

INTEGRATED CULTURAL RESOURCES MANAGEMENT PLAN



U.S. ARMY GARRISON ALASKA



2020 - 2025

This page left intentionally blank.

**Integrated Cultural Resources Management Plan for U.S. Army Garrison Alaska,
2020-2025**

Approval

This Integrated Cultural Resources Management Plan meets the requirements for ICRMPs set forth in Department of Defense Instruction 4715.16, *Cultural Resources Program*, and Army Regulation 200-1, *Environmental Protection and Enhancement*.

For USAG Alaska:



Christopher J. Ruga
Colonel, U.S. Army
Commanding



Date

This page left intentionally blank.

Table of Contents

TABLE OF CONTENTS	I
LIST OF FIGURES	III
LIST OF TABLES.....	III
EXECUTIVE SUMMARY	IV
1 INTRODUCTION	1
1.1 ICRMP Purpose and Organization	1
1.2 Changes from the Previous ICRMP	2
1.3 Update and Implementation of the ICRMP	3
1.4 Mission	4
1.4.1 U.S. Army Alaska Mission.....	4
1.4.2 U.S. Army Garrison Alaska Mission	4
1.4.3 U.S. Army Garrison Greely Mission	5
1.5 Management and Responsibilities	5
1.6 Partnerships.....	8
1.6.1 Alaska Native Tribal Partners.....	8
1.6.2 Other Partners	8
1.7 Statutes and Regulations.....	10
1.7.1 Applicable Federal Laws	10
1.7.2 Curation of Federally Owned and Administered Archaeological Collections.....	20
1.7.3 Executive Orders, Presidential Memoranda, and DoD Issuances	21
1.7.4 Army Regulations and Policy	24
1.7.5 Standards and Guidelines.....	25
1.7.6 Overlapping Authorities.....	25
2 HISTORICAL AND GEOGRAPHIC SETTING.....	28
2.1 Infrastructure.....	28
2.1.1 Training Areas	28
2.1.2 Ranges / Courses	29
2.2 Prehistoric Context.....	29
2.3 Historic Context	34
2.3.1 Military History	36
2.4 Mission Activities, Organizations and Programs that May Affect Cultural Resources ..	39
2.4.1 Training.....	39
2.4.2 Recreation	40
2.4.3 Installation Management.....	41
2.4.4 Programs	41
2.4.5 Organizations.....	43
3 CULTURAL RESOURCES INVENTORY	44
3.1 Archaeology.....	44
3.2 Historic Buildings and Structures	48
3.3 Properties of Traditional Religious and Cultural Significance	50
3.4 Documentation of Cultural Resources.....	50
3.4.1 Historic Context Reports	50
3.4.2 Archaeology Reports	51
3.4.3 Public Outreach Publications	51
3.4.4 Building Documentation	51
4 GOALS AND OBJECTIVES.....	52
4.1 Overall Goals.....	52
4.1.1 Archaeological Resources	52
4.1.2 Sacred Sites and Traditional Cultural Properties.....	53

4.1.3	Historic Buildings, Structures, and Objects	53
4.2	Planning Objectives	53
5	MANAGEMENT PLAN.....	55
5.1	Archaeological Resource Protection Act Procedures	55
5.2	National Historic Preservation Act's Section 110 Procedures.....	55
5.2.1	Minimizing Harm to National Historic Landmarks	56
5.3	National Historic Preservation Act's Section 106 Procedures.....	57
5.3.1	Identifying Undertakings	57
5.3.2	Streamlined Undertakings.....	57
5.3.3	Defining the Area of Potential Effect	58
5.3.4	Identifying Cultural Resources	59
5.3.5	Evaluating Eligibility	60
5.3.6	Assessing Effects	62
5.3.7	Treatment of Adverse Effects.....	63
5.4	Procedures for the National Historic Landmark	66
5.5	Development of Educational Materials and Interpretation	66
5.6	Post Review and Unanticipated Discoveries	67
5.7	Emergency Actions	68
5.8	Archaeological Site Monitoring, Survey, and Evaluation Methods	69
5.8.1	Principal Investigator Qualifications	69
5.8.2	Minimum Standards.....	70
5.8.3	Five Year Work Plan	73
5.9	Paleontological Resources.....	74
5.9.1	Responsibility.....	74
5.9.2	Procedures	74
5.10	Historic Buildings Maintenance and Assessment	75
5.10.1	Current Maintenance Procedures	75
5.10.2	Future Plans for Assessment of Historic Buildings	77
5.11	Shared Public Data	78
5.12	Curation of Artifacts	79
5.13	Capacity Building for Alaska Native Tribes.....	80
5.14	Incorporating Traditional Knowledge into Cultural Resources Management.....	80
5.14.1	Identifying Traditional Knowledge	81
5.14.2	Traditional Knowledge and its Importance for Historic Properties Management	82
5.14.3	Confidentiality	82
6	IMPLEMENTING THE ICRMP	84
6.1	Cultural Resources Implementation Goals and Objectives.....	84
6.2	Reporting	84
6.3	Agreements	85
6.4	NHPA Section 106 Agreements.....	85
6.5	Organizational Enhancement, Roles, and Responsibilities.....	86
6.5.1	Cultural Resource Organization	86
6.5.2	Staffing	86
6.5.3	Qualifications	87
6.6	Coordination	87
6.6.1	Training.....	87
6.7	Outreach.....	88
6.8	Financial Management and Funding	88
6.8.1	Environmental Funding	88
6.8.2	Facilities Funding.....	89
6.8.3	Budgeting	89

6.8.4 Contracting	89
6.9 Command Support.....	90
Appendix A. Glossary of Commonly Used Terms.....	92
Appendix B. Commonly Used Acronyms.....	99
Appendix C. Archaeological Sites Inventory	101
Appendix D. Historic Buildings and Structures Inventory.....	118
Appendix E. Ladd Field NHL Nomination (Re-evaluation)	122
Appendix F. Reports on USAG Alaska-Managed Lands	147
Appendix G. Summary of National Register of Historic Places Criteria	156
Appendix H. Five-Year Plans for Site Monitoring, Survey, and Evaluation	159
Appendix I. O&M PA Streamlined Review Process Criteria.....	163
Appendix J. Government-to-Government Consultation and Coordination.....	167
Appendix K. Citations.....	177

List of Figures

Figure 1. Fort Wainwright, Fort Greely, and associated training lands.....	27
Figure 2. Ladd Field NHL and Ladd Air Force Base Cold War HD	48
Figure 3. Fort Greely Cold War Historic District.....	49
Figure 4. Planning Branch Organizational Chart	86
Figure 5. Year 1 (2019) archaeological survey plan.	160
Figure 6. Year 2 (2020) archaeological survey plan.	161
Figure 7. Year 3 (2021) archaeological survey plan.	161
Figure 8. Year 4 (2022) archaeological survey plan.	162

List of Tables

Table 1. Archaeological Districts – USAG Alaska-managed.....	101
Table 2. Archaeological Sites: Eligible or Not Yet Evaluated – USAG Alaska-managed.....	101
Table 3. Archaeological Sites: Eligible or Not Yet Evaluated – USAG Greely-managed.....	116
Table 4. Contributing resources – Ladd Field National Historic Landmark.....	118
Table 5. Contributing resources – Ladd Air Force Base Cold War Historic District	119
Table 6. Contributing resources – Fort Greely Cold War Historic District.....	120
Table 7. Individually eligible buildings and structures	121
Table 8. Five-year site monitoring plan	159
Table 9. Five-year site evaluation plan.....	162

Executive Summary

The mission of U.S. Army Garrison Alaska (USAG Alaska) is to integrate resources and deliver installation services to enable readiness of Army forces in Alaska while enhancing the quality of life for Soldiers, Families, and the community. The USAG Alaska provides training areas for active duty military personnel from all branches of service, as well as National Guard and Reserve units. Fort Wainwright—outside Fairbanks, Alaska—is home to units of the U.S. Army Alaska (USARAK) and tenant organizations including Medical Activity-Alaska (MEDDAC), the Bureau of Land Management Alaska Fire Service, Defense Commissary Agency (DeCA), Army and Air Forces Exchange Service (AAFES), Doyon Utilities, North Haven Communities, Logistics Readiness Center, and the U.S. Army Corps of Engineers (USACE).

Following a garrison restructuring, some installation support activities for U.S. Army Garrison Greely (USAG Greely) will be performed by Fort Wainwright personnel and vice versa for Donnelly Training Area activities. Fort Greely—outside Delta Junction, Alaska—is home to the Space and Missile Defense Command and tenant organizations including 49th Missile Defense Battalion, Missile Defense Agency, Cold Regions Test Center, MEDDAC, Army Materiel Command, 59th Signal Battalion, USARAK, USACE, AAFES, DeCA, North Haven Communities, Doyon Utilities, and the Logistics Readiness Center. The primary mission of the USAG Greely is to integrate resources and deliver installation services to enable the readiness of U.S. Army Space and Missile Defense Command and other mission partners while sustaining and enhancing the quality of life for Soldiers, Families, and Civilians.

Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*, specifies Army policy for cultural resources management including the development of integrated cultural resources management plans for planning purposes. The Installation Management Command (IMCOM) directs and assists its installations with Cultural Resources Management Programs consistent with AR 200-1. The Garrison Commander has direct responsibility for establishing an installation's Cultural Resources Management Program by means of a plan that successfully integrates cultural resources management within the process of achieving daily mission objectives. Additionally the Garrison Commander has responsibility for appointing, by letter, an individual to serve as the Cultural Resources Manager.

This document follows the requirements for the preparation of an Integrated Cultural Resource Management Plan (ICRMP) as defined in AR 200-1. While not a decision-making document, this plan provides the Garrison Commander and those responsible for implementing the Commander's decisions with the data needed for informed decision-making regarding the treatment of cultural resources managed by the USAG Alaska. As a result, USAG Alaska personnel involved in planning activities are the intended audience for this document. This includes, in particular, the Cultural Resources Manager who is the individual responsible for the day-to-day management of cultural resources on the USAG Alaska-managed lands.

The ICRMP contains a set of policies that will enable the USAG Alaska to meet its legal responsibilities for the management of Forts Wainwright's and Greely's cultural resources. This ICRMP applies to all lands and properties managed by the USAG Alaska, including but not limited to Main Post (Fort Wainwright), Main Post (Fort Greely), Yukon Training Area, Tanana Flats Training Area, Donnelly Training Area, Gerstle River Training Area, Black Rapids Training Area, Whistler Creek Training Area, Whittier Terminal, Seward Recreation Area, Haines Fuel Terminal, Tok Fuel Terminal, and Sears Creek Pump Station.

Included in this document is a five-year plan that outlines goals that would benefit the management of cultural resources at Forts Wainwright and Greely. These goals, listed below, should be considered as recommendations and not as requirements.

- Ensure good stewardship of historic properties by supporting our current agreements and facilitating future agreements.
- Educate and reach out to the installation community and improve understanding of cultural resources and their management.
- Maintain compliance with applicable cultural resource laws and regulations.
- Implement surveys as needed and evaluate archaeological sites and buildings coming of age in conjunction with potential mission activities and installation development.
- Monitor the condition of and maintenance needs of historic properties.
- Consult Alaska Native tribal governments with a customary and/or historical association with Army-managed lands.

[NOTE: In hopes of this remaining a living management document, ~~strikethrough~~ and red text connote edits made by the installation CRM to correct data deficiencies discovered following ICRMP signature. These have only been made when they will not result in substantive changes to policy or procedure.]

1 Introduction

Installations are required to create and implement an ICRMP according to Army Regulation (AR) 200-1. An ICRMP is intended to serve as the key planning tool and for an installation's Cultural Resources Management Program, ensuring that activities conducted as part of the installation mission address cultural resource management issues, planning and resourcing priorities, and legal compliance requirements. The ICRMP is also designed to serve as a component of the installation's overall planning, to complement other plans such as the Integrated Natural Resources Management Plan and the Real Property Master Plan, and to provide the Garrison Commander with the information necessary to make informed decisions regarding the cultural resources under his or her control. The policies, protocols, and background information presented here are designed to ensure that the installation and its decision-makers execute professionally- and legally-sound stewardship of the cultural resources. The intent is that this stewardship occur in tandem with the military mission, ensuring that installation lands remain available and in good condition for future training use and Soldier readiness.

1.1 ICRMP Purpose and Organization

The primary purpose of this ICRMP is to establish, document, and provide for review cultural resources goals, objectives, and policies that the USAG Alaska will use to manage historic properties located within the boundaries of lands under its jurisdiction. All the activities programmed for ICRMP implementation measure, maintain, protect, and enhance cultural resources and associated historic properties. It is the intent of the Department of Defense (DoD) to clearly and openly express these management ideals and actions to the public through this ICRMP. The secondary purpose of this ICRMP is to guide the USAG Alaska cultural resources managers and personnel in their decision-making regarding management of historic properties on USAG Alaska-managed lands and the implementation of proposed cultural resource projects. This document follows the recommendations for the preparation of an ICRMP as outlined in the DoD Instruction 4715.16. The ICRMP is organized as follows:

Introduction (Section 1) provides information regarding Army policy and mission, a summary of the major components of the plan, a listing of partnerships, and a brief review of cultural resources laws and regulations. Also included is a discussion of overlapping management responsibilities.

Historical and Geographic Context (Section 2) includes a description of the installation and its infrastructure. It also presents an analysis of the cultural landscape, which includes a discussion of the natural environment, an overview of the development of the installation (including historic and prehistoric contexts), its architectural resources, and historic landscape.

Cultural Resources Inventory (Section 3) provides a review of existing cultural resources including archaeological sites, paleontological sites, buildings, structures, objects, and traditional cultural properties. A summary of previous archaeological and

architectural surveys, studies, and management plans is also provided. Potential cultural resources yet to be identified are discussed as well.

Future Requirements and Goals (Section 4) describes plans for the identification and prioritization actions required to implement goals and objectives of the ICRMP.

Management Plan (Section 5) addresses the cultural resources requirements for the management of the resources described in Section 3. This includes a discussion of the roles and responsibilities of staff, internal and external coordination procedures for Army activities that may directly or indirectly impact cultural resources, and Standard Operating Procedures (SOPs) for cultural resources actions. This section also discusses public participation in the cultural resources compliance process, current public education efforts, and recommendations for future public education and outreach.

ICRMP Implementation (Section 6) describes how the USAG Alaska plans to implement the goals and objectives found within the ICRMP. Also, it describes how the ICRMP helps sustain the military mission. It also discusses the partnerships, contracts, and other organizational and funding elements important to the implementation of the ICRMP.

Appendices (A through I) have been added to supplement the report sections presented in the body of the ICRMP. These include: (A) Glossary of Commonly Used Terms; (B) Commonly Used Acronyms; (C) Archaeological Sites Inventory; (D) Historic Buildings and Structures Inventory; (E) The Ladd Field NHL Nomination (Re-evaluation); (F) Reports on USAG Alaska-managed Lands; (G) Summary of National Register of Historic Places Criteria; (H) Five-Year Plans for Site Monitoring, Survey, and Evaluation; (I) O&M PA Streamlined Review Process Criteria; (J) Government-to-Government and Consultation and Coordination; and (K) Citations.

1.2 Changes from the Previous ICRMP

Beginning in 2019, cultural resources management responsibilities for lands and properties under the stewardship of the USAG Alaska and USAG Greely will be consolidated at the USAG Alaska, utilizing personnel at both Forts Wainwright and Greely with oversight from personnel at Fort Wainwright. This ICRMP, likewise, presents consolidated management plans for both installations. Unless otherwise specifically stated, the use of *USAG Alaska* throughout this document is implied to be inclusive of USAG Greely.

The previous ICRMP for Fort Wainwright was completed in 2013. Since then, a number of new historic properties have been added or deleted. Since 2013, a re-evaluation of the Ladd Field National Historic Landmark (NHL) has been submitted to the National Park Service (NPS) with an anticipated boundary revision. Two buildings contributing to the NHL were demolished in 2014 and the southern boundary of this district has experienced infill of new construction. A correction is anticipated that will remove the contributing status of one building from the NHL, but it will be retained as contributing to

the Ladd Air Force Base Cold War Historic District. One building individually eligible for the National Register of Historic Places (National Register) was determined no longer eligible in 2016. Finally, one structure previously determined not eligible for the National Register was determined eligible based on new research in 2018. Another eligible structure, the Bailey Bridge, is slated for demolition and consultation has begun for this process.

Fifty-one archaeological sites have been evaluated for eligibility for inclusion in the National Register since 2013. Twelve of those sites were determined eligible and thirty-nine were determined not eligible. The boundaries of four existing archaeological districts were reviewed and revised to be more inclusive and facilitate a more holistic approach to management of sites in those areas. Two new districts were established. These districts, receiving concurrence from the Alaska State Historic Preservation Officer (SHPO), will be assessed to determine contributing versus non-contributing sites within each district.

A holistic plan of archaeological site monitoring, high-use area surveys, and site evaluations is included in this ICRMP. Sites determined eligible for or those yet to be determined eligible for inclusion on the National Register will be visited within a 5-year cycle, spread across all training areas. Sites visited each year will be relocated, monitored for condition, and photographed. Determinations of Eligibility (DOEs) will be done on a sampling of sites listed for that year's monitoring plan or in areas near surveys being performed for range and garrison project development. Priority will be given to selected sites based on undertakings that might potentially affect the sites. See section 5.8.3 and Appendix H for the comprehensive plan details.

A protocol for cultural resources inventory prior to forestry activity is also included in this ICRMP. It outlines when and how survey will occur in response to undertakings with the purpose of forestry management on lands previously unsurveyed.

The previous ICRMP for Fort Greely was completed in 2011.

1.3 Update and Implementation of the ICRMP

AR 200-1 directs that ICRMPs be re-evaluated periodically and updated if necessary. In certain cases involving major changes such as mission change and realignment or closure determinations, the ICRMP should be re-evaluated prior to the five-year review point to determine if it still meets mission requirements or if it should be revised. Other events, such as the adoption of a Programmatic Agreement (PA), can also necessitate the revision of portions of the ICRMP prior to scheduled reviews.

An ICRMP is considered to be implemented if an installation:

- Actively requests, receives, and uses funds for high priority projects and activities.
- Ensures that sufficient numbers of professionally-trained cultural resources management personnel are available to perform the tasks required by the ICRMP.

- Coordinates annually with all internal and external cooperating offices.
- Documents specific ICRMP action accomplishments undertaken each year.

Cultural resources requirements defined as high priority are those projects and activities required to meet mission requirements in compliance with applicable cultural resources laws and regulations.

Not all projects listed in an ICRMP are high priority. The responsibilities of implementing an ICRMP are shared among those entities that use the land and manage facilities (e.g., trainers, facility managers) as well as those who ensure compliance and provide overall program oversight.

1.4 Mission

The United States Army must maintain its capability to put overwhelming land combat power on future battlefields and defeat potential enemies. Decisive victories depend on the Army's ability to rapidly deploy, fight, sustain, and win with minimum casualties. As the DoD's premiere land force, the Army relies on land to achieve its training and testing objectives and maintain force readiness. Force readiness depends on a high quality, realistic training environment and experience. Part of realistic training is creation of the battle environment where Soldiers train with their units, coordinating their efforts. This skill must be practiced on large-scale training areas and ranges with minimal restrictions to emulate the battlefield prior to going to war.

1.4.1 U.S. Army Alaska Mission

The mission of USARAK is to provide trained and ready forces in support of worldwide unified land operations; support the U.S. Pacific Command Theater Security Cooperation Program in order to contribute to a stable and secure operational environment; and, on order, execute the Joint Force Land Component Command functions in support of Homeland Defense and Defense Support of Civil Authorities in Alaska.

The units at Fort Wainwright which USARAK commands include the 1-25th Stryker Brigade Combat Team (SBCT), Northern Warfare Training Center (NWTC), and 17th Combat Sustainment Support Battalion (CSSB). Other tenant organizations include the 1-25th Attack Reconnaissance Battalion (ARB), 1-52nd General Support Aviation Battalion (GSAB), Cold Regions Test Center (CRTC), Cold Regions Research and Engineering Laboratory (CRREL), and US Army Medical Department Activity (MEDDAC).

1.4.2 U.S. Army Garrison Alaska Mission

The USAG Alaska's mission is to integrate resources and deliver installation services to enable readiness for Army forces in Alaska while enhancing the quality of life for its Soldiers, Families, and community.

1.4.3 U.S. Army Garrison Greely Mission

The USAG Greely's mission is to integrate resources and deliver installation services to enable the readiness of U.S. Army Space and Missile Defense Command and other mission partners while sustaining and enhancing the quality of life for its Soldiers, Families, and Civilians.

1.5 Management and Responsibilities

Department of Army personnel, at all levels, must ensure that mission requirements are carried out in harmony with statutory and regulatory requirements. Failure to fulfill these requirements could result in halting or delaying ongoing or proposed mission-essential projects, training and testing actions, and could deplete limited financial and staff resources. Proponents of Army actions should coordinate with the USAG Alaska Cultural Resources Management staff early in the planning stage of projects and activities to identify potential cultural resources compliance requirements. That being said, all management activities described in this ICRMP are subject to the availability of funding.

AR 200-1, *Environmental Protection and Enhancement*, outlines responsibilities with regard to cultural resources legislation for installations, Army commands, and supporting organizations. Specific responsibilities of the USAG Alaska Cultural Resources Program include:

- Develop, approve, and maintain an ICRMP.
- Inventory and evaluate cultural resources located on properties under USAG Alaska control and ownership.
- Protect and maintain eligible resources and promote their rehabilitation and adaptive reuse;
- Integrate preservation requirements with planning and management activities of the military mission.
- Cooperate with federal, state, and local agencies, Alaska Native tribes, and the public in cultural resources management.

Deputy Assistant Secretary of the Army (Environment, Safety and Occupational Health) (DASA [ESOH]): The DASA (ESOH) is the Army's Federal Preservation Officer (FPO) pursuant to designation by the Assistant Secretary of the Army (Installations, Logistics, and Environment) on behalf of the Secretary of the Army. As the Federal Preservation Officer, the DASA (ESOH) is responsible for oversight of the Army's activities under the National Historic Preservation Act (NHPA).

Assistant Chief of Staff for Installation Management (ACSIM): ACSIM is the Army Staff proponent for the military Cultural Resources Program.

Headquarters IMCOM and Army Environmental Command (AEC): The Commander, AEC, under the direction of the HQ IMCOM Commanding General, is responsible for a

broad range of technical support and oversight services for execution of the Army's Cultural Resources Program worldwide. AEC supports HQ IMCOM and installation cultural resources compliance activities and programs. HQ IMCOM for technical oversight and review and approval of agreements within the Cultural Resources Programs, which includes Section 106 PAs and Memorandum of Agreements (MOAs), Native American Graves Protection and Repatriation Act (the NAGPRA) Comprehensive Agreements and Plans of Action, other cultural resources agreements and actions, and National Register nominations.

Installation Management Command (IMCOM): IMCOM Directorates will direct and assist their installations in the conduct of installation Cultural Resources Programs. Each IMCOM Directorate will:

- Ensure that cultural resources responsibilities are implemented across all installations.
- Monitor installation Cultural Resources Management Programs.
- Review cultural resources documents and agreements, and forward to HQ IMCOM for review.
- Implement HQDA cultural resources management policy and guidelines in AR 200-1 at their respective installations.
-

Garrison Commander: As the installation commander and land manager at the localized level, the Garrison Commander will:

- Establish an installation Cultural Resources Program.
- Designate an installation CRM to coordinate the installation's Cultural Resources Program. The Garrison Commander will ensure that the CRM has appropriate knowledge, skills, and professional training and education to carry out installation cultural resources management responsibilities.
- Establish a government-to-government relationship with federally-recognized Indian tribes as needed.
- Ensure that cultural resources management is integrated with installation training and testing activities, master planning (AR 210-20), environmental impact analysis (AR 200-1), natural resources and endangered species management planning and programming to include Integrated Natural Resources Management Plans (AR 200-1), and the Integrated Training Area Management Program (ITAM).
- Serve as the Agency Official as defined in 36 CFR § 800 with responsibility for installation compliance with the NHPA.
- Serve as the Federal Agency Official as defined in 43 CFR § 10 with responsibility for installation compliance with the NAGPRA.
- Serve as the Federal Land Manager as defined in 32 CFR § 229 with responsibility for installation compliance with Archaeological Resources Protection Act (the ARPA). The ARPA permits are issued upon approval of the Garrison Commander in accordance with ER 405-1-12 and AR 405-80 and under a short term lease with the DPW Real Estate Branch.

- Serve as the Federal Agency Official as defined in 36 CFR § 79 with management authority over archaeological collections and associated records.
- Sign the NHPA PAs and MOAs, and the NAGPRA Comprehensive Agreements and Plans of Action, and other installation cultural resources agreements after IMCOM and HQDA comments have been addressed.

Cultural Resources Manager (CRM): The DPW is tasked with the management of natural and cultural resources through the Resource Planning Branch of the Environmental Division of DPW. Historic properties management is coordinated through the Cultural Resources Section of the Resource Planning Branch. The CRM is appointed by the Garrison Commander and reports to the Resource Planning Branch Chief. The Resource Planning Branch Chief reports to the Environmental Division Chief, who reports to the Director of DPW. All personnel in the Cultural Resources Section report to the CRM.

Unless otherwise stipulated by the Garrison Commander, the CRM will be the designated representative and will implement this ICRMP, which includes reviewing proposed projects, determining undertakings, and making decisions regarding DOEs in consideration of historic properties. The CRM is also responsible for coordinating with the public, the SHPO, the Advisory Council on Historic Preservation (ACHP), and other consulting parties. As the representative of the Garrison Commander, the CRM is the Point of Contact for all cultural resources concerns and is the initiating party for consultation with interested parties.

Native Liaison: “DoD American Indian/Alaska Native Policy: Alaska Implementation Guidance” encourages the creation of a Native Liaison Officer position to carry out the policy and Alaska guidance on behalf of the installation. The CRM or personnel within the Cultural Resources Section will serve as the Native Liaison for the USAG Alaska. The capacity of the liaison includes serving as topical SME and advisor to garrison command, having an authority to speak on the Army’s behalf and thus more aptly fulfill the government-to-government relationship. While duties include, but are not limited to the following, the Native Liaison will:

- Serve as the established USAG Alaska Point of Contact for tribes.
- Maintain a list of federally-recognized tribal governments in Alaska with current contact information for heads of each tribal government and secondary contacts.
- Maintain a list of all tribal ordinances or regulations involving consultation protocol, as well as any MOA or Comprehensive Agreement in effect between USAG Alaska and individual tribes and tribal organizations.
- Draft correspondence to tribes for signature by the Garrison Commander when initiating consultation or at Changes of Command.
- Maintain an administrative record of contact with each relevant tribe.
- Engage in efforts to improve and enhance government-to-government relations with the tribes through regular and open dialogue and partnering agreements (as authorized).

1.6 Partnerships

The USAG Alaska recognizes the contributions that non-Army interested parties can make to the management of historic properties. To that end, the USAG Alaska's goal is to develop partnerships for the completion of collaborative work that accomplishes the USAG Alaska's goal for stewardship to the most professional standard available in a fiscally responsible manner. Partnerships include those with Alaska Native tribes, the SHPO and other state agencies, the NPS, Bureau of Land Management (BLM), and universities.

1.6.1 Alaska Native Tribal Partners

While any federally-recognized tribe will be offered government-to-government interaction if they feel their tribal rights or resources are potentially affected by Army undertakings or actions, there are seven Alaska Native tribal governments that are regularly consulted. These federally-recognized tribes have a historic relationship with the USAG Alaska and have a customary interest in the lands managed by the USAG Alaska.

The primary consulting tribal governments with whom USAG Alaska enjoys a government-to-government relationship include the Chilkoot Indian Association (Haines), Village of Dot Lake, Healy Lake Village, Nenana Native Association, Northway Village, Native Village of Tanacross, and Native Village of Tetlin. USAG Greely additionally has relations with Gulkana Village.

Additionally, interaction with Alaska Native organizations also take place for the purposes of stakeholder input, mutually-beneficial relationship building, or other purposes. These organizations are currently identified as Doyon, Ltd., Tanana Chiefs Conference, and the Fairbanks Native Association.

1.6.2 Other Partners

Other partnerships with professional or municipal entities have been historically developed for mutual benefit. Currently the USAG Alaska has such relationships with the Alaska Historical Commission, Fairbanks North Star Borough Historic Preservation Commission, Festival Fairbanks, Interior and Arctic Alaska Aeronautical Foundation, Tanana-Yukon Historical Society, and University of Alaska Museum of the North. The USAG Greely has an additional relationship with the Delta Chamber of Commerce. Other partners worthy of further description include:

Alaska State Historic Preservation Officer (SHPO): The SHPO, located in the Office of History and Archaeology (OHA) and part of the State of Alaska Department of Natural Resources, is responsible for carrying out the National Register Programs in Alaska, statewide historic preservation planning, statewide survey and inventory of historic properties, and administering the federal historic preservation grants-in-aid program. These programs were established under the NHPA and many of the programs are

conducted in partnership with the U.S. Department of the Interior and the NPS Alaska Region. With these programs as the tools, the SHPO works with the USAG Alaska, interested tribal governments, and concerned citizens to insure that the USAG Alaska's National Register-eligible prehistoric and historic properties are taken into account when planning activities that potentially could affect them.

Advisory Council on Historic Preservation (ACHP): The ACHP is the independent federal agency established by the NHPA to comment on federal undertakings and to encourage federal agencies to consider historic properties in their project planning. The ACHP's regulation, titled "Protection of Historic Properties" (36 CFR § 800), govern the Section 106 review process. The ACHP contributes to the USAG Alaska's historic property management by participating, as needed, in consultation of undertakings and in the development of agreement documents. The ACHP is also the arbitrator of disputes between the agency and the SHPO.

National Park Service (NPS): The NPS, acting for the Secretary of the Interior, administers both the NHL and National Register programs. The NPS National Register of Historic Places (NRHP) is the nation's official list of cultural properties worthy of preservation. It includes districts, sites, buildings, structures, and object of local, state, or national significance. NHLs are nationally significant historic places designated as such by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. The NPS provides technical preservation advice to and consults during Section 106 undertakings with stewards of NHLs.

Bureau of Land Management (BLM): Some of the Army-managed lands within USAG Alaska training areas are in land withdrawal status from the BLM. Because of this status, the USAG Alaska and BLM have shared management responsibilities over training areas outside of the cantonment area. A MOA between BLM and the USAG Alaska outlines how those responsibilities will be divided. The USAG Alaska has the lead in meeting Section 106 obligations for its own and third party undertakings. The USAG Alaska also issues permits to third parties for archaeological activities on Army and withdrawn lands. The USAG Alaska will provide BLM with copies of Section 106 reports of archaeological activities conducted on withdrawn lands. Consultation and communication are standard management practices between the agencies.

Additionally, there are partner entities on the installations which steward existing or potential historic properties that were once under Army custody and may be again in the future. Doyon Utilities is the partner for privatized heat and power delivery. Under privatization, facilities and structures were transferred out of the garrisons' jurisdiction. North Haven Communities is the housing privatization partner for Forts Wainwright and Greely and have taken possession of many buildings at both locations. One historic property, Building 1048 on Fort Wainwright, is under the stewardship of this partner and is treated according to the Secretary of the Interior standards in consultation with the CRM.

1.7 Statutes and Regulations

A large body of federal legislation, regulations, and executive directives exists that outlines the responsibilities of federal agencies for preservation of cultural resources and provides procedural guidelines for the management of federally owned or controlled properties. The USAG Alaska is responsible for managing cultural resources in accordance with relevant federal laws and regulations.

Among the federal laws of primary importance to the USAG Alaska are the Antiquities Act, the NHPA, the National Environmental Policy Act (NEPA), the ARPA, and the NAGPRA. Accompanying Army regulations, particularly AR 200-1, prescribe management responsibilities and standards of treatment for historic properties.

1.7.1 Applicable Federal Laws

Antiquities Act : The Antiquities Act of 1906 (54 USC § 3203) authorizes the President to designate historic and natural resources located on federally owned or controlled land as National Monuments. The act provides protection to prehistoric and historic ruins and objects by providing criminal sanctions against excavation, injury, or destruction of those resources. The Departments of the Interior, Agriculture, and Defense can issue permits to recognized educational and scientific institutions for archaeological investigations. Permits are issued by the USAG Alaska in consultation with the DPW Real Estate Branch under a short term license and with the approval of the Garrison Commander.

National Historic Preservation Act (the NHPA): The NHPA of 1966, as amended through 2004, is the cornerstone of federal cultural resources management law. It is the responsibility of the federal government to be a leader in preservation, stating that government agencies should "provide leadership in the preservation of the prehistoric and historic properties of the United States and ... administer federally owned resources in the spirit of stewardship for the inspiration and benefit of present and future generations" [the NHPA, § 2(2) - 2(3)]. The NHPA establishes a national historic preservation program that includes elements for identification, evaluation, and protection of cultural resources. It presents a policy of supporting and encouraging the conservation of historic properties [defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register, including artifacts, records, and material remains related to such a property or resource" [54 USC § 300101]] by directing federal agencies to assume responsibility for those cultural resources under federal jurisdiction.

The act authorizes the Secretary of the Interior to expand and maintain the National Register, which is composed of historic properties—buildings, sites, structures, and objects—determined significant in American history, architecture, archaeology, engineering, and culture. The act directs the Secretary of the Interior to set forth procedures for nominating historic properties to the National Register by establishing criteria for the determination of those cultural resources that are eligible for inclusion.

The term “eligible for inclusion in the National Register” encompasses those properties formally determined as eligible and all other properties that meet the National Register criteria as defined by 36 CFR § 60.4 [ie. “historic properties”]. The Department of the Interior has issued guidelines [36 CFR § 60] that describe identification and evaluation procedures for federal agencies to request DOEs [36 CFR § 63].

The NHPA further directs the Secretary of the Interior to establish a SHPO, who directs and approves state preservation programs, and who, with the cooperation of private organizations, local governments, and state and federal agencies, identifies and inventories cultural resources within the state and ensures that eligible properties are protected. Through the act, a National Historic Preservation Fund and a grant program authorize funds to the states for historic preservation projects and to individuals for the preservation of historic properties. The NHPA authorized the establishment of the ACHP, which is to act as an independent federal agency to advise the President, Congress, and other federal agencies on historic preservation matters; to review the policies and programs of federal agencies; and to inform and educate federal agencies on matters relating to historic preservation.

Of particular importance to military installations are Section 106 and Section 110 of the NHPA. Section 106 requires federal agencies to consider effects of undertakings on resources listed in or eligible for inclusion in the National Register. Section 110, part of a 1980 amendment, requires federal agencies to institute programs to identify, evaluate, and nominate National Register-eligible cultural resources under their care. Compliance with preservation requirements on military lands is largely compliance with these sections of the NHPA. Numerous federal regulations, orders, and instructions elaborate upon and clarify these provisions of the NHPA and the compliance process.

PAs and MOAs are executed pursuant to the NHPA Section 106 and 36 CFR § 800 and are compliance agreements that set forth how the USAG Alaska will avoid, minimize, or mitigate adverse effects to historic properties. Section 106 PAs that address and define ongoing installation-wide undertakings associated with mission activities and their effects on historic properties over a five-year programming and budgeting cycle or longer are encouraged because they can streamline the NHPA compliance process and serve as a program management tool. Any management procedures and determinations provided in PAs and MOAs should be integrated into the ICRMP. However, the NHPA PAs and MOAs will not refer to or implement an ICRMP.

