

**Secretary of Defense
Environmental Awards FY 2002
U.S. Army Corps of Engineers Nomination for
Cultural Resources Management—Team**

**Project Delivery Team
Fort Tidball
Long Island, Alaska**



Jo Antonsen, Deputy Alaska State Historic Preservation Officer, standing next to a six-inch gun emplacement at Castle Bluff, Long Island, 2001

Background

In 1940, the 250th Coastal Artillery Unit Seabees and the U.S. Army Corps of Engineers (USACE) began construction of coastal defense units on Long Island, Alaska. These defenses protected the naval air station on nearby Kodiak Island, one of the first lines of defense against a Japanese invasion of the U.S. from the northwest.



Aerial view of Army area, Long Island, 1942

Leisnoi currently owns the site, with subsurface rights belonging to Koniag.

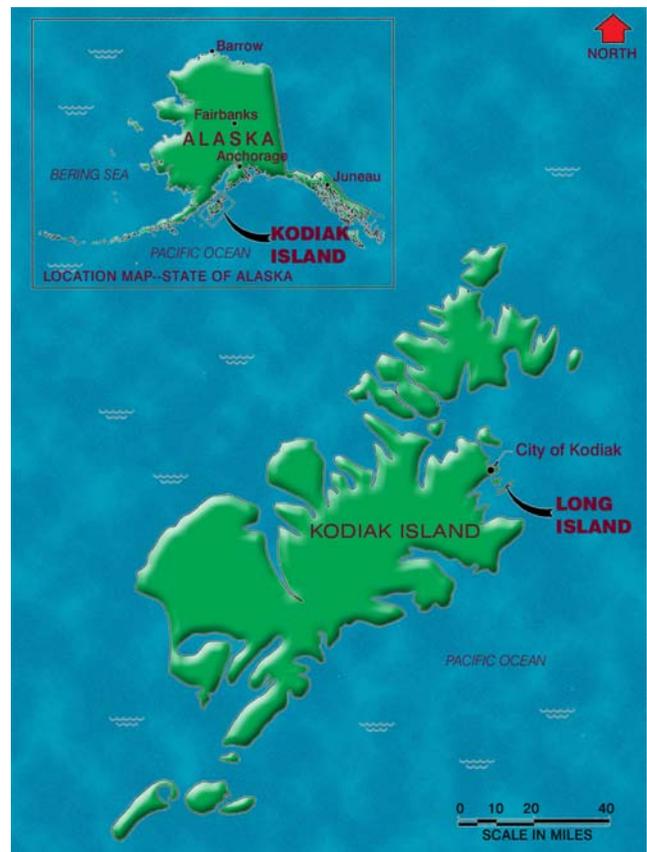
In 1995, Fort Tidball was designated as eligible for inclusion in the National Register of Historic Places (NRHP). Numerous recorded archaeological studies testified to the value of Long Island's prehistoric and early Russian contact and settlement sites. Long Island also has tremendous historical significance and value because of the relatively intact and undisturbed condition and setting of Fort Tidball. In addition, the island includes a Steller sea lion haul-out and hosts numerous eagle nests and a vigorous deer and rabbit population enjoyed by hunters. Because of this wealth of cultural and natural resources, Long Island receives significant recreational use by the local Kodiak Island community.

Team Members

Mollie TeVrucht (USACE) and Tom Beck (Jacobs Engineering), Project Managers. Mollie TeVrucht and Tom Beck were the project managers, responsible for scope, schedule, budget, and quality.

Wayne Crayton, USACE Biologist. Wayne Crayton prepared all the National Environmental Policy Act

Long Island, a 1,320-acre island approximately six miles east of Kodiak Island, was officially designated as Fort Tidball in 1943. At its peak, approximately 250 military personnel were stationed there. In 1945, the fort was decommissioned, and in 1947, it was abandoned. In 1956, the uninhabited island was returned to the jurisdiction of the Bureau of Land Management under Public Land Order (PLO) 1297. It was later transferred to Leisnoi, Inc., and Koniag, Inc., under the Alaska Native Claims Settlement Act of 1971 (ANCSA).



Locations of Kodiak Island and Long Island

(NEPA) documentation, including the Environmental Assessment (EA). He was primarily responsible for coordination with agencies and stakeholders regarding preservation of natural resources.

