Section 110, NHPA AFI 32-7065	44,000
2b	Update the 1996 Andersen AFB Cultural Resources Management Plan	Section 110, NHPA AFI 32-7065	40,000
2c	Develop a cultural resources GIS application for Andersen AFB	Section 110, NHPA DA Pam 200-4	30,000
2d	Establish a cultural resources management and inventory database to track progress toward meeting ICRMP goals	Section 110, NHPA AFI 32-7065	22,000
3a	Complete National Register forms for sites of potential eligibility	Section 110, NHPA AFI 32-7065	18,000
3b	Carry out further archaeological investigations at sites that are potentially endangered from existing intense activity (e.g., in high public use areas)	Section 110, NHPA	6,000 to 60,000
3c	Develop a program of stabilization and preventive maintenance for architectural resources subject to destruction or deterioration	Section 110, NHPA AFI 32-7065	23,000
3d	Design cultural resource protection signs for areas of high public use and in the EOD/Small Arms Range at Tarague Embayment	Section 110, NHPA	12,000
4a	Develop a cultural resources interpretive program for Andersen AFB	Section 110, NHPA AFI 32-7065	26,000
4b	Collect oral histories related to land use and community activities on the area now within Andersen AFB prior to, during, and after World War II	Sections 106 and 110, NHPA	40,000



**Priority 2 projects** deal with resources management. The primary project is to update the 1996 CRMP to current federal and Department of Defense standards. Other critical Priority 2 projects focus on (1) translating inventory data to digital format to facilitate resource management and (2) compiling available information on Northwest Field as a historic military landscape, with the primary intent to develop interpretive possibilities. The translation of inventory data to digital format will include developing a Geographic Information System (GIS) application for cultural resources and compiling a cultural resources management and inventory database to track ICRMP progress.

**Priority 3 projects** are resource-specific. One project is to complete National Register of Historic Places (NRHP) nomination forms for sites and buildings that are evaluated to be significant based on the NRHP criteria. The other three projects deal with mitigating the adverse effects of current use on historic resources (e.g., archaeological sites in high public access areas; historic buildings that may require special maintenance procedures).

**Priority 4 projects** are community-related. They are intended to provide community activities within Andersen AFB, and to enhance relations with the larger Guam community.

## REFERENCES

- Liston, Jolie. 1996. *The Legacy of Tarague Embayment and Its Inhabitants, Andersen AFB, Guam. Volume I: Archaeology*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.
- McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment*. Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Tomonari-Tuggle, M.J. 1996. The Stewardship of Cultural Resources: Management and Interpretation. Part II, in M.J. Tomonari-Tuggle and R.K. Olmo, *The Legacy of Tarague Embayment and its Inhabitants, Andersen AFB, Guam. Volume IV: Theoretical Perspectives and the Stewardship of Cultural Resources*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.
- Yoklavich, A.K., J. Craib, and P. Drolet. 1996. *Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

## II. PROJECT DESCRIPTIONS

The following descriptions provide background, tasks, and deliverables for each cultural resource project. Pertinent references to previous archaeological and cultural resource studies for each project are also included.

Under the descriptions for Projects 3b (additional investigations at potentially endangered archaeological sites) and 4a (development of an interpretive program) are tables listing resource-specific projects; these specific projects can be planned for implementation as part of the larger project under which they are listed or as individual projects using additional funds if they become available during a budget year.

## PROJECT NO. 1A

**PROJECT:** Update the archaeological component of the 1996 Andersen AFB Cultural Resources Overview Survey (Yoklavich et al. 1996).

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to provide a current overview of archaeological resources on Andersen AFB to be used as the basis for the update to the 1996 Cultural Resources Management Plan (Schilz 1996) (see Project No. 2b).

**BACKGROUND:** A Cultural Resources Overview Survey was completed in 1992. It was limited to summarizing archaeological resources using data and summaries from previous archaeological investigations and identifying previously known and potentially significant historic architectural resources. Since that time, the Tarague Legacy survey was completed; this survey added 130 new sites to the overall Andersen AFB inventory (Liston 1996). In addition, large areas of the installation remain unsurveyed.

**DESCRIPTION:** The following tasks are intended to update the archaeological component of the 1992 Overview Survey:

- a. Conduct archival research consisting of a critical review of previously written documents on the prehistory and archaeology of the Andersen AFB area.
- b. Based on the archival research, develop a research design for a reconnaissance level survey as described as task item c, below. The research design should present the rationale for sample survey locations, level of intensity and coverage, method for the reconnaissance survey, and personnel qualifications.
- c. Carry out a reconnaissance level survey of a sample of currently unsurveyed areas of the installation to better assess the range and diversity of archaeological resources on Andersen AFB. No testing or excavations are anticipated.
- d. Conduct field checks of all previously identified sites. These include the 19 sites listed in the 1996 CRMP as being on or eligible to the National Register of Historic Places, as well as various pottery scatters reported in the Northwest Field area (Kurashina et al. 1987; Haun 1988, 1989a, 1989b; and Haun et al. 1990).
- e. Provide accurate data for relocating all identified sites. The UTM coordinates for sites at Tarague Embayment should be verified; all other sites, including any located during the reconnaissance survey, should be located by global positioning system (GPS). All sites should be assigned discrete GHPO site numbers, if that has not already been done (see discussion in McNeill and Welch 1998:12, 18-20).
- f. Integrate new archaeological data with existing information to develop a synthesis of archaeology and prehistory (i.e., evolving land use, settlement, and history of the Andersen AFB area) in a cultural landscape format (as prescribed for integrated cultural resource management plans, under AR 200-4).

- g. Evaluate newly identified archaeological resources for significance, based on the criteria of the National Register of Historic Places, and re-evaluate previously identified sites, if appropriate. Also consider interpretive potential of sites in evaluating site significance.
- h. Coordinate with the base historian over the course of the project and assist the base historian in upgrading the base heritage information and integrating the archaeological and historical data into the heritage center data sets.
- i. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following documents will be prepared during the course of this project:

- a. Research Design. A research design for a reconnaissance level survey as described as task item c, above. The research design should present the rationale for sample survey locations, level of intensity and coverage, method for the reconnaissance survey, and personnel qualifications.
- b. Updated Overview Survey archaeological report. This document is intended as the working data source for preparation of the Integrated Cultural Resources Management Plan (ICRMP) under Project No. 2b. The Overview Survey report will be prepared in draft and final forms and will include (but not necessarily be limited to) the following components:
  - 1. introduction: scope-of-work, project personnel, methods
  - 2. background: summary of the prehistory and history of Guam as a context for the archaeological resources of Andersen AFB; critical review of previous archaeological investigations.
  - 3. archaeological resources: prehistoric and historic archaeological resources that were identified in the Overview Survey; description of areas that have not been intensively surveyed and the types and range of sites that might be present, based on the reconnaissance level survey (i.e., predictive models); archaeological sensitivity maps at a scale of 1" = 400' should show the locations of known sites and areas of low, medium, and high sensitivity (sensitivity based on the cultural landscape model developed under task item f, above, and described in deliverable item 4, below); the maps should be designed for incorporation into a GIS format (see Project No. 2c).
  - 4. synthesis: archaeological data will be discussed in the context of research questions relating to the prehistory and history of Guam and the Andersen AFB area; the synthesis will be presented as a cultural landscape model of Andersen AFB (i.e., in a framework that makes the significance of sites understandable for planners, managers, and operations personnel); discussion will integrate themes presented in the Guam Historic Preservation Plan; evaluations of sites and sensitivity areas will be based on the cultural landscape model.
  - 5. recommendations for additional survey: prioritized listing of areas that should be surveyed at an inventory level, as the basis for a phased program to identify,

record, and evaluate all prehistoric and historic resources under Andersen AFB jurisdiction; priority factors will include (but not be limited to) intensity and types of anticipated sites, intensity of proposed development and/or military activity, and representation of a particular physiographic type (e.g., coastal plain, mountain forest, upland plateau); previous recommendations for survey (e.g., Dilli and Haun 1991; McNeill and Welch 1998) will also be considered. This task is NOT to do the survey, but to establish when and how the surveys will be done. The listing is intended for use in budgeting out-year projects.

6. management considerations: archaeological data (sites, previous surveys) will be presented in a manner that allows easy acquisition to site information for planning and operations purposes (see Project No. 2d), as well as suitable for use by the scientific/historical community interested in the prehistory and history of the Andersen AFB area. Significance evaluations will consider the interpretive potential of identified archaeological resources.

**ESTIMATED COST:** \$55,000

**REFERENCES:**

- Dilli, B.J., and A.E. Haun. 1991. *Summary of Historic Preservation Mitigation Efforts for the Relocatable Over-the-Horizon Radar Projects at Northwest Field, Guam and North Field, Tinian*. Project: P-223, Contract No. N62472-90-C-0014. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- Haun, Alan E. 1988. *Archaeological Reconnaissance Survey and Field Inspections of Relocatable Over-the-Horizon Radar Sites on Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- 1989a. *Archaeological Reconnaissance Survey of Relocatable Over-the-Horizon Radar Site P-223, Territory of Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- 1989b. *Archaeological Reconnaissance Survey of Relocatable Over-the-Horizon Radar Site P-225, Territory of Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- Haun, A.E., R.S. Brown, and B.J. Dilli. 1990. *Archaeological Inventory Survey Harmon Annex Relocatable Over-the-Horizon Radar Site*. Report 777-050490(G). Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- Kurashina, H., T. McGrath, and H. Manner. 1987. *Archaeological Survey of Areas 1, 2, 1-A, and 2-A at Northwest Field, Andersen Air Force Base and Naval Communications Area Master Station Western Pacific, Finegayan, Guam, Mariana Islands*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Bernice P. Bishop Museum, Honolulu.

- Liston, Jolie. 1996. *The Legacy of Tarague Embayment and Its Inhabitants, Andersen AFB, Guam. Volume I: Archaeology.* Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.
- McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment.* Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam.* Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Yoklavich, A.K., J. Craib, and P. Drolet. 1996. *Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam.* Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

**PROJECT NO. 1B**

**PROJECT:** Update the architectural component of the 1992 Andersen AFB Cultural Resources Overview Survey (Yoklavich et al. 1996).

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to provide a current architectural resource database to be used as the basis for the update to the 1996 Cultural Resources Management Plan (Schilz 1996) (see Project No. 2b).

**BACKGROUND:** A Cultural Resources Overview Survey was completed in 1992. This Overview Survey did not address Cold War structures in detail, nor did it provide detailed historical documentation of some military structures. Further, recent innovations in evaluating cultural resources focus on placing individual resources in the context of the overall landscape. A military landscape is defined as one "that has been uniquely shaped through human activity in support of single or multiple military missions of the United States Department of Defense or its antecedents" (Loechl et al. n.d.).

**DESCRIPTION:** The following tasks are intended to update the 1992 Overview Survey and to review cultural resource conditions especially since Typhoon Paka:

- a. Conduct a critical review of previously written documents on the history of Andersen AFB, including reports of all previous architectural surveys.
- b. Update the Overview Survey of historical buildings to include buildings that are now more than 50 years old and to evaluate buildings of potential Cold War significance.
- c. Carry out detailed archival research on pre-military and military structures evaluated to be eligible to the National Register of Historic Places.
- d. Use the collected data to formulate a historic military landscape model of Andersen AFB and evaluate the significance of historic buildings and structures in the context of the landscape model. Also consider the interpretive potential of buildings and structures in evaluating significance.
- e. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following document will be prepared in draft and final forms during the course of this project:

- a. The updated Overview Survey architectural report is intended as the working data source for preparation of the Integrated Cultural Resources Management Plan (ICRMP) under Project No. 2b. The Overview Survey report will include (but not necessarily be limited to) the following components:
  1. introduction: scope-of-work, project personnel, methods
  2. background: summary of the modern history of Andersen AFB as a context for the architectural resources of the installation.

3. architectural resources: description of historic resources identified in the Overview Survey; in addition to descriptions of architectural characteristics, this discussion will include building-specific information from archival research.
4. synthesis: architectural data will be discussed in the context of the historical military landscape of Andersen AFB; significance evaluations of newly identified historic buildings will be based on the military landscape model; potential for public interpretation will be a consideration in evaluating architectural resources.
5. management considerations: architectural data will be presented in a manner that allows easy acquisition to site information for planning and operations purposes (see Project No. 2d). Building-specific maintenance and/or stabilization needs, if any, will be identified.

**ESTIMATED COST:** \$22,000

**REFERENCES:**

- Loechl, S.K., S.A. Batzli, and S.I. Ensore. n.d. *Guidelines for Documenting and Evaluating Historic Military Landscapes: An Integrated Landscape Approach*. Army Environmental Center Technical Guideline, prepared by USACERL, <http://aec-www.apgea.army.mil>.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Yoklavich, A.K., J. Craib, and P. Drolet. 1996. *Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.



## PROJECT NO. 1C

**PROJECT:** Prepare a traditional cultural properties component to the updated Andersen AFB Cultural Resources Overview Survey.

**AUTHORITY:** Sections 101, 106, and 110, National Historic Preservation Act, as amended.

**OBJECTIVE:** The purpose of this project is to identify traditional cultural properties on Andersen AFB, to be used in developing the update to the 1996 Cultural Resources Management Plan (Schilz 1996) (see Project No. 2b).