Section 106 (54 USC § 306108) of the NHPA ensures that cultural resources are properly considered in the planning stage of any federal agency activity. Federal agencies are required to consider the effects of their undertakings on any properties eligible for inclusion or listed on the National Register during the planning stage and to provide the ACHP an opportunity to comment. This process is detailed in implementing regulation 36 CFR § 800 (*Protection of Historic Properties*). An undertaking is defined as a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal

permit, license, or approval; and those subject to state or local regulation administered pursuant to a delegation or approval by a federal agency.

Failure to take the effects of an undertaking on historic properties into account in accordance with the NHPA Section 106 and 36 CFR § 800 can result in formal notification from the ACHP to the Secretary of the Army of foreclosure of ACHP's opportunity to comment on the undertaking pursuant to the NHPA. A notice of foreclosure can be used by litigants against the Army in a manner that can halt or delay critical mission activities.

The USAG Alaska will ensure that the efforts to identify, evaluate, and treat historic properties follow the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* and are conducted under the supervision of personnel who meet the applicable professional qualifications standards set forth in 36 CFR § 61, Appendix A. Disagreements between the Garrison Commander and SHPO regarding the eligibility of a property for listing in the National Register will be resolved through the procedures at 36 CFR § 63.2(d).

Section 106 does not require that an undertaking be stopped, but that reasonable efforts must be made to minimize harm to eligible properties. The reissued 36 CFR § 800 regulation (effective August 5, 2004) provides for increased involvement with additional consulting parties. These consulting parties include the SHPO, the Tribal Historic Preservation Officer when applicable, Native American tribes, local governments, applicants for federal permits or licenses, and the public, including individuals and organizations which have a demonstrated interest in the outcome of any undertaking (36 CFR § 800.2(c)). Further discussion of the involvement of consulting parties in the Section 106 process can be found in 36 CFR § 800.3 - 36 CFR § 800.7, 36 CFR § 800.10, and 36 CFR § 800.12.

Section 110 of the NHPA states that the federal agency must assume responsibility for the preservation of historic properties that are owned or controlled by the agency and that the federal agency should use, to the maximum extent possible, historic structures that are available. Section 110 reinforces the responsibilities of the federal agency to inventory, evaluate, and preserve historic properties. It is the responsibility of the agency to establish a program to locate, inventory, and nominate to the Secretary of the Interior all cultural resources that appear to qualify for inclusion in the National Register. Each agency is required to ensure that no potentially National Register eligible historic property is inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly. If federal actions will substantially alter or destroy a National Register-eligible property, sufficient time and effort must be expended to properly record the property. Section 110 also dictates that planning and actions necessary to minimize harm to NHLs will be undertaken when an undertaking may adversely affect such properties.

Section 110 of the NHPA imposes specific responsibilities upon the USAG Alaska regarding historic preservation. In accordance with Section 110 (a) (1), the affirmative

preservation responsibilities in Section 110 must be undertaken in a manner consistent with the installation's mission. Such responsibilities include but are not limited to:

- Establish a historic preservation program to include the identification, evaluation and nomination of historic properties to the National Register in consultation with the ACHP, SHPO, local governments, Alaska Native tribes, and the interested public as appropriate.
- Prior to acquiring, constructing, or leasing buildings, use available historic properties to the maximum extent feasible.
- Document historic properties that will be altered or destroyed as a result of Army action. Such actions must be reviewed in accordance with the NHPA Section 106.
- In transferring Army historic properties, ensure that the significant historic values of the property are appropriately preserved.
- The Secretary of the Army must document decisions to proceed with Army undertakings that adversely affect historic properties when the Garrison Commander has been unable to reach agreement through execution of a MOA or PA with the ACHP and SHPO.

Section 111 of the NHPA complements the directives of Section 110 by addressing the responsibilities of a federal agency concerning adaptive use, lease, exchange, or management of federal historic properties. It requires Garrison Commanders, to the extent practicable, to implement adaptive uses for historic properties that are not needed for current or projected agency purposes. After consultation with the ACHP, agencies may lease or exchange historic properties if the action is compatible with preservation.

Section 112 of the NHPA requires that all research, preservation, and protection activities be conducted by persons meeting professional standards developed by the Secretary of the Interior, including both agency and contractor personnel. Personnel responsible for the management of historic properties are required to meet the Secretary of the Interior's standards. All data produced by research is to be maintained permanently in appropriate databases.

Section 304 of the NHPA authorizes the head of a federal agency to withhold from public disclosure any information about the location, character, or ownership of a historic property if that disclosure might cause invasion of privacy, might cause harm to the resource, or might impede the use of a traditional religious site by practitioners. Only a Freedom of Information Act filing can make such information available.

National Environmental Policy Act (NEPA): NEPA of 1969 (42 USC § 4321) establishes a national policy that encourages productive and enjoyable harmony between us and our environment, to promote efforts that will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to enrich the understanding of the ecological systems and natural resources important to the nation. Under NEPA, federal agencies are required to preserve important historic, cultural, and natural aspects of our national heritage. The act

requires all federal agencies to prepare a document, most commonly a Record of Environmental Consideration (REC) or an Environmental Assessment (EA), which assesses the potential impacts of any proposed action on the environment. If impacts are judged potentially significant, an Environmental Impact Statement (EIS) must be prepared. An EIS identifies any unavoidable adverse environmental effects, as well as alternatives to the proposed action, prior to its implementation. The EIS will be prepared as early in the planning process as possible and will accompany the action's proposal through the agency review process. The NEPA's implementation regulations (40 CFR § 1500-1508) clarify that the act in no way directs, replaces, or supersedes the NHPA. Substitution of the NEPA process has been identified as an alternative process for consideration of impacts to historic properties and is procedurally defined in 36 CFR § 800.8.

Impact assessments under NEPA must consider the effects of proposed federal actions on cultural resources and the effects on American Indian tribes, Alaska Natives, and other ethnic and social communities to whom the cultural resources may have importance. The information needed to make such impact assessments may be acquired from information developed as a result of compliance with cultural resources statutes, regulations and executive orders.

Archaeological Resources Protection Act (the ARPA): The ARPA of 1979 (16 USC § 470) establishes that archaeological resources on public lands are part of the nation's heritage and should be preserved for the benefit of the American people. Unauthorized excavation, removal, damage, alteration, or defacement of archaeological resources on public lands is prohibited. The ARPA sets forth criminal and civil penalties for such violations. The act requires a permit for any excavation or removal of archaeological resources from public lands that is not sponsored by the federal agency. Such excavations must be of a scientific nature and must be conducted by qualified applicants. Individuals should comply with the *Secretary of the Interior's Professional Qualifications Standards*. All archaeological resources removed from public lands under the permit remain the property of the federal government.

The permit-granting authority usually belongs to the land manager responsible for the property. Permits are issued by the USAG Alaska in consultation with the DPW Real Estate Branch under a short term license and with the approval of the Garrison Commander. Although permits are not required for work contracted by the federal agency, a permit might be required for work conducted in investigations related to the NAGPRA (e.g., recovery of Native American human remains from a vandalized site). Acquiring a permit under the ARPA regulations does not constitute compliance with Section 106 of the NHPA.

Federal agencies may withhold any information pertaining to the location of archaeological sites if the agency determines that disclosing such information would put the resource at risk (Section 304 of the NHPA). This procedure, by itself, provides limited protection of such information. The use of Section 304 of the NHPA and the ARPA to exclude the release of sensitive information (on all archaeological sites

National Register eligible, National Register not evaluated, archaeological sites with a the NAGPRA component, and sacred sites) is the most effective procedural strategy (32 CFR § 800 229.18(a)(1-2)).

The act's implementing regulations for the DoD (32 CFR § 229) specify that protected resources must be at least 100 years old and of archaeological interest. Rocks and minerals, coins, and bullets are excluded from protection.

The Antiquities Act and the ARPA prohibit the excavation, collection, removal, and disturbance of archaeological resources (as defined by the ARPA) and objects of antiquity (as referenced in the Antiquities Act) on federally owned Army property without an ARPA permit. Violation of the ARPA may result in the assessment of civil or criminal penalties and forfeiture of vehicles and equipment that were used in connection with the violation.

The use of metal detectors to locate archaeological resources is prohibited on Army installations except when used by Army personnel, contractors, or permittees in association with official cultural resources management activities or pursuant to a permit issued under the ARPA.

The ARPA permits for archaeological investigations that may result in the excavation or removal of Native American human remains and other cultural items as defined in the NAGPRA, or in the excavation of archaeological resources that are of religious or cultural importance to federally-recognized Indian tribes, will be issued in accordance with AR 405-80. The USAG Alaska will issue the permit after the Garrison Commander conducts consultation in accordance with 43 CFR § 10.5 and 32 CFR § 229.7 with the culturally affiliated tribes. The Garrison Commander provides the USACE District with approval to issue the permit by means of a Report of Availability prepared after necessary consultation and compliance actions have been met. The ARPA permits will provide for the disposition of the NAGPRA cultural items in accordance with the NAGPRA subsections 3(a) and (b) and 43 CFR § 10. The Garrison Commander will ensure that documentation of consultation with culturally affiliated tribes is prepared and maintained as part of the record of each such permit.

The USAG Alaska will ensure that the ARPA permits:

- Comply with the requirements of 32 CFR § 229 and 43 CFR § 10.
- Require that any interests which federally-recognized tribes may have in the permitted activity are addressed in a manner consistent with the requirements of the NHPA and the NAGPRA prior to issuance of the permit.
- Require permitted activities be performed according to applicable professional standards of the Secretary of Interior.
- Require that excavated archaeological artifacts and associated records are permanently curated in a curation facility that meets the requirements of 36 CFR § 79.

Archaeological resources, objects of antiquity, and significant scientific data from federal installations belong to the installation, except where the NAGPRA requires repatriation to a

lineal descendant or tribe. Archaeological resources, objects of antiquity, and significant scientific data from non-federal land belong to the state, territory, or land owner. Such resources from lands used by the Army but for which fee title is held by another agency are the property of the agency designated as the land manager in the land use instrument (e.g., Public Land Order, Special Use Permit, etc.). Garrison Commanders should ensure that land use instruments allowing for military use are reviewed to determine proper roles and responsibilities.

USAG Alaska staff or contractors carrying out official duties associated with the management of archaeological resources who meet the professional qualifications and whose investigations meet the requirements of 32 CFR § 229.8 are not required to obtain a permit under the ARPA or the Antiquities Act for the investigation of archaeological resources on a federally owned or controlled installation, including situations where cultural items as defined by the NAGPRA may be excavated. However, in situations where the NAGPRA cultural items or the NHPA historic properties may be encountered during intentional excavation of archaeological resources, the requirements of the NAGPRA and 43 CFR § 10, and the NHPA and 36 CFR § 800 must be met prior to such archaeological excavations.

The Garrison Commander will ensure that Military Police, installation legal staff, the installation Public Affairs Office, and the Fish, Game, and Recreation Management staff are familiar with the requirements and applicable civil and criminal penalties under the ARPA. Also, in accordance with the ARPA Section 9, the Garrison Commander may withhold information concerning the nature and location of archaeological resources from the public under subchapter II of Chapter 5 of Title 5 of the United States Code or under any other provision of law.

Paleontological Resources Preservation Act (the PRPA): The PRPA of 2009 (16 USC § 470) is designed to preserve, manage and protect paleontological resources on federally managed lands. The PRPA applies to lands managed by the BLM and the United States Department of Agriculture (USDA) Forestry Division under 2015 USDA regulations (43 CFR § 291) and a 2016 proposed rule in the Federal Register which is to be finalized and published in 2019 (Federal Register Vol. 81, No. 235). This law addresses the management, collection, and curation of paleontological resources from federal land using scientific principles and expertise, including collection in accordance with permits, curation in an approved repository, and maintenance of confidentiality of specific locality data (43 CFR § 291). The act authorizes civil and criminal penalties for illegal collecting, damaging, otherwise altering or defacing, or for selling paleontological resources (43 CFR § 291.30 and 291.34).

The permit-granting authority usually belongs to the land manager responsible for the property. Permits are issued by the USAG Alaska in consultation with DPW Real Estate Branch under a short term license and with the approval of the Garrison Commander. Permits are not required for work contracted by the federal agency.

Paleontological resources are defined as any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth (43 CFR § 291.5).

Federal agencies may withhold any information pertaining to the location of paleontological sites if the agency determines that disclosing such information would put the resource at risk (43 CFR § 291.6).

The PRPA prohibits the excavation, collection, removal, and disturbance of paleontological resources on federally owned property without a permit (43 CFR § 291.13). Violation of the PRPA may result in the assessment of civil or criminal penalties (43 CFR § 291.30 through 291.39).

The USAG Alaska will ensure that the PRPA permits:

- Comply with the requirements of 43 CFR § 291.5.
- Require permitted activities be performed by qualified personnel with a graduate degree in paleontology or related field, experience in supervising paleontological fieldwork and in the analysis and reporting of paleontological finds (43 CFR § 291.15).
- Require that permitted activities are conducted for the purpose of furthering paleontological knowledge or for public education, is consistent with Federal land management plans, and will not threaten significant natural or cultural resources (43 CFR § 291.13).
- Require that the excavated paleontological specimen collection and associated records are permanently curated in a curation facility that meets the requirements of 43 CFR § 23.

Paleontological resources and significant scientific data from federal installations belong to the installation. Archaeological resources and significant scientific data from non-federal land belong to the state, territory, or land owner. Such resources from lands used by the Army but for which fee title is held by another agency are the property of the agency designated as the land manager in the land use instrument (e.g., Public Land Order, Special Use Permit, etc.). Garrison Commanders should ensure that land use instruments allowing for military use are reviewed to determine proper roles and responsibilities.

USAG Alaska staff or contractors carrying out official duties associated with the management of archaeological resources who meet the professional qualifications and whose investigations meet the requirements of 43 CFR § 291.13 are not required to obtain a permit under the PRPA for the investigation of paleontological resources on a federally owned or controlled installation.

The Garrison Commander will ensure that Military Police, installation legal staff, the installation Public Affairs Office, and the Fish, Game, and Recreation Management staff are familiar with the requirements and applicable civil and criminal penalties under the PRPA. Also, in accordance with the PRPA, the Garrison Commander may withhold information concerning the nature and location of paleontological resources from the public

under subchapter II of Chapter 5 of Title 5 of the United States Code or under any other provision of law.

Native American Graves Protection and Repatriation Act (the NAGPRA): The purpose of the NAGPRA of 1990 (25 USC § 3001-13) is to set forth the rights of Native American tribal groups and Native Hawaiian organizations with respect to ownership of human remains, funerary objects, sacred objects, and objects of cultural patrimony with which they can demonstrate lineal descent or cultural affiliation. The act protects Native American burial sites and controls the removal of human remains, funerary objects, sacred objects, and objects of cultural patrimony on federal, Native American, or Native Hawaiian lands during planned or unanticipated excavations. The NAGPRA requires that federal agencies and museums receiving federal funds inventory holdings for such remains and objects, and work with the tribal groups in a consultation process to reach agreements on the repatriation or other disposition of the remains and objects.

The stricter requirements of the NAGPRA should be implemented in addition to the Section 106 requirements when an undertaking has the possibility of impacting historic properties important to Alaska Native communities; however, both are overlapping at times and need coordinating efforts. The NAGPRA gives individuals and certain groups considerable decision-making authority in the excavation, removal, and repatriation of Native American cultural items and burials. Excavation of Native American cultural items and consultation with the appropriate federally-recognized Native American tribal groups should be undertaken as appropriate to the NAGPRA legislation. Guidelines for procedures to follow after unexpected discovery of Native American human remains are set forth in implementing regulations of 43 CFR § 10.4-6.

Through the NAGPRA, federal land managers have the responsibility to identify ethnic/cultural affiliation of human remains and proper ownership of associated funerary items, sacred objects, or objects of cultural patrimony and to ensure the rightful disposition of these items (defined in Section 2 of the NAGPRA) that are in federal possession or control. The NAGPRA requires that certain procedures be followed when there is an intentional excavation of or an inadvertent discovery of human remains, funerary items, sacred objects or other objects of cultural patrimony. The Garrison Commander will ensure compliance with the NAGPRA (23 USC § 3002) and its implementing regulation (43 CFR § 10).

The USAG Alaska may enter into Comprehensive Agreements with federally-recognized tribes for the purposes of compliance with the NAGPRA and 43 CFR § 10. Comprehensive Agreements should establish responsibilities and address all USAG Alaska land management activities that could result in the intentional excavation or inadvertent discovery of human remains, funerary objects, sacred objects, and objects of cultural patrimony, establish standard consultation procedures, and provide for the determination of custody, treatment, and disposition of human remains and the items listed above. The USAG Alaska has consulted with its relevant consulting tribes concerning the NAGPRA procedures.

Absent a Comprehensive Agreement, the USAG Alaska will *take reasonable steps to determine whether a planned activity could result in the intentional excavation or inadvertent discovery of human remains, funerary/sacred objects or items of cultural patrimony* from federally-owned or controlled USAG Alaska-managed lands in accordance with 43 CFR § 10.3(c)(1). When it is determined that human remains or such items may be encountered and, prior to issuing approval to proceed with the activity, the Garrison Commander will carry out the consultation procedures and planning requirements at 43 CFR § 10.3 and 10.5. Following consultation per 43 CFR § 10.5 as part of the intentional excavation or inadvertent discovery of human remains or items listed above, a written Plan of Action must be prepared in accordance with the 43 CFR § 10.5(e). Such procedures and actions should be coordinated with the requirements of the NHPA and the ARPA when such excavations or discoveries may involve historic properties and/or archaeological resources.

If an inadvertent discovery of human remains, funerary or sacred objects or other items of cultural patrimony occurs in connection with an ongoing activity on the installation and there is no Comprehensive Agreement in effect that sets forth agreed upon procedures for such instances, then the USAG Alaska must comply with 43 CFR § 10.4(a-d). Such compliance measures include but are not limited to notifications, cessation of the activity for 30 days in the area of the discovery, protection of the discovery, consultation with tribes affiliated with the discovery in accordance with 43 CFR § 10.5 and preparation of a written Plan of Action. The USAG Alaska must ensure that all authorizations to carry out activities on federally-owned or controlled installation lands, including leases and permits, include a requirement for the holder of the authorization to notify the commander immediately upon the inadvertent discovery of cultural items and to protect such discoveries until applicable compliance procedures are satisfied.

The USAG Alaska must ensure that intentional excavation and response to any inadvertent discovery of the NAGPRA human remains, funerary objects, sacred objects, and objects of cultural patrimony are carried out in compliance with all applicable statutory and regulatory requirements of the NAGPRA, the ARPA, and the NHPA. Each statute mandates compliance with independent requirements. Compliance with one statutory requirement, therefore, may not satisfy other applicable requirements.

Inventory and repatriation of human remains, funerary objects, sacred objects, and objects of cultural patrimony that are in existing collections under Army possession or control will occur in accordance with the NAGPRA Sections 5, 6, and 7 and 43 CFR § 10. In instances where there is a dispute as to the ownership of human remains, funerary objects, sacred objects, and objects of cultural patrimony, the installation will safeguard the cultural items until the dispute is resolved in accordance with the NAGPRA Section 7(e). The Garrison Commander will notify the IMCOM and HQDA (AEC) in the event of a dispute as to ownership of cultural items. All activities carried out to comply with the NAGPRA and 43 CFR § 10 will only occur with federally-recognized tribes and lineal descendants as defined and provided for by the NAGPRA.

American Indian Religious Freedom Act (the AIRFA): The American Indian Religious Freedom Act of 1978 (42 USC § 1996) states that it is the policy of the United States to “protect and preserve for American Indians their inherent right of freedom to exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.” The provisions of the AIRFA guarantee access to traditional sites on federal lands and noninterference with religious practices. Consultation under the AIRFA with Native American groups can simultaneously satisfy the requirements of NEPA as well.

1.7.2 Curation of Federally Owned and Administered Archaeological Collections

The USAG Alaska ensures that all “collections,” as defined in 36 CFR § 79.4 (a), are processed, maintained, and curated in accordance with the requirements of 36 CFR § 79. This applies to collections recovered under the NHPA, the ARPA, the Antiquities Act, Reservoir Salvage Act (as expanded/amended by the Archaeological Recovery Act and the Archaeological and Historic Preservation Act), and the PRPA. If, in the future, the USAG Alaska possesses the NAGPRA cultural items and human remains, control of the items will be disposed of in a manner consistent with the requirements of the NAGPRA and 43 CFR § 10.

The USAG Alaska archaeological collections may be processed, maintained, and curated on and by the installation, by another federal agency, state agency, or other outside institution or non-governmental organization, in cooperative repositories maintained by or on behalf of multiple agencies, or in other facilities, under contract, Cooperative Agreement (CA), or other formal funding and administrative arrangement provided the standards of 36 CFR § 79 are met. The USAG Alaska has agreement with the University of Alaska Fairbanks (UAF) through an Intergovernmental Support Agreement (IGSA) for maintenance and care of these collections by the University of Alaska Museum of the North (UAMN) which meets the requirements established in 36 CFR § 79.

The USAG Alaska will establish procedures in the installation ICRMP to minimize the amount of archaeological “material remains” (as defined in 36 CFR § 79.4(a) (1)) that are collected during archaeological inventory and permanently curated. Such procedures will be integrated into any contracts or CAs for such activities and will serve to reduce the long-term costs associated with archaeological materials curation requirements. Such procedures will recognize that not all archaeological material remains recovered from fieldwork need be accessioned into the installation collection and permanently curated. Archaeological material remains recovered during field inventory and site identification efforts should be analyzed and recorded and left in their primary context. Artifacts that cannot be left in primary context or are recovered from more extensive excavations, such as site evaluations for National Register eligibility, or from data recovery excavations (mitigation), will be permanently accessioned into the installation collection. The preservation and maintenance guidelines for collections of prehistoric and historic material remains and records recovered from federal or federally assisted programs that are in the care of the federal government are set forth in *Curation of Federally Owned*

and Administered Archaeological Collections [36 CFR § 79]. The NPS has established definitions, standards, procedures, and guidelines to be followed by federal agencies in preserving prehistoric and historic remains.

Approximately 65 cubic feet of prehistoric and historic artifacts and associated documentation related to archaeological sites located at Fort Wainwright, Fort Greely, and associated training lands are currently housed at the UAMN. The artifacts are chiefly prehistoric stone tool materials.

Approximately 4 cubic feet of paleontological specimens and associated documentation related to paleontological sites located at Fort Wainwright, Fort Greely, and associated training lands are currently housed at the UAMN. The specimens are chiefly skeletal remains of ice age mammals.

1.7.3 Executive Orders, Presidential Memoranda, and DoD Issuances

Executive Order (EO) 11593: *Protection and Enhancement of the Cultural Environment* (13 May 1971)

EO 11593 establishes a national policy to preserve and maintain the historic and cultural environment of the United States. The EO directs federal agencies to administer historic properties under their control so as to preserve the resources for future generations. This EO was codified and incorporated into the 1980 amendments to the NHPA as Section 110 and was further revised during the 1992 amendment to the NHPA.

EO 13007: *Indian Sacred Sites* (24 May 1996)

EO 13007 establishes that federal agencies are responsible for allowing Native American religious practitioners access to and ceremonial usage of sacred Native American sites on federal lands. The agency will keep the locations of such sites confidential and will avoid adversely affecting the integrity of these sites.

The USAG Alaska will consult with tribes to identify sacred sites that are necessary for the exercise of traditional religions and will provide access to USAG Alaska-managed lands for tribal practice of traditional religions, rights, and ceremonies. The USAG Alaska may impose reasonable terms, conditions, and restrictions upon access to such sites when the Garrison Commander deems it necessary for the protection of personal health and safety or to avoid interference with the military mission, or for other reasons of national security. The USAG Alaska will maintain the confidentiality of sacred site locations.

The USAG Alaska will avoid adversely affecting the physical integrity of sacred sites and will establish procedures to ensure reasonable notice is provided to federally-recognized tribes when proposed actions or land management policies and practices may restrict future access to, restrict ceremonial use of, or adversely affect the physical integrity of sacred sites. If necessary, such procedures should be set forth in this ICRMP. If a sacred site may be affected by USAG Alaska land management policies or practices, the Garrison

Commander will also ensure that the compliance requirements of the NHPA are met if the sacred site meets the NHPA definition of a historic property.

EO 13175: *Consultation and Coordination with Indian Tribal Governments* (6 November 2000)

EO 13175 requires federal agencies to support the policy of tribal self-determination by implementing an effective process to ensure meaningful and timely consultation with tribes during the development of policies with potential tribal impacts. The mandates of EO 13175 apply whenever federal agency actions have substantial direct effects on a tribe or on the relationship between the federal government and a tribe, or on the distribution of power and responsibilities between the U.S. and tribal governments. EO 13175 reiterates the policy of government-to-government interactions with tribes and applies specifically to federally-recognized tribal governments. The USAG Alaska Native Liaison is mandated to implement EO 13175 through:

- . Identifying USAG Alaska staff and programs that develop and implement programs, projects and activities with potential to affect tribal governments, lands, resources, and interests;
- . Promoting substantive communication whenever possible between the USAG Alaska and tribal governments through regular meetings and correspondence regarding department activities and plans, appropriate to each sovereign tribal government;
- . Engaging in active efforts to improve and enhance government-to-government relations with tribal governments through outreach, regular and open dialogue, and partnering agreements (as authorized), in cooperation with designated tribal representatives; and
- . Educating agency staff about the legal status/rights of and issues of concern to tribal governments and the methods for establishing effective communication and consultation with tribal groups.

Presidential Memorandum: *Distribution of Eagle Feathers for Native American Religious Purposes* (29 April 1994)

This Presidential Memorandum stipulates that salvageable eagle carcasses and eagle feathers located on federal lands may be collected for those Native American entities that are engaged in religious activities and are federally-recognized tribes eligible to receive services from the Bureau of Indian Affairs listed under 25 USC § 479a-1. Collected salvageable carcasses and feathers for Native American religious purposes should be shipped to the U.S. Fish and Wildlife Service Forensic Laboratory.

Regulation 50 CFR § 22.22 allows permits to be issued for the possession, taking, and transportation of lawfully acquired golden eagles or bald eagles or their parts, nests, or eggs for religious use by federally-recognized Native American tribal entities. The Secretary of the Interior may grant or deny the permit based on several criteria, among which are the effects that taking live eagles would have on the wild populations of the birds and whether the applicant is authorized to participate in bona fide tribal religious ceremonies.

Presidential Memorandum: *Government-to-Government Relations with Native American Tribal Governments* (29 April 1994)

U.S. policy concerning relationships with Native American tribes is established under the Presidential Memorandum which states that consultation with Native American tribes must be conducted as government-to-government interactions.

This memorandum requires that consultation between the Army and federally-recognized Indian tribes occur on a government-to-government basis and in an open and candid manner.

Consultation with federally-recognized Indian tribes on a government-to-government basis occurs formally and directly between Garrison Commanders and heads of federally-recognized tribal governments. Garrison Commanders establish government-to-government relations with federally-recognized Indian tribes by means of formal, written letters to the heads of tribal governments. Such letters should designate an installation native liaison who is authorized to conduct follow-on consultations with designated representatives of the tribal government. Any final decisions on installation plans, projects, programs, or activities that have been subject of government-to-government consultation will be formally transmitted from the Garrison Commander to the head of the tribal government.

This presidential memorandum also requires that installations assess the impact of their plans, projects, programs, and activities on tribal trust resources and assure that tribal government rights and concerns are considered during the development of such plans, projects, programs, and activities.

Presidential Memorandum: *Tribal Consultation* (5 November 2009)

President Obama signed a presidential memorandum on tribal consultation to acknowledge the unique legal and political relationship between the tribes and federal agencies. Its signing was in response to concerns that federal agencies had frequently failed in their mission to include the voices of tribal officials in the creation of policy. It prescribed the reporting of federal agencies to the President's Office of Management and Budget on the results of consultation in consistency with EO 13175, 90 days after the memorandum's signing and annually thereafter.

DoD American Indian and Alaska Native Policy (20 October 1998)

The DoD American Indian and Alaska Native Policy provides guidelines for government-to-government relations between military agencies and tribal governments based on the federal trust relationship, federal policy, treaties, and federal statutes and in support of tribal self-governance. It specifies that DoD personnel must consider the “unique qualities of individual tribes when applying these principles, particularly at the installation level” (Policy preamble). The policy recognizes and emphasizes the importance of increasing understanding and addressing tribal governments’ concerns prior to reaching decisions on “matters that may have the potential to significantly affect protected tribal resources, tribal rights, or Indian lands” (Ibid.). For the USAG Alaska,

these resources include those found in plant harvesting, hunting and fishing areas on Army-managed lands, including wildlife that migrates through Army lands.

DoD American Indian and Alaska Native Policy: Alaska Implementation Guidance (11 May 2001)

This document outlines specific guidelines for implementing the DoD American Indian and Alaska Native Policy for Alaska agencies.

DoD Instruction 4710.02: Department of Defense Interactions with Federally Recognized Tribes (DoDI 4710.02) (14 September 2006)

DoDI 4710.02 implements the Department of Defense American Indian and Alaska Native Policy, assigns responsibilities and provides procedures for DoD interactions with federally recognized tribes. DoDI 4710.02 defines consultation triggers (laws, regulations, and executive orders) and provides consultation guidelines. It requires base commanders at installations that have on-going consultation and coordination with tribes through an assigned staff member, serving as a tribal liaison. DoDI 4710.02 requires tribal consultation on ICRMPs and INRMPs that may affect tribal rights, land or resources and provides measures of merit for the NAGPRA.

DoD Instruction 4715.16: Cultural Resources Management

As specified in DoD Instruction 4715.16, the policy of the department is to integrate archaeological and historic preservation requirements of applicable laws with the planning and management of DoD activities. It assigns specific responsibilities to department heads, lists management procedures mirroring federal laws and regulations concerning cultural resources, and reinforces the responsibility of the DoD to comply with these laws. The directive applies to all branches and departments of the DoD, including National Guard and Reserve components.

1.7.4 Army Regulations and Policy

Army Regulation 200-1: Environmental Protection and Enhancement

AR 200-1 provides the policy for environmental protection and enhancement and for compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and other environmental acts. AR 200-1 states that the Army's goal is to manage cultural resources on Army-manage property in a way that minimizes effects to the mission, complies with federal law, and follows sound principles of cultural resource management. It establishes program requirements including: the development of an ICRMP, NHPA agreement documents, as necessary, the appointment of a CRM, the establishment of government-to-government relationships with federally-recognized Indian tribes, and the establishment of a program for early coordination between the installation's CRM and project proponents. Environmental audits and status reports are required, and entities responsible for site selection for military construction activities are to conduct environmental surveys prior to site selection.

Additionally, AR 200-1 provides the policy for complying with the NHPA, the AIRFA, EOs 13007 and 13175, the NAGPRA, the ARPA, and the AHPA. It states that the

Garrison Commander will be the agency official with responsibility for cultural resources actions, that installations will develop a program to identify historic and paleontological properties, sites of traditional cultural importance, and procedures for curating archaeological and paleontological resources. AR 200-1 and its implementing guidance Department of the Army Pamphlet (DA PAM) 200-1 nests with AR 200-4 and DA PAM 200-4 to form comprehensive guidance for an installation Cultural Resource Management Program.

AR 870-20: Historical Properties and Museums

AR 870-20 standardizes the guidelines and procedures for maintaining an Army museum. Used in conjunction with 36 CFR § 79, *Curation of Federally Owned and Administered Archaeological Collections*, this regulation includes procedures for the care and maintenance of significant property, for certification as a professional museum; for the establishment of exhibits; and for the acquisition, cataloguing, and de-accessioning of historical objects.

Army American Indian and Alaskan Native Policy (24 October 2012)

The Army American Indian and Alaskan Native Policy dovetails with the DoD American Indian and Alaska Native Policy. Signed by the Secretary of the Army on 24 October 2012, it recognizes the U.S. Army's responsibilities to federally recognized tribes and institutionalizes principles for Army interaction with these tribes. Guidance for implementing the policy was signed 10 July 2014.

1.7.5 Standards and Guidelines

Several key coordinating guidelines have been issued by the Secretary of the Interior and ACHP that prescribe standards recommended to manage historic preservation programs. Significant discussions are found in the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and in "Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines" issued in the Federal Register of 29 September 1983 (48 FR 44716-44740). The guidelines discuss preservation planning, identification, evaluation, registration, documentation, and professional qualifications. It should be noted that the above mentioned guidelines are neither law nor regulation and are only intended to serve as general guidance.

1.7.6 Overlapping Authorities

Because different laws and regulations may apply to a specific issue, compliance with one set of laws and regulations does not necessarily constitute full compliance with all laws pertaining to that issue. For instance, the AIRFA and EO 13007 address different aspects of Native American religious practices; Section 110 of the NHPA, EO 11593, and the ARPA all require inventory of all cultural resources on land under the control of federal agencies or the federal government; and the NHPA and NEPA may both come into play when planned or proposed federal actions or undertakings result in the potential to affect cultural resources.

The relationship between the NHPA and NEPA may be of significance. The extent to which proposed actions will impact cultural resources is crucial in determining whether the undertaking has "no adverse effect" under the NHPA or whether it has "no significant impact" under NEPA. NEPA applies to federal actions that have the potential for significant environmental impacts; the NHPA can apply to any federal action that has the capability of affecting National Register-eligible historic properties. For example, an action to replace an original wooden door with an aluminum door on a historic property would not be considered a significant impact under NEPA. Under the NHPA, however, the replacement of an original door could affect the integrity and eligibility of the building and thus be an "adverse effect."

Under revised regulations implementing Section 106 of the NHPA, the NEPA compliance process can be used for Section 106 compliance purposes if the procedures outlined in Section 8 of 36 CFR § 800 are followed. According to the regulation, "An agency official may use the process and documentation required for the preparation of an EA/ FONSI or an EIS/Record of Decision to comply with Section 106 in lieu of the procedures set forth in 36 CFR § 800.3 through 800.6 if the agency official has notified in advance the SHPO/Tribal Historic Preservation Officer, any Native American tribe on whose tribal land the undertaking occurs or affects historic properties, and ACHP that it intends to do so, and the standards of 36 CFR § 800.8(c)(I) are met."

The issue of archaeological fieldwork may also fall under the overlapping authorities of the ARPA and the NHPA. Work conducted on a National Register eligible or listed property under an ARPA permit would have to employ the appropriate the NHPA consultation procedures (36 CFR § 800) on potential impacts to those properties. The same situation of overlap may occur with the NAGPRA and the NHPA; the NAGPRA requirements may apply if Native American human remains and associated funerary objects are uncovered in an archaeological excavation being conducted under a Section 106 action.

Consultation requirements fall under several areas of legislation and may, in some cases, overlap. The NHPA, ARPA, NEPA, and EO 13007, *Indian Sacred Sites*, contain consultation requirements. Section 106 of the NHPA coordination requires that a federal agency, when potentially impacting or having an impact on National Register eligible or listed historic properties, must consult with other federal, state, and local agencies, as well as federally-recognized Native American tribal groups. Under the ARPA permit-granting regulations, consultation is also required in many situations.

NEPA requirements dictate that EAs and EISs be made available to the public for comment on potential impacts to environmental and cultural resources. EO 13007, which allows Native American tribes the religious use of and access to sacred sites, directs agencies to implement or propose procedures to facilitate consultation with appropriate Native American tribes and religious leaders to expeditiously resolve disputes relating to agency action on federal lands that may adversely affect access to, the ceremonial use of, or the physical integrity of sacred sites.