Peggy Yang, Jacobs Engineering Task Manager. Peggy Yang developed the matrix and coordinated with stakeholders and regulators regarding the proposed remedial action.

Diane Hanson, USACE Archaeologist.

Sylvia Elliott, Jacobs Engineering Historian.

Catherine Williams, Northern Land Use Research (NLUR) Archaeologist.

Diane Hanson wrote the Memorandum of Understanding with the State Historic Preservation Officer. Along with Sylvia Elliott, she identified historical and cultural resources at the sites. Catherine Williams provided field oversight to ensure that all historical and cultural resources were properly protected during site work.

Dave Morbach, USACE Real Estate Specialist. Dave Morbach coordinated with the landowners for the Right of Entry to conduct activities on their land.



Site walk with stakeholders, Long Island, 2001

Scott McKean, USACE Engineer.

Richard Ragle, USACE Chemist.

Drew Anderson, Jacobs Project Engineer.

These technical specialists designed the environmental remediation to meet all applicable engineering and chemistry requirements.

Gary Haynes (USACE) and Debra Blanton (Jacobs Engineering), Contract Specialists.

Gary Haynes and Debra Blanton ensured that all contracts met acquisition regulation requirements.

Kathy Streveler, USACE Quality Assurance Representative.

Brian Roberts, Jacobs Engineering Site Manager.

Troy Izatt, Jacobs Engineering Safety and Health Officer.

These field managers performed quality assurance and quality control of fieldwork and provided oversight of subcontractors while ensuring that work was conducted safely.

Debi Somerville, Jacobs Engineering Administrative Assistant.

Yvonne Sebile, Jacobs Engineering Cost Analyst.

Debra Arbogast, Jacobs Engineering Cost Administrator.

Debi Somerville, Yvonne Sebile, and Debra Arbogast tracked and managed costs to ensure that the team was operating within the project budget.

Position Description

Work was performed under the **Defense Environmental Restoration Program—Formerly Used Defense Sites (DERP-FUDS)** program and the **Native American Lands Environmental Mitigation Program (NALEMP)**. The goal of the DERP-FUDS program is to reduce the risk to human health, safety, and the environment resulting from past Department of Defense (DoD) activities, in a timely, cost-effective manner. The goal of NALEMP is to mitigate DoD impacts to Native lands. The USACE

Alaska District performed the work using the Total Environmental Restoration Contract (TERC) held by Jacobs Engineering.

Project Delivery Team’s Primary Goals

- **To complete all mission requirements, on time and under budget, while preserving the cultural resources of the sites.**
- **To work together with stakeholders, regulators, and landowners to achieve consensus solutions to project challenges.**
- **To maintain an active community relations program, including close partnerships with Native groups, the local government, and Kodiak museums.**
- **To preserve and enhance the historical value of the area while protecting archaeological resources.**

Together this interdisciplinary team of professionals from USACE and Jacobs took on the challenge of meeting the mission objectives. These objectives included identifying and defining areas of environmental concern, seeking a clear definition of applicable regulatory criteria for site closure, and removing contaminated soils and asbestos-containing building materials. The impetus for restoration was the presence of unacceptable risks to human health and the environment. Because the environmental contamination was the result of former military activity, the site was eligible for restoration under the FUDS program. The FUDS program includes the standard phases for site evaluation, assessment, and restoration. The remedial investigation revealed that remedial action was required, and so restoration was initiated. NALEMP funding was used to remove dilapidated structures that were a public safety hazard. Safety hazards such as open utilidors, vaults, and overhead hazards were attenuated.

Significant Dates

- 1986 Corps identified Long Island as FUDS eligible**
- 1994 Remedial investigation identified the location and extent of environmental contamination. Seven areas of concern were identified, including the Headquarters Complex, Burt Point, Garage Area, Deer Point, Castle Bluff Garrison, and Point Head.**
- 1995 Fort Tidball eligible for the National Register of Historic Places**
- 2002 Final Memorandum of Agreement (MOA) signed in July. Remedial action, building demolition, and safety hazard mitigation completed. Cultural artifacts collected and donated to museums.**

Accomplishments

A primary challenge to the project team was the competing, and sometimes conflicting, interests of the landowners, the local community, the State Historic Preservation Officer (SHPO), the Alaska