**BACKGROUND:** The 1992 Cultural Resources Overview Survey discussed archaeological and historic architectural resources. Since the survey was completed, changes to the National Historic Preservation Act and its implementing regulations have clarified an additional category of "historic properties," that is, traditional cultural properties (TCPs). According to 36 CFR 800 (the regulations implementing Section 106 of the NHPA) and National Register Bulletin 38 (Parker and King 1990) which was written to provide guidance for identifying TCPs, a TCP is a property or place that is eligible for inclusion in the National Register of Historic Places because of its association with traditional cultural practices or beliefs of a cultural group that are rooted in the group's history and are important in maintaining the continuing cultural identity of the group. Although 36 CFR 800 specifies Indian tribes and Native Hawaiian organizations as the cultural groups, National Register Bulletin 38 expands the definition to "all cultural groups."

References for this project include Parker and King (1990), King (1996), Shull (1997), and Tuggle and Tomonari-Tuggle (2000).

**DESCRIPTION:** This project will involve the following tasks:

- a. Conduct archival and documentary research of published and unpublished material concerning folklore, history, and land use patterns, including archaeological reports, related to the area now covered by Andersen AFB.
- b. Consult with knowledgeable groups and individuals, particularly those who lived in or adjacent to Andersen AFB prior to World War II. With permission from the consulted individuals or groups, interviews will be audio recorded, with all pertinent information transcribed for incorporation into the report prepared as task item d, below.
- c. Based on information collected by archival and oral historical research, carry out a field inspection of potential traditional cultural properties to determine integrity of condition (location, setting, environment).
- d. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following document will be prepared in draft and final forms during the course of this project:

- a. Summary Report. This document is intended as a data source for preparation of the Integrated Cultural Resources Management Plan (ICRMP) under Project No. 2b. The report will include (but not necessarily be limited to) the following components:
  1. introduction: scope-of-work, project personnel, methods used to carry out the scope.
  2. background: summary of the archival and oral historical sources researched for this project.
  3. traditional cultural properties: description of potential TCPs identified in the archival and oral historical research.
  4. synthesis: discussion of the nature of TCPs in the Andersen AFB area and their role as part of the cultural landscape of the installation.
  5. management considerations: TCP data will be presented in a manner that allows easy acquisition to site information for planning and operations purposes, as well as suitable for use by the scientific/historical community interested in the cultural landscape of the Andersen AFB area; recommendations for dealing with TCPs will include (but not necessarily be limited to) potential impacts, mitigation alternatives, identification of interested cultural groups, and procedures for consultation with cultural groups.

**ESTIMATED COST:** \$34,000

**REFERENCES:**

- King, Thomas F. 1996. More on TCPs and Section 106. *Bulletin, Society for American Archaeology* 14:13, 20-21.
- Parker, P.L., and T.F. King. 1990. *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. National Register Bulletin 38. National Park Service, U.S. Department of the Interior. U.S. Government Printing Office.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Shull, Carol D. 1997. Letter to Ms. J. Bitner, President, National Conference of State Historic Preservation Officers. Keeper of the National Register of Historic Places, U.S. Department of the Interior, National Park Service. November 13.
- Tuggle, H.D., and M.J. Tomonari-Tuggle. 2000. *Identification of Native Hawaiian Traditional Cultural Properties, Navy Region Hawaii. A Brief on Project Status with Emphasis on Ford Island (Moku'ume'ume)*. Prepared for Commander, Pacific Division, Naval Facilities Engineering Command. International Archaeological Research Institute, Inc., Honolulu.

## PROJECT NO. 1D

**PROJECT:** Update the inventory of artifacts, human remains, and documents that have been collected during archaeological and historical investigations at Andersen AFB and develop a plan for disposition to an appropriate local organization.

**AUTHORITY:** National Historic Preservation Act, as amended; 36 CFR 79.

**OBJECTIVE:** The purpose of this project is to update the computerized inventory database of materials collected during archaeological and historical investigations carried out on Andersen AFB and to develop a plan that provides for disposition to permanent facilities.

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996). Andersen AFB currently has an interim curation facility that meets the minimum standards of 36 CFR 79. The majority of the collection has been labeled, boxed, and entered into a computerized database. However, there remain approximately 15 boxes of collected materials that will require entering into the system. The present facility is intended for interim use only, and it is the intent of Andersen AFB to transfer the collections to a permanent facility.

**DESCRIPTION:** This project will consist of the following tasks:

- a. Review the existing computerized database and cross-check existing box-lists with box contents.
- b. Enter all uncataloged materials into the database, and mark and box all unprocessed materials.
- c. Through consultation with the Guam Historic Preservation Officer, identify a permanent curation facility to which artifact and document collections will be transferred; establish standardized procedures for disposition of these materials to this permanent facility; develop a programmatic agreement with the curation facility to ensure future dispositions of materials.
- d. Facilitate any necessary consultation with the Advisory Council on Historic Preservation, the Air Force, and the Government of Guam.
- e. If human remains are involved, conduct consultation procedures using the Native American Graves Protection and Repatriation Act (NAGPRA) as general guidelines (NAGPRA does not apply in the Territory of Guam).
- f. Prepare a written report presenting the results of the study.

**DELIVERABLE:** Preliminary and final reports will document the scope-of-work, methods, process, and results of this project. A programmatic agreement with the permanent curation facility will also be drafted.

**ESTIMATED COST:** \$17,000

**REFERENCES:**

Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam.* Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

## PROJECT NO. 2A

**PROJECT:** Develop a military landscape history of Northwest Field that integrates all available archaeological, historical, oral historical, and archival data on this significant portion of Andersen AFB.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to bring together the disparate information that has been collected on Northwest Field and to integrate it into a historical military landscape model. The synthesis can then be used for future planning in the area, as well as the basis for an interpretive kiosk (see Project No. 4a).

**BACKGROUND:** Northwest Field is one of the few areas on Andersen AFB that has been studied to any extent. There have been numerous archaeological projects in Northwest Field (Kurashina et al. 1987; Haun 1988, 1989a, and 1989b), and the area was also considered in the 1992 Overview Survey (Yoklavich et al. 1996). However, with the exception of the summary in the nomination form for the National Register of Historic Places, prepared by IARII for Andersen AFB in January 1997, there has been no synthesis of the data, particularly as a military landscape as prescribed by Department of the Army Regulation 200-4 (which guides the development of Integrated Cultural Resources Management Plans).

A similar but more general synthesis of the archaeology, prehistory, and history of Andersen AFB is also proposed as an out-year project (see Project Nos. 1a and 1b). The Northwest Field study will focus on and present a detailed discussion of this specific area.

**DESCRIPTION:** The following tasks will be carried out for this project:

- a. Conduct archival research consisting of a critical review of previously written documents on the prehistory, archaeology, and history of the Northwest Field area.
- b. Based on the archival research, develop a research design for an inventory survey as described as task item c, below. The research design should present the rationale for level of intensity and coverage, survey and testing methods, and personnel qualifications.
- c. Carry out an inventory survey of presently unsurveyed areas of Northwest Field to identify all archaeological resources. Testing will focus on identifying site function and temporal occupation, with the intent to refine the research design. All sites will be located by GPS and will be assigned GHPO site numbers.
- d. Update historic buildings survey and evaluations, if appropriate.
- e. Compile new archaeological and historical architectural data into a format that anticipates development of a cultural resources GIS (see Project No. 2c) and a cultural resources database (see Project No. 2d).