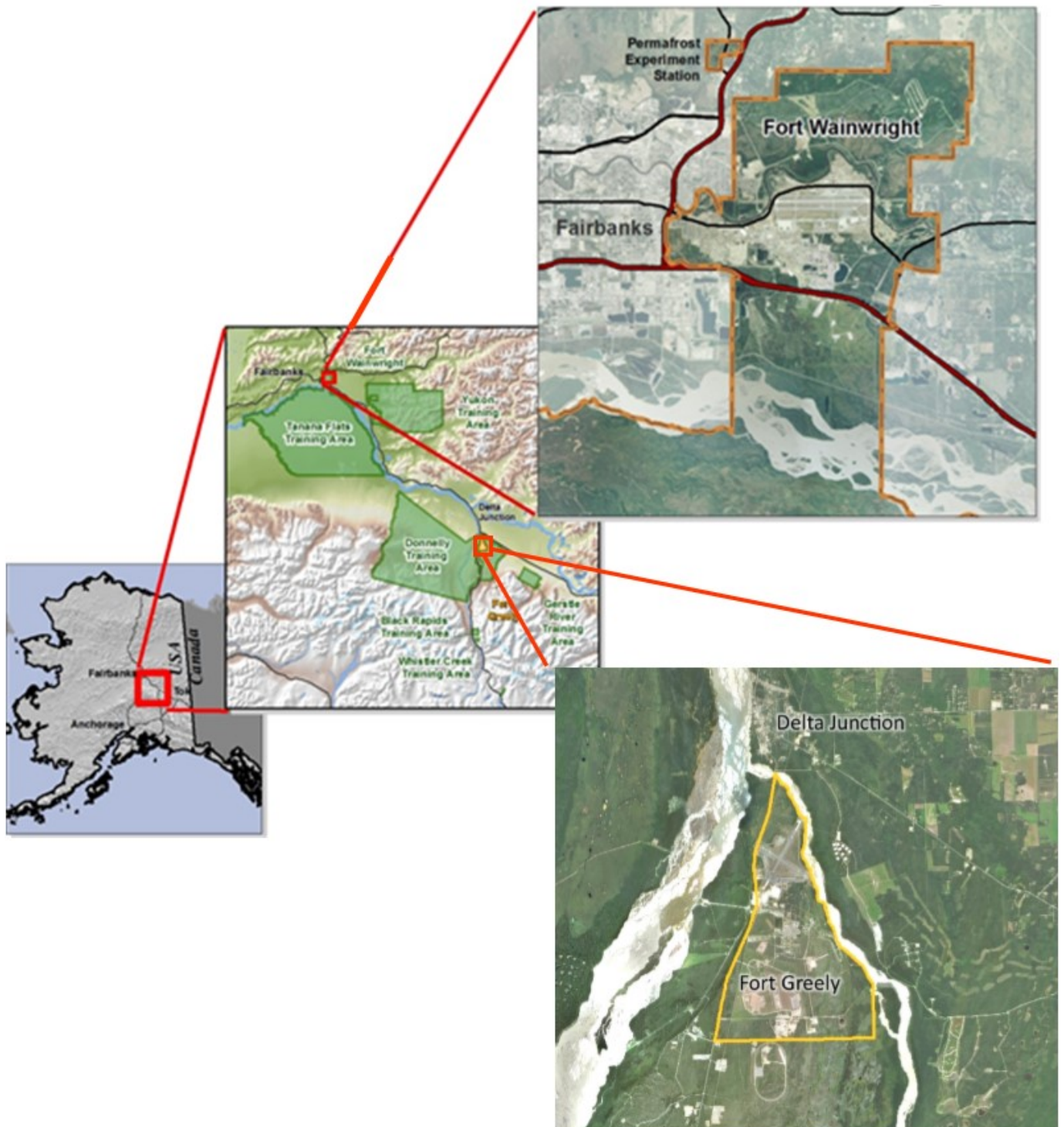


Figure 1. Fort Wainwright, Fort Greely, and associated training lands

2 Historical and Geographic Setting

For the purposes of managing cultural resources, the USAG Alaska manages Forts Wainwright and Greely. Fort Wainwright is located in interior Alaska, north of the Alaska Range and consists of Main Post and six major training areas-- Tanana Flats Training Area (TFTA), Yukon Training Area (YTA), Donnelly Training Area East and West (DTA)¹, Gerstle River Training Area (GRTA), Black Rapids Training Area (BRTA), and Whistler Creek Training Area (WCTA) totaling approximately 1,559,000 acres. Fort Greely is located in interior Alaska adjacent to the town of Delta Junction, 103 miles southeast of Fairbanks and encompassing approximately 6,700 acres.

Additionally there are outlying properties under the jurisdiction of the USAG Alaska, including Seward Recreation Area, a parcel where a permafrost research tunnel is located, and several parcels that formerly supported the Haines-Fairbanks Pipeline which are now in restoration status—Whittier Terminal, Haines Fuel Terminal, Tok Fuel Terminal, and Sears Creek Pump Station

2.1 Infrastructure

The Fort Wainwright Main Post area consists of the cantonment, including an airfield, and local training areas. Immediately to the south of the Main Post area is the Small Arms Range Complex. TFTA is 650,000 acres located directly south of the Main Post across the Tanana River, contains two dudded impact areas, 13 landing zones, three drop zones, multiple firing points and an air assault strip among its light maneuver area. YTA, located approximately 20 miles southeast of the Main Post and measuring 260,000 acres, has two drop zones, four landing zones, five ranges, numerous observation and firing points, a dudded impact area, and an Air Force AFTAC. DTA East and West is approximately 648,485 acres in size and is located approximately 90 miles southeast of the Main Post. It contains a small arms complex, an expansive nine-part dudded impact area, weapons testing ranges, maneuver ranges, seven drop zones, two air assault strips, 14 ranges, and numerous observation and firing points. BRTA and WCTA, 4,654 acres combined, are home to the NWTC which have structures and facilities necessary for mountain and cold weather training, including a ski hill and rock climbing wall. GRTA is 20,580 acres in size and has no infrastructure and is used for maneuver training and non-dudded small arms firing.

Fort Greely consists of a cantonment, airfield, the Missile Defense Complex, and testing facilities used by the Cold Region Test Center (CRTC). It is surrounded on all sides by DTA East and West with a small attachment to State of Alaska and private land on its southwest boundary.

2.1.1 Training Areas

¹ The Donnelly Training Area formerly was part of Fort Greely but has been realigned to Fort Wainwright.

The major training areas managed by the USAG Alaska are broken into many concise, number training sub-areas. Fort Wainwright Main Post has 11 local training areas; TFTA has 10 training areas; YTA has 18 training areas; and DTA contains 50 training areas, all managed as unique entities.

2.1.2 Ranges / Courses

For the purposes of this ICRMP, ranges are defined as those areas where live-fire, non-dudding training may occur which are under the jurisdiction of ITAM. Live-fire training may occur in other locations, but these ranges or courses are designed specifically for this activity. Listed below are the ranges fitting this definition at each major training area.

There are 18 ranges and courses on the Main Post and adjacent Small Arms Complex. YTA supports seven ranges, including a Digital Multi-Purpose Training Range, an Infantry Platoon Battle Course, an Infantry Squad Battle Course, the McMahon CALFEX Range, the Grizzly Battle Course, and a Trench. BRTA has a High Angle Mountainous Marksmanship Range (HAMMR).

At DTA, there are 16 ranges, including a Battle Area Complex; a Combined Arms Collective Training Facility; a Combined Arms Live Fire Exercise Village; a Collective Training Range that includes two Infantry Platoon Battle Courses and one Multi-Purpose Training Range; a High Angle Mountainous Marksmanship Range (HAMMR); 3 ranges used primarily by CRTC for testing; and the Wills Small Arms Complex made up of 8 small arms ranges.

2.2 Prehistoric Context

Interior Alaska has been continuously inhabited for the last 14,000 years, and evidence of this continuum of human activity has been preserved within and around Fort Wainwright's training lands. Interior Alaska's ice-free status during the last glacial period provided a corridor connecting the Bering Land Bridge and eastern Asia to North America. This allowed small bands of nomadic peoples to colonize Alaska, and the rest of the continent, and began a period of habitation in Interior Alaska that has persisted through the entire Holocene, the arrival of European traders in the late 1810s, the Klondike Gold Rush of the late 19th and early 20th centuries, and the military development of the Interior during the middle of the 20th century. USAG Alaska managed-lands comprise a vast and still relatively unsurveyed region with areas of high potential for yielding evidence of this activity.

Alaska has long been regarded as the gateway to the Americas and has held archaeological interest as the possible location for the oldest archaeological sites in the New World. This is due to more than Alaska's proximity to Asia and ice-free condition at the end of the Pleistocene. Similarities between archaeological assemblages in Siberia and Alaska and the discovery of lanceolate projectile points in the muck deposits around Fairbanks in the early 1900s (which bore a resemblance to Clovis

points of some antiquity in the American Southwest) also sparked interest in Alaska as a source area for all Native Americans. In recent years, the Tanana Valley has proven to be an early New World population center with a number of reliably dated archaeological sites placing humans in the area at the end of the last glacial period. These sites include McDonald Creek, a 13,900² year old bison processing site with stone tool resharpening debris³ located in the TFTA, as well as Swan Point, dating to 14,150 years ago⁴, and Holzman, at 13,600 years ago⁵, all three of which are located within a 10 mile radius. These sites have stone tool debris, human-worked bone, and remains of extinct Pleistocene fauna in well stratified sediments with radiocarbon dates from charcoal and faunal material in cultural contexts. No other regional complex of well-dated pre Clovis sites exists anywhere else in North or South America.

After initial colonization, archaeologists generally divide Interior Alaska's prehistory into three broad time periods: the Paleoarctic Tradition (12,000-7,000 years ago), the Northern Archaic Tradition (7,000-1,500 years ago), and the Athabaskan Tradition (1,500-800 years ago)⁶. Archaeological materials from these cultures are generally limited to lithic artifacts such as projectile points, cutting tools, scrapers, waste flakes from tool manufacturing, faunal remains, and hearths.

Reconstructions of paleoecological evidence suggest that the end of the Pleistocene was marked by a warming trend in Interior Alaska that may have contributed to initial colonization of the area⁷. Several sites in areas surrounding Army lands demonstrate that people were well established in Interior Alaska by 13,000 years ago. Significant sites in the Tanana Valley dating 13,500-12,000 years ago include Healy Lake⁸, Walker Road⁹, Mead¹⁰, Upward Sun River¹¹, Keystone Dune¹², Broken Mammoth¹³, and Delta River Overlook¹⁴. The Younger Dryas cooling event from 13,000-12,000 years ago may have led to a temporary population decline¹⁵ in the Interior before permanent, wide-spread colonization.

The Paleoarctic Tradition is a term now generally used by archaeologists to refer to the first settled people known from all over Alaska. It was originally defined by Anderson^{16 17} as the earliest microblade-using tradition in the American Arctic, with a proposed relationship to late Pleistocene northeast Asian cultures based on similarities in these distinctive artifact types. Archaeological evidence indicates that early settlers

² All dates are given in calendar years before present.

³ Goebel et al. 2014, Graf et al. 2018

⁴ Holmes 2011

⁵ Wygal et al. 2018

⁶ Potter 2008a, 2008b

⁷ Bigelow and Powers 2001

⁸ Cook 1996

⁹ Goebel et al. 1996

¹⁰ Holmes 2001

¹¹ Potter et al. 2014

¹² Reuther et al. 2016

¹³ Holmes 1996

¹⁴ Potter et al. 2018

¹⁵ Potter 2008a, 2008b

¹⁶ Anderson called it the "American Palaeoarctic Tradition," but most researchers use the shortened version.

¹⁷ Anderson 1968, 1970

camped on terraces, lakeshores, buttes, and bluffs. By using these locations on higher ground, they could locate and track prey that included large mammals such as mammoth and bison. Evidence from the Upward Sun River Site, located on the south side of the Tanana River between DTA and TFTA, for example, demonstrates that hunter-gatherers in Interior Alaska were concentrating on harvesting bison and wapiti at the end of the Pleistocene (the Upward Sun River Site is also known for one of the earliest burials in the Americas¹⁸). The nearby McDonald Creek site on Army-managed land yielded artifacts in association with bison, waterfowl, and small game¹⁹. Delta River Overlook, in DTA, also contained an archaeological record with early diet indicators. This site was visited twelve times between 12,000 and 2,000 years ago, and its earliest inhabitants were big game hunters concentrating on the procurement of bison and wapiti²⁰. It is likely that the treeless environment and nomadic nature of these peoples had a direct impact on the kinds of tools they fashioned. Stone, bone, antler, and ivory provided the most abundant material for manufacturing weapons and cutting tools. Artifacts typically associated with this culture include small stone microblades, microblade cores, bifacial projectile points, and unifacial scraping tools.

In Interior Alaska, this tradition historically included two cultural divisions called the Nenana and Denali Complexes. The Nenana Complex was identified by Powers and Hoffecker from sites in the Nenana Valley²¹. This complex began approximately 11,000 years ago with an artifact assemblage that included triangular or teardrop-shaped, bifacially worked projectile points (“Chindadrn” points²²); large unifacial chopper-like tools; and flake tools. The Nenana Complex is defined as lacking microblades, microblade cores, and burins, and was proposed to predate the microblade-rich Denali Complex. Many Nenana Complex archaeological sites are located in the Tanana Valley, adjacent to Fort Wainwright training lands (Broken Mammoth²³, Chugwater²⁴, Donnelly Ridge in DTA²⁵, Healy Lake²⁶, Delta River Overlook in DTA²⁷, Mead²⁸, McDonald Creek in TFTA²⁹, and Swan Point³⁰).

The Denali Complex, dated roughly to 10,500 to 8,500 years ago, was originally defined by West³¹ and includes distinctive wedge-shaped microblade cores, core tablets and their derivative microblades, large blades, biconvex bifacial knives, certain end-scrapers, and burins. West later defined the Denali Complex as a regional variant of the American Paleoarctic Tradition³². Denali sites in the vicinity of Fort Wainwright’s

¹⁸ [Potter 2008a, 2008b; Potter et al. 2008; Potter et al. 2011

¹⁹ Esdale et al. 2012c, Gaines et al. 2011, Goebel et al. 2014, Graff et al. 2018

²⁰ Potter et al. 2018

²¹ Powers and Hoffecker 1989

²² Cook 1969, 1975; Holmes and Cook 1999

²³ Holmes 1996; Yesner et al. 1999

²⁴ Lively 1996

²⁵ West 1967, 1996; Donnelly Ridge

²⁶ Cook 1989

²⁷ Potter et al. 2018

²⁸ Holmes 2007

²⁹ Graf et al. 2018

³⁰ Holmes et al. 1996; Holmes 1998, 2007

³¹ West 1967, 1975

³² West 1981

training lands include Mount Hayes³³, Swan Point³⁴, and Gerstle River³⁵. Several sites in DTA and the Tanana Flats have been dated to this period (including Delta River Overlook³⁶ and Hurricane Bluff³⁷).

The relationship between the proposed Nenana and Denali Complexes is as of yet unresolved. As discussed above, some researchers view the Nenana Complex as a bifacial industry that predates the microblade-based Denali Complex. However, current research at sites such as Swan Point and Broken Mammoth indicates that microblades and burins were used by the earliest known cultures in Interior Alaska, with a later co-occurrence with Chindadn points—the defining artifact type of the Nenana Complex. Although some archaeologists still believe that there is a cultural distinction between the Nenana and Denali complexes³⁸, the general understanding of Interior Alaskan archaeologists is that there is a behavioral explanation for the presence or absence of microblades in different assemblages³⁹. Moreover, both Nenana and Denali technology persist in central Alaska throughout the Holocene⁴⁰.

The site density declined in the areas around Fort Wainwright in the early Holocene, suggesting a slight depopulation during a period of climate change that initiated the widespread establishment of spruce forests⁴¹. The boreal forest in Interior Alaska was established by 8,000 years ago⁴². Sites from this time period are less well publicized than the older sites, but include Houdini Creek (circa 8,600 years old)⁴³, Lucky Strike (c. 8,500 years old)⁴⁴, Blair Lakes (c. 8,000 years old)⁴⁵, Delta River Overlook (several components)⁴⁶, Delta Creek (c. 8,000)⁴⁷, and the Campus Site (c. 7,700 years old)⁴⁸. Bison, wapiti, and birds were the most important subsistence game during this period⁴⁹.

The site density increased again after about 6,000 years ago in Interior Alaska⁵⁰. This population increase coincides roughly with the emergence of the Northern Archaic Tradition and the appearance of side-notched projectile points. Anderson originally defined the Northern Archaic Tradition to specifically address notched point-bearing stratigraphic horizons that did not contain microblades at the Onion Portage site in northern Alaska⁵¹. Alaskan notched points were generally similar to Archaic-age dart points in the contiguous United States. Time has shown middle Holocene assemblages

³³ West 1996

³⁴ Holmes et al. 1996; Holmes 1998, 2007

³⁵ Potter 2001

³⁶ Potter et al. 2018

³⁷ Esdale et al. 2015

³⁸ e.g., Dumond 2001

³⁹ Holmes 2001; Potter 2008a, 2008b; Yesner and Pearson 2002

⁴⁰ Bever 2006

⁴¹ Potter 2008a, 2008b

⁴² Bigelow and Powers 2001

⁴³ Bever 2001

⁴⁴ Potter et al. 2007

⁴⁵ Esdale et al. 2017

⁴⁶ Potter et al. 2018

⁴⁷ Doering pers. comm. 2018

⁴⁸ Pearson and Powers 2001; Potter et al. 2007; Potter 2008

⁴⁹ Potter 2007, 2008a, 2008b

⁵⁰ Potter 2008a, 2008b

⁵¹ Anderson 1968

in Alaska to be quite diverse, however, and it is questionable whether this trait is related to southern forms or if it is a reliable indicator of cultural affiliation⁵². Artifact assemblages associated with this culture can vary but generally contain a myriad of tools ranging from bifacial knives and microblades to end scrapers and side-notched projectile points. Middle Holocene hunter-gatherers had a subsistence economy focused on seasonally abundant game including caribou, fish, and moose⁵³. Notched point assemblages occur in many sites in Interior Alaska, including over one dozen on Army-managed lands, have also produced middle Holocene dates from hearth charcoal. The 6,300-6,700 year old dates from Banjo Lake were also associated with a microblade component⁵⁴.

Use of microblade and burin-based industries appears to continue through the middle and late Holocene in Interior Alaska⁵⁵. By the late Holocene, archaeologists see a shift from seasonal large mammal hunting with a nomadic lifestyle to a focus on seasonally over-abundant resources, use of storage, and more permanent settlements⁵⁶. Artifact assemblages do not drastically change until the last millennium of the Holocene when microblades gradually disappear from the archaeological record⁵⁷.

Linguistic evidence suggests that the Athabascan culture may have appeared in the Tanana Valley as early as 2,500 years ago, or earlier⁵⁸. Through ethnography, oral history, and a broad array of cultural items, much has been learned about Athabascan culture and history in the region. The artifacts associated with the Athabascan culture are exceptionally diverse and include bone and antler projectile points, fishhooks, beads, buttons, birch bark trays, and bone gaming pieces. In the Upper Tanana region, copper was available and used in addition to the traditional material types to manufacture tools such as knives, projectile points, awls, ornaments, and axes⁵⁹. A late prehistoric Athabascan occupation is recognized at several sites in and around Fort Wainwright's training areas⁶⁰. Of particular interest in this regard is a copper projectile point found in a buried context at DTA⁶¹.

The Athabascan Tradition includes late prehistoric and proto-historic cultures generally believed to be the ancestors of Athabascan tribes who currently inhabit Interior Alaska. Excavated Athabascan sites in the interior are rare, but the limited body of evidence allows for several generalizations. The raw material usage was reorganized in the Athabascan Tradition, which de-emphasized stone tool-making and increased the emphasis on the manufacture of items from native copper and organic materials⁶². Assemblages include ground and pecked stone artifacts and an increased use of

⁵² Clark 1992; Cook and Gillispie 1986

⁵³ Potter 2008a, 2008b

⁵⁴ Robertson et al. 2008

⁵⁵ Esdale 2008; Potter 2004

⁵⁶ Potter 2008b

⁵⁷ Potter 2008a, 2008b

⁵⁸ Kari 2016; Kari and Potter 2010

⁵⁹ Clark 1981

⁶⁰ Andrews 1975; Andrews 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978

⁶¹ Robertson et al. 2009

⁶² Dixon 1985

expedient tools. There was a broadening and diversifying of the resource base at this time to include small mammals and freshwater marine animals such as fish and mollusks⁶³. Athabaskan sites tend to occur in resource-rich areas near lakes, streams, and rivers and are generally characterized by large house pit and cache pit features. Proto-historic Athabaskan assemblages include Euro-American trade goods such as glass beads and iron implements. Sites of this time period reflect an increased reliance on outside trade and include log cabins co-occurring with traditional house pits, as well as a change in site location to maximize trading opportunities⁶⁴.

Athabaskan settlement patterns depended greatly on the availability of subsistence resources, and Interior bands lived a nomadic lifestyle. They often traversed vast areas to support themselves and spent considerable time engaged in subsistence activities. It was often necessary for bands to divide into smaller groups to find game, and preserved fish were used as a staple of the diet in addition to fresh game⁶⁵.

Four Athabaskan linguistic and geographic groups have inhabited the Tanana Valley: the Upper Tanana, Tanacross, Tanana, and Koyukon. Each group is further distinguished according to geographic location. The bands of the Tanana and Tanacross groups are historically associated with the geographic area that embodies Forts Wainwright and Greely. Salcha, Chena, Wood River, Goodpaster, and Healy Lake bands have inhabited the region since protohistoric times and possibly even prehistoric times⁶⁶. Use of the region varied from one band to the next. The Salcha, Chena, Goodpaster, and Wood River bands of the Tanana Athabascans and the Healy Lake band of the Tanacross Athabascans used certain parts of what are now Forts Wainwright and Greely⁶⁷. Several villages have been reported on or near Fort Wainwright. One occupied by the Wood River band is said to have been located in the southern part of Fort Wainwright but has not been found⁶⁸. The Blair Lakes Archaeological District on TFTA may relate to the prehistory of the Athabaskan Tradition. Euro-American historic archaeological sites are also present⁶⁹.

2.3 Historic Context

With the beginning of Euro-American contact in Interior Alaska in the early 19th century, trade influences and influxes of new populations began to change life in the region. Land use patterns shifted from traditional indigenous uses to activities based on Euro-American economic and political systems. Historical accounts document traditional settlement patterns that were focused on a widely mobile seasonal round, with the fall caribou hunt playing a pivotal role in subsistence preparations for the winter and summer activities focused at fish camps, berry and root collecting, and in sheep

⁶³ McFadyen Clark 1981; McFadyen Clark 1996; Ream 1986; Sheppard et al. 1991; Shinkwin 1979

⁶⁴ Andrews 1975; Andrews 1977; Andrews 1987; McFadyen Clark 1981; VanStone and Goddard 1981

⁶⁵ Andrews 1975

⁶⁶ Andrews 1975

⁶⁷ McKennan 1981

⁶⁸ Dixon 1980; Reynolds 1986

⁶⁹ Gamza 1995; Phillips 1984

hunting. These activities were frequently communal, with several local bands connected by common interest, geography, and intermarriage.⁷⁰

As Euro-American traders, miners, missionaries and explorers moved into the Tanana River Valley, the traditional life ways of local Athabascan groups were disrupted. Access to trade goods and the development of the fur trade not only affected traditional material culture, but also began to dramatically affect subsistence activities and settlement patterns. Similarly, the arrival of missionaries in Interior Alaska profoundly influenced traditional social organization. The introduction of mission schools for Native children and the doctrine of new religious beliefs contributed to an erosion of traditional practices.⁷¹

Russian fur traders began settling Interior Alaska starting in the 1810s, establishing a post at Nulato on the Yukon River and one at Taral on the Copper River. British traders established Fort Yukon in 1847. Trade goods from these posts may have passed to Tanana Athabascans and Upper Tanana Athabascans through intra-Native trade networks. Direct contact between Tanana Athabascans and white traders increased after the 1860s. With the U.S. purchase of Alaska in 1867, control of trading stations and the fur trade passed to Americans. Through the 1880s, American traders established several additional posts on the Yukon and Tanana rivers, including locations at Nuklukayet (modern-day Tanana), Belle Isle (modern-day Eagle), and Fort Yukon.

Trade goods introduced by Euro-American settlers influenced the Native lifestyle. Clothing, staples, tools, and other necessities could be obtained through trade. Guns allowed hunters to obtain game with greater efficiency. Gradually, Athabascan groups began to alter their traditional nomadic patterns in favor of more permanent settlements. However, while significant, this contact would not have as dramatic an impact on the region as the discovery of gold in the Interior during the last decades of the 19th century. The towns established by Euro-American settlers at the turn of the 20th century, in response to the Klondike Gold Rush and the eventual military development of the region, would rapidly and permanently change the demography and economy of Interior Alaska.

Gold strikes in the Fortymile River region, Birch Creek area, and the Canadian Klondike began drawing miners and prospectors north in the 1880s and 1890s. In response to this gold rush, E.T. Barnette established a trading post on the Chena River in 1901. The following year, prospector Felix Pedro discovered gold nearby, and a new gold rush soon led to the founding of Fairbanks at the site of Barnette's original trading post. Most mining activities in the region occurred on creeks north of Fairbanks, with the town serving as a supply center. Agricultural and other commercial activities, such as lumber, also developed to support mining activities in the Fairbanks area. Homesteads existed on parts of what is today the Main Post of Fort Wainwright as early as 1904.

⁷⁰ McKennan 1981

⁷¹ McKennan 1981

In 1898, the discovery of gold in the Tanana uplands began a rush of Euro-American settlement into the Tanana River Valley. As the economic importance of the Tanana Valley increased, the need for reliable transportation routes and communication systems rose in tandem. Captain William Abercrombie established the military trail connecting Valdez to Eagle in 1899. Other trails, such as the Bonnifield and Donnelly-Washburn Trails, saw increased use and development in the first decade of the 20th century. This increase in activity also resulted in the establishment of several roadhouses and posts, including Pile Driver or 30-Mile, Gordon's, and Sullivan's Roadhouses. In 1906, congressional appropriations led to improvement of the Valdez-Fairbanks Trail, crossing the Alaska Range south of Delta Junction, following the Tanana River to Fairbanks. Completion of the Alaska Railroad in 1923 was followed two decades later by construction of the Alaska Highway in 1942, firmly tying the Alaskan Interior to the outside.

As Fairbanks grew in the first decade of the 20th century, several agricultural homesteads were developed on lands now encompassed by sections of the USAG Alaska cantonment. These homesteads provided Fairbanks with a variety of agricultural products and wood for fuel, but were subsumed when lands were withdrawn for the creation of Ladd Field, which later became Fort Wainwright.⁷²

Riverboats were the primary means of getting people and supplies into the Interior at the turn of the 20th century. The Fairbanks town site was located at the upper limit of navigation for stern-wheeler riverboats on the Chena River. Upriver from that point, residents navigated the river using willow-draft boats in summer and sleds in the winter. As commerce in the area increased, roads and trails were constructed, sometimes following earlier indigenous routes.

By 1910, most of the easily accessible placer gold deposits were exhausted, and capital-intensive technologies became necessary to extract remaining deposits. These methods were not possible with the existing transportation infrastructure. The completion of the Alaska Railroad in 1923 expanded transportation options for the region by connecting Fairbanks to the tidewater at Seward and making large-scale dredging operations economically feasible. Aviation also became a key component of Interior transportation, beginning in earnest in the 1920s.

Full historic contexts of early mining, transportation, and homesteads on Fort Wainwright have been completed. These studies have determined that there are no properties eligible for the National Register under these contexts.

2.3.1 Military History

⁷² Price 2002

The earliest U.S. military activities in the Interior were Army reconnaissance expeditions.⁷³ In 1899, the Army established posts on the Yukon River at Fort Egbert (near present-day Eagle) and Fort Gibbon (near Tanana). Soon after, the Army constructed a telegraph, cable, and wireless system connecting Alaskan towns and military posts to Seattle. The Washington-Alaska Military Cable Telegraph System (WAMCATS) was constructed in sections between 1899 and 1906. One section ran from Fort Liscum (near Valdez) to Fort Egbert, crossed the Fortymile region east of Fort Greely, and then down the Tanana River to Fort Gibbon. The U.S. Army Signal Corps established a telegraph station three miles from the mouth of the Salcha River in 1902 and another at Big Delta in 1904.

In 1939, construction began on Ladd Field. The post became the station of the Cold Weather Test Detachment. Initially designed to be a small permanent facility, Ladd Field's original construction included a 5,000-foot concrete runway and aircraft parking apron, nine administration and housing buildings, six technical buildings, a medical corps building, tactical fuel storage, and utilidors. The testing program's goals were to develop standard procedures for servicing and operating aircraft in subzero temperatures, evaluate the cold weather performance of all aircraft components, and test other important gear for arctic operations such as clothing, communications equipment, and survival gear.

With the outbreak of war, Ladd took on additional roles, being home of the Sixth Air Depot Group and the Air Transport Command. It served as the transfer point for over 7,900 aircraft bound for the Soviet Union on the Alaska-Siberia route during Lend-Lease operations. Lend-Lease also required the construction of airfields in Big Delta (near Fort Greely), Fairbanks (Ladd Field), Northway, Tanacross, Galena, Big Moses, and Nome to aid the operation.

The Army constructed the Alaskan-Canada Highway during 8 months and 12 days in 1942 to connect the more southern Lend-Lease airfields and to support Lend-Lease's Northwest Staging Route, as the route through Canada and Alaska was known. Station 17, Alaskan Wing, Air Transport Command, the future Fort Greely was established on June 30, 1942, a few miles south of the junction of the Alaska and the Richardson Highways. Located approximately 90 miles south of Ladd Field, the airstrip was used as an alternative to Ladd Field, a practice landing field for Soviet pilots, a staging field for the Army Air Transport Command, and as an auxiliary transfer point for Russian and American pilots involved in the Lend-Lease Program.⁷⁴ To facilitate this work, a Birchwood Hangar, facilities for 854 officers and enlisted men, a steam plant, a 14-bed hospital, and four 25,000-gallon tanks were included in the construction at Big Delta.

⁷³ In 1869, Capt. Charles W. Raymond led a survey expedition from St. Michael to Ft. Yukon. Lt. Frederick Schwatka led an 1883 reconnaissance of the Chilkoot Pass and Yukon River, and Lt. Henry T. Allen's party traveled through the Copper River and Tanana River valleys in 1885. Responding to the Klondike Gold Rush, Capt. Patrick Ray and Lt. Wilds P. Richardson reported on conditions along the Yukon River in 1897. In 1898, parties under Capt. E.F. Glenn and Lt. J.C. Castner conducted expeditions in the Tanana and Yukon River regions. 172nd Infantry Brigade, *The US Army in Alaska*, May 1976, 12, 24, 28, 34-40.

⁷⁴ CH2M Hill, "Preliminary Assessment, Fort Greely Alaska," (U.S. Army Engineer District Alaska, 1992), p. 27.

By the war's end in 1945, Ladd Field had expanded to accommodate 4,555 personnel. Wartime facilities sprang up around the perimeter of the airfield in the form of prefabricated temporary buildings-- Quonset huts, Butler Buildings, wood frame 800 Series buildings, and Pacific Huts. Construction continued into 1944 and when complete Ladd Field became a sprawling airbase. It had grown from a small garrison of 17 buildings to more than 700. The original six-square-mile cantonment had more than doubled in size and a bombing and gunnery range (Tanana Flats) had been established south of the base. Over 19,000 acres were added to the original 960-acre cantonment between 1940 and 1943. In addition, 655,000 acres were withdrawn during this time for a bombing and gunnery range, which is now known as the Tanana Flats Training Area.

When the Air Force became a separate branch of service in 1947, Ladd Field was redesignated as Ladd Air Force Base and served as the Cold War era Northern Sector Command Center for the Alaskan Command. Its foremost missions in the Cold War were air defense, strategic reconnaissance of the Soviet Union, and arctic research; others included search and rescue, tactical support, communications, and training. Ladd's air defense mission was to deter the Soviet Union from taking Alaskan territory and provide support to the Distance Early Warning Line, the warning system which served to alert continental defenses and the Strategic Air Command of polar air attacks.

Ladd Air Force Base was also the scene of significant Cold War arctic research. The Arctic Aeromedical Laboratory studied human adaptation to arctic and subarctic climates, and the cold weather equipment testing program, which began during World War II, continued on a smaller scale. The Army was also present at the base to provide anti-aircraft and ground defense.

In 1961, the U.S. Air Force moved its operations to Eielson AFB, twenty-six miles southeast of Fairbanks, and transferred the installation, which was renamed Fort Jonathan Wainwright, to the Army. The Army's missions for the next 15 years included ground and anti-aircraft defense, northern warfare doctrine development, training support, logistics, National Guard and Reserve support, and civil defense assistance. NIKE missile batteries were in operation beginning in 1959. Cold weather testing and training in Alaska expanded and the Cold Regions Research and Engineering Laboratory (CRREL) was established in 1961. Tight fiscal and personnel resources in the 1970s resulted in a surplus of facilities at the installation. The Army made several of these facilities available to the Alyeska Pipeline Service Company during the construction of the Alaska Pipeline. Other facilities were leased out to the BLM in the mid-1980s, and a number of these out-grants remain in effect.

During the war in Vietnam, improvements at Fort Greely focused primarily on equipment modernization, rather than on new construction. Arctic training again was emphasized in the 1970s, with exercises conducted annually. In 1986, the 6th Infantry Division (Light) was activated at Fort Wainwright with a primary mission to function as a rapid

deployment force, ready to deploy worldwide on short notice. Much of the 6th Infantry Division's training occurred at Fort Greely.⁷⁵

The Division brought 1,800 additional personnel plus their dependents to Fort Wainwright. A new Post Exchange, gymnasium, medical center, range facilities, housing, and battalion headquarters were built to support the activation of the Division and marked the first new construction on the installation since the Air Force's major construction activities in the 1950s. The 6th LID was inactivated in 1994 and replaced by U.S. Army Alaska.

In the post-Cold War period, Fort Greely was part of a significant military reduction and reorganization. Instead of stationing a division at Fort Wainwright as planned, the Army activated a brigade. In 1995, the Defense Base Realignment and Closure (BRAC) Commission selected Fort Greely as one of eleven U.S. Army posts to undergo realignment.⁷⁶ New requirements for basing interceptor missiles as part of a Ballistic Missile Defense System (BMDS), however, resulted in renewed activity at Fort Greely. The surrounding training areas were transferred to the jurisdiction of Fort Wainwright and the newly realigned BMDS Fort Greely included the airfield, cantonment area, and the missile fields just south of the cantonment area.

In 1985, the Ladd Field NHL was designated in recognition of Ladd Field's role in World War II. The NHL is a multiple property district encompassing the core permanent buildings around the North Post, the airfield, utilidors and runways. Its period of significance is 1939 to 1945 and it was deemed significant due to its roles in Lend-Lease operations, Air Transport Command, and cold weather testing.

In recognition of the exceptional significance of the Air Force missions, the Ladd Air Force Base Cold War Historic District was determined eligible for the National Register in 2001. The boundary of this district overlaps the footprint of the Ladd Field NHL and extends outward to include mission-related buildings constructed by the Air Force during the 1947-1960 period of significance.

Following the BRAC decision and through a MOA signed with the SHPO in 2000, the core of Fort Greely was concurred to be eligible for the National Register as the Fort Greely Cold War Historic District.

2.4 Mission Activities, Organizations and Programs that May Affect Cultural Resources

2.4.1 Training

Off-Road Maneuver: Various types of off-road maneuver exercises occur on USAG Alaska-managed lands. These include use of light tracked vehicles, trucks, and small

⁷⁵ Colt Denfeld, "The Cold War in Alaska: A Management Plan for Cultural Resources, 1994-1999," (Anchorage, Alaska: Alaska District, U.S. Army Corps of Engineers, 1994), pp. 39-41.