Cost savings of \$162,000 from innovative matrix evaluation of sites

Department of Environmental Conservation (ADEC), and the Alaska Department of Natural Resources. The landowner, Leisnoi, Inc., expected USACE to remove all safety hazards on Long Island in order to limit Leisnoi’s liability. In their view, this removal included all the structures and buildings associated with Fort Tidball. However, the value and attraction of the property to potential future landowners, Alaska State Parks and the Office of History and Archaeology, was enhanced by the presence of a historic World War II fort. The property sale was complicated by the

ADEC's designation of Long Island as a contaminated site. The negotiation and communication necessary to guide all stakeholders toward the common goal of restoring the environment while preserving the historic and prehistoric significance of Long Island was one of the project team's greatest achievements.

Site logistics also presented an enormous challenge for team members. The project is located on an uninhabited island with no infrastructure: no paved roads, no electricity, and no water or sanitary facilities. Everything needed to conduct work had to be brought to the island by boat or plane. This presented many and varied challenges that the team had to overcome in order to conduct fieldwork safely and efficiently. Despite these difficulties, **work was completed ahead of schedule and more than \$420,000 under budget.**



Site walk with stakeholders, Long Island, 2001

Overall Cultural Resources Management

Improvements in Program Planning and Budgeting, and Coordination of Cultural Resources Management

Beginning in FY 2000, interactive meetings were held with stakeholders to identify individual goals and common ground that could be built on for mutual benefit. The team was able to identify programmatic requirements and available funding sources to execute the work required to complete site cleanup and meet stakeholder needs. In a move that saved considerable time, resources, and money, **separate projects under two programs, NALEMP and FUDS, were executed simultaneously.** The project team worked with stakeholders to reach consensus solutions that resulted in the establishment of a **matrix of criteria** applicable to environmental cleanup, building demolition and debris removal, and associated mitigation measures. Sites on Long Island could then be grouped into categories using this matrix, rather than negotiating site-specific actions and mitigation measures for individual sites. Structures were categorized by criteria such as type, location, and contribution to the historical landscape. Mitigation measures ranged from providing historical and contemporary photographs, building blueprints, as-built drawings, and structure inventories, to collecting, and transporting, and documenting artifacts. By applying this matrix approach, rather than formulating unique mitigation requirements for each individual structure, an estimated 2,900 hours of labor and \$162,000 were saved on field surveys, photography, reporting, and work plan preparation costs.

This approach also allowed a Memorandum of Agreement (MOA) between USACE, Leisnoi, Inc., Alaska State Parks, and the Alaska State Historical Preservation Officer to be finalized two ahead of the date projected a year earlier. An Environmental Protection Plan and a Cultural Resources Reporting Plan that incorporated provisions of the MOA were drafted for review by the stakeholders and implemented as project guidance documents in March 2002.

Alternative Management Approaches

With the MOA finalized two months ahead of schedule, the project team could proceed with environmental cleanup, building demolition, and debris removal projects simultaneously under the two funding programs. This resulted in a significant savings of over \$240,000 because of the high transportation and logistical support costs associated with working on a remote island. With mitigation

measures for each category of site defined in advance, further cost benefit was achieved by factoring opportunities for cost-sharing between programs into the project work plan. Rapid reporting of daily subcontractor and vendor costs incurred in the field allowed the project team to accurately generate productivity curves and field cost projections, and thereby prioritize work tasks and allocate budgets under both programs. This maximized the synergy between FUDS and NALEMP and resulted in maximum cost benefit.

The consortium formed between USACE, Jacobs Engineering, Leisnoi, Inc., Alaska State Parks, ADEC, SHPO, and the Kodiak community not only provided the stakeholders with ample opportunity for input, but also allowed the project team to exploit the knowledge and resources of the many entities for the benefit of the project. The MOA required the project team to provide collections of architectural and as-built drawings. Many of the stakeholders possessed some of the required materials, but none had a complete inventory. The project team was able to draw on the resources of the stakeholders and coordinate the assembly of the required MOA submittals. This is estimated to have reduced the labor required for an archive search by approximately 300 hours, for a cost avoidance of \$18,000.