- f. Integrate new archaeological and historical architectural data with existing information to develop a synthesis of archaeology, prehistory, and history in a cultural landscape format (as prescribed for integrated cultural resource management plans, under AR 200-4). This task should build on the general cultural and historic military landscape models developed under Project Nos. 1a and 1b.
- g. Prepare a written report presenting the results of this project. Recommendations should include ideas, themes, and alternative methods for interpretation of Northwest Field.

**DELIVERABLE:** The following documents will be prepared during the course of this project:

- a. Research Design. A research design for an inventory level survey as described as task item c, above. The research design should present the rationale for location, level of intensity and coverage, and method for the inventory survey.
- b. Synthesis Report. This document will include (but not necessarily be limited to) the following components:
  - 1. introduction: scope-of-work, project personnel, methods used to carry out the scope.
  - 2. background: summary of the prehistory and history of Guam as a context for the archaeological resources of Northwest Field; critical review of previous archaeological and historical investigations at Northwest Field.
  - 3. archaeological resources: description of prehistoric and historic archaeological resources at Northwest Field.
  - 4. historical architectural resources: description of historical architectural resources in Northwest Field.
  - 5. synthesis: archaeological data will be discussed in the context of important research problems in the prehistory and history of Guam and the Andersen AFB area; the synthesis will be presented as a cultural landscape model of Northwest Field, with additional discussion of the military landscape that has developed since World War II; the landscape model should be the foundation for evaluations of newly identified sites, areas of sensitivity, and buildings.
  - 6. management considerations: archaeological and architectural data will be presented in a manner that allows easy acquisition to site information for planning and operations purposes (see Project No. 2d), as well as suitable for use by the scientific/historical community interested in the prehistory and history of Northwest Field. Specific recommendations for interpretation of Northwest Field will be presented.

**ESTIMATED COST:** \$44,000

**REFERENCES:**

- Haun, Alan E. 1988. *Archaeological Reconnaissance Survey and Field Inspections of Relocatable Over-the-Horizon Radar Sites on Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- 1989a. *Archaeological Reconnaissance Survey of Relocatable Over-the-Horizon Radar Site P-223, Territory of Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- 1989b. *Archaeological Reconnaissance Survey of Relocatable Over-the-Horizon Radar Site P-225, Territory of Guam, Mariana Islands, Micronesia*. Prepared for Wilson Okamoto and Associates, Honolulu. Paul H. Rosendahl, Ph.D., Inc., Hilo.
- Kurashina, H., T. McGrath, and H. Manner. 1987. *Archaeological Survey of Areas 1, 2, 1-A, and 2-A at Northwest Field, Andersen Air Force Base and Naval Communications Area Master Station Western Pacific, Finegayan, Guam, Mariana Islands*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Bernice P. Bishop Museum, Honolulu.
- Yoklavich, A.K., J. Craib, and P. Drolet. 1996. *Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

**PROJECT NO. 2B**

**PROJECT:** Update the 1996 Andersen AFB Cultural Resources Management Plan (Schilz 1996) to conform to recent changes in federal law and regulations and Department of Defense instructions regarding cultural resources, and to address changes to installation mission, objectives, procedures, and organization.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to develop an Integrated Cultural Resources Management Plan (ICRMP) for Andersen AFB. This plan will provide an extensive outlook of the entire CRM program, as well as be a component to the base General Plan. The plan will comply with the following federal and military guidelines: Air Force Instruction (AFI) 32-7065; Department of the Army (DA) Pamphlet 200-4; Andersen AFB Integrated Natural Resources Management Plan; Andersen AFB General Plan (dated February 1999); Land Use Plan; A-106 budgeting requirements; and all other pertinent regulatory guidance. The ICRMP will also be consistent with the Guam Historic Preservation Plan.

An objective of the ICRMP will also be to review the current 5-year cultural resource program (as delineated in the projects proposed herein) and revise proposed projects and priorities based on the cultural landscape model developed as the framework for the ICRMP (see below).

**BACKGROUND:** The existing Cultural Resources Management Plan (Schilz 1996) was completed in 1996, over four years ago. It does not address recent changes to regulations implementing the National Historic Preservation Act, particularly changes to Section 106, nor changes in Department of Defense instructions for cultural resources management, particularly DA Pamphlet 200-4. The existing plan also does not deal with archaeological and historical resources that were identified in the Tarague Embayment Legacy of Tarague project (Liston 1996), which added a considerable number of resources to the total Andersen AFB inventory.

New directions in cultural resource management focus on cultural landscapes as a context for management. As stated in DA Pamphlet 200-4, Section 2-2.d, "the cultural landscape provides the overall framework for the ICRMP and future implementation of management activities or project specific compliance actions." This planning approach analyzes the spatial relationships among cultural resources within their natural and man-made settings; past and on-going military activities are treated as an integral part of the landscape.

**DESCRIPTION:** Using the data and syntheses developed in the Overview Survey updates (Project Nos. 1a, 1b, and 1c) and the compilation of information concerning Northwest Field (Project No. 2a), this project will focus on developing an integrated management framework for dealing with cultural resources on Andersen AFB. This project will involve the following tasks:

- a. Review the results of the updated Overview Survey (see Project Nos. 1a, 1b, and 1c).



- b. Research the present organization and conditions at Andersen AFB that affect or could affect cultural resource management, including:
  - 1. review existing installation conditions to determine any changes since 1996. Installation conditions include (but are not limited to) installation organization and mission, offices that carry out actions that could affect cultural resources, proposals for development that could affect cultural resources over the next seven years, and offices with oversight authority and procedures for cultural resource management.
  - 2. conduct site investigations and interviews in consultation with 36 CES/CEVN and GHPO to determine relevant current issues in regard to the treatment and disposition of cultural resources.
  - 3. review the installation General Plan and other pertinent installation management plans for components that will require updating as part of this project.
- c. Develop recommendations at two levels:
  - 1. management in the context of Andersen AFB as a cultural landscape, taking into account cultural and natural resources as part of a military environment.
  - 2. building and site-specific recommendations for preservation to ensure appropriate actions to mitigate potential adverse impacts.
- d. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following documents will be prepared during the course of this project:

- a. ICRMP, following DA Pamphlet 200-4 criteria format (page 2, section 2-4 of DA Pamphlet 200-4). The ICRMP will be prepared in preliminary draft, draft, and final forms. The preliminary draft version is intended for review by Andersen AFB staff and the draft version by Andersen AFB staff and the GHPO.
- b. Revision inserts to the installation General Plan to ensure current information is available to all installation entities.