⁷⁶ Defense Base Closure and Realignment Commission 1995 Report to the President

four-wheel drive vehicles, Strykers (heavy wheeled vehicles), and heavy tracked vehicles such as tanks. Maneuver training may involve ground disturbance that can negatively impact archaeological sites. Some training areas receive relatively heavy training pressure (and, therefore, have greater potential for ground disturbance), while other areas are less intensively used. Environmental factors can play a role in scheduling. Off-road activity by Strykers and tracked vehicles in winter has a low potential for impacting archaeological resources through frozen ground and adequate snow cover. Activities by these vehicles in summer have an increased potential to damage or destroy archaeological resources.

Excavation: Excavation and ground-disturbing activities associated with military training activities can damage or destroy archaeological sites. Common training activities requiring excavation and ground disturbance may include, but are not limited to, trenches, bombing, artillery fire, foxholes, bivouacs, and tank traps. Engineering units train to provide infrastructure to combat units during combat situations. This training includes digging trenches to lay pipes and other utilities.

Weapons Training: The requirement for live-fire weapons training has the potential to affect cultural resources. Weapons proficiency is a critical component of combat. Direct live-fire training normally entails an individual gunner, the crew of a weapon system, or a collective unit firing at predetermined targets from designated firing positions on a designated range facility. Field artillery and mortar units fire live ammunition indirectly (where the gunner relies on an observer to direct fire using indirect overhead arching ballistics) into the impact area from designated firing points. An impact area is simply a designated site used for training with live munitions. A dud-producing impact area is a site where live-fire munitions such as mortars or howitzers are used that might result in unexploded ordnance remaining at the impact site. Unexploded ordnance are munitions (bullets, mortars, grenades, etc.) that did not explode when they were employed and still pose a risk of detonation. Activities occurring in a dud-producing impact area are streamlined undertakings addressed by the *Programmatic Agreement between the United States Department of the Army and the Alaska State Historic Preservation Officer Regarding the Operation, Maintenance, and Development of the Army Installation at Fort Wainwright and Associated Training Areas* because of the safety issues involved in surveying those areas.

2.4.2 Recreation

Access and Recreation: Outdoor recreation opportunities contribute to the quality of life not only of the military community, but also of the Alaskan community in general. The USAG Alaska provides quality opportunities for outdoor recreation (e.g., hunting, fishing, off-road vehicle areas, and winter recreation). However, the policy of public access has the potential to increase the risk of vandalism to cultural resources.

Vandalism: Vandalism to cultural resources can cause the loss of historic integrity. Vandalism of archaeological sites on federal land is a violation of the ARPA and will be criminally prosecuted.

Conservation Enforcement: Conservation enforcement has the potential to affect cultural resources in a positive way by enforcing the ARPA and ensuring recreational impacts on cultural resources are minimized.

2.4.3 Installation Management

All the following actions have the potential to affect historic properties and need to be reviewed by the Cultural Resources Management staff to ensure compliance with the NHPA Section 106 and other relevant laws.

Maintenance and Upgrade: Road and trail repair, grading, upgrading, and snowplowing all have the potential to impact archaeological resources. Although these facilities exist, their maintenance and upgrade can affect cultural resources.

Construction: Mission requirements may make construction of new facilities necessary. The excavations for building foundations, utilities, and roads uncover or destroy cultural resources. New construction can affect cultural resources by being placed too close to existing historic properties, obscuring site lines, causing in-fill and changing spatial relationships between properties.

Vegetation Management: Activities such as the removal or planting of trees and vegetation outside the cantonments can disturb archaeological sites. Heavy equipment, including hydroaxes, used in these activities may also have an adverse effect on archaeological sites.

Maintenance and Renovation of Buildings and Structures: Maintenance activities can destroy or alter features of a historic property. Replacement of doors or windows with a new type can alter the historic character of a building or structure. Painting with colors inconsistent with those in use during a property's period of significance can also have an adverse effect.

Demolition: Demolition of historic properties negatively affects the resources and should be done only as a last resort. The decision to demolish a facility should be justified with a life-cycle economic analysis. Potential reuses of the building must be considered prior to the decision to demolish.

Landscaping: Landscaping not consistent with a historic property's landscape during its period of significance can diminish the property's historic integrity.

In-action: Avoidance and neglect of historic buildings and structures can result in deterioration and loss of integrity. A decision not to maintain a historic property is considered an undertaking and requires the NHPA Section 106 compliance.

2.4.4 Programs

Sustainable Range Management: Range operations and maintenance have the potential to affect cultural resources during the operation and maintenance of ranges and training lands to sustain long-term doctrinal training requirements. ITAM enables the Army mission by managing and maintaining training lands to sustain and enhance the capability to meet long-term doctrinal requirements.

An important component of ITAM is Land Rehabilitation and Maintenance (LRAM). LRAM involves repair of damaged lands and use of land construction technology to avoid future damage to training lands. LRAM uses technologies, such as revegetation and erosion control techniques, to maintain soils and vegetation required to accomplish the military mission. These efforts are specifically designed to maintain quality military training lands and minimize long-term costs associated with land rehabilitation or additional land acquisition⁷⁷.

Through the use of heavy equipment and erosion control techniques, LRAM may result in ground disturbance that can negatively impact archaeological sites. Generally, LRAM does not require extensive use of heavy equipment or massive land reshaping⁷⁸. LRAM projects are also planned to avoid significant archaeological sites or areas of cultural resource sensitivity.

Environmental Management: Some environmental protection measures have the potential to affect cultural resources. Spill response and environmental remediation may result in disturbance to archaeological sites if soils are excavated. Environmental personnel should be aware of the presence of archaeological sites to avoid inadvertent damage. The incorporation of archaeological maps into Geographic Information System (GIS) databases aids and protective signage aids awareness.

Environmental conservation can affect cultural resources by providing stewardship. The purpose of the Environmental Conservation Program is to enable the Army mission by characterizing, monitoring, complying and continuing oversight of installation natural and cultural resources. Conservation allows Army managers to exercise stewardship of natural and cultural resources by facilitating the planned management of these resources. This is accomplished through coordination with facility managers, range managers, and other land users, and through the implementation of projects that help preserve, maintain, repair, and improve natural and cultural resources toward the sustainment of mission requirements.

Facilities Management: Facilities management has the potential for impacting cultural resources. This includes abatement and disposal of building hazardous waste. The Sustainment, Restoration, and Modernization Program enables the Army mission by providing the sustainment of range and other facilities in good working order to meet long-term doctrinal training requirements. These requirements include restoring failed or failing facilities, systems, and components damaged by a lack of sustainment,

⁷⁷ CEMML and Gene Stout & Associates 1998a:126

⁷⁸ CEMML and Gene Stout & Associates 1998a:126

excessive age, fire, storm, flood, freeze, or other natural occurrences; improving facilities to current standards and modernizing facilities to meet new standards; and the erection, installation, or assembly of a new real property facilities; the addition, expansion, extension, alteration, conversion, or complete replacement of an existing real property facility.

2.4.5 Organizations

The cantonments are comprised of all the facilities and infrastructure needed to support a functioning military community. Routine activities within the cantonments may affect cultural resources. In addition, activities in support of the maintenance of the larger installation property can affect historic properties. Numerous organizations use Forts Wainwright and Greely under host-tenant agreements or arrive periodically to use the facilities under temporary agreements. The missions of these user groups have the potential to affect historic properties. Key garrison and tenant users which are identified as potentially having an effect on historic properties include the Directorate of Public Works; Directorate of Emergency Services; Directorate of Plans, Training, Mobilization and Security; Cold Regions Research and Engineering Laboratory; Cold Regions Test Center; Northern Warfare Training Center; US Army Alaska; US Army Space and Missile Defense Command; Missile Defense Agency; United States Air Force; visiting military entities that conduct training exercises on USAG Alaska-managed lands; and Bureau of Land Management, Alaska Fire Service.

3 Cultural Resources Inventory

This section describes the known cultural resources on USAG Alaska-managed lands including historic buildings and archaeological sites. This section also details the reports, contexts, and other documentation of these resources. Historic properties are assigned and identified by Alaska Heritage Resources Survey (AHRS) numbers which are compiled into a database managed by the Alaska OHA for use by qualified members of the profession.

3.1 Archaeology

Fort Wainwright, Fort Greely and its training lands contain 716 known archaeological sites, one traditional cultural property, and six archaeological districts (Appendix C). Seventy-nine sites are eligible for the National Register, 526 sites have not been evaluated, and 111 additional sites have been determined ineligible for the National Register. Of the eligible or un-evaluated sites, 9 are historic and 596 are prehistoric sites.

Archaeological surveys of the Fort Wainwright Main Post area began in 1979. Surveys of the north side of the Chena River and Birch Hill area, resulted in the discovery and relocation of several prehistoric archaeological sites (FAI-00040, 00041, 00042, 00043, 00199, and 00200)⁷⁹. Surveys of the Main Post building areas continued in the 1980s^{80 81}. No sites were found in these previously disturbed areas. Surveys of the River Road pond in 1996 found one site (FAI-00509), which has failed to be relocated in subsequent attempts. Beginning in 2001, several different principal investigators targeted areas of construction undertakings. Two historic sites (FAI-01603 and 01604) and one additional prehistoric site (FAI-01990) were found in these investigations. In 2011 and 2012, surveys were completed of the entire cantonment north and south of the Chena River, discovering three additional historic sites (FAI-02117, FAI-02197, and FAI-02198). Two sites were evaluated for the National Register in 2013 (FAI-00199 and FAI-00200). Of the 11 archaeological sites known from the Fort Wainwright cantonment, 10 have been determined not eligible and one has been determined eligible (FAI-00040) for inclusion on the National Register. This total does not include any historic buildings located on the installation.

Archaeological sites were first identified in the TFTA in 1973 during survey in the Blair Lakes area⁸². Surveys continued for archaeological district designations in the regions of Blair Lakes (District FAI-00335), Clear Creek Butte (District FAI-00336), and Wood River Buttes (District FAI-00337)⁸³. In 1993, proposed work in the Clear Creek Butte area prompted relocation of several archaeological sites⁸⁴. Ninety-two new sites were found in 2009-2010 during survey of the Wood River Buttes, Salmon Loaf, and north

⁷⁹ Dixon et al. 1980

⁸⁰ Steele 1992, 1983

⁸¹ Reynolds 1983, 1985

⁸² Bradley et al. 1973

⁸³ Dixon et al. 1980

⁸⁴ Staley 1993

and east of Blair Lakes. The district boundaries were adjusted in 2016 to accommodate the new discoveries⁸⁵. Recent surveys have focused on the Blair Lakes region which has a long history of use dating from late glacial times to the more recent homesteading period and has also been a significant region for military training. This area hosts the second oldest archaeological site in all of Alaska, the McDonald Creek site (FAI-02043), with stone tool debris dating to 13,900 years ago⁸⁶. In total, archaeologists have identified 168 archaeological sites in TFTA. Of these sites, 17 have been determined eligible for inclusion in the National Register, one site is not eligible (FAI-00053) and 150 remain to be evaluated for eligibility.

The road system in the YTA was the first of many areas to be investigated and eight sites were discovered during a 1978 road survey. A Determination of Eligibility (DOE) evaluation was conducted on one of these sites in 1979⁸⁷. The Stuart Creek area was surveyed in 1992, but discovered no archaeological sites, and the 1999 survey of Stuart Creek and the YTA road system uncovered one historic site⁸⁸. Archaeologists have been surveying portions of YTA in conjunction with construction projects since 2001. Currently, North Beaver Creek, Skyline, Johnson, Quarry, Brigadier, and Manchu Roads in YTA are almost entirely surveyed, as is the area east of Skyline Road outside of the Stuart Creek Impact Area, McMahon Trench, the Manchu Range, and the majority of Training Areas 307 and 310, north and south of Manchu and Quarry Roads. Twenty-one archaeological sites have been identified in YTA. Seventeen of the sites have been determined not eligible for listing in the National Register and four have not been evaluated. Surveys will continue in YTA in association with range control development and timber sale projects requiring ground disturbance.

Archaeological investigations in what is now the DTA began in the 1960s⁸⁹. The Donnelly Ridge site (XMH-00005) was excavated in 1964 and found an assemblage containing microblade core technology similar to early Holocene Denali Complex sites. Several surveys of Fort Greely and adjacent training lands in the late 1970s documented 64 new sites⁹⁰. Various locations surveyed in DTA from 1980 to 1983 found four additional new sites⁹¹, and one more site was located in the Donnelly Dome area in 1988⁹². Investigations in DTA from 1992 to 2002 located sixteen new sites during this decade of fieldwork, and attempted to relocate old sites^{93 94 95 96}.

Concentrated efforts to expand survey coverage of DTA East began in 2002. Over 200 new sites were located in the Texas Range, Donnelly Drop Zone, and Eddy Drop Zone in the first half of the decade. In recent years, archaeologists have aimed to evaluate

⁸⁵ Carlson et al. 2017

⁸⁶ Esdale et al. 2014, Graf et al. 2018

⁸⁷ Cook 1979

⁸⁸ Higgs et al. 1999

⁸⁹ West 1967

⁹⁰ Rabich and Reger 1978; Bacon 1978; Holmes 1979b; Bacon and Holmes 1979

⁹¹ Steele 1980a, 1980b, 1982a, 1982b, 1983a, 1983b

⁹² Reynolds 1988

⁹³ Staley 1993

⁹⁴ Gamza 1995

⁹⁵ Higgs et al. 1999

⁹⁶ Odess 2002

many known archaeological sites in DTA for inclusion on the National Register in conjunction with construction and use of the Battle Area Complex and its Surface Danger Zone. Sites have also been discovered during surveys for road and trail maintenance. Major excavations have taken place in training areas that have greatly increased our understanding of the prehistory of the area, including the middle Holocene Banjo Lake site⁹⁷ and the multicomponent Delta River Overlook (XMH-00297) and Hurricane Bluff (XMH-00297) sites⁹⁸.

Potential expansions into DTA West, west of the Delta River, prompted 2011 and 2012 surveys into new areas such as Molybdenum Ridge, where 21 new sites were discovered in 2011. Eleven surface sites were also found along Dinosaur Ridge in 2016. Because of its remote setting, however, the archaeology of DTA West is still poorly understood and represents a gap in the USAG Alaska's inventory of cultural properties.

To date, 475 archaeological sites have been identified within DTA. Fifty-four sites have been found to be eligible for the National Register, and 67 were found not eligible. An additional 354 sites remain to be evaluated. Historic archaeology sites are poorly represented in this region, with only four currently known to exist.

The Donnelly Ridge Archaeological District (XMH-00388) encompasses Denali Complex sites, south and west of Donnelly Dome. Two new prehistoric districts were identified in 2016, east and west of Jarvis Creek: the Jarvis Creek Archaeological District (XMH-01553) and the Heart among the Glaciers Archaeological District (XMH-01552)⁹⁹. Archaeological work in DTA will complete the survey of 100% of the land in DTA East, conducting DOEs on archaeological sites in high traffic areas, and exploring parts of DTA West that are scheduled for expansion of military training activities.

Despite its incomplete nature, the archaeological record known from DTA represents all of the currently recognized prehistoric cultures of the Alaskan Interior. Of significance is the role played by sites located on DTA in the definition of the Denali Complex of the American Paleoarctic Tradition¹⁰⁰. The oldest dates for human habitation at DTA are roughly 10,100 years at site XBD-00167¹⁰¹ and 12,000 years at Delta River Overlook (Potter et al. 2018); however, undisturbed stratigraphic deposits that are 12,800-12,930 years old indicate the potential for intact archaeological occupations of this age. Sites yielding Northern Archaic side-notched points are common¹⁰². At DTA, site Banjo yielded an AMS date of 5720 ± 50 BP from hearth charcoal associated with a microblade component¹⁰³. A late prehistoric Athabascan occupation is recognized at several sites¹⁰⁴. Of particular interest in this regard is a copper projectile point found in

⁹⁷ Esdale et al. 2013

⁹⁸ Potter et al. 2018

⁹⁹ Carlson et al. 2016

¹⁰⁰ Anderson 1970; West 1967, 1981

¹⁰¹ Higgs et al. 1999

¹⁰² Robertson et al. 2004, 2005; Raymond-Yakoubian and Robertson 2005

¹⁰³ Esdale et al. 2015, Robertson et al. 2008

¹⁰⁴ e.g., Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978

a buried context at DTA at site XBD-00272¹⁰⁵. Euro-American historic archaeological sites are also present¹⁰⁶. The Delta River Overlook Site (XMH-00297) may prove to be one of the most significant prehistoric sites in the region. The site, overlooking the Delta River from a high bluff, has deeply stratified deposits and contains evidence of at least twelve occupations over the time span of 2,000 to 12,000 years before present¹⁰⁷. People using the site were hunting bison in the river valley and processing the animals on the bluff edge. This site provides important evidence concerning changing subsistence strategies and tool technology over time¹⁰⁸.

Survey efforts increased in 2013 in the BRTA in advance of the construction of a high-angle marksmanship range. Ten sites, eight of which were discovered during these surveys in 2013, are known from this rocky landscape. Four sites have been determined ineligible for the National Register, and all sites are small surface lithic scatters and isolated points as there is very little deposition in most of the mountainous training area. An additional surficial prehistoric site, XMH-01504, was found in the small WCTA to the south of BRTA in 2015.

Six sites were discovered at Tok Fuel Terminal in the early 1980s. Three of these sites have been found ineligible for the National Register (TNX-00006, 00007, 00008). These were relocated in 2013¹⁰⁹. In 2015 and 2016, surveys of the landform found an additional seven sites. This landform also as a related Traditional Cultural Property.

The GRTA and Haines Fuel Terminal, also managed by Fort Wainwright, have been infrequently utilized for training activities, and very few surveys or identification of archaeological sites have occurred in these areas. Archaeologists surveyed small portions of GRTA in 2011 through 2013. Three prehistoric sites (XMH-01359, XMH-01494, and XMH-01509) are known from this training area. One site, XMH-01494 was determined ineligible in 2013¹¹⁰. One ineligible historic site is known from Haines Fuel Terminal (SKG-00043), but no surveys have been completed in this area since 2001.

Archaeological surveys work around Fort Greely began in the 1970s. Work covering the entire Fort Greely cantonment area began in earnest in 2002, covering 7,500 acres of land and identifying sixteen prehistoric archaeological sites. These are located mainly in the southern portion of the Fort Greely boundary. Eleven of the sites were evaluated for the National Register in 2010¹¹¹. In summary, nine of the sites have been found not eligible and seven of the sites have been found eligible for the National Register. No known sites remain to be evaluated for the National Register. None of the sites have been radiometrically dated but two have diagnostic artifacts which were associated with the Denali Complex (XMH-00280) and Northern Archaic Tradition (XMH-01168).

¹⁰⁵ Robertson et al. 2009

¹⁰⁶ Gamza 1995; Phillips 1984

¹⁰⁷ Potter et al. 2018

¹⁰⁸ Potter et al. 2018

¹⁰⁹ Esdale et al. 2013b

¹¹⁰ Esdale et al. 2013b

¹¹¹ Gaines et al. 2010

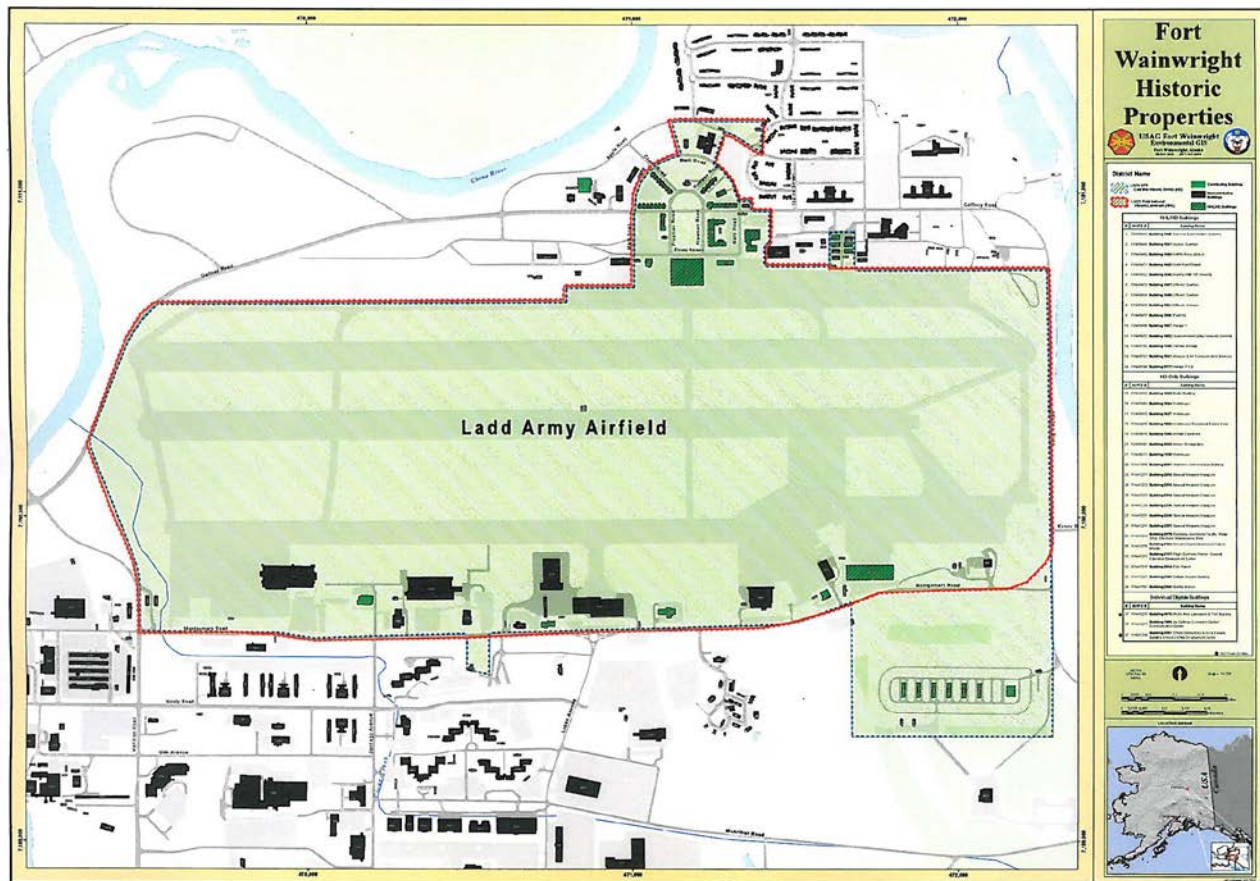


Figure 2. Ladd Field NHL and Ladd Air Force Base Cold War HD

3.2 Historic Buildings and Structures

The NPS conducted the first building survey of Fort Wainwright in 1984. This survey was conducted to identify extant buildings associated with the World War II era Ladd Field, and resulted in the designation of Ladd Field as a NHL. A re-evaluation is currently with the NPS for review (Appendix E).

The entire Fort Wainwright Main Post has been inventoried and evaluated for eligibility for inclusion in the National Register under World War II and Cold War historic contexts. As part of the World War II context, Ladd Field has been designated a NHL. The Ladd Field NHL district (FAI-00236) currently includes 18 buildings and structures centered on the runways (Table 3).

Under the Cold War context, the Fort Wainwright Main Post has been inventoried and evaluated, with 36 buildings and structures contributing to the Ladd Air Force Base Cold War Historic District (FAI-01288). This historic district was determined eligible for inclusion in the National Register in 2001, with 68 contributing resources. It was re-

evaluated in 2010 during which time it was reduced in sized with 36 contributing resources (Table 4).

Also, in 2010, USAG Alaska determined three buildings to be individually eligible for the National Register: Building 1060 (FAI-01257), Building 4391 (FAI-01789), and Building 4070 (FAI-01283). Previously, Building 1060 and Building 4070 had been part of the Cold War historic district. Building 1060 was concurred not eligible in 2016. In 2018, based on new data, Fort Wainwright's Bailey Bridge (FAI-02138) was re-evaluated and found to be eligible. (Table 6)

FORT GREELY - NEW POST HISTORIC DISTRICT		
BOUNDARIES: Beginning at intersection of Delta Avenue and First Street east following Big Delta Avenue to intersection of East Fifth Street and Arctic Avenue (with Building 675 included) thence along East Fifth Street to a point approximately 50 feet north of Building 615, thence west to fence line thence south to unnamed street thence west on unnamed street to a point approximately 50 feet west of Building 503, thence south to Big Delta Avenue, thence return to point of beginning.		
CONTRIBUTING BUILDINGS:		
Bldg #	Name	AHRS #
P501	Post Headquarters	XMH-656
P503	Gymnasium	XMH-657
P504	Fire Station	XMH-504
P601	Commissary/Admin	XMH-665
P602	Gas Station	XMH-666
P603	Post Engineer	XMH-667
P605	Motor Repair	XMH-669
P606	Power Plant	XMH-670
P608	Instru/Calibration	XMH-672
P609	CRTC HQ	XMH-673
P610	Photo Lab	XMH-674
P612	Tank Repair	XMH-675
P614	Data Integration	XMH-676
P615	Maintenance	XMH-677
P650	Arts/Crafts	XMH-698
P652	Service Club	XMH-700
P653	Recreation	XMH-701
P654	HQ, NWTC	XMH-702
P656	Post Exchange	XMH-703
P658	Vehicle Maintenance	XMH-704
P659	Barracks	XMH-705
P660	Barracks	XMH-706
P661	Barracks	XMH-707
P662	Barracks	XMH-708
P663	Medical	XMH-709
P675	Post Exchange	XMH-711

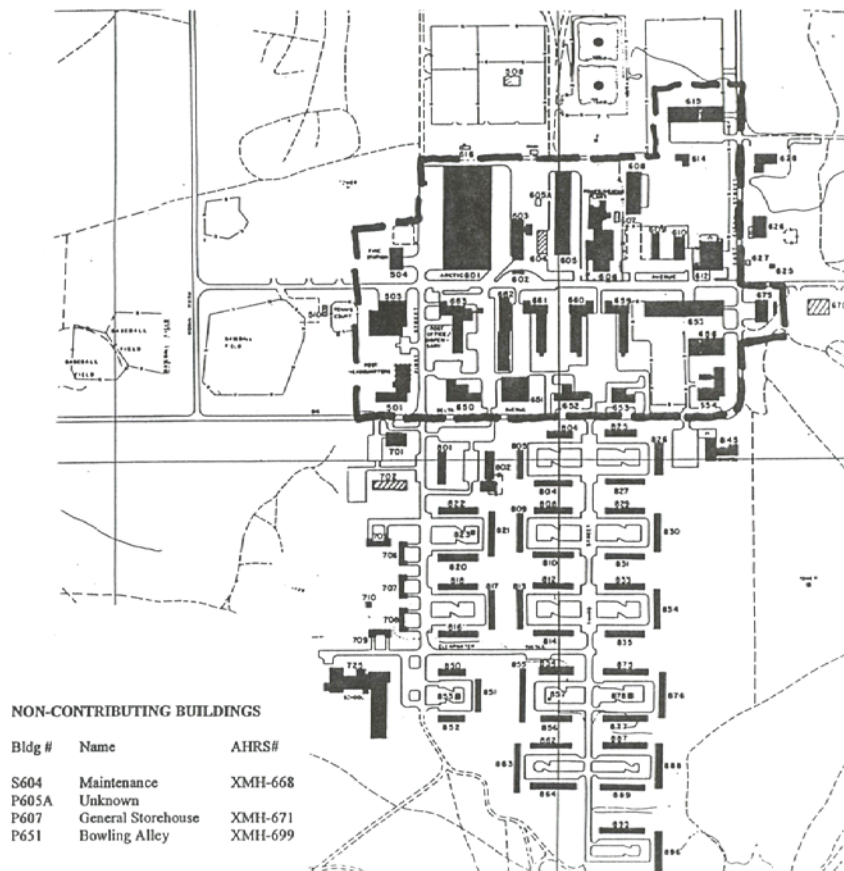


Figure 3. Fort Greely ~~Cold War~~ New Post Historic District

Building survey work on Fort Greely began in 1997. In 1999 At that time, 26 Cold War-era buildings on Fort Greely were determined to be eligible for the National Register and a district (XMH-~~00845~~ 01275) was created (Table 5). In response to the realignment of Fort Greely, the installation and the SHPO entered into a MOA in 1999 concerning these buildings and the Army agreed to mitigate any impacts to these structures by preparing a *Historic American Buildings Survey* (HABS). With completion of the HABS recordation, the MOA allowed the Army to transfer, remodel, rehabilitate, or demolish any of these buildings without SHPO consultation. Since this time, Buildings 610, 614, and 659 have been demolished leaving twenty-three remaining buildings.

3.3 Properties of Traditional Religious and Cultural Significance

The USAG Alaska is aware that properties of traditional religious and cultural significance to Alaska Native tribes may be present on lands it manages. One SHPO-recognized Traditional Cultural Property (TCP), TNX-00067, has been documented at the Tok Fuel Terminal, locally known as Six-Mile Hill¹¹². Efforts have been made to document culturally significant sites – here identified as TCPs, sacred sites, or areas of particular historical/cultural interest – by utilizing input from indigenous land users. Investigation of such sites in DTA resulted in the report entitled *Culturally Significant Site Survey: Donnelly Training Area, Alaska* (2008) and did not find any properties of traditional religious and cultural significance. Investigation of TFTA and YTA consisted of an indigenous place name study by qualified linguistic authorities. This study resulted in a GIS data layer that provides for the review of named locations prior to military development. USAG Alaska recognizes these types of studies often are not exhaustive and the Army continues to be open to new information on properties of traditional religious and cultural significance on the lands it manages as the information comes available.

3.4 Documentation of Cultural Resources

The following sections summarize publications produced for or about Fort Wainwright cultural resources. These publications can be acquired in hardcopy at the Cultural Resources Management Program office located in Building 3023 on Fort Wainwright or digitally through the Fort Wainwright Environmental Division website, <https://home.army.mil/wainwright/index.php/about/environmental/cultural-resources/public-outreach>.

Additionally, the Cultural Resources Management Program disseminates information about cultural resources to the Fort Wainwright community and the greater public through lectures and classroom demonstrations; participation in local events; article publication in local, and statewide publications; and distribution of literature through other outlets, including visitor bureaus, tourist destinations, and libraries.

3.4.1 Historic Context Reports

USAG Alaska has developed a number of historic context reports in support of Section 110 and Section 106 of the NHPA. These reports include:

- *Northern Defenders: Cold War Context of Ladd Air Force Base, Fairbanks, Alaska* (2001)
- *Early Mining History, Fort Wainwright and Fort Greely, Alaska* (2001)
- *Early Transportation Routes, Fort Wainwright, Alaska* (2002)
- *Homesteads on Fort Wainwright, Alaska* (2002)

¹¹² Simon and Gelvin-Reymiller 2002

- *The Haines-Fairbanks Pipeline* (2003)
- *The World War II Heritage of Ladd Field, Fairbanks, Alaska* (2004)
- *Nike Hercules Operation in Alaska* (2004)
- *Tracking the Unthinkable: the Donnelly Flats MIDAS Ground Station and the Early Development of Space Warning Systems, 1959-1967* (2006)
- *Cold Weather Testing in Alaska* (2011)
- *Cold Missions: the U.S. Army Air Forces and Ladd Field in World War II* (2012)
- *The U.S. Air Force F-82 Twin Mustang and the Fate of 46-497* (2016)
- *Dispelling the Cold Bugaboo: a History of the Arctic Aeromedical Laboratory, 1947-1967* (2018)

3.4.2 Archaeology Reports

The first archaeological survey of USAG Alaska-managed lands took place in the 1960s. Since that time, numerous reports on individual sites, full surveys, and effects of projects on archaeological sites have been completed. Since 2001, the results of those surveys have been compiled to produce reports submitted to the SHPO with redacted versions distributed to stakeholders. (Appendix F).

3.4.3 Public Outreach Publications

USAG Alaska publishes three tri-fold brochures for public outreach on the topics of the Ladd Field NHL, Ladd Air Force Base Cold War Historic District, and laws and responsibilities pertaining to archaeological sites on military lands. A driving tour of the NHL is published and a series of twelve interpretive panels throughout the installation educate viewers on historic properties in the immediate vicinity. USAG Alaska has developed a lesson plan on Ladd Field based on the NPS' *Teaching with Historic Places* standards and a teachers' toolkit on Alaska archaeology. In addition to contexts, a series of shorter monographs have also been produced. All outreach materials are available in print at various outlets while supplies last and through the Environmental Division website. A strong social media presence has also become a vehicle for outreach through the Environmental Division's Facebook page.

3.4.4 Building Documentation

A number of buildings on Fort Wainwright have been documented using HABS standards including Buildings 1047, 1043, 1021, 1557, 1555, 1048, 1024, 1049, 1562, 3005, and 3008 on Fort Wainwright. Buildings 501, 503, 504, 601, 602, 603, 605, 606, 608, 609, 610, 612, 614, 615, 650, 652, 653, 655, 656, 658, 659, 660, 661, 662, 663, and 675 have been documented similarly on Fort Greely. A comprehensive condition assessment and rehabilitation plan and reuse study has been conducted for Buildings 3005 and 3008. All buildings over 40-years old on Fort Wainwright and Fort Greely have been surveyed, and their building survey information, including photographs, is compiled in a local Access database. This documentation is created and survey practice continues annually or as needed as buildings come of age.

4 Goals and Objectives

The purpose of this section is to describe the proactive steps toward the integration of cultural resource concerns with day-to-day installation activities. To effectively meet the USAG Alaska goal to integrate cultural resources stewardship with mission and training requirements, this section includes a description of the desired conditions for historic properties over the next five-year planning period at Forts Wainwright and Greely. It also establishes management practices that will be employed to achieve these management goals.

4.1 Overall Goals

- Comply with federal laws and regulations governing the treatment of historic properties in ways that meet and support the USAG Alaska's military mission.
- Maintain a Cultural Resources Management staff that meets the professional qualifications set forth in the *Secretary of the Interior's Professional Qualifications Standards* (36 CFR § 61).
- Develop efficient management procedures that streamline review of and consultation on undertakings.
- Continue professional development of staff through yearly applicable training.
- Recognize the special expertise of Alaska Native tribes and the value of indigenous knowledge and oral history in documenting the past.
- Inventory and evaluate historic properties for eligibility to the National Register.
- Minimize intentional adverse effects on resources that are eligible for inclusion in the National Register, and prevent vandalism and destruction of historic properties.
- Support the appropriate maintenance, repair, and rehabilitation of historic properties as identified and as funding is available.
- Ensure maintenance and repair activities are performed in accordance with the *Secretary of the Interior's Guidelines for the Treatment of Historic Properties*.
- Preserve significant historic properties whenever possible and mitigate appropriately in the long-term public interest when adverse effects cannot be avoided.
- Coordinate consultation with Alaska Native tribal governments on a government-to-government basis as required by EO 13175, the Army American Indian and Alaska Native Policy, and the DoD American Indian and Alaska Native policy.
- Maintain confidentiality of the nature and location of archaeological sites.
- Programmatically manage archaeological sites.

4.1.1 Archaeological Resources

The desired future condition for USAG Alaska's archaeological resources focuses on the need to preserve our heritage and manage cultural resources on USAG Alaska-managed lands in accordance with all applicable laws and regulations. Archaeological sites will be inventoried and evaluated to the greatest extent possible and as funding allows in order to facilitate increased use of training lands. When feasible, National Register eligible or not-yet-determined eligible sites will be avoided by ground disturbing

military training and the siting of new construction. If avoidance is not feasible, protective steps will be taken to minimize damage to the site or mitigate, when adverse effects cannot be avoided. Those same sites will be monitored according to a prescribed plan (see Section 5.8.3). Management practices for these properties on USAG Alaska-managed lands have been developed through consultation with neighboring Alaska Native tribes and other stakeholders.