Status of Integrated Cultural Resources Management Plan

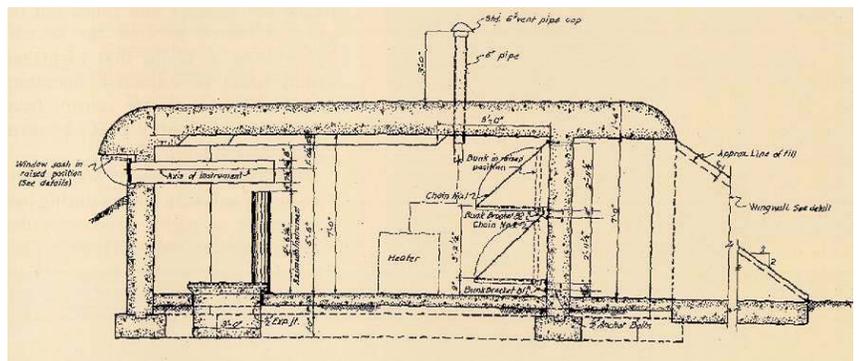
There is no current ICRMP because the project is on property that is not owned by the DoD. This was a Section 106 action, and the historian and archaeologists determined that an ICRMP was not appropriate.

Historic Buildings and Structures

Historic buildings and structures at the former Fort Tidball included large wood-frame buildings such as mess halls, generator buildings, a headquarters complex, concealed planning and plotting buildings, Quonset huts, wooden and steel observation towers, and concrete searchlight, munitions, and command bunkers. The only structures removed were those that either contained asbestos materials, stood on



Base-end station (B-22), Point Head, Long Island, 1999



Typical as-built drawing of command observation post, 1946

contaminated soil, or were so dilapidated that they no longer retained their essential physical features or integrity of location or materials. Concrete building foundation slabs and piers of removed buildings were left in place to preserve the historical landscape and setting as much as possible.

Rehabilitating the concrete bunkers rather than sealing the entrances addressed safety hazards. This approach also served as a mitigation measure, supporting the project team's goal of maximizing site restoration. The rehabilitation of the bunkers will allow adaptive reuse as educational or interpretive features. During fieldwork, portions of the old road system that bypassed culturally sensitive areas were rehabilitated so that necessary equipment could reach project sites. Following completion of site work, those portions were carefully restored to original condition, but environmental protection measures that improved the road condition were retained. In the event of future use, the improved roads are located along alignments that have the least potential for future impacts to cultural or historical resources.

Archaeological Resources

In 1995, USACE determined that Fort Tidball was eligible for the NRHP, and the SHPO concurred with this determination. Six pre-World War II era historical sites are recorded in the Alaska Heritage Resources Survey for Long Island. These sites were occupied during the Koniag and Kachemak



Catherine Williams, Archaeological Monitor, documenting Deer Point Quonset hut, 2002

traditions, between 500 and 4000 years ago. One Russian period site has been recorded on the island. It is a brick kiln that may be one of the few Russian American Company sites in the area. This site was determined eligible for the NRHP in 1978. Neither the Russian site nor any of the pre-World War II period sites were damaged by the cleanup work that took place on Long Island. Site protection guided the paradigm under which environmental restoration activities were conducted.

By developing a mutually beneficial partnership with stakeholders who had particular knowledge and documentation relating to Fort Tidball, the project team was able to recover and compile archaeological data from

a wide variety of sources. During the course of site restoration activities, over 30 World War II artifacts were encountered. These artifacts were collected, catalogued, and donated to the Kodiak Military History Museum. These artifacts included metal shelves with intact clothes bars, ceramic insulators on wooden blocks, paper name stencils, a wood chisel, and several intact glasses and medicine bottles. Also saved for the museum were several of the metal panels from the removed Quonset huts with manufacturer's names and dates imprinted on them. Two metal cabinet doors with detailed electrical diagrams were also collected from a multi-story underground bunker in the Castle Bluff Garrison area.

By reducing invasive site activities whenever possible, a maximum amount of land and associated cultural resources were left undisturbed. Out of 1,320 acres, fewer than three acres were disturbed or restored. Overall, less than 1%



Salvaged Quonset panel with manufacturer imprints, 2002

of the island was impacted. This preservation of cultural resources enhances the interpretive value of Long Island and allows future research possibilities.