**ESTIMATED COST:** \$40,000

**REFERENCES:**

- Liston, Jolie. 1996. *The Legacy of Tarague Embayment and Its Inhabitants, Andersen AFB, Guam. Volume I: Archaeology.* Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam.* Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

## PROJECT NO. 2C

**PROJECT:** Develop the framework for a geographic information system (GIS) application for cultural resources management at Andersen AFB.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; DA Pamphlet 200-4.

**OBJECTIVE:** The purpose of this project is to create a spatial analytic tool to assist in managing cultural resources in the context of facilities and land management and military planning at Andersen AFB. When designed well, a cultural resources GIS application can be a powerful tool for installation planning. However, the data that can be incorporated into a GIS are often overwhelming in bulk and complexity, with the end result that the developed application is unwieldy and ineffective in use. Thus, this project focuses on investigating the existing GIS opportunities on the installation as well as on Guam (especially the Guam Historic Preservation Office), designing the essential building blocks for a cultural resources application that can be further developed in the future, and providing a proof-of-concept application that works within the existing GIS environment (see Tomonari-Tuggle et al. 2000 for an example of a similar project).

**BACKGROUND:** There are over 150 archaeological sites and 38 historic structures or historic complexes that have been identified on Andersen AFB (Yoklavich et al. 1996; Liston 1996). But large areas of the installation have not yet been surveyed, and management of these areas is based on generalized recommendations for levels of appropriate activity (Schilz 1996; McNeill and Welch 1998).

A cultural resources GIS application fits well with a recent trend in cultural resources planning that places individual resources in the context of the surrounding landscape. The cultural landscape approach integrates natural and cultural resource data as a means to systematically analyze the interplay of human/cultural interaction with the natural environment through time. Department of the Army (DA) Pamphlet 200-4 (Section 2-1b[3]) states:

Ecosystems on any Army installation have all been effected to some degree by human activity. Prehistoric and historic archeological resources, historic buildings, structures and districts, sacred sites, endangered species habitat, wetlands, riparian areas, and other components of the ecosystem have been influenced, maintained, or created by prehistoric and historic human occupants, and modern military use of the land. All of these natural and man-made features, including those related to military operations, are viewed as a series of surface and subsurface features that make up the installation's cultural landscape.

At a practical level, easily accessible and accurate locational information is essential for planners, facilities managers, and cultural resource managers to make informed decisions when planning for new facilities development, repairs and renovations, and demolitions.

**DESCRIPTION:** The project involves the following tasks:

- a. Research the current state of GIS on the installation, primarily through interviews with installation staff currently involved in GIS applications and with local government counterparts in the Guam Historic Preservation Office.
- b. Inventory existing sources for cultural resources data (e.g., archival maps, archaeological and architectural site maps, historical photographs) that are relevant to a cultural landscape planning strategy and are appropriate for use in a GIS format.
- c. Design a proof-of-concept GIS cultural resources application for the installation.
- d. Develop recommendations for expanding the proof-of-concept application, with specifics regarding infrastructure, equipment, and staffing requirements, budgetary considerations, and future research needs.
- e. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following products will be prepared during the course of this project:

- a. Preliminary and final reports documenting the scope-of-work, methods, process, and results of the GIS investigations. A key part of the report will be recommendations for expanding the proof-of-concept application, with specifics regarding infrastructure, equipment, and staffing requirements, budgetary considerations, and future research needs.
- b. Proof-of-concept GIS cultural resources application in ArcView format.

**ESTIMATED COST:** \$30,000

**REFERENCES:**

- Liston, Jolie. 1996. *The Legacy of Tarague Embayment and Its Inhabitants, Andersen AFB, Guam. Volume I: Archaeology*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment*. Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.
- Tomonari-Tuggle, M.J. 1996. The Stewardship of Cultural Resources: Management and Interpretation. Part II, in M.J. Tomonari-Tuggle and R.K. Olmo, *The Legacy of Tarague Embayment and its Inhabitants, Andersen AFB, Guam.. Volume IV: Theoretical Perspectives and the Stewardship of Cultural Resources*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.

Yoklavich, A.K., J. Craib, and P. Drolet. 1996. *Cultural Resource Management Overview Survey, Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

## PROJECT NO. 2D

**PROJECT:** Establish a cultural resources management and inventory database to track program progress in meeting ICRMP goals.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to develop an electronic database of cultural resources data to enhance analysis for facilities management and operations, as well as for planning future research investigations. The electronic database should be designed to allow efficient addition of new data in the future.

**BACKGROUND:** At present, information on cultural resources investigations and results can be found in a variety of documents and maps that may be difficult to access and are almost impossible to update. In hard copy format, data manipulation for analytical and management purposes is not possible without considerable time and effort.

**DESCRIPTION:** The project involves the development of digitized versions of cultural resources data. Data categories include archaeological sites, historic buildings, annotated bibliography of archaeological and historic architectural investigations, and maps showing archaeological areas of low, medium, and high sensitivity. Digital formats for textual and graphic presentations should be consistent with database management systems of 36 Environmental, with anticipated development of a cultural resources GIS application (see Project No. 2c). Provisions for addition of future data should also be made.

**DELIVERABLE:** The following documents and products will be prepared during the course of this project:

- a. Database of cultural resources information that can be easily updated and manipulated for management purposes. The database will be in a format that is compatible with existing 36 Environmental computer formats. Data categories and contents will include (but not be limited to) the following:
  1. archaeological site list with UTM and/or GPS locational data, significance evaluations, and management recommendations, cross-referenced to the archaeological report(s) that provides site information.
  2. historic building list with installation identification numbers, significance evaluations, and management requirements for stabilization and preventive maintenance, cross-referenced to the architectural report(s) that provides building information.
  3. annotated bibliography of previous archaeological and historic architectural investigations; annotations should include management recommendations for specific sites and/or survey areas and for historic buildings.

- b. Archaeological sensitivity maps showing the locations of known sites and areas of low, medium, and high sensitivity (maps should be in a format that is consistent with the ArcView program and in anticipation of development of a cultural resource GIS application); these maps are based on the analysis carried out in the updated Overview Survey (see Project Nos. 1a, 1b, and 1c) and developed as part of the updated ICRMP (see Project No. 2b).
- c. Preliminary and final reports documenting the scope-of-work, methods, process, and results of the database development. A key part of the document will be a detailed manual for updating and manipulating the database for management purposes.

**ESTIMATED COST:** \$22,000

**PROJECT NO. 3A**

**PROJECT:** Complete National Register forms for historic properties of potential eligibility.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to comply with requirements of Section 110 of the National Historic Preservation Act, which states that "each Federal agency shall establish a program to locate, inventory, and nominate to the Secretary all properties under the agencies ownership or control ... that appear to qualify for inclusion on the National Register."

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996).