4.1.2 Sacred Sites and Traditional Cultural Properties

USAG Alaska is aware that properties of traditional religious and cultural significance to Alaska Native tribes may be present on lands it manages. Identifying and managing these properties is a high priority in the sound management practices for cultural resources on USAG Alaska-managed lands. Efforts have been made to document these sites, utilizing input from indigenous land users. To date, one report based on personal interviews and a GIS data layer resulting from an indigenous place name study have been produced to document known areas of cultural interest on DTA, TFTA, and YTA. The Traditional Cultural Property (TCP) on the Tok Fuel Terminal parcel will be fully evaluated toward future excessing of the terminal property. The desired future condition for these resources is to identify and manage them in ongoing consultation with Alaska Native tribes.

4.1.3 Historic Buildings, Structures, and Objects

The overall goal is to provide sound stewardship of buildings, structures, and objects that are eligible for listing or that are listed in the National Register. USAG Alaska's goal is to maintain these historic properties' eligibility while adaptively reusing them to the maximum practical extent. Educating planners and users is necessary to increase awareness and acceptance of reuse. A desired future outcome is a more robust historic buildings condition assessment component that can be implemented in conjunction with the DPW Facility Management branch.

4.2 Planning Objectives

In order to meet the goals outlined in Section 4.1, the following objectives have been established:

- Develop appropriate procedures to ensure all undertakings on USAG Alaska-managed lands meet standard review requirements.
- Develop, improve, and expand awareness of historic properties and their preservation by military and non-military personnel.
- Develop partnerships with Alaska Native tribes and other consulting parties toward obtaining technical assistance regarding historic property management on USAG Alaska-managed lands.
- Request and consider input from interested parties and Alaska Native tribes early in project planning stages.

- Implement a cultural landscape planning approach to cultural resources management that recognizes the complexity of the human cultural interaction with the natural terrain through time.
- Update GIS data layers for traditional Alaska Native place names, archaeological sites, historic buildings and structures, and culturally relevant sites.
- Re-focus site monitoring to assess the effects of authorized activities on known archaeological sites.
- Develop and implement a plan to annually conduct DOEs on archaeological sites prioritized toward areas of heavy use and in potential development zones.
- Evaluate the six existing USAG Alaska archaeological districts for contributing/noncontributing sites.
- Re-evaluate the Ladd Air Force Base Cold War Historic District and Fort Greely Cold War Historic District.
- Develop a system to monitor maintenance and repair activities on historic buildings and structures.
- Streamline protocols for maintaining confidentiality of archaeological site location information as well as sacred sites, Traditional Cultural Properties, and sites of traditional religious and cultural significance to tribes, as appropriate
- Survey unsurveyed areas anticipated for ground-disturbance by training activities.
- Coordinate with Range Control to ensure that Range, ITAM, and LRAM staff have access to up-to-date historic property data as needed for project planning.

5 Management Plan

5.1 Archaeological Resource Protection Act Procedures

The Archaeological Resource Protection Act (the ARPA) (16 USC § 470), requires that all federal land managers inventory archaeological sites within their property boundaries and monitor these sites for damage or disturbance. Individual agreements have been put in place to protect archaeological sites in areas of heavy military activity (e.g. Battle Area Complex Surface Danger Zone, DTA) and the USAG Alaska has developed a site monitoring plan and a DOE plan to evaluate sites in high traffic areas. Vandalism has not been a problem on USAG Alaska-managed lands, but unmonitored construction and routine military activities may have affected archaeological sites in the past.

In the event that inadvertent damage to a cultural resource is detected, the Cultural Resources Management staff will immediately review site records, evaluate the remainder of the site for eligibility in the National Register, and assess the site for adverse effects. If the site is eligible and continues to be in danger of damage or destruction, appropriate mitigation measures will take place (e.g., excavation, barricading, capping, etc.) after consultation with the SHPO. If the damage is determined to be severe and/or the site has been determined to be significant, the CRM will document the damage and provide such documentation in a report to the SHPO.

Intentional destruction of an archaeological site is in direct violation of the ARPA. As per Section 6 of the ARPA (16 USC § 470ee), no person may excavate, remove, damage or otherwise alter or deface any archaeological resource or sell, purchase, exchange, or transport any archaeological resource if the resource was excavated or removed from public lands. In the instance that excavation without a permit or selling of artifacts is identified, the federal land manager is responsible for pursuing charges. The remaining portions of the site will be evaluated for eligibility in the National Register, and appropriate mitigation measures will take place in consultation with the SHPO and BLM.

Archaeologists affiliated with universities, museums, or other agencies consult the USAG Alaska to conduct scientific site excavations. As per Section 4 of the ARPA (16 USC § 470cc), permits for excavation or removal of archaeological resources on USAG Alaska-managed land can be distributed to the qualified applicant for the furthering of archaeological knowledge by the federal land manager. The USAG Alaska issues the ARPA permits upon approval of the Garrison Commander in accordance with ER 405-1-12 and AR 405-80 and under a short term lease with the DPW Real Estate Branch for undertakings that are not part of normal resource management by the installation.

5.2 National Historic Preservation Act's Section 110 Procedures

Section 110 of the NHPA states that the federal agency must assume responsibility for the preservation of historic properties that are owned or controlled by the agency and that the federal agency should use, to the maximum extent possible, historic structures that are available. Section 110 reinforces the responsibilities of the federal agency to

inventory, evaluate, and preserve historic properties. It is the responsibility of the agency to establish a program to locate, inventory, and nominate to the Secretary of the Interior all cultural resources that appear to qualify for inclusion in the National Register. The Army, as an agency, has programmatically opted out of mandatory nomination and, instead, deems 'eligible' as an acceptable equivalent status for management purposes. Also, planning and other actions necessary to minimize harm to all NHL sites will be undertaken when a project may adversely affect such historic properties.

5.2.1 Minimizing Harm to National Historic Landmarks

For projects that may affect the Ladd Field NHL, the USAG Alaska will consider the following alternatives in keeping with the spirit of 36 CFR § 800.10:

Avoidance: This project alternative provides for avoidance of adverse impacts altogether. This is accomplished by not proceeding with the project or that part of the project that will have the impact or by relocating or redesigning a project or features of a project to avoid impacts to historic properties.

Minimize Impact: Minimize the unavoidable adverse impact by limiting the degree or magnitude of the action and its implementation. This alternative seeks to limit construction impacts to temporarily protect a resource until permanent treatments can be applied, and/or to control the impacts through monitoring and oversight.

Preserve, Rehabilitate, or Restore the Affected Environment: This alternative allows for project redesign when involving historic properties, so that the *Secretary of the Interior's Standards for the Treatment of Historic Properties* are applied.

Monitoring During the Project: Any preservation, maintenance or other measures implemented to minimize the effects of an undertaking on a historic building or structure will require ongoing monitoring to ensure the measures are effective. If it is observed that measures originally outlined are insufficient or not effective, or other unforeseen impacts occur, additional preservation alternatives will need to be explored.

Adaptive Reuse: Historic buildings and structures that are no longer needed or suitable for their original use will, to the extent feasible, be considered for an alternative use that would support other installation missions.

Ongoing Preservation and Maintenance: Reduce or eliminate the cumulative impact of an undertaking through preservation and maintenance operations during the life of the action. Examples include securing historic buildings and structures from exposure to weather and protection of sites from disturbance and erosion.

Mothballing: This alternative provides for sealing a historic building or structure from the elements to temporarily protect it from the weather and secure it from vandalism.

5.3 National Historic Preservation Act's Section 106 Procedures

5.3.1 Identifying Undertakings

An undertaking is a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of the Army, including those carried out by or on behalf of the Army, those carried out in whole or in part with Army funds, and those requiring Army approval. The Cultural Resources Management staff will evaluate all projects and actions planned for implementation on lands owned, managed, or utilized by the USAG Alaska to determine if they meet this definition of an undertaking.

Undertakings can be projects, work orders, contractor actions, permits, leases, and other activities as defined above and are generated through several different sources. Undertakings may originate with DPW, infrastructure maintenance contractors, military construction project proponents, and other entities. The majority of projects that have the potential to affect historic properties are generated either through work orders—for minor, lower cost, shorter timeline projects—or Military Construction (MILCON) requests—for new projects or major repair/maintenance actions over \$1,000,000.

In order to identify potential undertakings, the CRM will coordinate with project proponents, attend planning charrettes, provide input into the preconstruction process and participate in the work order review process. Proponents of MILCON projects will coordinate with the CRM to review proposed actions. The CRM assists the proponents in meeting requirements of Section 106 of the NHPA.

Undertakings conducted by or for USARAK tenant-unit organizations with funding appropriated for the tenant are the responsibility of the tenant; likewise, compliance with Section 106 is the responsibility of the tenant unless DPW has assumed that responsibility on their behalf. Additionally, all USAG Alaska staff, infrastructure maintenance contractors, and MILCON project proponents intending to initiate or permit projects, activities, or programs on USAG Alaska-managed lands will coordinate with the Cultural Resources Management staff to ensure the successful implementation of Section 106 responsibilities.

The Cultural Resources Management staff will use the information provided by the proponent to determine whether the project or activity qualifies as an undertaking and, if so, whether it has the potential to affect historic properties.

5.3.2 Streamlined Undertakings

After a project has been determined to be an undertaking, the Cultural Resources Management staff will determine if the undertaking has already been addressed through a nationwide Program Alternative or if the undertaking qualifies for the Streamlined Review Process set forth in the O&M PA.

Program Alternatives

Many types of undertakings have already been addressed through a fully executed Program Alternative in accordance with 36 CFR § 800.14 of Section 106 regulations. Program Alternatives include, but are not limited to, both nationwide Program Alternatives and Program Comments. These are:

- Program Comment for Capeheart and Wherry Era Army Family Housing and Associated Structures and Landscape Features (1949-1962)
- Program Comment for Cold War Era Unaccompanied Personnel Housing (1946-1974)
- Program Comment for World War II and Cold War Era (1939-1974) Ammunition Storage Facilities
- Program Comment for World War II and Cold War Era (1939-1974) Army Ammunition Production Facilities and Plants
- Programmatic Memorandum of Agreement Regarding the Demolition of World War II Temporary Buildings

Programmatic Agreement between the United States Department of the Army and the Alaska State Historic Preservation Officer Regarding the Operation, Maintenance, and Development of the Army Installation at Fort Wainwright and Associated Training Areas. (O&M PA)

In 2016, the USAG Alaska renewed its O&M PA with the SHPO and NPS to streamline the review process for undertakings that have little to no potential to affect historic properties. For undertakings that meet the following criteria and therefore fall under the O&M PA, no further consultation is required unless otherwise specifically requested by the SHPO, Alaska Native tribes, ACHP, NPS, local governments, or other interested parties for the following undertakings. The first exhibit of the O&M PA, entitled Streamlined Review Process Criteria is found in Appendix I.

Memorandum of Agreement between the Department of the Army and the Alaska State Historic Preservation Officer Regarding the Realignment of Fort Greely, Alaska

Fort Greely command and the SHPO signed an agreement in 2000 in response to the effects of BRAC on Fort Greely. It cited the concurrence of eligibility for 26 buildings, the creation of a historic district in which those buildings were situated, and stipulated a prescribed documentation of those buildings. Following completion of the stipulation, the parties agreed that future actions on those buildings would need no further review.

5.3.3 Defining the Area of Potential Effect

The Area of Potential Effect (APE) is the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such historic properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking. The size of the APE is determined on a case-by-case basis and includes in its calculation the scale and nature of the undertaking. The Cultural Resources Manager may consult with SHPO, tribes, and other consulting parties to

provide expertise in the determination of the APE. Generally, the size of the APE will be commensurate with the size of the project, encompassing both potential direct and indirect effects. Cumulative effects may also influence the final APE. Projects should also consider visual impacts.

To determine the project APE:

- Categorize the undertaking (repair and maintenance, ground-disturbing activity, etc.).
- Determine whether the effects typically associated with this category of undertaking are the expected effects for the project.
- Based on anticipated effects and where those effects might occur in relation to the project, define the APE.
- Complete this process for all potential project locations, if the project will have multiple locations.
- If applicable, include all APE definitions on a project map, including areas of direct and indirect effect.

5.3.4 Identifying Cultural Resources

The purpose of identification is to collect information about historic properties within an APE. After the resources in the APE are identified, they are evaluated for eligibility in the National Register. Not all resources qualify for inclusion in the National Register. National Register eligibility is a threshold that affects subsequent management actions for the resources. Properties do not have to be formally listed in the National Register to meet this threshold; they only need to be determined eligible for listing in the National Register.

Identification studies typically include background research, field investigations, consultation, analysis, and documentation of findings. Prior to a project-specific identification study, the Cultural Resources Management staff will conduct a pre-inventory analysis to determine whether additional investigation is necessary and, if so, what type of inventory approach is appropriate.

The Cultural Resources Management staff will review the project area to establish whether the APE has been previously inventoried and to determine what types of historic properties are likely to be found in the APE. Background research should be conducted in preparation for survey as appropriate to the project. Potential sources include, but are not limited to, installation files and maps, previous identification surveys, BLM files, AHRS maps and files at the Alaska OHA, previously identified historic contexts for the region, local histories, and traditional tribal knowledge. Information may also be available from local governments, Alaska Native organizations and tribal governments, universities, and public and private groups and institutions. Resources for this review may also include, but are not limited to, the GIS inventory and maps of the USAG Alaska historic properties, USAG Alaska planning level surveys, installation building inventories, and maps of archaeological sites, established historic districts, and

the Ladd Field NHL. Preliminary analysis may also involve the application of archaeological predictive models and the consideration of any known TCPs.

If the area has been investigated previously, the Cultural Resources Management staff will assess the quality of any collected data. If the area has not been investigated or if the quality of previously obtained data is poor or outdated, further identification efforts will be required to make a determination of eligibility. The Cultural Resources Management staff will determine the need for additional identification based on existing survey data and/or predictive model results and preliminary tribal consultation on potential traditional cultural properties. If additional identification studies are required, the appropriate tasks may include additional background research, field investigation, tribal consultation, analysis, and report preparation. The SHPO, NPS, Alaska Native tribes, and other consulting parties will also be consulted and may participate in the identification and evaluation of historic properties.

Cultural resources surveys include archaeological sites; paleontological sites; historic buildings and structures; and properties of traditional, religious and cultural importance. Each has specific requirements and guidelines. Methods for conducting historic and archaeological surveys differ. Standards and guidelines for each may be found in the *Secretary of the Interior's Standards for Identification* and in *Guidelines for Local Surveys: A Basis for Preservation Planning*.

As part of the research process, NPS and AEC should be contacted periodically to determine whether any nationwide historic contexts have been developed that might apply to historic properties on Fort Wainwright. Similarly, SHPO may have a statewide context against which the historic relevance of a resource can be weighed. The USAG Alaska has been proactive in developing historic contexts for resources on its installation that are specific to the history of the region and to the military in Alaska.

AHRS site forms will be completed and turned in to the OHA for each identified cultural resource. AHRS is a database of all known historic and archaeological sites in Alaska, regardless of National Register eligibility. In cases of militarily sensitive properties, photos and maps may be subject to internal review and restriction.

If no historic properties are identified following consultation with the SHPO and other consulting parties, an undertaking can proceed. If historic properties are identified in the APE, the Cultural Resources Management staff will evaluate resources for eligibility for the National Register.

5.3.5 Evaluating Eligibility

Evaluation for eligibility is a process based on established criteria and guidance developed by the National Register Program. The process relies on two key concepts: *significance* and *integrity*. Both of these criteria must be met and demonstrated to establish National Register eligibility. Understanding the historic context of a property allows reasonable judgments to be made about those thresholds. Because significance

and integrity are subjective concepts, the National Register has developed criteria for evaluation and definitions of aspects of integrity. These are provided in 36 CFR § 60.4 and summarized in Appendix G. While the same National Register framework is used to evaluate historic properties, archaeological resources, and properties of traditional religious and cultural importance, evaluations will emphasize the aspects appropriate to the type of resource under consideration.

To evaluate eligibility, first the property's' *significance*, or lack thereof, must be understood. To achieve this, the Cultural Resources Management staff will utilize existing historic contexts or develop new contexts based on sound research and following the *Secretary of the Interior's Standards for Preservation Planning*.

Once, the *significance* is understood, the National Register criteria for evaluation of eligibility for inclusion in the National Register will be applied. If the cultural resource meets one or more of these criteria of significance and retains integrity, it is eligible for the National Register with concurrence from the SHPO. If the resource does not meet any of the criteria or does not retain integrity, it is determined to be not eligible for the National Register.

Integrity is the ability of the resource to convey its significance, to reveal to the viewer the reason for its inclusion in the National Register. Integrity must be judged based on how the cultural resource's physical features relate to its significance. Seven aspects are used to define integrity: location, design, setting, materials, workmanship, feeling, and association. Most, if not all, of the aspects of integrity should be present for the resource to retain its historic integrity.

If a cultural resource meets one or more of the criteria for evaluation, integrity must be evaluated. If the resource does not meet any of the significance criteria or does not retain integrity, it is determined to not be eligible for the National Register with concurrence from the SHPO.

Lastly, the Cultural Resources Management staff will determine if the cultural resource represents a type usually excluded from the National Register. Properties normally excluded from National Register eligibility include religious properties, properties that have been moved, birthplaces, graves and cemeteries, reconstructed properties, and properties less than 50 years old. However, exceptions can be made for these kinds of properties if they meet four National Register criteria for evaluation, fall under one of the seven special criteria considerations, and retain integrity.

As discussed previously, it may not be necessary or appropriate to specifically identify and evaluate all properties of traditional religious and cultural importance for inclusion in the National Register. However, when this is determined to be an appropriate measure, the identification, evaluation, and management of properties of traditional religious and cultural importance require tribal consultation and participation.

A traditional cultural property is defined in National Register Bulletin 38 as a site "eligible

for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community." Besides meeting these requirements, a traditional cultural property must also meet one or more of the four National Register criteria for eligibility and retain integrity. The statement of significance describing eligibility will be based on traditional knowledge, literature reviews and archival records. Integrity is best determined by the tribe recognizing the site's significance.

If the SHPO does not agree with the USAG Alaska's finding of eligibility and the USAG Alaska and the SHPO are unable to reach concurrence through future consultation, the DOE will be forwarded on to the Keeper of the National Register for a final determination.

5.3.6 Assessing Effects

This section provides for the consideration of the effects of a project on historic properties. If historic properties are present within a project's APE, it must be determined if the undertaking will affect those properties. *Effect* is defined as an alteration to the characteristics of a cultural resource that qualify it as eligible for listing in the National Register. Determinations of effect will be made by the Cultural Resources Management staff with final determinations reviewed by the CRM.

There are three possible determinations listed below.

No Historic Properties Affected: This determination is made when there are no historic properties present within the undertaking's APE or they are present but will not be affected by the undertaking.

Finding of No Adverse Effect (aka No Historic Properties Adversely Affected): This determination is made when there may be an effect, but the effect will not be harmful to those characteristics that qualify the property for inclusion in the National Register.

Finding of Adverse Effect (aka Historic Properties Adversely Affected): This determination is made when there may be an effect and that effect could diminish the integrity of the characteristics that qualify the property for the National Register.

An adverse effect is found when an undertaking may diminish, directly or indirectly, the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration will be given to all qualifying characteristics of a cultural resource, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative. Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property.

- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and applicable guidelines.
- Removal of a property from its historic location.
- Change of the character of the property's use or physical features within the property's setting that contributes to its historic significance.
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural importance to Alaska Native tribes.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

5.3.7 Treatment of Adverse Effects

If the USAG Alaska determines that an undertaking will adversely affect a historic property, the USAG Alaska will enter into an agreement in the form of a MOA or PA with interested parties, which include, but are not limited to, SHPO, ACHP, Alaska Native tribes, local governments, and other consulting parties as appropriate. The purpose of this type of agreement is to avoid, minimize, and mitigate the adverse effects of an undertaking on historic properties. However, if avoidance is achieved early enough in the process and there are no other adverse effects, then there may be no need for a MOA or PA.

Archaeological Sites and Traditional Cultural Properties

For projects that may affect archaeological sites and TCPs, the USAG Alaska will consider the following approaches:

Avoidance: In many instances, projects proposed for areas containing sites that are eligible or potentially eligible for the National Register can be changed to avoid impacts. Avoidance is most easily arranged during planning stages when an area is being chosen for a project. Siting of projects in areas not containing significant resources can often be achieved with little adjustment or delay in the planning process. Even large-scale projects, such as building and road construction, can often be planned to avoid archaeologically and culturally sensitive areas.

Sometimes undertakings cannot be planned or redesigned to avoid areas containing sites. In these instances, it is often possible to protect sites from adverse impacts by physically placing them off-limits. Barriers, Seibert stakes, signs, and fencing may be used to protect sites from adverse effects and may include educational panels explaining legal implications for disturbing the site. Physical obstructions, combined with verbal instruction and/or special contractual obligations, are usually sufficient to protect sites from activities and inadvertent damage. The marking-off of areas,

however, has the disadvantage of potentially alerting the public to the presence of significant resources. If protection is only necessary during construction activities and future use of the project area will not include any impacts to the historic property, temporary protection measures such as monitoring by an archaeologist or tribal citizen partner – when applicable—may be appropriate during construction. Such monitors observe that no inadvertent damage is inflicted to a property during construction activities, are available if post-review discoveries are made, and are utilized only during active construction.

Minimization: In cases involving large archaeological sites, it may be possible to protect only a portion of the site. The area chosen for protection must either be a “valid sample” representative of the site or, if possible, a definable area upon which the site’s significance rests. Given these conditions, a portion of the site may be placed off-limits through the use of barriers, signs, or other such measures designed not to bring attention to the archaeological site. This kind of treatment may also be appropriate for properties of traditional religious and cultural significance as well. Avoidance and minimization options should be discussed and coordinated with Alaska Native tribes that have an interest in the area. Plans may be arranged ahead of time for known situations and conditions and even for specific sites.

Physical protection of an archaeological site or TCP requires periodic monitoring through time to assess the effectiveness of implementation. If it is suspected that written or verbal instruction is being ignored, or that markers or barriers placed around the site are insufficient, other strategies will be explored and implemented to ensure protection. Periodic monitor partnering and tours of certain sites would include interested Alaska Native tribes.

Mitigation: Mitigation for archaeological sites has traditionally focused around data recovery or excavation of the site in order to record and preserve the information and material contained in the site prior to an adverse effect. However, excavation and data recovery is not the only mitigation option for archaeological sites. Possible mitigation strategies include any one or combination of the following:

- Data recovery through excavation.
- Off-site mitigation at a different archaeological site than the one to be impacted.
- Sampling the portion of the eligible site that will be impacted and which needs to be mitigated, (for large scale projects) and protection of the remainder.
- Public interpretation.
- Other options of creative mitigation developed in consultation with stakeholders.

If only a portion of a site will be impacted, partial excavation, in combination with other protective measures, may be appropriate. Creative mitigation, including public interpretation, may be used as a sole mitigation measure in some circumstances or in combination with other mitigation measures.

Mitigation in the form of data recovery is implemented as a last resort when an archaeological site or a portion of a site cannot be avoided or physically protected from undertakings. Data recovery consists of excavation and documentation, analysis, and reporting. Requirements for documentation are set forth in the *Secretary of the Interior's Standards and Guidelines: Archaeology and Historic Preservation*. See Section 5.8.2.

The USAG Alaska acknowledges that the affected groups (such as Alaska Native tribes) are the experts as to the type and extent of adverse effect a particular activity may have on a cultural significant site. Therefore, if the property needing mitigation is a TCP and is eligible for the National Register, the USAG Alaska will consult with the appropriate parties to identify suitable mitigation measures. The USAG Alaska will, to the extent practicable, provide protection for and appropriate level of access to culturally significant sites in accordance with EO 13007, *Sacred Sites*.

Historic Buildings, Structures, and Objects

For undertakings that may affect historic buildings, structures, and objects, the USAG Alaska will consider the following alternatives:

Avoidance: This option provides for avoidance of adverse effects altogether. This is accomplished by not proceeding with the undertaking or that part of the undertaking that will have the impact or by relocating or redesigning an undertaking or features of an undertaking to avoid effects to historic properties.

Minimization: This option provides for minimization of an unavoidable adverse effect by limiting the degree or magnitude of the action and its implementation. This approach seeks to limit construction impacts to temporarily protect a historic property until permanent treatments can be applied, and/or to control the impacts through monitoring and oversight. The following are some examples of minimization:

- Adaptive Reuse: Historic buildings and structures that are no longer needed or suitable for their original use will, to the extent feasible, be adaptively reused to support other installation missions.
- Effects can be minimized by investing in preservation and maintenance of the affected historic property. Examples include securing historic buildings and structures from exposure to weather and protection of sites from disturbance and erosion.
- Mothballing provides for sealing a historic building or structure from the elements to temporarily protect it from the weather and secure it from vandalism.
- Minimization by design is also an option.

Any preservation, maintenance or other measures implemented to minimize the effects of an undertaking on a historic building or structure will require periodic monitoring to ensure the measures are effective. If it is observed that measures originally outlined

are insufficient, not effective, or other unforeseen impacts occur, additional preservation alternatives will need to be explored.

Mitigation: When the undertaking consists of demolition or substantial alteration, mitigation to a historic property may take the form of Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) documentation as general guidance. Additional mitigation measures may include: salvage, educational materials, interpretation, relocation, training or other appropriate actions. In consultation with the SHPO and other interested parties, the Cultural Resources Management staff will make recommendations to the USAG Alaska leadership to determine the type and amount of mitigation to be carried out based on the significance and character-defining elements of the property.

Mitigation includes documentation of historic buildings, structures, or objects, as set forth by the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*. Because of the precise and professional nature of HABS documentation, a qualified professional must carry out all such documentation. Architectural documentation will be provided to the SHPO and will be maintained in the USAG Alaska files. The USAG Alaska will retain prepared documents and maintain a permanent record of what has been performed. Mitigation records will be made available upon request.

5.4 Procedures for the National Historic Landmark

One NHL is located on the installations managed by the USAG Alaska. The NHPA Section 110(f) requires the USAG Alaska to undertake planning and actions to minimize harm to NHLs and provide reasonable opportunity for the ACHP to comment on undertakings that directly and adversely affect NHLs. Use and appropriate maintenance of the buildings, structures, and cultural landscape of the NHL, as required by the NHPA Section 110(a) (1), will ensure proper management of the NHL. Maintenance of contributing resources to the NHL must be carried out in accordance with the *Secretary of the Interior's Guidelines for Treatment of Historic Properties* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*.

When an undertaking affecting the NHL requires consultation, the USAG Alaska will notify the NPS and invite the NPS to participate in the consultation where there may be an adverse effect per 36 CFR § 800.10(c).

5.5 Development of Educational Materials and Interpretation

Educational materials, interpretation, and public outreach efforts should follow these guidelines listed below when used as mitigation:

- Be accessible to multiple audiences.

- Demonstrate relevance to Soldiers and dependents as the first-line installation caretakers.
- Be developed in partnership with Alaska Native tribes and other interested parties.
- Have mechanisms for feedback and an identifiable and consistent point of contact and.
- Be reasonably durable and not ephemeral (though ephemeral products, such as a public display of artifact collections, may be included as part of the final mitigation package).

5.6 Post Review and Unanticipated Discoveries

In the course of conducting approved activities, the USAG Alaska and/or its contractors shall not intentionally or knowingly affect (such as remove, disturb, or cause to be removed or disturbed) any historic properties outside the approved scope of work.

In the event that previously unidentified archaeological materials are discovered during the execution of any undertaking,

- All ground disturbing activity shall immediately cease in the area of discovery and the installation contracting officer (if applicable) and environmental division staff will be notified. "Area of discovery" is defined as the area surrounding any discovered materials that is needed to ensure protection of the find or that which might contain additional materials. Ground disturbance may continue on the undertaking outside the area of discovery.
- The find should be secured until it can be evaluated by an Army-affiliated archaeologist or other personnel meeting the *Secretary of the Interior's Professional Qualification Standards for Archeologists*. This will occur as soon as logistically possible and with attention paid to undertaking timelines.
- The Army shall notify the SHPO and appropriate Alaska Native tribal governments (tribes) within 48 hours of discovery.
- The Army shall ensure that any archaeological work that may be necessary shall be completed in accordance with the NHPA and the ARPA.
- The SHPO and/or tribes may, upon request and as arranged by Army-affiliated personnel, inspect the work site to determine the nature and area of the affected archaeological site.
- In consultation with the SHPO and tribes, the Army will determine the eligibility of the resource for inclusion on the National Register in a timely fashion.
- Work may resume in the area of discovery pending approval by the CRM and the SHPO.

In the event that human remains or funerary objects are discovered during the execution of any undertaking, the Army shall comply with all State and Federal laws pertaining to human remains and will approach this work with the deserved dignity and respect.

- All work at the site will cease and the remains will be secured in place from further disturbance or vandalism, as required by Alaska Statute 11.46.482(a)(3), until after the appropriate law enforcement authorities have ensured that the remains are not

related to any crime or missing person, and until a plan for treatment has been developed.

- The Army shall notify the appropriate law enforcement authorities and the SHPO within 24 hours of the discovery.
- If the appropriate, qualified parties-- which may include, but are not limited to the State Medical Examiner or an Army-affiliated archaeologist-- determine that the remains are Native American, all work will cease and the installation will initiate consultation with the appropriate tribal governments to create a mutually-acceptable treatment plan in accordance with the NAGPRA as amended.
- If the remains are determined to not be Native American and criminal investigation is deemed unwarranted, the Army shall immediately notify the SHPO and consult with the SHPO to identify descendants or other interested parties, if any, and develop a plan for the respectful treatment and disposition of the remains.
- Work may resume in the area of discovery pending approval by the CRM and the SHPO.

If, during the course of the undertaking, there are any unforeseen or unanticipated effects to historic properties other than the identification of a previously unknown archaeological site or human remains, the Army shall initiate consultation pursuant to 36 CFR § 800.13(b)(3) to resolve the unforeseen effects.

5.7 Emergency Actions

There may be times that the USAG Alaska must respond to disasters or emergencies that affect the operations and missions of the installations. These emergencies can be both natural or in response to situations that result from human events. This may also include those actions necessary to respond to a threat to national security, including short-term, mission-essential activities for deployable troops.

Activities and actions undertaken to respond to disasters and emergencies can have an adverse effect on historic properties located on the installations. There may be instances where known historic properties will be affected or where unidentified historic properties will be affected by activities taking place in areas of the installation that have not been previously inventoried. As with inadvertent discoveries, emergency actions require an expedited process for handling historic properties that may be affected by emergency action.

Within 48 hours of the conclusion of a formal disaster or emergency and pursuant to 36 CFR § 800.12, the CRM will determine the necessary course of action to identify and mitigate damage to potential and known historic properties and the potential for salvage of any cultural resource data. Appropriate consulting parties, including the SHPO, tribes, and ACHP, will be notified of the USAG Alaska's actions and afforded up to seven days to comment as time permits. These undertakings will be implemented within 30 days after the disaster or emergency event has been formally declared by the appropriate authority. Immediate rescue and salvage operations conducted to preserve

life or property are exempt from these requirements. Documentation of emergencies will occur for the subject undertaking.

If the CRM determines data recovery and/or recordation is necessary, it will include, but not be limited to:

- Where subsurface disturbance over an area that has not been inventoried has occurred, either as a result of the disaster or the cleanup effort, archaeological inventory of all exposed surfaces will occur.
- If known archaeological site(s) or properties of traditional religious and cultural importance are damaged, but the damage is minor, protective strategies designed to prevent further site degradation will take place.
- In the event that the damage to an archaeological site or culturally significant site is severe and the site was or may have been eligible for the National Register, a report will be prepared documenting the damage and the potential for salvage of values that cannot otherwise be conserved. Notification and consultation with appropriate Alaska Native tribes may be needed to determine if artifacts encountered are funerary objects, objects of cultural patrimony, or human remains pursuant to the NAGPRA. If the potential for salvage is high, a research design will be prepared and salvage may proceed when normalcy is restored. If it can be documented that there is little or no potential for salvage and the SHPO concurs, the damage will be documented in photographs, artifacts at the site will be collected and documented, an updated DOE will be completed, and no further site investigation will take place.
- If demolition or disposal of a National Register-listed or eligible building, structure, or object is necessary due to life safety issues as the result of a disaster or emergency, recordation will be limited to photographs of all exterior surfaces and features. Only those interior features that may be safely accessed may be documented with photographs.
- If a National Register-eligible or listed building, structure, or object is damaged, initial repair will be limited to stabilization and protection from further damage. Rehabilitation will be undertaken at a later date when normalcy is restored and subject to availability of funds.
- If known properties of traditional religious and cultural importance are damaged, consultation on treatment will be coordinated with Alaska Native tribes.

5.8 Archaeological Site Monitoring, Survey, and Evaluation Methods

This section describes the minimum standards and methodology for archaeological surveys and excavations conducted on USAG Alaska-managed lands.

5.8.1 Principal Investigator Qualifications

The CRM will ensure that the principal investigator of archaeological surveys or excavations conducted on USAG Alaska-managed lands will meet the qualifications mandated in 36 CFR § 61.

5.8.2 Minimum Standards

Site monitoring, survey, and evaluation requirements will vary depending on the scope and character of the undertaking. Final survey area will be based on the APE, project needs, established minimum methodology (see below), and exempted areas.

Background Research

The investigator will conduct a thorough literature review and site file search prior to initiating fieldwork. This research will include the environmental, archaeological, and historical background of the region. It will aim to identify potential data gaps and also take into account local settlement patterns, resource availability, resource exploitation, and temporal or cultural affiliations. The CRM or principal investigator will then formulate a research design based on the background research, size of the APE, potential undertakings in the area, and terrain conditions.

Archaeological Site Monitoring

The NHPA Section 110a and AR 200-1 § 6-4 requires federal land managers to inventory, monitor, and keep current listings of historic properties. The USAG Alaska is adopting a plan to monitor the condition of all known eligible or not yet evaluated historic and prehistoric archaeological sites on training lands. Sites will be monitored once every five years according to the prescribed plan and as funding allows.

Site monitoring aims to provide a baseline condition assessment of sites and to track site condition through time so that impacts can be quickly identified and mitigated. Site monitoring will include:

- Site visit under no-snow conditions.
- Evaluation of current site condition.
- Mapping of site disturbance.
- Evaluation of changes to site since last visit.
- Site photographs.
- Identification of potential future impacts.

Phase 1 Investigation

Phase 1 investigations attempt to locate archaeological resources within the project APE. After the boundaries of the APE are established, a pedestrian survey will cover 100% of the area with transects spaced at 20-m intervals. Shovel testing will be placed systematically on a metric grid at a minimum of 20-m intervals in high probability areas (uplands, river bluffs, shorelines, and areas near attractive resources or raw materials). Shovel test pits will not be excavated when slope gradients exceed 30%, the ground surface is flooded or waterlogged, or landscapes are extensively disturbed. Shovel test pits should be a minimum of 50 x 50 cm in diameter and excavated to bedrock or glacial till. All excavated sediments should pass through ¼ inch mesh hardware cloth. When historic buildings and structures greater than 50 years old are encountered, shovel tests should be placed around the perimeter of each structure to identify historic archaeological deposits.

The USAG Alaska has a minimal collection policy. Only artifacts excavated in shovel test pits or tools found on the surface will be collected. All waste flakes and construction debris from features should be left on site.