Native American Program

The projects were executed in concert with the American Indian and Alaskan Native Policy, and prepared by the District's Native Liaison Officer. This policy is designed to enhance the government-to-government working relationship between the DoD and Tribes in Alaska through implementation of the Department's American Indian and Alaska Native Policy.



Long Island is home to abundant wildlife that helps to support the traditional lifestyles of Native Alaskan Tribes

No sacred sites or Alaskan Native cultural items were disturbed during site work. The surface rights to Long Island and the former Fort Tidball were deeded to Leisnoi, Inc., a Village Corporation established under the Alaska Native Claims Settlement Act. Subsurface rights were deeded to Koniag, Inc., the Regional Native Corporation. Native shareholders of Leisnoi have unrestricted access to all of Long Island for subsistence use. Members of local Alaskan Native Tribes frequently visit Long Island, where they can enjoy use of natural resources to support their traditional subsistence lifestyle. Three Leisnoi members were employed during site work and shared their knowledge of the site as they recalled it in their youth.

Curation

The project team promoted the cultural resources conservation ethic by avoiding historical buildings and potential undiscovered archaeological sites as much as possible. Beginning in August of 2001, the project team coordinated the proper allocation of artifacts with the curators of three Kodiak museums: the Alutiiq Museum, the Baranof Museum, and the Kodiak Military History Museum. Provisions were made in the MOA for curation of artifacts with Alaska State Parks as the lead agency. This resulted in collection and curation in a systematic and comprehensive manner that ensured a ready sharing of information among all stakeholders.

Representatives of Alaska State Parks, the Kodiak Military History Museum, and the Kodiak Historical Society were invited to remove any artifacts or structural materials from any buildings or building remnants scheduled for removal. Objects collected during site restoration activities were catalogued and fully documented. All of the recovered artifacts were donated to the Kodiak Military Museum after the fieldwork was completed in early September 2002. A few of the more fragile artifacts (such as glass bottles and cardboard stencils) were given directly to the museum by the archaeological monitor earlier in the field season.

Cultural Resources Awareness and Education

Prior to participating in site restoration activities, all personnel working on site were trained in Section 106 compliance and project Cultural Resources Awareness and Reporting requirements. Once on site, the Archaeological Monitor provided additional cultural resources training to all civil subcontractor personnel. Training was enforced by communicating observations and discoveries as they were made

and at daily tailgate meetings. This fostered a proactive and forthcoming working relationship with on-site workers. As a result, all stipulations of Section 106 and the MOA were met, and no site was disturbed that was not included in the scope of the project.

The artifacts donated for curation and the submittals produced as mitigation are expected to contribute greatly to the understanding of the historical context, setting, and significance of Fort Tidball and the Coastal Defense System.

Community Relations

Extensive community interaction and public education

The project team maintained an active community relations program, including close partnerships with local Native groups, local governments, and museums. USACE performed active community outreach and public education in the form of semi-annual fact sheet mailings to over 200 individuals, bi-annual community open house meetings, and regular informational presentations to the City Council and Borough Assembly.

Team members were invited to present aspects of the work to public school classes, and informational brochures on historical and cultural issues were provided to the local museum for public distribution. Public school classes routinely visit Long Island to view the historic landscape and learn about Alaska’s role in World War II.

The public was encouraged to be active participants in the decision-making process, and copies of all project documents were provided to the Kodiak Public Library for easy community access. This program made it abundantly clear that both the community and the team valued Long Island as a cultural heritage, as well as a historical and recreational site.



Open house to give the public opportunities to learn about the remediation activities, 2002

Environmental Enhancement

Effective mitigation enabled complete environmental restoration of all sites

Due to the efforts of the project team, the work completed in September 2002 resulted in closure of all formerly contaminated sites at Fort Tidball. In addition, the team preserved and enhanced the historical value of the site while protecting archaeological resources.

Prior to site restoration, the public had not been encouraged to visit Long Island because of the presence of site contamination, and because many structures and features with historic significance were not safe or stabilized. The value of Long Island as a cultural asset has been enhanced to the benefit of present and potential future landowners, the local community, and historical and archaeological researchers.

Mission Enhancement

By developing a comprehensive program for cultural resources management at the former Fort Tidball, the project team has enhanced the USACE Alaska District’s DERP-FUDS mission to ensure continued protection of human health and the environment, and to comply with legally enforceable agreements and orders while incorporating the principle of moving projects to lower relative risk categories over time.