**DESCRIPTION:** The 1996 CRMP identifies the sites listed in the attached table, *Sites of Potential Eligibility to the National Register*, as having potential for eligibility to the National Register of Historic Places. These sites should be evaluated and if evaluated to be eligible, then National Register forms should be completed. Information for completion of forms will be gathered from published sources, primarily the updates to the Overview Survey (see Project Nos. 1a, 1b, and 1c). No new survey or field checks are anticipated.

**DELIVERABLE:** The final product of this project will be completed National Register of Historic Places forms for the sites listed in the attached table.

**ESTIMATED COST:** \$18,000

**REFERENCES:**

McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment*. Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.

Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

Sites of Potential Eligibility to the National Register of Historic Places.

Site Name/Number	Location	Historical Period	CRMP Reference*
Pagat Point Latte Site (66-08-0021)	Marbo Annex (Andersen South); McNeill and Welch (1998:20) say that this site is on the east edge of the base	prehistoric	page 38-39
Torres Farm House	Northwest Field	pre-World War II	page 40
Leon Guerrero Water Catchment	between Northwest Field and runways	pre-World War II	page 40-41
Water Reservoir (Structure 09120)		Cold War	page 45-51
Water Reservoir (Structure 00078)	Mount Santa Rosa	Cold War	page 45-51
Tumon-Maui Water Well (Structure 00001)		Cold War	page 45-51
Andersen Airfield (66-07-1064)	Andersen Airfield	Cold War	page 51
Arc Light Memorial		Cold War	page 51
Laundry Building (Building 01125)	Marbo Annex (Andersen South)	Cold War	page 51
Quonset Hut (Building 00043)	Harmon Annex	late World War II	page 55
Building 00271	Harmon Annex	late World War II	page 55
Building 00607	Harmon Annex	late World War II	page 55

\* Schilz 1996



**PROJECT NO. 3B**

**PROJECT:** Carry out further archaeological investigations at sites that are potentially endangered from existing intense activity (e.g., in high public use areas). The listed investigations can be carried out as individual projects as funds become available, following the general scope-of-work presented herein.

**AUTHORITY:** Sections 106 and 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to anticipate potential adverse impacts of high intensity use on known archaeological sites, as well as to contribute data to further the understanding of prehistory and archaeology of Andersen AFB. In addition, new archaeological work at Tarague can help to refine and expand public interpretation, since some of the potentially endangered sites are near interpretive trails.

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996:87-88), and is also recommended in the Tarague Legacy management report (Tomonari-Tuggle 1996:94).

**DESCRIPTION:** The attached table, *Sites Proposed for Additional Archaeological Investigations*, lists archaeological sites that are identified in the 1996 CRMP and the Tarague Legacy management report as being potentially adversely impacted by current use and/or requiring additional investigations to evaluate research potential and significance. These projects can be carried out as individual projects; a column titled "Estimated Cost" identifies an approximate budget for each project.

The following tasks should be carried out for each of the listed projects:

- a. Prepare a research design that will be used to guide archival and field investigations. The research design will present research objectives, intended scope of investigations, field and archival research methods and scheduling, personnel qualifications, and curation of materials and associated records. For sites in the Tarague Embayment, a public outreach component of the project should be incorporated into the research design; examples of public outreach activities include the use of community volunteers on field and laboratory crews, a formal field school for archaeology students at the University of Guam, site tours during field work, and evening workshops or presentations.
- b. Conduct background research consisting of a critical review of previously written documents concerning the sites and/or general area that will be investigated.
- c. Conduct field investigations that minimally address the work listed in the column "Minimum Intensity of Work" in the attached table. All structures, sites, and buried cultural deposits identified by the fieldwork will be documented by verbal description, site plan view maps (to scale), and a complete photographic record. All newly identified sites will be located by global positioning system (GPS).

- d. Conduct laboratory analysis of collected field materials, as appropriate. All artifacts will be thoroughly cleaned, photographically recorded, sketched, and identified; all metric and descriptive attributes will be recorded and presented in tabular form in the final report for the project. Dating samples will be appropriately prepared in the laboratory, with primary emphasis on obtaining sufficiently large organic charcoal samples for carbon-14 age determinations and carbon 12/13 isotope correction. All archaeological site plan view maps will be drafted in a clear manner and at a scale allowing for ready identification of all constituent features; significant physiographic features in the site area will also be illustrated in the site maps.
- e. Analyze materials collected from the archival studies, field investigations, and laboratory analysis. The data analysis will consist of a critical review of the collected information in the context of previous investigations in northern Guam and/or the Mariana Islands, as appropriate, evaluations of site significance, and development of management alternatives for site preservation, including recommendations for future investigations. Recommendations for public interpretation should be considered.
- f. Prepare a written report presenting the results of the study.

**DELIVERABLE:** The following documents will be prepared during the course of this project:

- a. Research Design. A research design will be prepared as a guide to archival, field, and laboratory phases of the project. It will present research objectives, intended scope of investigations, field and archival research methods and scheduling, personnel qualifications, and curation of materials and associated records.
- b. Letter Report. A brief letter report will be submitted to 36 CES/CEVN upon completion of the field work. This will summarize field schedules, activities, and results of the field work.
- c. Summary Report. A summary report of this project will be prepared in preliminary and final forms and will detail the scope-of-work, research objectives, methods, and results of all tasks of the project (as listed above).

**ESTIMATED COST:** variable

**REFERENCES:**

McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment*. Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.

- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Tomonari-Tuggle, M.J., E. Komori, T.S. Dye, and J.R. McNeill. 2000. *Cultural Landscape Pilot Project for Supporting Implementation of the Integrated Cultural Resources Management Program at the Schofield Barracks Military Reservation, Island of O'ahu*. Prepared for the U.S. Army Corps of Engineers, Pacific Ocean Division. International Archaeological Research Institute, Inc., Honolulu.

Sites Proposed for Additional Archaeological Investigations.

Site No.	Site Description	Location	Potential Impact	Minimum Intensity of Research	Estimated Cost
7-0017	Lafac pottery scatter	NE coastal area, between Lafac Pt. and Pati Pt.	see 1996 CRMP, page 39	surface mapping, test excavation to evaluate research potential and significance	\$30,000
7-1594	artifact scatter	West Tarague	close to Sirena Beach Road, probable impact from beach goers	surface collection, test excavation to better define site boundaries and character	\$35,000
7-1595	village complex	Tarague EOD/Small Arms Range	military use	surface collection, test excavation to better define site boundaries and character	\$35,000
7-1614	village complex	Tarague EOD/Small Arms Range	impact from EOD vehicles being drive off the beach road	intensive areal excavation to define site boundaries and character; recommend measures to mitigate impacts from off-road vehicle access	\$60,000
8-0005	Hilaan Site	Harmon Annex, between Tanguisson and Hilaan Pt.	see 1996 CRMP	surface mapping, test excavation to determine depth and areal extent of site	\$35,000
8-1514	Tarague Cave	West Tarague	potential vandalism of pictographs	document pictographs	\$6,000
8-1516	block rock shelter	West Tarague	adjacent to main parking area, high public use	excavation for data recovery	\$40,000
8-1588	block rock shelter	West Tarague	major point along interpretive trail	excavation for data recovery	\$45,000
--	numerous sherd scatters	Northwest Field	see 1996 CRMP, page 39	accurate location, surface mapping, test excavation to evaluate research potential and significance	\$30,000
8-1065	Northwest Field	Northwest Field	training bivouacs (McNeill and Welch 1998:28)	surface mapping of WWII structural foundations, roads	\$18,000

**PROJECT NO. 3C**

**PROJECT:** Develop a program of stabilization and preventive maintenance for significant historical architectural resources that are subject to destruction or deterioration.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended.