Recorded information during a Phase 1 investigation should include: photo documentation; site, test pit, and artifact mapping; and test pit and site descriptions. Photographic documentation should include the vegetation and terrain of the APE. Site locations, test pit locations, and areas where test pits were not excavated should all be photographed. Maps of site landforms, test pit number and location, and surface finds should be created to define the horizontal limits of the site, determine sample size, and facilitate identification of areas of moderate and high artifact densities. Surface distribution of artifacts will guide the location of test units for Phase 2 investigations. Test pit records should include location, size, and depth. Sediment descriptions with profile drawings and Munsell colors are required for all shovel test pits.

Phase 2 Investigation

If data generated during a Phase 1 investigation clearly documents the absence of cultural material or if all sites can be easily avoided by any undertakings, a Phase 2 investigation will not be conducted. Phase 2 investigations are equivalent to DOEs for inclusion in the National Register. The criteria for evaluation are found in 36 CFR § 60. As in Phase 1 investigations, DOEs should limit artifact collection to surface tools and all subsurface materials that were excavated.

Phase 2 investigations aim to define site significance and boundaries without seriously impacting the integrity of the site. A DOE requires a physical description of the site and an evaluation of site condition and significance. It includes relevant sources, site maps, and photographs. In a Phase 2 evaluation, the following documentation should be included:

- Vertical and horizontal site limits as defined by maps of surface scatters, shovel tests, and/or auger holes.
- Site sediment descriptions and stratigraphic profiles from test units.
- Site structure.
- Site formation and post depositional transformation processes.
- Relative or absolute temporal information.
- Artifact and feature spatial data.
- Other relevant data.

Included in a DOE evaluation is a discussion of the cultural chronology of the site based on radiocarbon dates or relative dating methods and the cultural history of the region. The significance of the site at local, state, and even national levels is assessed, and a DOE for the National Register is made in consultation with the SHPO.

Phase 3 Investigation

A Phase 3 investigation aims to mitigate adverse effects through data collection (usually in the context of the NHPA's Section 106 process) prior to any disturbance of the site that is eligible for or listed in the National Register.

Phase 3 investigations occur only in cases where the site will be adversely impacted by an undertaking and after development of a MOA with the SHPO.

To begin a Phase 3 investigation, a recovery plan must be submitted to the SHPO and will include background research, previous investigations, Phase 2 research descriptions, a justification of the DOE, and a proposal of fieldwork and mitigation to be conducted. If the Phase 3 data recovery plan includes excavation of all or part of the site, the excavation will follow the minimum methods listed below.

Excavation Methodology

Excavation methodology will be tailored to the specific site and any conditions set by the MOA. In general, first a sampling strategy that covers at least 20% of the archaeological site will be defined. In many cases, complete excavation of the site will be possible. The percentage of site recovery will depend on the degree of disturbance and the size of the archaeological site. Site stratigraphy and artifact concentration (surface or subsurface) should guide the placement of excavation units. Block excavations over artifact concentrations will be used to maximize data recovery and excavate the largest percentage of the site possible. Low density areas will also be tested with single excavation units, especially where deposits are buried.

Documentation

Results of archaeological surveys and excavations will be documented for inclusion in Section 106 review letters and NHPA reports, inclusion in the Administrative Record and submissions to agencies as necessary. Level of documentation should be appropriate to the results and findings and may include:

- Methodology.
- APE, survey, and excavation area descriptions.
- Description of sites identified, including DOEs.
- Copies of AHRs forms.
- Photos of resources and project areas.
- Maps of the survey area and inventoried archaeological sites in a format compatible with ArcGIS.
- References or sources.
- Site boundaries, artifact and feature locations (from GPS on survey, Trimble GPS during phase 2 investigations, and from total station during excavation).
- Artifact densities and feature locations.
- Artifact and faunal analyses.
- Sediment, charcoal, pollen or other data analyses.

Archaeological Survey for Forest Management

Vegetation clearing for forest management that does not include ground disturbance is a frequent, year-round, activity on Fort Wainwright. Forest management includes tree and scrub clearing for fire breaks, mowing landing zones, maintaining lines of site, thinning trees for maneuver capabilities, and timber sales. These activities often cover large acreages and occur mainly during winter months. Many of these areas have not been previously surveyed for archaeological sites. Because there is extremely limited potential for disturbance of buried archaeological sites, the USAG Alaska will not conduct archaeological surveys for these activities. If ground disturbance is planned, regular Section 106 procedures will be followed for areas where previous surveys do not exist. In areas that are previously surveyed, ground disturbance that is not affecting sites will fall under the O&M PA. Ground disturbance affecting sites will be subject to Section 106 procedures established above. In case of unexpected ground disturbance, inadvertent discovery procedures will apply. For the purposes of this ICRMP, hydro axing is considered a ground-disturbing activity and, where proposed, will be addressed on a case-by-case basis to ensure that surface or shallowly-buried sites will not be impacted. Survey will occur prior to hydro axing in previously unsurveyed areas and when ground in the area of activity is not frozen.

5.8.3 Five Year Work Plan

An integrated plan has been developed to address the three management activities addressing archaeological sites. Monitoring of eligible and unevaluated sites, evaluation of known sites, and survey triggered by Section 106 review are planned to holistically address the USAG Alaska inventory over a repeating 5-year cycle. Management activities is planned in order to carry out any of the needed activities in a concise geographic area to conserve and maximize resources.

Archaeological Site Monitoring Plan

Known sites that are eligible for the National Register or not yet evaluated will be monitored on a five-year cycle to evaluate condition and protection measures (Appendix H). Sites included in the monitoring plan are all those determined eligible for the National Register and those that have not yet been evaluated for the National Register. For efficiency, sites identified for monitoring each year are grouped by training area and are in number that is manageable during one field season. Site monitoring by training area is on the same schedule as the site evaluation plan to maximize resources, minimize redundancies, and ensure the maximum coverage in a short field season. In addition, sites may be monitored when located adjacent to newly developed survey areas. Planned monitoring areas may be substituted for others due to training area closures or other impediments.

Year 1 (2019): sites in DTA East and Fort Greely

Year 2 (2020): sites in TFTA

Year 3 (2021): sites in YTA, GRTA, BRTA, and WCTA

Year 4 (2022): sites in DTA West

Year 5 (2023): sites at Tok Fuel Terminal

Archaeological Site Evaluation Plan

Sites will be evaluated for eligibility for inclusion in the National Register with priority given to those sites most at risk for impact and within 100 m of roads, trails, landing zones, bivouacs, and other human made features on the landscape. It is not the intent to achieve 100% evaluation of the USAG Alaska inventory, but to evaluate those sites located in areas of potential impact or opportunistically accessible, as times allows in the field season. This will allow Fort Wainwright to focus protective measures and open up more areas for mission requirements.

Year 1 (2019): sites in DTA East

Year 2 (2020): sites in TFTA

Year 3 (2021): sites in YTA, GRTA, BRTA, and WCTA

Year 4 (2022): sites in DTA West

Year 5 (2023): sites at Tok Fuel Terminal

Archaeological Survey Plan

Archaeological survey efforts will be dictated by ground disturbing projects that occur outside currently surveyed areas and available funding for survey activities. As resources allow, archaeological surveys will attempt to open up more training areas to unrestricted soldier digging and maneuvering.

5.9 Paleontological Resources

Paleontological resources (as defined in the PRPA, P.L. 111-011(d) Sec 6301), are any fossilized remains, traces or imprints of organisms preserved in or on the earth's crust that are of paleontological interest and that provide information about the history of life on earth (not including archaeological resources). It is possible that paleontological resources will be encountered during management, recreation, or military activities on Army lands. At present, only the USACE Permafrost Research Tunnel Facility on USAG Alaska-managed lands is known to contain paleontological material. Pleistocene fossils are known from the deep loess beds in the permafrost tunnel.

5.9.1 Responsibility

Although the PRPA is only applicable to DOI and Forest Service lands, AR 200-1 states that paleontological resources must be addressed for impact or loss in any NEPA documentation. This regulation also requires managing documents for cultural resources to include a policy for management and limited of collection of paleontological resources. It is, therefore, the responsibility of the Garrison Commander and CRM to ensure that paleontological resources found in Army lands are identified, inventoried, protected, and curated.

5.9.2 Procedures

Paleontological resources will be inventoried by the Cultural Resource Management staff in conjunction with standard archaeological surveys, inventories, and Section 106

procedures. If any individual fossils or fossil sites are discovered, the CRM will consult with a qualified paleontologist from the UAMN. Curation of paleontological resources is covered by an existing IGSA with the UAF.

Federal regulations limit collection of paleontological resources on BLM and Forest Service lands to casual surface collection of common invertebrate and plant fossils for personal use. Permits for broader collection or excavation of paleontological resources are the responsibility of BLM. Any misuse or destruction of paleontological sites or resources will be brought to the attention of the BLM by the CRM.

5.10 Historic Buildings Maintenance and Assessment

The Cultural Resource Management Program is dedicated to promoting the management of the USAG Alaska's historic buildings through proactive and effective stewardship. This proactive approach assists in the reduction of operating costs for historic buildings and ensures that all applicable regulatory laws and regulations are adhered to. The Cultural Resource Management Program will enhance current stewardship activities through the implementation of an assessment plan that will support the treatment, maintenance, and repair of historic buildings located within the Ladd Field NHL, the Ladd Air Force Base Cold War Historic District, and the Fort Greely Cold War Historic District. Preserving the integrity of individual buildings during maintenance, repair, and rehabilitation projects is essential to the integrity of both of Fort Wainwright's and Fort Greely's historic districts. The purpose of this plan is to assist other divisions within DPW by monitoring maintenance, repair, and rehabilitation efforts affecting USAG Alaska's historic buildings and report needs for the same as they are seen for work as funding for their preservation and maintenance is available.

Current procedures used by the Cultural Resources Management Program to assist with the maintenance needs for Forts Wainwright's and Greely's historic buildings include:

- Utilizing qualified professional staff.
- Recording historic buildings, historic documentation, and in-depth building studies.
- Reviewing project requests.
- Monitoring project development and execution.
- Assessing maintenance needs of historic buildings.
- Submitting work orders as needed.
- Integrating information into large-scale planning documents.

5.10.1 Current Maintenance Procedures

Many different types and levels of undertakings can affect a building's architectural character and appearance, from replacement of deteriorated building elements to the rehabilitation and adaptive reuse of an entire building. Changes that are not done in a sympathetic manner can negatively impact not only the historic building itself, but the surrounding historic buildings or districts. To aid federal agencies in making sensitive

changes to historic buildings, the NPS developed the *Secretary of Interior's Standards for the Treatment of Historic Properties*, which describes the accepted standards for the preservation, rehabilitation, restoration, and reconstruction of historic buildings. Cultural Resource Management Section staff utilizes these standards when reviewing projects that require the repair or maintenance of a historic building. Along with the accepted standards, the Cultural Resources Management Program utilizes a professionally trained staff, historic documentation, in-depth building reports, and an established project review process to help maintain the historic buildings on Forts Wainwright and Greely.

Staff Qualifications

The Cultural Resource Management staff is comprised of a full-time staff that has the education, background, and professional experience needed to effectively monitor and advocate for Forts Wainwright and Greely's historic building maintenance needs. The education, background and professional experience is required under 36 CFR § 61 and detailed in the *Secretary of the Interior's Professional Qualifications*.

Building Recordation and Studies

The Cultural Resource Management staff frequently utilizes historic photographs, early site plans and maps, original drawings, future project planning maps, installation and NHL design guidelines, as well as real property records to identify historic properties and evaluate their significance. The review of these documents aids the Cultural Resource Section by providing knowledge of original materials used in the construction of USAG Alaska's historic buildings and in deciding what materials are appropriate for repair or rehabilitation projects. Old photographs and site plans also aid in documenting sites that no longer exist and can be used to identify current or potential environmental problems for areas being considered for future development projects.

In addition to routine surveys and DOEs, there have been a number of in-depth studies conducted on several of Fort Wainwright's historically significant buildings and the development of a set of design guidelines for projects within the NHL to aid in future planning and development decisions. A few of the in-depth studies conducted including the Condition Assessment Rehabilitation Plans for Hangars 2 (3008) and 3 (3005), the Ladd Chapel Structural Assessment, and multiple HABS.

Project Reviews

For compliance purposes, all work on USAG Alaska-managed land is informally and/or formally reviewed to monitor current conditions and to determine if there is the potential to affect historic properties. Informal reviews involve consultations with engineers, architects, facilities maintenance, and other staff via phone, in-person, and/or email conversations. Formal reviews include, but are not limited to, work orders and NEPA documentation as well as pre-design and planning meetings. Work orders are the most frequently utilized type of project review completed by the Cultural Resource Management Section.

Work orders are standardized forms that are required when a building manager or DPW personnel are requesting maintenance or repair of any infrastructure on the installations. During the environmental review of the work order, the CRM reviews the request and determines if there is a potential to affect any historic buildings. If there is, then the CRM adds information to the work order, including possible ways to avoid, minimize, and/or mitigate the effects. Additionally, the CRM contacts the proponent of the request and the project manager, if one has been assigned, to discuss the scope of work and its impact to any historic buildings.

Early consultation with all parties involved in the project is essential to ensure adequate time to facilitate the Section 106 consultation. Many work orders reviewed by the CRM are for standard maintenance or repair work that is an integral part of maintaining the installation's infrastructure. Most of the time, these projects have no adverse effects to historic buildings. During this review, the CRM determines if the proposed work has been addressed through a nationwide Program Alternative or if it qualifies for a streamlined review process set forth in the O&M PA.

If the CRM finds that an undertaking has the potential to affect a historic property which cannot be addressed by an existing Programmatic Agreement or the O&M PA, then Section 106 consultation is initiated with the SHPO and all interested consulting parties. Usually the consultation begins with informal phone conversations with consulting parties as well as the drafting of the initial Section 106 correspondence.

Even when a project is initially determined to have no potential to affect historic buildings or is addressed by the O&M PA, it is still critical to follow up on these projects and monitor their progress. To properly monitor a project's progress, follow-up with project managers and additional review of any changes to a project's scope of work is required. Projects can take up to several years to receive funding and in that time may be altered or combined with other work orders. The CRM reviews the 1-n¹¹³ list to verify which projects have been approved for the current fiscal year and the priority listing of the projects.

Building Assessments

The Cultural Resources Management Program's long term goal is to generate and maintain a full assessment of the maintenance history and needs of all historic buildings within the NHL and Cold War Historic Districts. Currently work performed on historic structures is recorded in the local Access database that tracks all eligible or contributing buildings.

5.10.2 Future Plans for Assessment of Historic Buildings

To aid in the collection of relevant data regarding historic buildings on Forts Wainwright and Greely, the recordation of their current condition and any possible future repairs will

¹¹³A list compiled through DPW, which states projected, funded, and prioritized projects over the next year in priority of "1" to however many "n."

serve as a useful tool for Cultural Resource Management staff to make informed decisions regarding future management and in the understanding of how new projects will impact the historic fabric of the building.

Assessments

The DPW currently completes scheduled inspections through the Facility Management Branch. Piggybacking historic property assessments onto these inspections will lead to the Cultural Resource Management staff gaining valuable knowledge regarding the accepted process for submitting work orders to initiate repairs. Through this process the Cultural Resources Management staff will become more informed stewards of the repair and maintenance needs of the historic buildings on Post and, as a result, can proactively advocate for these issues.

Ideally, inspections of historic buildings within the NHL will include photographs and written documentation of exterior and interior conditions of the building, a basic check for pest infestations and water damage, and assessment of the condition of existing historic materials. To achieve this goal of establishing scheduled inspections of historic buildings on Post, the Cultural Resources Management staff will work with the Facility Management Chief to facilitate cooperation with and education of staff within the Cultural Resource Management Section.

Additionally, scheduled project follow-ups will be conducted to ensure there have been no changes in the scope of work for projects already approved and awarded. A long-term goal of these inspections will be to incorporate and use them in conjunction with more detailed and in-depth studies to assist the Cultural Resources Management staff in becoming advocates for the repair and maintenance of historic buildings. The Cultural Resources Management staff will have all the needed information to submit to DPW customer service for correct channeling.

Integration of Information

The goal of these expanded assessments will be to integrate the collected information with other departments and documents maintained on Post, such as the Installation Design Guidelines and pre-design and construction meetings.

5.11 Shared Public Data

The confidentiality of the nature and location of archaeological resources is provided for in 32 CFR § 229.18. The confidentiality and location of historic properties is provided for in 36 CFR § 800.11, pursuant to the NHPA Section 304. The USAG Alaska and the SHPO have an annually renewable agreement in which the State of Alaska agrees to share historic properties site location information with the Cultural Resources Management staff.

Ownership of information provided by Alaska Native tribal governments remains with the tribes. Confidentiality of information is important and includes responsible, accountable use of information provided by the tribes to the USAG Alaska.

The USAG Alaska's cultural resource documents will be prepared so that maps of specific site locations are easily removable. Documents for the public will be produced so that specific location information is not included and that references are redacted.

The USAG Alaska's signage will be generic as to not identify cultural sites on the landscape.

The NHPA and NEPA require federal agencies to provide tribes, interested parties and the public with the opportunity to comment on historic properties management activities that may affect them. The process used to accomplish consultation on these issues regarding USAG Alaska-managed lands is the NEPA process outlined in 40 CFR § 1506.6 "Public Involvement." AR 200-1 and Section 106 also provide procedures for involving the public.

Participants in public involvement in general include:

- Public Affairs Officer
- SHPO
- NPS, Alaska Region
- BLM, Eastern Interior Field Office
- Alaska Native tribes
- Alaska Native organizations (e.g., Alaska Native Corporations)
- Other federal or state agencies
- General public
- Local governments
- Other interested parties

In accordance with EO 13175, the Garrison Commander must directly contact Alaska Native tribes when their participation is needed. This process is separate from and in addition to the public process and is based on the government-to-government relationship between federally-recognized tribes and the federal government (Appendix J).

Non-federally-recognized tribes and other Alaska Native organizations may express interest in certain activities and will be invited to participate on the same basis as other members of the public. Some Alaska Native organizations, such as tribal consortia, may participate in government-to-government consultation only if designated by a federally-recognized tribe as acting on their behalf.

5.12 Curation of Artifacts

Artifacts recovered through cultural resources management activities must be curated in compliance with 36 CFR § 79, *Curation of Federally-Owned and Administered Archaeological Collections*. This regulation and 48 FR 44737, *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*, establish standards

that curation facilities must meet in order to house artifacts removed from public lands. The curation of artifacts removed from USAG Alaska-managed land is the responsibility of the CRM, acting on behalf of the Garrison Commander.

The UAMN in Fairbanks serves as the primary repository for cultural and natural history collections from university research and academic units, state and federal agencies, and Alaska Native corporations. As such, it will curate artifacts recovered from USAG Alaska installations.

ARPA permit holders conducting surveys on USAG Alaska installations must prepare artifacts for curation in accordance with the requirements identified in the permit. The UAMN has specific requirements for preparation of artifacts that must be met prior to acceptance for curation. This will be clearly spelled out in any permits that may require the curation of recovered artifacts.

The CRM will ensure that all artifacts recovered as a result of Army undertakings on USAG Alaska-managed lands are properly curated. Through an agreement with the UAMN, the USAG Alaska has procedures in place for curation of artifacts recovered from USAG Alaska-managed lands. Scopes of work and contracts drawn up for archaeological surveys will include a copy of the guidelines for curation of artifacts, as required by the UAMN. The CRM will include the costs of curation as part of the overall project costs.

Contact information for the UAMN is Archaeology Collections Manager, University of Alaska Museum, P.O. Box 756960, Fairbanks, AK 99775, (907) 474-6943.

5.13 Capacity Building for Alaska Native Tribes

The Cultural Resources Management Program may place significant demands on the regulatory, administrative, and management structure of Alaska Native tribal governments. The USAG Alaska may provide technical assistance to aid tribes with understanding USAG Alaska documents and ensure access to culturally significant sites when requested.

The implementation of capacity building programs is dependent on the availability of funds.

Development of mutually-beneficial agreements between the USAG Alaska and Alaska Natives tribes can also build tribal capacity significantly. Such agreements would be accomplished through work sessions between the USAG Alaska and interested tribes. This process ensures the inclusion of procedures and outcomes desired by any one tribe and should not exclude ideas and desires of other tribes.

5.14 Incorporating Traditional Knowledge into Cultural Resources Management

The USAG Alaska recognizes the special relationship Alaska Natives have with the land and respects the traditional knowledge held by the tribes in understanding the land and its natural and cultural resources. The USAG Alaska also acknowledges the importance of the land and its resources to the traditional cultural values and cultural identity of Alaska Natives. It is understood that the separation of “nature” and “culture” is a western concept and not necessarily the worldview of Alaska Natives. It is important that Army land managers understand the need for incorporating consideration of traditional knowledge about the cultural significance of the land and its resources into the management of resources that may exist on USAG Alaska-managed lands.

This section of the ICRMP is intended to apprise the CRM, other installation staff, and others who might directly or indirectly be involved in the management of historic properties, of Alaska Native views regarding natural and cultural aspects of the environment. This includes Alaska Native traditional knowledge and its relationship with the environment so that non-Native land managers more fully understand and, therefore, more fully consider the views of Alaska Natives in their decision-making and management activities. This section attempts to define traditional knowledge and sets forth management practices regarding traditional knowledge.

- Traditional knowledge can be defined as the totality of all knowledge and practices used today based on past experiences and observation. It is a collective property of a distinct culture and generally an attribute of a particular people who are linked through various economic, cultural and religious activities.
- Traditional knowledge is carried in and communicated through the beliefs, customs, and practices of a living community that are passed down through generations, generally through the spoken word or oral history and through the practice of traditional skills. Part of what makes the knowledge traditional is the fact that it is not written down. It is understood that traditional knowledge must not be overlooked or discounted in resource management simply because it may not take written form.
- Traditional knowledge provides Alaska Natives with an understanding of how lands and places have been used and the significance these places have in their cultural identity. This knowledge is important in identifying areas that may require special management considerations.

5.14.1 Identifying Traditional Knowledge

The significant places about which Alaska Natives hold traditional knowledge may be accorded certain standing and consideration under various federal statutes, regulations, and executive orders, such as considerations of properties of traditional religious and cultural importance (also known as traditional cultural properties) under the NHPA Section 106, sacred sites under EO 13007, the AIRFA, and the NAGPRA.

The NHPA requires federal agencies to consult with tribes that may attach religious or cultural significance to properties that may be affected by an undertaking. As identified

in National Register Bulletin 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, tribal knowledge is a key element of identifying properties of significance to tribes. Therefore, the bulletin directs agencies to work with tribes using traditional knowledge to assist in identifying properties that may have significant values to tribes. It is further emphasized in the bulletin that it is the tribal members using traditional knowledge who are able to identify what is culturally, traditionally, and religiously significant to them. This subject should not be addressed by an entity outside of the tribe.

For the purposes of this ICRMP, it is the responsibility of the tribe, not the USAG Alaska, to identify the appropriate traditional knowledge holders who can identify resources that have significance to the tribe. There are no recognized standards outside of the tribe that directs the USAG Alaska on the qualifications of who may be a traditional knowledge holder.

5.14.2 Traditional Knowledge and its Importance for Historic Properties Management

Traditional knowledge is the special knowledge that different tribes and people possess about all the things, activities, feelings, and parts of their universe that contribute to their existence as a tribal entity or a people through time. It is handed down through the generations and usually by word of mouth. This knowledge, as an example, may include a tribal member's understanding about how to collect natural resources such as berries, fish, and animals and their understanding about sites on the land that may be associated with those activities. This knowledge may also include the proper way in which these activities took place in the past and the meaning of these activities to tribal identity.

Those responsible for considering effects to resources will be better prepared to implement their considerations taking into account the views of Alaska Natives by appreciating traditional knowledge and its breadth of application to the environment.

The implementing regulations for the NHPA require federal agencies to consult with tribes in order to identify any properties of traditional religious and cultural importance that may be affected by a proposed undertaking and to gather information from tribes about these properties while also acknowledging that "Indian tribes and Native Hawaiian organizations possess special expertise in assessing the eligibility of historic properties that may possess religious and cultural significance to them" (36 CFR § 800 (4) (c) (1)).

5.14.3 Confidentiality

Traditional knowledge is the property of the people that possess it. The USAG Alaska will take measures to maintain the confidentiality of this information from the general public or other parties that may not have the interest of the tribes at heart. To insure confidentiality of this information, the following steps will be implemented:

- The tribe providing the information will retain ownership of the information.
- The USAG Alaska will request tribes to identify sensitive areas rather than site-specific location information.
- The USAG Alaska will recognize the expertise of the traditional knowledge holders in identifying what is significant to the tribe and consider appropriate management measures.
- The USAG Alaska may assist the tribes in developing a database for managing information on sites significant to the tribe and that are on USAG Alaska-managed lands.

The USAG Alaska will work cooperatively with appropriate tribes when undertakings may affect or be proposed in or near locations that may be of traditional religious and cultural importance to the tribes. Through consultation with the appropriate tribes, the USAG Alaska will attempt, to the extent possible, to avoid adverse effects by identifying locations of traditional religious and cultural importance and especially to those locations that may be determined eligible for inclusion on the National Register.

6 Implementing the ICRMP

AR 200-1 requires not just preparation and update of an ICRMP, but “implementation” of the ICRMP. The following section discusses the definition and funding aspects of implementation. Implementation anticipates the execution of all high priority projects and activities in accordance with specific timeframes identified in the ICRMP.

An ICRMP is considered to be “implemented” if an installation:

- Actively requests, receives, and uses funds for “must fund” projects and activities.
- Ensures that sufficient numbers of professionally trained cultural resources management personnel are available to perform the tasks required by the ICRMP.
- Coordinates annually with all internal and external cooperating offices.
- Documents specific ICRMP action accomplishments undertaken each year.

Recurring and statutorily required cultural resources project requirements are funded through Army funding allocation models and prioritized based on mission requirements and compliance with cultural resources laws and regulations. Additional funding is requested for one-time projects such as Military Construction or stationing actions. All projects listed in an ICRMP are not necessarily high priority. Implementation of ICRMPs is a shared responsibility among those activities that affect those resources as well as those who ensure compliance and provide overall program oversight. Accordingly, projects necessary to implement ICRMPs are not limited to environmental funds.

6.1 Cultural Resources Implementation Goals and Objectives

The Cultural Resources Management Program includes all the tasks required to plan, organize, implement, and operate the Cultural Resources Management Program for the USAG Alaska. Goals for Cultural Resources Management Program implementation are:

- Enable the USAG Alaska to maintain compliance with the NHPA and other cultural resource laws and regulations.
- Prepare, update, and submit high priority projects on time annually.
- Develop, update, and execute an environmental spending plan annually.
- Contribute to Installation Status Reports and data calls regarding the status of cultural resources on time annually.
- Maintain designated cultural resources professionals with appropriate training and qualifications.
- Prepare, update, and execute MOUs, MOAs, and PAs as required to accomplish cultural resources management.
- Perform tasks to support historic properties in a way that contributes to supporting readiness and sustaining the mission.

6.2 Reporting

The USAG Alaska is responsible for submitting reports for funding requirements, funding work plans, and environmental quality status. The USAG Alaska must annually submit the data on the status of cultural resources on the installations and the Installation Status Report.

6.3 Agreements

AR 200-1 directs that, where applicable, an installation should enter into agreements with state and federal conservation agencies for the preservation and stewardship of cultural resources. Federal agencies, including the Army, must engage in full and open competition in accordance with the Federal Acquisition Regulation to obtain goods and services. Congress, however, has created exceptions to that rule through enactment of independent statutory authority, empowering federal agencies to procure goods and services from other federal agencies, states, local governments, and private non-profit organizations through interagency agreements. Much of the work laid out in this plan will be accomplished through agreements with various entities.

MOAs, IGSAs, and CAs will be pursued to accomplish the described tasks as funding allows and while within the best interest of the Federal government and the USAG Alaska.

6.4 NHPA Section 106 Agreements

Agreement documents—PAs and MOAs—executed pursuant to of the NHPA Section 106 and its implementing regulations at 36 CFR § 800 are compliance agreements that set forth how the Army will satisfy its responsibilities in the event that an Army undertaking affects a historic property. Section 106 PAs that address and define ongoing installation-wide undertakings associated with mission activities and their effects on historic properties are encouraged, as they can streamline NHPA compliance and serve as a program management tool. Any management procedures and determinations provided in PAs and MOAs are integrated into the installation's ICRMP. However, NHPA PAs and MOAs will not refer to or implement an ICRMP. The following are Section 106 MOAs and PAs that are currently active.

- Privatization of Military Housing (65732-0024/LEGAL 14147121.10)
- The Monitoring and Treatment Plan of Archaeological Sites Located Within the Surface Danger Zone of the Battle Area Complex Training Facility at Fort Wainwright, Donnelly Training Area (FW-PA-1003)
- Amended Monitoring and Treatment Plan of Archaeological Sites Located within the Surface Danger Zone (SDZ) of the Battle Area Complex (BAX) Training Facility at DTA (FW-PA-1207)
- Archaeological Excavation and Mitigation of the McDonald Creek Site (FAI-02043) TFTA (FW-MOA-1409)
- Data Recovery Mitigation for Firebreak Maintenance and Disturbance at XMH-01303 (FW-MOA-1505)

- The Operation, Maintenance, and Development of the Army Installation at Fort Wainwright and Associated Training Areas (FW-PA-1015, renewed as FW-PA-1601)
- Archaeological Excavation and Mitigation of XMH-00917, DTA East (FW-MOA-1619)
- Archaeological Excavation and Mitigation of XMH-00292 and XMH-00923, Donnelly Training Area East, Fort Wainwright (FW-MOA-1726)
- Installation of Systems to Support AVCATT Simulators (FW-MOA-1731)
- Renovations of Building 2077 (FW-MOA-1732)
- Construction of a Hangar for the Gray Eagle UAS (FW-MOA-1803)

6.5 Organizational Enhancement, Roles, and Responsibilities

6.5.1 Cultural Resource Organization

The Resource Planning Branch is a sub-component of the DPW Environmental Division. The Cultural Resources Management Program is a part of the Resource Planning Branch.

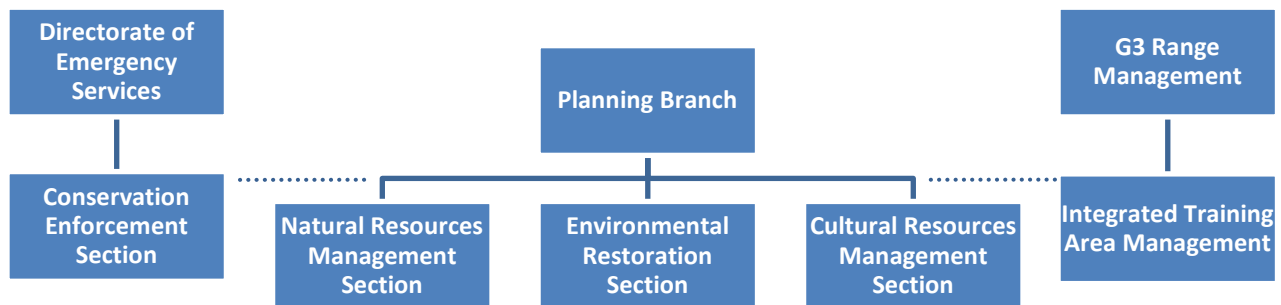


Figure 4. Planning Branch Organizational Chart

6.5.2 Staffing

The management and conservation of cultural resources under Army stewardship is an inherently governmental function. The provisions of AR 5-20 (*Commercial Activities Program*) do not apply to the planning, implementation, enforcement, or management of Army Cultural Resources Management Programs. This includes all positions (for example, professional and technical) that have been validated as a requirement to perform cultural resources management. However, support to the Cultural Resources Management staff, where it is severable from management, planning, implementation, or enforcement actions of cultural resources, may be subject to the provisions of AR 5-20. Personnel positions associated with activities that support (on an as-needed basis) the Cultural Resources Management staff (for example, field crews) may be subject to the provisions of AR 5-20.

The ideal situation would be for all positions to be full-time, permanent federal positions. Considering current Army personnel policies, the addition of permanent, full-time federal

positions is not likely in the foreseeable future. A blended workforce is a necessity. The USAG Alaska is also directed by AR 200-1 to seek technical assistance from appropriate cultural resources agencies (federal, state, and local). As needed, the USAG Alaska will hire specialized expertise needed for some projects within this ICRMP. This expertise may come from universities, governmental agencies, and contracting entities.

Federal In-house Capabilities: The USAG Alaska has limited in-house federal positions as a result of manpower restrictions. There is currently one full-time Department of the Army civilian position.

Federal Agency Support: The USAG Alaska may utilize personnel support from other federal agencies, however, this option has not been used previously. These types of personnel meet the requirements for “government in nature” positions for planning for, management of, and enforcement for cultural resources.

Contractor Support: As a final option for manpower assistance, the USAG Alaska may turn to outside contractors for tasks that are severable from management, planning, implementation or enforcement actions of cultural resources. Contractors give the USAG Alaska access to a wide variety of expertise. Contractors may be used for projects such as historic building inventory, archaeological excavations, plan preparation, and similar activities.

6.5.3 Qualifications

Pursuant to the NHPA Section 112, agency personnel or contractors responsible for historic properties analysis must meet qualifications standards established by the Office of Personnel Management in consultation with the Secretary of the Interior. These are the *Secretary of the Interior’s Professional Qualification Standards*, defined in 36 CFR § 61. Historic properties management activities discussed in this ICRMP must be conducted and/or supervised by cultural resources professionals with the minimum qualifications that meet the standards for the appropriate discipline. The disciplines represented on staff should reflect program or garrison needs based on the types of cultural resources located at installations.

6.6 Coordination

A blended workforce can also contribute to chain-of-command challenges. Therefore, the USAG Alaska has instituted a framework of conservation and cultural resource teams, in-progress reviews, and periodic training to meet these challenges.

6.6.1 Training

Interdisciplinary training is essential for DoD CRMs and staff to address practical job disciplines, statutory compliance requirements, applicable regulations, and current scientific and professional standards as related to the preservation of cultural resources.

The cultural resources training objective is to identify and help achieve technical requirements as well as to facilitate the implementation of a successful and proactive program.

Appropriate training will assist the CRM in carrying out cultural resources management activities on Forts Wainwright and Greely, ensuring compliance with historic preservation laws.

Educating the USAG Alaska staff on cultural resources laws and regulations will assist in achieving and maintaining compliance. Basic training for unit commanders, environmental officers, and others on historic preservation laws and regulations and on the history of Forts Wainwright and Greely will provide them with the necessary tools to be good stewards of the historic properties on the installations.

The CRM will offer training, as needed, for any tenant or outside agency to understand the requirements for coordinating a project with the Cultural Resources Management staff and will coordinate all undertakings by tenants or outside agencies that affect a historic property with the SHPO, ACHP, and interested parties.

The Cultural Resources Management staff has developed curriculum, in consultation with the SHPO, for an internal training of the USAG Alaska DPW staff and contractors concerning a variety of preservation concerns and providing a greater understanding of the considerations to be taken into account during project planning and execution.

6.7 Outreach

Each Cultural Resources Management Program subject area participates in public outreach activities through the environmental division webpage, social media, classroom visits, media outlets, and installation and community events. A Cultural Resources Working Group of community stakeholders assists with outreach and serves as a sounding board and advisory body for continued outreach development.

6.8 Financial Management and Funding

Establishing and executing a budget is a responsibility of the CRM. The intent of the funding section of this ICRMP is to link resources with the established goals. The funding section of this plan will be used to develop and support environmental funding requirements. Activities designed to identify, evaluate, assess, stabilize, and report are eligible for environmental funds when such undertakings are developed in accordance with professional historic preservation standards and guidelines established by the Secretary of the Interior.