Part of the team's mission included an initiative to promote environmental security, as well as cultural resources management at Fort Tidball. The National Security Strategy includes environmental issues as part of promoting prosperity. Environmental security contributes to the national interest, since it is integral to continued gains in prosperity.

Cultural Resources Compliance

During the planning stage of the project, the project team evaluated Section 106 compliance requirements and initiated the Section 106 process. The archaeologist worked closely with the Alaska State Historic Preservation Officer to ensure that planned project activities were compatible with protecting cultural resources on Fort Tidball. Before project activities commenced at Long Island, USACE, the SHPO, Leisnoi, Inc., and Alaska State Parks developed an MOA for the environmental restoration activities within the Fort Tidball Historic District. The team and SHPO worked together to map out access routes to each of the work with minimum impact on both the vegetation and the historic landscape.



Mobilization to North Cape via helicopter, 2000

Full compliance with laws, regulations, statutes, and program guidance

While excavation and demolition activities were underway, an archaeological monitor was present to ensure the protection of Long Island's archaeological resources and the historic structures, buildings, and landscape of Fort Tidball. Site management personnel ensured that construction equipment and methods met the requirements set forth by the

MOA, the Environmental Assessment, DNR Tidelands Permit, ADEC, U.S. Coast Guard, and the Alaska Department of Transportation. The project team also strictly complied with the Occupational Health and Safety Administration (OSHA) regulations for the transportation, handling, and disposal of contaminated materials and asbestos.



Wood garage (S-9) at Castle Bluff, 2002

To maximize efficiency and reduce the costs associated with working at multiple project sites on an uninhabited island, work was sequenced during six weeks in July and August 2002 to support simultaneous mobilization of asbestos abatement, building demolition, and soil excavation crews. The project schedule was developed so that the property documentation required under the MOA could be accomplished without interfering with environmental cleanup activities. Field oversight ensured that removal activities were in compliance with the MOA and that mitigation measures were completed in an appropriate and timely manner. Site activities were typically underway at two or three sites simultaneously, and the project team, the landowner, and other federal agencies involved in the environmental cleanup communicated frequently. This regular communication was integral to the project's success.

Awards and Services

Jacobs' cultural resources planning coordinator, Sylvia Elliot, was on the board of directors of the Alaska Association for Historic Preservation from 1996–1998. In addition to her participation as a member of the Long Island Project Team, Ms. Elliot is currently working on three other cultural resources projects for the USACE, Alaska District: a driving guide to historic World War II structures on Amaknak and Unalaska islands; a Preservation Brief on conducting environmental cleanup activities in a National Historic Landmark; and a brochure on the World War II and post-war history of Annette Island.

Catherine M. Williams, M.A., of NLUR, a Fairbanks-based cultural resources management firm, was the field archaeologist for the Long Island project. NLUR has received numerous letters of commendation for participation in cultural resource management, public education, and archaeology projects, as well as appreciation from satisfied clients for efficient and flexible completion of professional work. NLUR is the past recipient of a USACE Contractor Safe Performance Award as part of a team led by Jacobs Engineering Group, Inc.

Wayne Crayton is the Senior NEPA Coordinator for the Environmental Resources Section in the Alaska District. He and other team members received the Secretary of Defense Productivity Excellence Award for their work on the Akutan FUDS project.

Diane K. Hanson is the senior district archaeologist for the Alaska District. She is currently the president of the Alaska Anthropological Association and the Alaska Consortium of Zooarchaeologists. She received a teaching excellence award as an adjunct professor in 2000.

Conclusion

The project team, composed of a variety of specialists including funds managers, real property and contracting specialists, scientists, engineers, archaeologists, and planners, worked closely with stakeholders to develop clearly defined milestones and complete the projects ahead of schedule and under budget. The NALEMP and FUDS projects were completed for at a savings of over \$420,000.

The team achieved clean closure of all 42 contaminated sites on Long Island while preserving the island's unique historical heritage. All goals were reached with awareness of and sensitivity to cultural resources concerns. Through sound use of innovative environmental management techniques such as the criteria matrix, the funding available from NALEMP and FUDS was maximized. Finally, the team successfully coordinated with stakeholders to achieve consensus solutions to project challenges.



Approaching Castle Bluff by helicopter