**OBJECTIVE:** The purpose of this project is to design a program of stabilization and preventive maintenance for significant historic architectural resources that have been identified as subject to destruction or deterioration.

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996:87-88).

**DESCRIPTION:** Utilizing resource data gathered as part of the architectural component of the updated Overview Survey (see Project No. 1b) and the management recommendations in the Integrated Cultural Resources Management Plan (see Project No. 2b), this project will develop building-specific procedures for stabilization and preventive maintenance, including a briefing document or manual that can be used for training maintenance personnel.

**DELIVERABLE:** The deliverable for this project will consist of the following documents:

- a. Briefing manual. This document is intended for use by the individual who has oversight authority on historic buildings maintenance (to be identified in the ICRMP, see Project No. 2b).
- b. Building-specific procedures. This set of documents will consist of step-by-step instructions for stabilization and preventive maintenance for specific buildings or groups of similar buildings. It is intended for use by facilities managers and maintenance personnel.

**ESTIMATED COST:** \$23,000

**REFERENCES:**

- McNeill, J.R., and D.J. Welch. 1998. *Military Exercises and Historic Sites in Military Training Areas on the Island of Guam: an Archaeological Assessment*. Prepared for Belt Collins Hawaii. International Archaeological Research Institute, Inc., Honolulu.
- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.

**PROJECT NO. 3D**

**PROJECT:** Design cultural resource protection signs for areas of high public use and in the EOD/Small Arms Range at Tarague Embayment.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; Archaeological Resource Protection Act (ARPA).

**OBJECTIVE:** The purpose of this project is to alert the public to the fact that it is a felony offense to excavate, remove, damage, or otherwise alter or deface an archaeological site on federal lands and that it is also a felony offense to offer to sell, purchase, transport, or receive any archaeological resources that were excavated or removed from federal lands.

**BACKGROUND:** This project is identified as a conservation recommendation in the Tarague Legacy management report (Tomonari-Tuggle 1996:92).

**DESCRIPTION:** This project will entail the preparation of text and graphics, and design of layouts for warning signs to be used at archaeological sites in areas of high public use and in the EOD/Small Arms Range at Tarague Embayment. Wording on the signs should be positive (e.g., help us to preserve these sites) rather than threatening (e.g., you will be penalized). In the EOD/Small Arms Range area, warning signs should be posted at all secured gates to ensure that anyone passing through on official business will be aware of ARPA and its penalties; warning signs to stay on existing dirt roads and/or off-limits signs should also be designed for sensitive sites in this area. All warning signs should be designed in a manner that readily identifies them as resource protection markers and should be coordinated with the overall interpretive signage.

Fabrication and installation of signs are not included in the budget.

**DELIVERABLE:** The deliverables for this project will consist of design and layout of ARPA warning signs and off-limits type signs for the EOD/Small Arms Range. They will be provided in three steps: preliminary text, preliminary layout, and final camera-ready layout. The preliminary text and preliminary layout are subject to review and comment by 36 CES/CEVN staff.

**ESTIMATED COST:** \$12,000

**REFERENCES:**

Tomonari-Tuggle, M.J. 1996. The Stewardship of Cultural Resources: Management and Interpretation. Part II, in M.J. Tomonari-Tuggle and R.K. Olmo, *The Legacy of Tarague Embayment and its Inhabitants, Andersen AFB, Guam. Volume IV: Theoretical Perspectives and the Stewardship of Cultural Resources*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.

**PROJECT NO. 4A**

**PROJECT:** Prepare an interpretive plan for cultural resources at Andersen AFB.

**AUTHORITY:** Section 110, National Historic Preservation Act, as amended; AFI 32-7065.

**OBJECTIVE:** The purpose of this project is to develop a cultural resources interpretive program that shares the archaeology and history of Andersen AFB with installation personnel and their dependents as well as local Guam residents. An interpretive program serves several purposes: provides recreational activities and public education for base personnel and their dependents; fosters a sense of pride in the installation and stewardship for cultural resources which helps in historic preservation efforts and enhances community relations by forging links to the larger Guam community.

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996). It is also proposed in the Tarague Legacy management report (Tomonari-Tuggle 1996).

**DESCRIPTION:** Development of the interpretive plan includes the following tasks:

- a. Review existing interpretive activities on base and in the larger Guam community that can serve as models for the interpretive program; this review can be used to evaluate opportunities and constraints.
- b. Develop a general theme or approach that will focus the interpretive program.
- c. Review cultural resources data and summaries to identify the optimum resources for interpretation. Criteria for selection include how well the sites/buildings illustrate interpretive themes, site/building stability to withstand impacts from visitor traffic, accessibility to the public, and site/building location relative to high use areas (where interpretation may serve as a protective measure).
- d. Identify requirements for preparing sites/buildings for interpretation and public access (e.g., stabilization, restoration, or reconstruction).
- e. Determine the best installation organization to manage the interpretive program.
- f. Prepare a written report presenting the results of this project.

**DELIVERABLE:** The following document will be prepared in preliminary and final forms for this project:

- a. Interpretive Plan. The interpretive plan will guide the formation and maintenance of an interpretive program. The plan should include the following components:
  1. goals and objectives of the interpretive program.
  2. general framework for the program in terms of its place in the installation mission and organization, as well as a program theme and approach.

3. archaeological sites and historic architecture that best lend themselves to public interpretation.
4. alternative mechanisms for interpretation, including exhibits, workshops, self-guided tours, guided tours, and in-school programs for children.
5. a prioritized listing of interpretive projects that are integrated into an overall interpretive theme and concept for the installation. This listing would be used for out-year budget preparations. The attached table *Suggested Interpretive Projects for Andersen AFB* lists possible interpretive projects that could be proposed in out-year budgets before the overall interpretive plan is developed; the interpretive projects listed in the table can also be incorporated into the prioritized listing in the interpretive plan.
6. pro-active ways to create historic preservation partnerships with the larger Guam community.
7. staff requirements and responsibilities for implementing the interpretive plan and maintaining the resultant interpretive program.

**ESTIMATED COST:** \$26,000

**REFERENCES:**

- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Tomonari-Tuggle, M.J. 1996. The Stewardship of Cultural Resources: Management and Interpretation. Part II, in M.J. Tomonari-Tuggle and R.K. Olmo, *The Legacy of Tarague Embayment and its Inhabitants, Andersen AFB, Guam.. Volume IV: Theoretical Perspectives and the Stewardship of Cultural Resources*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.