6.8.1 Environmental Funding

The purpose of environmental funding is to enable the Army mission by enabling the approved categories of work involved in resources management. All activities outlined

in the ICRMP will be performed subject to the availability of funding. IMCOM policy for use of environmental funds for cultural resources activities is established in annual funding guidance. The funding guidance also specifies projects and activities that are not eligible for environmental funding. Funding for cultural resources requirements, recurring and non-recurring, is modeled as described in Section 6.0.

6.8.2 Facilities Funding

Army facility support is funded through Sustainment, Restoration, and Modernization (SRM) funds. The purpose of SRM funding is to enable the Army mission by funding the sustainment of range and other facilities in good working order to meet long-term doctrinal training requirements. Restoration funding is intended to restore failed or failing facilities; systems, and components damaged by a lack of sustainment, excessive age, fire, storm, flood, freeze, or other natural occurrences; and to improve facilities to current standards. Modernization funding adapts facilities to meet new standards and includes the erection, installation, or assembly of a new real property facility; and the addition, expansion, extension, alteration, conversion, or complete replacement of an existing real property facility.

6.8.3 Budgeting

The Environmental Division partners with the garrison Resource Management Office to manage the environmental budget. An obligation plan (cultural resources management is included in this) is utilized to communicate planning requirements and to help manage the annual budget.

6.8.4 Contracting

The contracting process includes two primary components: (1) purchase and acquisition and (2) contract management. Purchase and acquisition is necessary to establish and let a contract and contract management is necessary to ensure good communication between the government and contractor to enable good contract performance.

Purchase and Acquisition: The first step in the contract process is purchase and acquisition. The USAG Alaska Environmental Division starts the process by clearly defining desired services in a Performance Work Statement (PWS), estimating costs, and initiating a purchase request. The USAG Alaska Environmental Division works with a contracting agency to develop an acquisition strategy, which is approved by the Garrison Commander at the Acquisition Review Board.

The Economy Act of 1932, as amended, allows federal agencies to obtain services directly from other federal agencies or utilize contracts and cooperative agreements already in place by other federal agencies. The Military Interdepartmental Purchase Request is used to acquire cultural resources services. Using this process, the USAG Alaska will utilize an agency such as the USACE or the U.S. Forest Service for procurement of services.

Contract Management: Once a contract mechanism is in place, the USAG Alaska Environmental Division must nominate a federal employee to act as the Contracting Officer's Representative or technical representative the execution of the work. The Contracting or Grants Officer authorizes the representative to verify that the contractor or agency performs to the technical requirements of the PWS, perform necessary inspections, maintain liaison and direct communication with the contractor or agency employee, monitor the contractor's performance, submit a report concerning performance of services rendered, and coordinate site entry for contractor and other agency personnel.

6.9 Command Support

Command support is essential to implement this ICRMP. Without this support, priority projects for cultural resources management will not occur. Failure to execute these projects risks violation of environmental laws, reduced mission readiness, and negative public reaction to a lack of environmental stewardship. The Installation Commander is responsible for compliance with environmental laws and sets the tone for environmental stewardship. Command emphasis on this ICRMP ensures a healthy environment, sustainable resources, and quality future training lands.

This page left intentionally blank.

Appendix A. Glossary of Commonly Used Terms

Adverse effects are those effects of an undertaking that may alter, directly or indirectly, any of the characteristics of a historic property that qualify the historic property for inclusion in the National Register in a manner that would diminish the integrity of the historic property's location, design, setting, materials, workmanship, feeling, or association. The criteria of adverse effect also require consideration of all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the historic property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Archaeological resource means any material remains or physical evidence of human habitation, occupation, use, or activity, including the site, location, or context in which such evidence is situated.

Archaeological interest means capable of providing scientific or humanistic understandings of past human behavior, cultural adaptation, and related topics through the application of scientific or scholarly techniques such as controlled observation, contextual measurement, controlled collection, analysis, interpretation, and explanation.

Area of potential effect means the geographic area(s) within which an undertaking may directly cause changes in the character or use of historic properties, if any such historic properties exist.

Building means a construction (e.g., house, hotel, church, etc.) created principally to shelter any form of human activity.

Consulting parties are those parties that have a consultative role in the NHPA Section 106 process and for the purposes for the implementation of the ICRMP, consulting parties can include the SHPO, BLM, NPS, federally-recognized Alaska Native tribes, representatives of certified local governments, non-governmental entities considered to be local stakeholders in heritage resources, and applicants for federal permits, licenses, assistance or other forms of federal approval.

Consultation means the formal process of seeking, discussing, identifying and considering the views of consulting parties.

Coordination, for the purposes of cultural resources management, means the informal communication and exchange of information and ideas between consulting parties concerning historic preservation issues affecting the USAG Alaska, usually on a staff-to-staff basis, for routine management issues as distinguished from the formal consultation and tribal consultation processes.

Cultural Resource is a general term for physical remnants of the past that are valued by and are important to a community of people (or culture). It can be referring to a historic property as defined in the NHPA; a cultural item as defined in the NAGPRA or by a federally-recognized Indian tribe; an archaeological resources as defined in the ARPA; a sacred sites as defined in EO 13007 to which access is provided under the AIRFA; or collections as defined in *Curation of Federally-Owned and Administered Collections* (36 CFR § 79).

Cultural Resources Manager (CRM) is the individual designated by the Garrison Commander, in accordance with AR 200-1, to coordinate the NHPA Section 106 responsibilities. The Garrison Commander will ensure that the CRM has appropriate knowledge, skills, and professional training and education to carry out installation cultural resources management responsibilities. The CRM will ensure that all historic properties technical work, including identification and evaluation of historic properties, assessment and treatment of effects, and preparation of the ICRMP, is conducted by individuals who meet the applicable standards within the *Secretary of the Interior's Professional Qualification Standards*.

Disposal means any authorized method of permanently divesting the Department of the Army of control of and responsibility for real estate.

District means a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.

Effect means alteration to the characteristics of a historic property that qualify it for inclusion in or make it eligible for inclusion in the National Register.

Environmental Assessment (EA) is a NEPA term used for the documentation used to assist agency planning and decision-making. It is required to assess environmental impacts and evaluate their significance and is routinely used as a planning document to evaluate environmental impacts, develop alternatives and mitigation measures, and allow for agency and public participation.

Environmental Impact Statement (EIS) is a NEPA term referring to a detailed written statement required under NEPA for major federal actions significantly affecting the quality of the human environment.

Federally-recognized Tribe, for the purposes of the ICRMP means: (i) an American Indian tribe, band, nation, pueblo, village, or community within the United States presently acknowledged by the Secretary of the Interior to exist as an American Indian tribe pursuant to the Federally-Recognized Indian Tribe List Act, Public Law 103-454; and (ii) Regional Corporations or Village Corporations, as those terms are defined in Section 3 of the Alaska Native Claims Settlement Act (43 USC. 1602), which are

recognized as eligible for the special programs and services provided by the United States to Indians because of their status as American Indians.

The **Garrison Commander**, an Army colonel, is charged with providing Base Operations Support to all activities and personnel on the Program Objective Memorandum. The Garrison Commander directs, oversees, and coordinates garrison staff.

Government-to-government relations, for the purposes of this document, means relations formally established between the USAG Alaska and federally-recognized Alaska Native tribes through their respective governmental structures. In recognition of a federally-recognized indigenous tribe's status as a sovereign nation, formal government-to-government relations are established and maintained directly between Garrison Commanders and the heads of tribal governments.

Historic preservation includes identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, and education and training regarding the foregoing activities or any combination of the foregoing activities.

Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. The term includes artifacts, records, and remains that are related to and located within such properties. The term includes historic properties of traditional religious and cultural importance to federally-recognized American Indian tribes. The term "eligible for inclusion in the National Register" includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

Historic property type refers to the kind of resource being documented, recorded, or evaluated. Types of historic properties include buildings (churches, forts, libraries, post offices, etc.), structures (bridges, canals, earthworks, etc.), objects (automobiles, boundary markers, fountains, sculptures, etc.), and districts (collections of buildings, structures, and objects unified by a common theme).

Improvements mean an addition to land amounting to more than repair or replacement and costing labor or capital (e.g., buildings, pavements, pipelines, and other structures more or less permanently attached to the land).

In-grants means real property acquired for Army use by lease, license, or permit.

Installation means a grouping of facilities located in the same vicinity, which are under control of the Army and used by Army organizations. This includes land and improvements. In addition to those used primarily by Soldiers, the term "installation" applies to real properties such as depots, arsenals, ammunition plants, hospitals, terminals, and other special mission installations. The term may also be applied to a

state or region in which the Army maintains facilities. For example, the Army National Guard may consider National Guard facilities within a state to be one installation and the U.S. Army Reserve may consider Regional Support Centers to be installations. The Garrison Commander is the individual responsible for management and operation of the installation.

Integrated Cultural Resources Management Plan (ICRMP) is a five-year plan developed and implemented by a Garrison Commander to provide for the management of cultural resources in a way that maximizes beneficial effects on such resources and minimizes adverse effects and impacts without impeding the mission of the Army.

Keeper of the National Register of Historic Places means the individual who has been delegated the authority by NPS to list properties and determine their eligibility for the National Register of Historic Places. The Keeper may further delegate this authority as he or she deems appropriate.

Memorandum of Agreement refers to an agreement document that outlines a federal agency's planned actions to avoid, minimize, and mitigate an adverse effect to a historic property.

Mitigation refers to actions taken to reduce, minimize, or alleviate adverse effects caused by a federal undertaking.

Mothballing refers to the act of temporarily securing a building or structure and its component features to reduce vandalism or break-ins. When a building or structure is mothballed, adequate ventilation to the interior should be provided, and utilities and mechanical systems modified or secured. The process also entails stabilizing the building or structure, exterminating or controlling pests, and protecting the exterior from moisture penetration. A plan for maintaining and monitoring the building or structure should be developed and implemented.

National Historic Landmark (NHL) means a historic property that the Secretary of the Interior has designated a National Historic Landmark pursuant to the Historic Sites Act of 1935, Public Law 100-17. NHLs are places where significant historical events have occurred, where prominent Americans worked or lived, that represent those ideas that shaped the nation, that provide important information about our past, or that are outstanding examples of design or construction.

National Register of Historic Places Criteria means the criteria established by the Secretary of the Interior for use in evaluating the eligibility of properties for the National Register (36 CFR § 60).

Native Liaison is the individual designated by the Garrison Commander to facilitate the government-to-government relationship with federally-recognized Indian tribes. The Garrison Commander will ensure that the Native Liaison has appropriate knowledge, skills, and professional training and education to conduct installation consultation

responsibilities with federally-recognized American Indian and Alaska Native tribes. The Native Liaison is also responsible, when designated, to carry out staff-to-staff consultation actions with federally-recognized tribes. The Native Liaison will have access to the installation command staff in order to facilitate direct government-to-government consultation.

NEPA process means the decision-making process established by the National Environmental Policy Act as implemented by the regulations published by the Council on Environmental Quality and AR 200-2. The NEPA process involves preparation of a NEPA document, a Record of Environmental Consideration, an Environmental Assessment or an Environmental Impact Statement, followed by a decision document. An EA usually results in either a Finding of No Significant Impact or Notice of Intent to prepare an EIS. An EIS results in a Record of Decision.

Object is a term to distinguish from buildings and structures those constructions (e.g., fountains, monuments, sculptures, etc.) that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

Professional standards mean, for the purposes of (this document), those standards set forth in the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716), which apply to individuals conducting technical work for the Army. Tribal members are uniquely qualified to identify and assist in the evaluation, assessment of effect, and treatment of historic properties to which they attach traditional religious and cultural importance. When the Army requests assistance from federally-recognized American Indian tribes to aid in the identification, evaluation, assessment of effects and treatment of historic properties of traditional religious and cultural importance, such tribal members need not meet the *Secretary of the Interior's Professional Qualifications Standards*.

Properties of Traditional Religious and Cultural Importance are properties that are associated with the traditions, beliefs, practices, life ways, arts, crafts, and social institutions of an Indian tribe.

Real estate means real property owned by the United States and under the control of the Army. It includes the land, right, title, and interest therein and improvements thereon. The land includes minerals in their cultural state and standing timber; when severed from the land, they become personal property. Rights and interest include leaseholds, easements, rights-of-way, water rights, air rights, and rights to lateral and subjacent support. Installed building equipment is considered real estate until severed. Equipment in place is considered personal property.

Record of Environmental Consideration (REC) is a signed statement, required under AR 200-2, submitted with the documentation that briefly documents that an Army undertaking has received environmental/cultural review that briefly describes the proposed action and timeframe and identifies the proponent and approving official(s).

The REC provides sufficient documentation to enable a decision. Comments, which result from the review of the REC, are compiled into a decision; the approved guidance for the undertaking is then provided to the proponent.

Rehabilitation is defined as the act or process of making possible a compatible use for a historic property through repair, alterations, and additions while preserving those portions or features that convey its historical or cultural values.

Restoration is defined as the act or process of accurately depicting the form, features, and character of a historic property as it appeared at a particular period of time by means of removal of features from other periods of its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make historic properties functional is appropriate within a restoration project.

Site is a location of significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value regardless of the value of any existing structure.

Sovereignty, with respect to federally-recognized American Indian tribes, means the exercise of inherent powers of self-governance and self-determination over their members and territories.

Standard Operating Procedures are the step-by-step methods the USAG Alaska will follow when managing historic properties affected by installation undertakings. These are based on the goals, management practices, and historic preservation standards.

State Historic Preservation Officer (SHPO) means the official appointed or designated pursuant to Section 101 (b) (1) of the NHPA of 1966, as amended, to administer the state historic preservation program or representative designated to act for the SHPO.

Streamlined Activities refers to the USAG Alaska's undertakings that meet the criteria set forth in the O&M PA. The USAG Alaska does not individually consult with SHPO on these undertakings as they have little to no potential to adversely affect historic properties.

Transfer means the change of jurisdiction over real property from one federal agency or department to another, including military departments and defense agencies.

Traditional Cultural Property is generally defined as a property type that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that are rooted in the community's history and are important in maintaining the continuing cultural identity of the community.

Tribal consultation means seeking, discussing, identifying and considering tribal views through good faith dialogue with federally-recognized Alaska Native tribes on a government-to-government basis in recognition of the unique relationship between federal and tribal governments and the status of federally-recognized Alaska Native tribes as sovereign nations (see government-to-government relations.)

Treatment plans provide guidance on maintenance, repair, rehabilitation, restoration, and preservation of historic properties. The plans are based on the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Undertaking means a project, activity, or program that is funded in whole or in part under the direct or indirect jurisdiction of the Army, including those carried out by or on behalf of the Army, those carried out in whole or in part with Army funds, and those requiring Army approval.

View shed refers to the visual and spatial relationship between the historic property and the surrounding area. It refers to the area on the ground that is visible from a specific location or locations. A view shed can also refer to the view into and out of a neighborhood, and the view created by a landscape.

Appendix B. Commonly Used Acronyms

ACHP	Advisory Council on Historic Preservation
AHRS	Alaska Heritage Resources Survey
AIRFA	American Indian Religious Freedom Act
ARPA	Archaeological Resources Protection Act
APE	Area of Potential Effect
AEC	Army Environmental Command
AR	Army Regulation
BRAC	Base Realignment and Closure
BRTA	Black Rapids Training Area
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CA	Cooperative Agreement
CRTC	Cold Regions Test Center
CRM	Cultural Resources Manager
DoD	Department of Defense
DOE	Determination of Eligibility
DPW	Directorate of Public Works
DTA	Donnelly Training Area
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
GIS	Geographic Information System
GRTA	Gerstle River Training Area
HQDA	Headquarters, Department of the Army
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
ICRMP	Integrated Cultural Resources Management Plan
IGSA	Intergovernmental Support Agreement
IMCOM	Installation Management Command
ITAM	Integrated Training Area Management
LRAM	Land Rehabilitation and Maintenance
MILCON	Military Construction
MOA	Memorandum of Agreement
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NPS	National Park Service
National Register	National Register of Historic Places
NWTC	Northern Warfare Training Center
OHA	Office of History and Archaeology
O&M PA	Operations and Maintenance Programmatic Agreement
PA	Programmatic Agreement
PRPA	Paleontological Resources Protection Act

REC	Record of Environmental Consideration
SOP	Standard Operating Procedure
SHPO	State Historic Preservation Officer
TFTA	Tanana Flats Training Area
TCP	Traditional Cultural Property
UAMN	University of Alaska Museum of the North
USACE	U.S. Army Corps of Engineers
USARAK	U.S. Army, Alaska
USAG Alaska	U.S. Army Garrison Alaska
USAG Greely	U.S. Army Garrison Greely
WCTA	Whistler Creek Training Area
YTA	Yukon Training Area

Appendix C. Archaeological Sites Inventory

Surveys have been conducted on lands managed by Forts Wainwright and Greely since the 1960s. In addition to the individual sites listed below, there are six archaeological districts eligible for the National Register.

Table 1. Archaeological Districts – USAG Alaska-managed

AHRS # / Name	Location	Status	Historic/Prehistoric
FAI-00335 Blair Lakes	TFTA	Eligible	Historic/Prehistoric
FAI-00336 Clear Creek Buttes	TFTA	Eligible	Prehistoric
FAI-00337 Wood River Buttes	TFTA	Eligible	Prehistoric
XMH-00388 Donnelly Ridge	DTA East	Eligible	Prehistoric
XMH-01552 Heart among the Glaciers	DTA East	Eligible	Prehistoric
XMH-01553 Jarvis Creek	DTA East	Eligible	Prehistoric

Table 2. Archaeological Sites: Eligible or Not Yet Evaluated – USAG Alaska-managed

AHRS #	Location	Status	Historic/Prehistoric
FAI-00040	Fort Wainwright	Eligible	Prehistoric
FAI-00044	TFTA	Eligible	Prehistoric
FAI-00046	TFTA	Eligible	Historic
FAI-00047	TFTA	Not evaluated	Prehistoric
FAI-00050	TFTA	Not evaluated	Prehistoric
FAI-00052	TFTA	Eligible	Prehistoric
FAI-00054	TFTA	Eligible	Historic
FAI-00055	TFTA	Not evaluated	Prehistoric
FAI-00059	TFTA	Not evaluated	Prehistoric
FAI-00060	TFTA	Not evaluated	Prehistoric
FAI-00086	TFTA	Not evaluated	Prehistoric
FAI-00087	TFTA	Not evaluated	Prehistoric
FAI-00088	TFTA	Not evaluated	Prehistoric
FAI-00161	TFTA	Not evaluated	Historic
FAI-00170	TFTA	Not evaluated	Prehistoric
FAI-00171	TFTA	Not evaluated	Prehistoric
FAI-00172	TFTA	Not evaluated	Prehistoric
FAI-00173	TFTA	Not evaluated	Prehistoric
FAI-00174	TFTA	Not evaluated	Prehistoric
FAI-00175	TFTA	Not evaluated	Prehistoric
FAI-00176	TFTA	Not evaluated	Prehistoric
FAI-00177	TFTA	Not evaluated	Prehistoric

FAI-00178	TFTA	Not evaluated	Prehistoric
FAI-00179	TFTA	Not evaluated	Prehistoric
FAI-00180	TFTA	Not evaluated	Prehistoric
FAI-00181	TFTA	Not evaluated	Prehistoric
FAI-00182	TFTA	Not evaluated	Prehistoric
FAI-00183	TFTA	Not evaluated	Prehistoric
FAI-00184	TFTA	Not evaluated	Prehistoric
FAI-00185	TFTA	Not evaluated	Prehistoric
FAI-00186	TFTA	Not evaluated	Prehistoric
FAI-00187	TFTA	Not evaluated	Prehistoric
FAI-00188	TFTA	Not evaluated	Prehistoric
FAI-00189	TFTA	Not evaluated	Prehistoric
FAI-00190	TFTA	Not evaluated	Prehistoric
FAI-00191	TFTA	Not evaluated	Prehistoric
FAI-00192	TFTA	Not evaluated	Prehistoric
FAI-00193	TFTA	Not evaluated	Prehistoric
FAI-00194	TFTA	Eligible	Prehistoric
FAI-00195	TFTA	Eligible	Prehistoric
FAI-00196	TFTA	Eligible	Prehistoric
FAI-00197	TFTA	Eligible	Prehistoric
FAI-00198	TFTA	Eligible	Prehistoric
FAI-01356	TFTA	Not evaluated	Prehistoric
FAI-01357	TFTA	Not evaluated	Prehistoric
FAI-01556	YTA	Not evaluated	Prehistoric
FAI-01885	TFTA	Not evaluated	Prehistoric
FAI-01886	TFTA	Not evaluated	Prehistoric
FAI-01887	TFTA	Not evaluated	Prehistoric
FAI-01888	TFTA	Not evaluated	Prehistoric
FAI-01889	TFTA	Eligible	Prehistoric
FAI-01998	TFTA	Not evaluated	Prehistoric
FAI-02001	TFTA	Not evaluated	Prehistoric
FAI-02002	TFTA	Not evaluated	Prehistoric
FAI-02003	TFTA	Not evaluated	Prehistoric
FAI-02004	TFTA	Not evaluated	Prehistoric
FAI-02005	TFTA	Not evaluated	Prehistoric
FAI-02006	TFTA	Not evaluated	Prehistoric
FAI-02007	TFTA	Not evaluated	Prehistoric
FAI-02008	TFTA	Not evaluated	Prehistoric
FAI-02009	TFTA	Not evaluated	Prehistoric

FAI-02010	TFTA	Not evaluated	Prehistoric
FAI-02011	TFTA	Not evaluated	Prehistoric
FAI-02012	TFTA	Not evaluated	Prehistoric
FAI-02013	TFTA	Not evaluated	Prehistoric
FAI-02014	TFTA	Not evaluated	Prehistoric
FAI-02016	TFTA	Not evaluated	Prehistoric
FAI-02018	TFTA	Not evaluated	Prehistoric
FAI-02019	TFTA	Not evaluated	Prehistoric
FAI-02020	TFTA	Not evaluated	Prehistoric
FAI-02021	TFTA	Not evaluated	Prehistoric
FAI-02022	TFTA	Not evaluated	Prehistoric
FAI-02023	TFTA	Not evaluated	Prehistoric
FAI-02024	TFTA	Not evaluated	Prehistoric
FAI-02025	TFTA	Not evaluated	Prehistoric
FAI-02026	TFTA	Not evaluated	Prehistoric
FAI-02027	TFTA	Not evaluated	Prehistoric
FAI-02028	TFTA	Not evaluated	Prehistoric
FAI-02029	TFTA	Not evaluated	Prehistoric
FAI-02030	TFTA	Not evaluated	Prehistoric
FAI-02031	TFTA	Not evaluated	Prehistoric
FAI-02032	TFTA	Not evaluated	Prehistoric
FAI-02033	TFTA	Not evaluated	Prehistoric
FAI-02043	TFTA	Eligible	Prehistoric
FAI-02044	TFTA	Not evaluated	Prehistoric
FAI-02045	TFTA	Not evaluated	Prehistoric
FAI-02046	TFTA	Not evaluated	Prehistoric
FAI-02047	TFTA	Eligible	Prehistoric
FAI-02048	TFTA	Not evaluated	Prehistoric
FAI-02049	TFTA	Not evaluated	Prehistoric
FAI-02050	TFTA	Not evaluated	Prehistoric
FAI-02051	TFTA	Not evaluated	Prehistoric
FAI-02052	TFTA	Not evaluated	Prehistoric
FAI-02053	TFTA	Not evaluated	Prehistoric
FAI-02054	TFTA	Not evaluated	Prehistoric
FAI-02055	TFTA	Not evaluated	Prehistoric
FAI-02056	TFTA	Not evaluated	Prehistoric
FAI-02057	TFTA	Not evaluated	Prehistoric
FAI-02058	TFTA	Not evaluated	Prehistoric
FAI-02059	TFTA	Not evaluated	Prehistoric

FAI-02060	TFTA	Eligible	Prehistoric
FAI-02061	TFTA	Not evaluated	Prehistoric
FAI-02062	TFTA	Not evaluated	Prehistoric
FAI-02063	TFTA	Eligible	Prehistoric
FAI-02064	TFTA	Eligible	Prehistoric
FAI-02065	TFTA	Not evaluated	Prehistoric
FAI-02066	TFTA	Not evaluated	Prehistoric
FAI-02067	TFTA	Not evaluated	Prehistoric
FAI-02068	TFTA	Not evaluated	Prehistoric
FAI-02069	TFTA	Not evaluated	Prehistoric
FAI-02070	TFTA	Not evaluated	Prehistoric
FAI-02071	TFTA	Not evaluated	Prehistoric
FAI-02072	TFTA	Not evaluated	Prehistoric
FAI-02073	TFTA	Eligible	Prehistoric
FAI-02074	TFTA	Not evaluated	Prehistoric
FAI-02075	TFTA	Not evaluated	Prehistoric
FAI-02076	TFTA	Not evaluated	Prehistoric
FAI-02077	TFTA	Eligible	Prehistoric
FAI-02078	TFTA	Not evaluated	Prehistoric
FAI-02079	TFTA	Not evaluated	Prehistoric
FAI-02080	TFTA	Not evaluated	Prehistoric
FAI-02081	TFTA	Not evaluated	Prehistoric
FAI-02082	TFTA	Not evaluated	Prehistoric
FAI-02083	TFTA	Not evaluated	Prehistoric
FAI-02084	TFTA	Not evaluated	Prehistoric
FAI-02085	TFTA	Not evaluated	Prehistoric
FAI-02086	TFTA	Not evaluated	Prehistoric
FAI-02087	TFTA	Not evaluated	Prehistoric
FAI-02088	TFTA	Not evaluated	Prehistoric
FAI-02089	TFTA	Not evaluated	Prehistoric
FAI-02090	TFTA	Not evaluated	Prehistoric
FAI-02091	TFTA	Not evaluated	Prehistoric
FAI-02092	TFTA	Not evaluated	Prehistoric/Historic
FAI-02093	TFTA	Not evaluated	Prehistoric
FAI-02094	TFTA	Not evaluated	Prehistoric
FAI-02095	TFTA	Not evaluated	Prehistoric
FAI-02097	TFTA	Not evaluated	Prehistoric
FAI-02199	TFTA	Not evaluated	Prehistoric
FAI-02200	TFTA	Not evaluated	Historic

FAI-02234	TFTA	Not evaluated	Prehistoric
FAI-02235	TFTA	Not evaluated	Prehistoric
FAI-02236	TFTA	Not evaluated	Prehistoric
FAI-02237	TFTA	Not evaluated	Prehistoric
FAI-02238	TFTA	Not evaluated	Prehistoric
FAI-02239	TFTA	Not evaluated	Prehistoric
FAI-02240	TFTA	Not evaluated	Prehistoric
FAI-02241	TFTA	Not evaluated	Prehistoric
FAI-02242	TFTA	Not evaluated	Prehistoric
FAI-02243	TFTA	Not evaluated	Prehistoric
FAI-02244	TFTA	Not evaluated	Prehistoric
FAI-02245	TFTA	Not evaluated	Prehistoric
FAI-02246	TFTA	Not evaluated	Prehistoric
FAI-02247	TFTA	Not evaluated	Prehistoric
FAI-02248	TFTA	Not evaluated	Prehistoric
FAI-02250	TFTA	Not evaluated	Prehistoric
FAI-02319	TFTA	Not evaluated	Prehistoric
FAI-02320	TFTA	Not evaluated	Prehistoric
FAI-02321	TFTA	Not evaluated	Prehistoric
FAI-02322	TFTA	Not evaluated	Prehistoric
FAI-02323	TFTA	Not eligible, contributing	Prehistoric
FAI-02361	TFTA	Not evaluated	Prehistoric
FAI-02368	TFTA	Not evaluated	Historic
FAI-02391	TFTA	Not evaluated	Prehistoric
FAI-02392	TFTA	Not evaluated	Prehistoric
FAI-02393	TFTA	Not evaluated	Prehistoric
FAI-02394	TFTA	Not evaluated	Prehistoric
HEA-00685	DTA West	Not evaluated	Prehistoric
TNX-00007	Tok Terminal	Eligible	Prehistoric
TNX-00010	Tok Terminal	Eligible	Prehistoric
TNX-00231	Tok Terminal	Not evaluated	Prehistoric
TNX-00232	Tok Terminal	Not evaluated	Prehistoric
TNX-00233	Tok Terminal	Not evaluated	Prehistoric
TNX-00234	Tok Terminal	Not evaluated	Prehistoric
TNX-00235	Tok Terminal	Not evaluated	Prehistoric
TNX-00236	Tok Terminal	Not evaluated	Prehistoric
TNX-00256	Tok Terminal	Not evaluated	Prehistoric
XBD-00033	DTA West	Not evaluated	Prehistoric
XBD-00105	YTA	Not evaluated	Prehistoric

XBD-00106	DTA West	Eligible	Prehistoric
XBD-00108	DTA West	Not evaluated	Prehistoric
XBD-00109	DTA West	Not evaluated	Prehistoric
XBD-00110	DTA West	Eligible	Prehistoric
XBD-00187	DTA West	Not evaluated	Prehistoric
XBD-00188	DTA West	Not evaluated	Prehistoric
XBD-00189	DTA West	Not evaluated	Prehistoric
XBD-00271/ XMH-01284	DTA East	Not evaluated	Prehistoric
XBD-00272	DTA East	Not evaluated	Prehistoric
XBD-00273	DTA East	Not evaluated	Prehistoric
XBD-00311	DTA West	Not evaluated	Prehistoric
XBD-00333/ XMH-01178	DTA East	Not evaluated	Prehistoric
XBD-00335	DTA West	Eligible	Prehistoric
XBD-00364	YTA	Not evaluated	Prehistoric
XBD-00368	YTA	Not evaluated	Prehistoric
XBD-00370	YTA	Not evaluated	Prehistoric
XBD-00425	DTA West	Not evaluated	Prehistoric
XBD-00426	DTA West	Not evaluated	Prehistoric
XBD-00427	DTA West	Not evaluated	Prehistoric
XBD-00428	DTA West	Not evaluated	Prehistoric
XBD-00429	DTA West	Not evaluated	Prehistoric
XBD-00430	DTA West	Not evaluated	Prehistoric
XBD-00431	DTA West	Not evaluated	Prehistoric
XBD-00450	DTA West	Not evaluated	Prehistoric
XBD-00451	DTA West	Not evaluated	Prehistoric
XMH-00001	DTA East	Not evaluated	Prehistoric
XMH-00005	DTA East	Eligible	Prehistoric
XMH-00006	DTA East	Eligible	Prehistoric
XMH-00007	DTA East	Eligible	Prehistoric
XMH-00008	DTA East	Eligible	Prehistoric
XMH-00009	DTA East	Eligible	Prehistoric
XMH-00010	DTA East	Eligible	Prehistoric
XMH-00011	DTA East	Eligible	Prehistoric
XMH-00012	DTA East	Not evaluated	Prehistoric
XMH-00016/ XMH-00970	DTA East	Not evaluated	Prehistoric
XMH-00019	DTA East	Eligible	Prehistoric
XMH-00020	DTA East	Eligible	Prehistoric
XMH-00023	DTA East	Not evaluated	Prehistoric

XMH-00226	DTA West	Not evaluated	Historic
XMH-00232	DTA West	Not evaluated	Prehistoric
XMH-00233	DTA West	Not evaluated	Prehistoric
XMH-00234	DTA West	Not evaluated	Prehistoric
XMH-00235	DTA West	Not evaluated	Prehistoric
XMH-00236	DTA West	Not evaluated	Prehistoric
XMH-00237	DTA West	Not evaluated	Prehistoric
XMH-00238	DTA West	Not evaluated	Prehistoric
XMH-00265	DTA East	Eligible	Prehistoric
XMH-00266	DTA East	Eligible	Prehistoric
XMH-00267	DTA East	Not evaluated	Prehistoric
XMH-00268	DTA East	Not evaluated	Prehistoric
XMH-00269	DTA East	Not evaluated	Prehistoric
XMH-00270	DTA East	Not evaluated	Prehistoric
XMH-00272	DTA East	Not evaluated	Prehistoric
XMH-00274	DTA East	Not evaluated	Prehistoric
XMH-00277/ XMH-00879	DTA East	Eligible	Prehistoric
XMH-00278	DTA East	Not evaluated	Prehistoric
XMH-00279/ XMH-00918	DTA East	Eligible	Prehistoric
XMH-00281/ XMH-00972	DTA East	Not evaluated	Prehistoric
XMH-00282	DTA East	Eligible	Prehistoric
XMH-00283	DTA East	Not evaluated	Prehistoric
XMH-00284/ XMH-00882	DTA East	Eligible	Prehistoric
XMH-00285	DTA East	Not evaluated	Prehistoric
XMH-00286	DTA East	Not evaluated	Prehistoric
XMH-00292/ XMH-00885	DTA East	Eligible	Prehistoric
XMH-00294	DTA East	Eligible	Prehistoric
XMH-00295	DTA East	Eligible	Prehistoric
XMH-00296	DTA East	Not evaluated	Prehistoric
XMH-00297	DTA East	Eligible	Prehistoric
XMH-00298	DTA West	Not evaluated	Prehistoric
XMH-00299	DTA West	Not evaluated	Prehistoric
XMH-00300	DTA West	Not evaluated	Prehistoric
XMH-00301	DTA West	Not evaluated	Prehistoric
XMH-00302	DTA West	Not evaluated	Prehistoric
XMH-00303	DTA West	Not evaluated	Prehistoric

XMH-00304	DTA West	Not evaluated	Prehistoric
XMH-00305	DTA West	Not evaluated	Prehistoric
XMH-00306	DTA West	Not evaluated	Prehistoric
XMH-00307	DTA West	Not evaluated	Prehistoric
XMH-00309	DTA West	Not evaluated	Prehistoric
XMH-00310	DTA West	Not evaluated	Prehistoric
XMH-00311	DTA West	Not evaluated	Prehistoric
XMH-00313	DTA West	Not evaluated	Prehistoric
XMH-00314	DTA West	Not evaluated	Prehistoric
XMH-00323/ XMH-00893	DTA East	Not evaluated	Prehistoric
XMH-00829	DTA West	Not evaluated	Prehistoric
XMH-00830	DTA West	Not evaluated	Prehistoric
XMH-00831	DTA West	Not evaluated	Prehistoric
XMH-00832	DTA West	Not evaluated	Prehistoric
XMH-00833	DTA West	Not evaluated	Prehistoric
XMH-00834	DTA West	Not evaluated	Prehistoric
XMH-00835	DTA West	Not evaluated	Prehistoric
XMH-00836	DTA West	Not evaluated	Prehistoric
XMH-00837	DTA West	Not evaluated	Prehistoric
XMH-00838	DTA East	Eligible	Prehistoric
XMH-00839	DTA West	Not evaluated	Prehistoric
XMH-00840	DTA West	Not evaluated	Prehistoric
XMH-00841	DTA West	Not evaluated	Prehistoric
XMH-00843	DTA East	Not evaluated	Prehistoric
XMH-00874	DTA East	Eligible	Prehistoric
XMH-00878/ XMH-00908	DTA East	Eligible	Prehistoric
XMH-00881	DTA East	Eligible	Prehistoric
XMH-00887	DTA East	Eligible	Prehistoric
XMH-00890	DTA East	Eligible	Prehistoric
XMH-00891	DTA East	Eligible	Prehistoric
XMH-00894	DTA East	Not evaluated	Prehistoric
XMH-00895	DTA East	Eligible	Prehistoric
XMH-00896	DTA East	Not evaluated	Prehistoric
XMH-00897	DTA East	Not evaluated	Prehistoric
XMH-00899	DTA East	Not evaluated	Prehistoric
XMH-00900	DTA East	Not evaluated	Prehistoric
XMH-00901	DTA East	Not evaluated	Prehistoric
XMH-00902	DTA East	Not evaluated	Prehistoric