Suggested Interpretive Projects for Andersen AFB.

Project Description	Comment	Estimated Cost *
Introductory brochure on the cultural resources of Andersen AFB	This brochure would be intended for distribution at newcomers' briefings to introduce new personnel and their dependents to the history and cultural resources of the installation. The brochure could also be distributed to base visitors. It should also provide leads to additional sources of information.	\$9,000
Prehistory-oriented exhibit in the Heritage Room, using drawings and photographs.	The Heritage Room is an existing facility that is known as a source of historical information. It would be relatively easy to incorporate a prehistory-oriented exhibit into the current presentations.	\$12,000
Self-guided driving tour of Andersen AFB, focusing on the development of the installation after World War II and its role in the Cold War and the Vietnam War.	The driving tour brochure should minimally include Northwest Field (see below), Andersen Field (also called North Field), the Arc Light Memorial, and Building 01125 (Laundry Building). Several buildings (e.g., Wing Headquarters and Post Office) that no longer maintain their historical integrity due to extensive alterations should be included as dating from the original 1948 installation (historical photographs can illustrate their original form).	\$12,000
Outdoor exhibit kiosk at Northwest Field	This outdoor kiosk would relate the history of Northwest Field and its place as a significant National Register site. It could be a point of interest on the self-guided driving tour of Andersen AFB (see above).	\$12,000

\* for design only

## PROJECT NO. 4B

**PROJECT:** Carry out oral history interviews related to land use and community activities prior to, during, and after World War II on the area now within Andersen AFB.

**AUTHORITY:** Sections 106 and 110, National Historic Preservation Act, as amended.

**OBJECTIVE:** There are three objectives to this project. First, the oral histories can contribute to a better understanding of the place of Andersen AFB in the Guam community history. Second, the oral histories can provide information to supplement written records regarding specific historical sites on the installation, particularly those that have been evaluated as eligible to or have potential for eligibility to the National Register of Historic Places. Third, the collection of oral histories can be a pro-active means for outreach to the larger island community.

**BACKGROUND:** This project is identified as a priority for implementation in the 1996 CRMP (Schilz 1996:87-88), and is also recommended as a conservation mechanism in the Tarague Legacy management report (Tomonari-Tuggle 1996:93-94).

In addition to providing information and personal recollections about specific historic properties as well as about Andersen AFB in general, oral history interviews can establish links to cultural groups in the Guam community that can facilitate future compliance-related actions. This would directly respond to recent changes in historic preservation compliance regulations, particularly those implementing Section 106 of the National Historic Preservation Act. These changes call for public involvement as a key ingredient in successful consultation, with major emphasis on early consultation with Indian and Native Hawaiian organizations. Further, they specify that for the purposes of Section 106, the term "historic properties" includes "properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization;" National Register Bulletin 38, which attempts to provide guidance for identifying traditional cultural properties, expands the definition to those properties important to "all cultural groups," not just Indian tribes and Native Hawaiian organizations.

**DESCRIPTION:** This project involves the following tasks:

- a. Develop a research design that identifies the goals and objectives of oral history interviews and proposes a method to carry out the interviews.

General oral history topics can include (but not be limited to) pre-World War II use of the area that is now Andersen AFB, early development of the installation, installation activities during the Korean and Vietnam Wars, and Cold War activities particularly related to the Strategic Air Command. Informants should include former personnel at Andersen AFB as well as Guam residents.

Specific pre-war sites for which oral histories would provide information include the Leon Guerrero water catchment, the Torres farm house, and the Tarague stone pier (Schilz 1996:40-42).

- b. Conduct oral history interviews as guided by the research design. With permission from the oral history interviewee, the interviews should be audio recorded, with all pertinent information transcribed for incorporation into the report (task item e, below).
- c. If appropriate, conduct field inspections with oral history informants to sites with which they are familiar.
- d. Integrate oral history information into site descriptions.
- e. Prepare a written report presenting the results of the study.

**DELIVERABLE:** The following documents will be prepared during the course of this project:

- a. Research Design. The research design will summarize the scope-of-work, outline the goals and objectives of the oral history interviews, present historical themes that will frame the interviews, and provide a prioritized listing of potential interviewees and how they can contribute to the stated goals and objectives.
- b. Summary Report. The summary report, which will be submitted in preliminary and final forms, will expand on the research design, document the methods, process, and results of the oral history interviews, summarize the oral history interviews, evaluate the manner in which the interviews were set up and carried out, with the objective of defining opportunities and constraints for continuing oral history projects, and make recommendations for how best to incorporate oral history interviews as part of future archaeological and historical investigations and interpretive projects at Andersen AFB. The report will also identify actual and potential partnerships within Andersen AFB as well as in the larger Guam community to carry on oral history interviews after the completion of this project.

**ESTIMATED COST:** \$40,000

**REFERENCES:**

- Schilz, Allan J. 1996. Final Report. *Cultural Resource Management Plan. Andersen Air Force Base, Mariana Islands, Territory of Guam*. Prepared for the Department of the Navy, Pacific Division, Facilities Engineering Command. Ogden Environmental and Energy Services Company, Inc., Honolulu.
- Tomonari-Tuggle, M.J. 1996. The Stewardship of Cultural Resources: Management and Interpretation. Part II, in M.J. Tomonari-Tuggle and R.K. Olmo, *The Legacy of Tarague Embayment and its Inhabitants, Andersen AFB, Guam.. Volume IV: Theoretical Perspectives and the Stewardship of Cultural Resources*. Prepared for Andersen Air Force Base. International Archaeology, Inc., Honolulu.



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**DEPARTMENT OF THE ARMY**  
US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND  
504 SCOTT STREET  
FORT DETRICK, MARYLAND 21702-5012

REPLY TO  
ATTENTION OF:

MCMR-RMI-S (70-1y)

5 Mar 02

MEMORANDUM FOR Administrator, Defense Technical Information Center (DTIC-OCA), 8725 John J. Kingman Road, Fort Belvoir, VA 22060-6218

SUBJECT: Request Change in Distribution Statements

1. The U.S. Army Medical Research and Materiel Command has reexamined the need for the limitation assigned to technical reports written for grants. Request the limited distribution statements for Accession Documents listed at enclosure be changed to "Approved for public release; distribution unlimited." These reports should be released to the National Technical Information Service.

2. Point of contact for this request is Ms. Judy Pawlus at DSN 343-7322 or by e-mail at judy.pawlus@det.amedd.army.mil.

FOR THE COMMANDER:

Encl

A handwritten signature in black ink, appearing to read "Phyllis M. Rinehart", is written over the typed name and title.

PHYLLIS M. RINEHART  
Deputy Chief of Staff for  
Information Management

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