XMH-00903	DTA East	Not evaluated	Prehistoric
XMH-00904	DTA East	Eligible	Prehistoric
XMH-00905	DTA East	Not evaluated	Prehistoric
XMH-00906	DTA East	Not evaluated	Prehistoric
XMH-00907	DTA East	Not evaluated	Prehistoric
XMH-00909	DTA East	Not evaluated	Prehistoric
XMH-00910/ XMH-00911	DTA East	Not evaluated	Prehistoric
XMH-00913	DTA East	Not evaluated	Prehistoric
XMH-00914	DTA East	Not evaluated	Prehistoric
XMH-00915	DTA East	Not evaluated	Prehistoric
XMH-00917	DTA East	Not evaluated	Prehistoric
XMH-00919	DTA East	Eligible	Prehistoric
XMH-00920	DTA East	Eligible	Prehistoric
XMH-00921	DTA East	Not evaluated	Prehistoric
XMH-00923/ XMH-00922	DTA East	Not evaluated	Prehistoric
XMH-00924	DTA East	Not evaluated	Prehistoric
XMH-00925	DTA East	Not evaluated	Prehistoric
XMH-00926	DTA East	Not evaluated	Prehistoric
XMH-00927	DTA East	Not evaluated	Prehistoric
XMH-00928	DTA East	Not evaluated	Prehistoric
XMH-00929	DTA East	Not evaluated	Prehistoric
XMH-00930	DTA East	Eligible	Prehistoric
XMH-00931	DTA East	Eligible	Prehistoric
XMH-00932	DTA East	Not evaluated	Prehistoric
XMH-00933	DTA East	Eligible	Prehistoric
XMH-00934	DTA East	Not evaluated	Prehistoric
XMH-00939	DTA East	Not evaluated	Prehistoric
XMH-00940	DTA East	Not evaluated	Prehistoric
XMH-00941	DTA East	Not evaluated	Prehistoric
XMH-00942	DTA East	Not evaluated	Prehistoric
XMH-00944	DTA East	Not evaluated	Prehistoric
XMH-00945	DTA East	Eligible	Prehistoric
XMH-00947	DTA East	Not evaluated	Prehistoric
XMH-00948	DTA East	Not evaluated	Prehistoric
XMH-00949	DTA East	Not evaluated	Prehistoric
XMH-00950	DTA East	Not evaluated	Prehistoric
XMH-00951	DTA East	Not evaluated	Prehistoric
XMH-00953	DTA East	Eligible	Prehistoric

XMH-00955	DTA East	Not evaluated	Prehistoric
XMH-00956	DTA East	Not evaluated	Prehistoric
XMH-00957	DTA East	Not evaluated	Prehistoric
XMH-00958	DTA East	Not evaluated	Prehistoric
XMH-00959	DTA East	Not evaluated	Prehistoric
XMH-00960	DTA East	Not evaluated	Prehistoric
XMH-00961	DTA East	Not evaluated	Prehistoric
XMH-00962	DTA East	Not evaluated	Prehistoric
XMH-00963	DTA East	Not evaluated	Prehistoric
XMH-00964	DTA East	Not evaluated	Prehistoric
XMH-00966	DTA East	Not evaluated	Prehistoric
XMH-00967	DTA East	Not evaluated	Prehistoric
XMH-00968	DTA East	Not evaluated	Prehistoric
XMH-00969	DTA East	Not evaluated	Prehistoric
XMH-00971	DTA East	Not evaluated	Prehistoric
XMH-00973	DTA East	Not evaluated	Prehistoric
XMH-00975	DTA East	Not evaluated	Prehistoric
XMH-00976	DTA East	Not evaluated	Prehistoric
XMH-00977	DTA East	Not evaluated	Prehistoric
XMH-00978	DTA East	Not evaluated	Prehistoric
XMH-00979	DTA East	Not evaluated	Prehistoric
XMH-00980	DTA East	Not evaluated	Prehistoric
XMH-00992	DTA East	Not evaluated	Prehistoric
XMH-00993	DTA East	Not evaluated	Prehistoric
XMH-00994	DTA East	Not evaluated	Prehistoric
XMH-00995	DTA East	Not evaluated	Prehistoric
XMH-00996	DTA East	Not evaluated	Prehistoric
XMH-00997	DTA East	Not evaluated	Prehistoric
XMH-00998	DTA East	Not evaluated	Prehistoric
XMH-00999	DTA East	Not evaluated	Prehistoric
XMH-01051	DTA East	Not evaluated	Prehistoric
XMH-01052	DTA East	Not evaluated	Prehistoric
XMH-01053	DTA East	Not evaluated	Prehistoric
XMH-01054	DTA East	Not evaluated	Prehistoric
XMH-01055	DTA East	Not evaluated	Prehistoric
XMH-01056	DTA East	Not evaluated	Prehistoric
XMH-01057	DTA East	Not evaluated	Prehistoric
XMH-01058	DTA East	Not evaluated	Prehistoric
XMH-01061	DTA East	Eligible	Prehistoric

XMH-01062/ XMH-01063	DTA East	Not evaluated	Prehistoric
XMH-01067	DTA East	Not evaluated	Prehistoric
XMH-01068	DTA East	Not evaluated	Prehistoric
XMH-01069	DTA East	Not evaluated	Prehistoric
XMH-01070	DTA East	Not evaluated	Prehistoric
XMH-01071	DTA East	Not evaluated	Prehistoric
XMH-01074	DTA East	Not evaluated	Prehistoric
XMH-01075	DTA East	Not evaluated	Prehistoric
XMH-01076	DTA East	Not evaluated	Prehistoric
XMH-01077	DTA East	Not evaluated	Prehistoric
XMH-01078	DTA East	Not evaluated	Prehistoric
XMH-01084	DTA East	Not evaluated	Prehistoric
XMH-01085	DTA East	Not evaluated	Prehistoric
XMH-01086	DTA East	Not evaluated	Prehistoric
XMH-01087	DTA East	Not evaluated	Prehistoric
XMH-01088	DTA East	Not evaluated	Prehistoric
XMH-01089	DTA East	Not evaluated	Prehistoric
XMH-01090	DTA East	Not evaluated	Prehistoric
XMH-01091	DTA East	Not evaluated	Prehistoric
XMH-01092	DTA East	Eligible	Prehistoric
XMH-01093	DTA East	Eligible	Prehistoric
XMH-01095/ XMH-01142	DTA East	Not evaluated	Prehistoric
XMH-01096	DTA East	Not evaluated	Prehistoric
XMH-01097	DTA East	Not evaluated	Prehistoric
XMH-01098	DTA East	Not evaluated	Prehistoric
XMH-01099	DTA East	Not evaluated	Prehistoric
XMH-01100	DTA East	Not evaluated	Prehistoric
XMH-01104	DTA East	Not evaluated	Prehistoric
XMH-01105	DTA East	Not evaluated	Prehistoric
XMH-01106	DTA East	Not evaluated	Prehistoric
XMH-01107	DTA East	Eligible	Prehistoric
XMH-01108	DTA East	Not evaluated	Prehistoric
XMH-01109	DTA East	Eligible	Prehistoric
XMH-01110	DTA East	Eligible	Prehistoric
XMH-01111	DTA East	Not evaluated	Prehistoric
XMH-01114	DTA East	Not evaluated	Prehistoric
XMH-01115/ XMH-01117	DTA East	Eligible	Prehistoric
XMH-01116	DTA East	Eligible	Prehistoric

XMH-01118	DTA East	Not evaluated	Prehistoric
XMH-01119	DTA East	Not evaluated	Prehistoric
XMH-01120	DTA East	Not evaluated	Prehistoric
XMH-01121	DTA East	Not evaluated	Prehistoric
XMH-01122	DTA East	Not evaluated	Prehistoric
XMH-01123	DTA East	Not evaluated	Prehistoric
XMH-01124	DTA East	Not evaluated	Prehistoric
XMH-01125	DTA East	Not evaluated	Prehistoric
XMH-01126	DTA East	Not evaluated	Prehistoric
XMH-01128	DTA East	Not evaluated	Prehistoric
XMH-01129	DTA East	Not evaluated	Prehistoric
XMH-01130	DTA East	Not evaluated	Prehistoric
XMH-01131	DTA East	Not evaluated	Prehistoric
XMH-01133	DTA East	Not evaluated	Prehistoric
XMH-01134	DTA East	Not evaluated	Prehistoric
XMH-01135	DTA East	Not evaluated	Prehistoric
XMH-01136	DTA East	Not evaluated	Prehistoric
XMH-01137	DTA East	Not evaluated	Prehistoric
XMH-01138	DTA East	Not evaluated	Prehistoric
XMH-01139	DTA East	Not evaluated	Prehistoric
XMH-01140	DTA East	Not evaluated	Prehistoric
XMH-01141	DTA East	Not evaluated	Prehistoric
XMH-01143	DTA East	Not evaluated	Prehistoric
XMH-01144	DTA East	Not evaluated	Prehistoric
XMH-01145	DTA East	Eligible	Prehistoric
XMH-01146	DTA East	Eligible	Prehistoric
XMH-01147	DTA East	Not evaluated	Prehistoric
XMH-01148	DTA East	Not evaluated	Prehistoric
XMH-01149	DTA East	Not evaluated	Prehistoric
XMH-01150	DTA East	Not evaluated	Prehistoric
XMH-01151	DTA East	Not evaluated	Prehistoric
XMH-01152	DTA East	Not evaluated	Prehistoric
XMH-01153	DTA East	Not evaluated	Prehistoric
XMH-01154	DTA East	Not evaluated	Prehistoric
XMH-01155	DTA East	Not evaluated	Prehistoric
XMH-01156	DTA East	Not evaluated	Prehistoric
XMH-01157	DTA East	Not evaluated	Prehistoric
XMH-01158	DTA East	Not evaluated	Prehistoric
XMH-01159	DTA East	Not evaluated	Prehistoric

XMH-01162	DTA East	Not evaluated	Prehistoric
XMH-01163	DTA East	Not evaluated	Prehistoric
XMH-01169	DTA East	Not evaluated	Prehistoric
XMH-01170	DTA East	Not evaluated	Prehistoric
XMH-01175	DTA East	Not evaluated	Prehistoric
XMH-01176	DTA East	Not evaluated	Prehistoric
XMH-01194	DTA East	Not evaluated	Prehistoric
XMH-01195	DTA East	Not evaluated	Prehistoric
XMH-01196	DTA East	Not evaluated	Prehistoric
XMH-01197	DTA East	Not evaluated	Prehistoric
XMH-01198	DTA East	Not evaluated	Prehistoric
XMH-01199	DTA East	Not evaluated	Prehistoric
XMH-01200	DTA East	Not evaluated	Prehistoric
XMH-01201	DTA East	Not evaluated	Prehistoric
XMH-01202	DTA East	Not evaluated	Prehistoric
XMH-01203	DTA East	Not evaluated	Prehistoric
XMH-01204	DTA East	Not evaluated	Prehistoric
XMH-01206	DTA East	Not evaluated	Prehistoric
XMH-01207	DTA East	Not evaluated	Prehistoric
XMH-01208	DTA East	Not evaluated	Prehistoric
XMH-01209	DTA East	Not evaluated	Prehistoric
XMH-01210	DTA East	Not evaluated	Prehistoric
XMH-01211	DTA East	Not evaluated	Prehistoric
XMH-01213	DTA East	Not evaluated	Prehistoric
XMH-01214	DTA East	Not evaluated	Prehistoric
XMH-01215	DTA East	Not evaluated	Prehistoric
XMH-01216	DTA East	Not evaluated	Prehistoric
XMH-01217	DTA East	Not evaluated	Prehistoric
XMH-01218	DTA East	Not evaluated	Prehistoric
XMH-01219	DTA East	Not evaluated	Prehistoric
XMH-01220	DTA East	Not evaluated	Prehistoric
XMH-01221	DTA East	Not evaluated	Prehistoric
XMH-01222	DTA East	Not evaluated	Prehistoric
XMH-01237	DTA East	Not evaluated	Prehistoric
XMH-01278	DTA East	Not evaluated	Prehistoric
XMH-01279	DTA East	Not evaluated	Prehistoric
XMH-01280	DTA East	Not evaluated	Prehistoric
XMH-01281	DTA East	Not evaluated	Prehistoric
XMH-01282	DTA East	Not evaluated	Prehistoric

XMH-01283	DTA East	Not evaluated	Prehistoric
XMH-01285	DTA East	Not evaluated	Prehistoric
XMH-01286	DTA East	Not evaluated	Prehistoric
XMH-01287	DTA East	Not evaluated	Prehistoric
XMH-01288	DTA East	Not evaluated	Prehistoric
XMH-01289	DTA East	Not evaluated	Prehistoric
XMH-01290	DTA East	Not evaluated	Prehistoric
XMH-01291	DTA East	Not evaluated	Prehistoric
XMH-01292	DTA East	Not evaluated	Prehistoric
XMH-01293	DTA East	Not evaluated	Prehistoric
XMH-01294	DTA East	Not evaluated	Prehistoric
XMH-01295	DTA East	Not evaluated	Prehistoric
XMH-01296	DTA East	Not evaluated	Prehistoric
XMH-01297	DTA East	Not evaluated	Prehistoric
XMH-01298	DTA East	Not evaluated	Prehistoric
XMH-01299	DTA East	Not evaluated	Prehistoric
XMH-01300	DTA East	Not evaluated	Prehistoric
XMH-01301	DTA East	Not evaluated	Prehistoric
XMH-01302	DTA East	Not evaluated	Prehistoric
XMH-01303	DTA East	Eligible	Prehistoric
XMH-01332	DTA East	Not evaluated	Prehistoric
XMH-01333	DTA East	Not evaluated	Prehistoric
XMH-01334	DTA East	Not evaluated	Prehistoric
XMH-01335	DTA East	Not evaluated	Prehistoric
XMH-01336	DTA East	Not evaluated	Prehistoric
XMH-01356	DTA East	Eligible	Prehistoric
XMH-01357	DTA East	Eligible	Prehistoric
XMH-01358	DTA East	Not evaluated	Prehistoric
XMH-01359	GRTA	Not evaluated	Prehistoric
XMH-01360	DTA East	Not evaluated	Prehistoric
XMH-01361	DTA East	Not evaluated	Prehistoric
XMH-01362	DTA East	Not evaluated	Prehistoric
XMH-01363	DTA East	Not evaluated	Prehistoric
XMH-01364	DTA East	Not evaluated	Prehistoric
XMH-01365	DTA East	Not evaluated	Prehistoric
XMH-01366	DTA East	Not evaluated	Prehistoric
XMH-01367	DTA East	Not evaluated	Prehistoric
XMH-01368	DTA East	Not evaluated	Prehistoric
XMH-01369	DTA East	Not evaluated	Prehistoric

XMH-01370	DTA East	Not evaluated	Prehistoric
XMH-01371	DTA East	Not evaluated	Prehistoric
XMH-01372	DTA East	Not evaluated	Prehistoric
XMH-01373	DTA East	Not evaluated	Prehistoric
XMH-01374	DTA East	Not evaluated	Prehistoric
XMH-01375	DTA East	Not evaluated	Prehistoric
XMH-01376	DTA East	Not evaluated	Prehistoric
XMH-01377	DTA East	Not evaluated	Prehistoric
XMH-01378	DTA East	Not evaluated	Prehistoric
XMH-01379	DTA East	Not evaluated	Prehistoric
XMH-01380	DTA East	Not evaluated	Prehistoric
XMH-01381	DTA East	Not evaluated	Prehistoric
XMH-01382	DTA East	Not evaluated	Prehistoric
XMH-01383	DTA East	Not evaluated	Prehistoric
XMH-01384	DTA East	Not evaluated	Prehistoric
XMH-01414	DTA West	Eligible	Prehistoric
XMH-01434	DTA West	Not evaluated	Prehistoric
XMH-01435	DTA West	Not evaluated	Prehistoric
XMH-01436	DTA West	Not evaluated	Prehistoric
XMH-01437	DTA West	Not evaluated	Prehistoric
XMH-01438	DTA West	Not evaluated	Prehistoric
XMH-01439	DTA West	Not evaluated	Prehistoric
XMH-01440	DTA West	Not evaluated	Prehistoric
XMH-01441	DTA West	Eligible	Prehistoric
XMH-01442	DTA West	Not evaluated	Prehistoric
XMH-01443	DTA West	Not evaluated	Prehistoric
XMH-01445	DTA West	Not evaluated	Prehistoric
XMH-01446	DTA West	Not evaluated	Prehistoric
XMH-01447	DTA West	Not evaluated	Prehistoric
XMH-01449	DTA West	Not evaluated	Prehistoric
XMH-01450	DTA West	Eligible	Prehistoric
XMH-01451	DTA West	Not evaluated	Prehistoric
XMH-01452	DTA West	Not evaluated	Prehistoric
XMH-01453	DTA West	Not evaluated	Prehistoric
XMH-01454	DTA West	Not evaluated	Prehistoric
XMH-01455	DTA East	Not evaluated	Prehistoric
XMH-01456	DTA East	Not evaluated	Prehistoric
XMH-01458	DTA East	Not evaluated	Prehistoric
XMH-01459	DTA East	Not evaluated	Prehistoric

XMH-01460	DTA East	Not evaluated	Prehistoric
XMH-01491	DTA West	Not evaluated	Prehistoric
XMH-01493	DTA East	Not evaluated	Prehistoric
XMH-01503	BRTA	Not evaluated	Prehistoric
XMH-01504	BRTA	Not evaluated	Prehistoric
XMH-01505	BRTA	Not evaluated	Prehistoric
XMH-01506	BRTA	Not evaluated	Prehistoric
XMH-01507	BRTA	Not evaluated	Prehistoric
XMH-01508	BRTA	Not evaluated	Prehistoric
XMH-01509	GRTA	Not evaluated	Prehistoric
XMH-01511	DTA East	Not evaluated	Prehistoric
XMH-01512	DTA East	Not evaluated	Prehistoric
XMH-01524	DTA East	Not evaluated	Prehistoric
XMH-01525	DTA East	Not evaluated	Prehistoric
XMH-01526	DTA East	Not evaluated	Prehistoric
XMH-01527	DTA East	Not evaluated	Prehistoric
XMH-01532	DTA East	Not evaluated	Prehistoric
XMH-01533	DTA East	Not evaluated	Prehistoric
XMH-01535	DTA East	Not evaluated	Prehistoric
XMH-01536	DTA East	Not evaluated	Prehistoric
XMH-01537	DTA East	Not evaluated	Prehistoric
XMH-01538	WCTA	Not evaluated	Prehistoric
XMH-01539	DTA East	Not evaluated	Historic
XMH-01544	DTA West	Not evaluated	Prehistoric
XMH-01545	DTA West	Not evaluated	Prehistoric
XMH-01546	DTA East	Not evaluated	Prehistoric
XMH-01547	DTA East	Not evaluated	Prehistoric
XMH-01548	DTA East	Not evaluated	Prehistoric
XMH-01549	DTA West	Not evaluated	Prehistoric
XMH-01550	DTA West	Not evaluated	Prehistoric
XMH-01551	DTA West	Not evaluated	Prehistoric
XMH-01554	DTA East	Not evaluated	Prehistoric
XMH-01555	DTA East	Not evaluated	Prehistoric
XMH-01567	DTA East	Not evaluated	Prehistoric

Table 3. Archaeological Sites: Eligible or Not Yet Evaluated – USAG Greely-managed

XMH-00280	Fort Greely	Eligible	Prehistoric
XMH-01168	Fort Greely	Eligible	Prehistoric
XMH-01224	Fort Greely	Eligible	Prehistoric

XMH-01225	Fort Greely	Eligible	Prehistoric
XMH-01226	Fort Greely	Eligible	Prehistoric
XMH-01227	Fort Greely	Eligible	Prehistoric
XMH-02871	Fort Greely	Eligible	Prehistoric

Appendix D. Historic Buildings and Structures Inventory

The National Park Service conducted the first major building survey on Fort Wainwright in 1984. This survey was conducted as part of a regional process investigating World War II resources in the Pacific. The survey resulted in the designation of Ladd Field NHL (FAI-00236) in 1985. A re-evaluation was concluded in 2018, adjusting the district boundary and adjusting the contributing resource inventory (Appendix E).

Through concurrence with the Alaska SHPO, the Ladd Air Force Base Cold War Historic District (FAI-01288) was determined eligible for inclusion on the National Register in 2001. In 2010, the SHPO concurred on a district boundary revision and reduction in resources, with three buildings individually eligible for inclusion. One, Building 1060, has since been deemed not eligible. A re-evaluation of the historic district is due to be performed by 2020.

In June 1999, at the request of USARAK, the Alaska SHPO drafted a Determination of Eligibility for Cold War properties on Fort Greely. This resulted in ~~a Cold War Historic District (XMH-00845)~~ **Fort Greely New Post Historic District (XMH-01275)**. In 2000 Fort Greely and the Alaska SHPO entered into a MOA concerning these buildings and the Army agreed to mitigate any impacts to these structures by preparing a HABS. With completion of the HABS recordation, the MOA allowed the Army to transfer, remodel, rehabilitate, or demolish any of these buildings without SHPO consultation. Since this time, Buildings 610, 614, and 659 have been demolished. Other buildings have undergone significant alterations in response to new mission requirements.

Table 4. Contributing resources – Ladd Field National Historic Landmark

	Building #	AHRS #	NAME
1	1021	FAI-00448	Nurses Quarters
2	1024	FAI-00449	Radio Station
3	1043	FAI-00451	North Post Chapel
4	1045	FAI-00452	(Murphy Hall) Bachelor Officer Quarters
5	1046	FAI-00502	Garage
6	1047	FAI-00453	Apartments-Officers (7 units)
7	1048	FAI-00446	Commander's Quarters
8	1049	FAI-00454	Apartments-NCO (12 units)
9	1051	FAI-00456	Apartments-NCO (14 units)
10	1541	FAI-00503	Airways & Air Communications Services
11	1555	FAI-00467	Hospital/Barracks (250 bed)/Theater
12	1557	FAI-00469	Hangar No 1
13	1562	FAI-00472	Quartermasters

	Building #	AHRS #	NAME
14	2077	FAI-00504	Hangars No 7 and 8
15	N/A	FAI-01244	North Runway
16	N/A	FAI-01245	South Runway
17	N/A	FAI-02677	Parade Ground
18	N/A	FAI-01242	Utilidors

Table 5. Contributing resources – Ladd Air Force Base Cold War Historic District

	Building #	AHRS #	NAME
1	1021	FAI-00448	Company Operations Annex
2	1024	FAI-00449	Radio Station (Red Cross office?)
3	1043	FAI-00451	North Post Chapel
4	1045	FAI-00452	(Murphy Hall) Bachelor Officer Quarters
5	1046	FAI-00502	Garage
6	1047	FAI-00453	Officers' Quarters Apartments-Officers (7 units)
7	1048	FAI-00446	Commander's Quarters
8	1049	FAI-00454	NCO Quarters Apartments-NCO (12 units)
9	1051	FAI-00456	NCO Quarters Apartments-NCO (14 units)
10	1533	FAI-00463	Warehouse
11	1534	FAI-00464	Warehouse
12	1537	FAI-00465	Warehouse
13	1538	FAI-00533	Warehouse
14	1541	FAI-00503	Airways & Air Communications Services
15	1555	FAI-00467	Headquarters (?)
16	1556	FAI-00468	Reciprocal Engine Shop
17	1557	FAI-00469	Hangar 1
18	1558	FAI-00470	Airfield Operations
19	1562	FAI-00472	Air Force Service Stores No 4
20	2077	FAI-00504	Hangars No 7 & 8
21	2079	FAI-01259	Flight Communications Section
22	2080	FAI-01327	Water Supply
23	2104	FAI-01260	Falcon Missile Section
24	2107	FAI-01261	Flight Synthetic Trainer
25	2200	FAI-01806	Access Control Facility
26	2201	FAI-01230	Ordnance Storage
27	2202	FAI-01231	Ordnance Storage

	Building #	AHRS #	NAME
28	2203	FAI-01232	Ordnance Storage
29	2204	FAI-01233	Ordnance Storage
30	2205	FAI-01234	Ordnance Storage
31	2206	FAI-01235	Ordnance Storage
32	2207	FAI-01236	Ordnance Storage
33	3004	FAI-01318	Fire Station
34	3005	FAI-00482	Hangar No 3
35	3008	FAI-00485	Hangar No 2
36	3203	FAI-00495	Ammunition Storage Igloo

Table 6. Contributing resources – Fort Greely ~~Cold War~~ New Post Historic District

	Building #	AHRS #	NAME
1	501	XMH-00656	Headquarters
2	503	XMH-00657	Gymnasium
3	504	XMH-00658	Fire Station
4	601	XMH-00601	Commissary/Administration
5	602	XMH-00602	Gas Station
6	603	XMH-00603	Post Engineer
7	605	XMH-00669	Motor Repair
8	606	XMH-00670	Power Plant
9	608	XMH-00672	Instrument Calibration
10	609	XMH-00673	CRTC HQ
11	612	XMH-00675	Tank Repair
12	615	XMH-00677	Maintenance
13	650	XMH-00698	Arts and Crafts
14	652	XMH-00700	Service Club
15	653	XMH-00701	Recreation
16	654/655	XMH-00702	NWTC HQ
17	656	XMH-00703	Post Exchange
18	658	XMH-00704	Vehicle Maintenance
19	660	XMH-00706	Barracks
20	661	XMH-00707	Barracks
21	662	XMH-00708	Barracks
22	663	XMH-00709	Medical
23	675	XMH-00711	Post Exchange

Table 7. Individually eligible buildings and structures

	Building #	AHRS #	NAME
1	4070	FAI-01283	Aeromedical Laboratory
2	4391	FAI-01789	Chena Elementary School
3	N/A	FAI-02138	Bailey Bridge

Appendix E. Ladd Field NHL Nomination (Re-evaluation)

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 1**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

+

1. NAME AND LOCATION OF PROPERTY**Historic Name:** Ladd Field**Other Name/Site Number** Ladd Air Force Base; U.S. Army Garrison Fort Jonathan Wainwright (FAI-00236)**Street and Number** (if applicable):**City/Town:** Fort Wainwright**County:** Fairbanks North Star Borough**State:** Alaska**2. SIGNIFICANCE DATA****NHL Criteria:** NHL Criterion 1**NHL Criteria Exceptions:****NHL Theme(s):** IV. Shaping the Political Landscape

Military Institutions and Activities

VI. Expanding Science and Technology

Cold Weather (Arctic) Aviation Testing

VII. Changing Role of the United States in the World Community

Period(s) of Significance: World War II period, 1939-1945**Significant Person(s)** (only Criterion 2):**Cultural Affiliation** (only Criterion 6):**Designer/Creator/Architect/Builder:** US Quartermaster Corps (1939-1941), US Army Corps of Engineers**Historic Contexts:** World War II in the Pacific: Alaska and the Aleutians

Paperwork Reduction Act Statement. We are collecting this information under the authority of the Historic Sites Act of 1935 (16 U.S.C. 461-467) and 36 CFR part 65. Your response is required to obtain or retain a benefit. We will use the information you provide to evaluate properties nominated as National Historic Landmarks. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number. We estimate the time to prepare an initial inquiry letter is 2 hours, including time to maintain records, gather information, and review and submit the letter. We assume that consultants will prepare nominations at an average cost of \$32,680 per nomination. You may send comments on the burden estimate or any other aspect of this form to the Information Collection Clearance Officer, National Park Service, 12201 Sunrise Valley Drive, Room 2C114, Mail Stop 242, Reston, VA 20192.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 3**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

P	6	471119	7191221
Q	6	471146	7191119
R	6	471003	7190942
S	6	471001	7190710
T	6	470793	7190712
U	6	470792	7190667
V	6	469537	7190655
W	6	569324	7190214
X	6	469477	7189825

3. Verbal Boundary Description:

Ladd Field boundary begins at the apex of Marks Road, extending north along Peach Road to Apple Road to encompass the North Post Chapel. The boundary then runs directly east to Building 1024 (Military Affiliate Radio Station (MARS) Building), then south to Apple Road. The boundary follows Apple Road northwest to Building 1044, then turns south to Marks Road. The boundary then follows Marks Road in an arc to a point just north of Building 1021 (Nurses' Quarters). The boundary extends east to the end of the building, then south to Gaffney Road before turning directly west to return to Marks Road. The boundary follows Marks Road south to the edge of the taxiway and airfield, then turns east. At Building 1540, the boundary extends north to Building 1537, then east to Building 1535 before turning south once again to return to the edge of the taxiway and airfield. The boundary then follows the edge of the airfield east to Ketcham Road, then follows Ketcham Road south to the north edge of the southern taxiway. The boundary then follows the edge of the taxiway west to Meridian Road, where it turns north to merge with Gaffney Road. The boundary follows Gaffney Road north to the northern edge of the north taxiway, where the boundary follows the taxiway east to Marks Road. The boundary then turns north to follow Marks Road arc to the apex.

4. Boundary Justification:

Ladd Field was an Army Airfield during World War II. The original nomination, approved in 1985, included 24 contributing buildings within the original NHL district boundary. Today, the NHL district boundary has been adjusted to include the contributing World War II structures still existent within the bounds of the original post from this period. The new boundary encompasses 22 buildings and structures from the period of 1939 to 1945, including 19 buildings, two runways, and an extensive utilidor system. The intent of this justification is to update the 1985 Ladd Field NHL nomination form. Since 1985, the loss of five World War II period structures south of the runways, inclusion of six Cold War Buildings, and the construction of 19 contemporary buildings has resulted in a complete loss of integrity for the area south of the runways and necessitates the adjustment of the southern boundary. Likewise, the recognition of five World War II era Butler Buildings on the north side of the runways has caused an adjustment of the northern boundary.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 2**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

3. WITHHOLDING SENSITIVE INFORMATION

Does this nomination contain sensitive information that should be withheld under Section 304 of the National Historic Preservation Act?

☐ Yes

☒ No

4. GEOGRAPHICAL DATA

1. Acreage of Property: 528
2. Use either Latitude/Longitude Coordinates or the UTM system:

Latitude/Longitude Coordinates:

Datum if other than WGS84:

(enter coordinates to 6 decimal places)

Latitude:

Longitude:

OR

UTM References:	Zone	Easting	Northing
A	6	469421	7189988
B	6	472286	7190057
C	6	472273	7190755
D	6	471686	7190765
E	6	471686	7190884
F	6	471605	7190882
G	6	471338	7190778
H	6	471337	7190936
I	6	471368	7190936
J	6	471366	7190978
K	6	471330	7190978
L	6	471256	7191091
M	6	471286	7191185
N	6	471398	7191122
O	6	471402	7191124

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 4**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

5. SIGNIFICANCE STATEMENT AND DISCUSSION**INTRODUCTION: SUMMARY STATEMENT OF SIGNIFICANCE**

Ladd Field is nationally significant for its association with the themes of Expanding Science and Technology; Shaping the Political Landscape; and the Changing Role of the United States in the World. The original nomination form dating from 1985 listed the associated theme as World War II in the Pacific; however, the thematic approach has been reworked since the original nomination was approved. As such, the application of the following themes is a shift from the original nomination and will serve to better expand on the significance of Ladd Field during the World War II period.

Expanding Science and Technology: Located near Fairbanks, Ladd Field was the first U.S. Army airfield in Alaska and was established as a cold weather testing facility for the advancement of cold weather aviation technology. Specifically, the Cold Weather Test Detachment was established to ensure all Army planes and equipment could operate in extreme cold down to -60° F. Cold weather testing continued into the modern era, with the research work of the Permafrost Division, the Cold Regions Research and Engineering Laboratory, 46th/72nd Reconnaissance Squadron, the Arctic Aeromedical Laboratory, Ice Island Research Stations, and the Cold War missions of the installation.

Shaping the Political Landscape: Upon entry of the United States into World War II, Ladd Field became the center of operations for the Alaska Theater. With the Japanese invasion of the Aleutian Islands, Ladd Field was the military traffic hub of Alaska, serving as a supply and repair depot for operations in the Aleutians.

The Changing Role of the United States in the World: During World War II, Ladd Field served as the northern hub for Lend-Lease operations, whereby 7,926 planes were transferred to Soviet control for use in the European Theater. At Ladd Field, the planes were transferred to Soviet mechanics and pilots, who ferried them from Fairbanks across the Bering Sea into Siberia. International cooperation was evident at Ladd Field, with American and Soviet soldiers working in tandem to supply the Soviets with aircraft to use in the European battlefields.

PROVIDE RELEVANT PROPERTY-SPECIFIC HISTORY, HISTORICAL CONTEXT, AND THEMES. JUSTIFY CRITERIA, EXCEPTIONS, AND PERIODS OF SIGNIFICANCE LISTED IN SECTION 2.

COLD WEATHER TESTING

During the 1930s, Alaska's Territorial delegate to Congress Anthony J. Dimond began to lobby Congress for better defenses of the largely undefended Territory. Events in Europe and Asia during this period served to reinforce the need for defenses, as Brigadier General Billy Mitchell testified before Congress, "I believe in the future, he who holds Alaska will hold the world." In 1934, U.S. Army Major General H.H. "Hap" Arnold led a flight expedition to Alaska to identify locations for potential airbases. In addition to establishing defensive airbases and tactical supply points in the Territory, Arnold identified the need to establish a cold weather test station in Alaska to experiment in adapting military planes, personnel, equipment, and base facilities to operate successfully in arctic temperatures. In the October 1940 issue of National Geographic, Arnold wrote that the U.S. military had no aviation experience in the Arctic, and adaptation would be necessary in the face of growing hostilities in Europe. Previous cold weather testing operations had taken place in laboratories, with only sparse field testing under extreme cold conditions. With the Wilcox National Defense Act of 1935, Congress authorized the construction of new airbases, including one in Alaska for the purposes of cold weather testing and training. The U.S. Government set aside nearly six square miles of public land for a military reservation in

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 5**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

the Fairbanks area in March 1937 through Executive Order 7596. After Arnold became chief of the Army Air Corps, he persuaded the War Department to conduct a survey for a cold weather aircraft test facility in Alaska during the early summer of 1938. The U.S. Army chose a site 3.5 miles east of Fairbanks and began construction of the Cold Weather Experimental Station in August of 1939 with the work being undertaken by the US Army Quartermaster Corps. At the peak of construction in the spring of 1940, more than 1,000 men were at work on the construction of Ladd Field.¹ While construction of the airfield was in process, official dedication ceremonies took place in September 1940, officially opening Ladd Field, named in honor of Major Arthur K. Ladd who died in an aircraft accident in South Carolina in 1935.² The airfield was placed under the command of Major Dale V. Gaffney.

Construction of the runway and buildings continued into 1941 with the more substantial buildings such as Building 1557 (Hangar 1) not completed until 1942. Additional troops arrived in September 1940, followed soon after by two B-17 Flying Fortresses, an O-38, and two P-37s.³ Testing personnel developed portable nose hangars to service the aircraft during cold weather while a permanent maintenance facility, Hangar 1, was under construction. By September 1941, there were 520 men stationed at Ladd Field and the airfield was making due with limited resources.⁴

Despite the limited resources, cold weather testing continued at Ladd Field until the spring of 1942. After the Japanese invasion of the Aleutians, the U.S. Army disbanded the Cold Weather Test Detachment and dispersed its personnel to other military posts in Alaska. The Eleventh Air Force took command of Ladd Field and established a depot to repair and service aircraft for the Aleutian Campaign. Several months later, the commanding general of the Army Air Forces recognized the need for further intensive cold weather testing and reactivated the Cold Weather Test Detachment at Ladd in July 1942. Testing continued well after the conclusion of World War II. During peak operations each winter, the Cold Weather Test Detachment averaged 560 personnel, including as many as 52 civilian factory representatives. Activities included testing aircraft and experimenting with clothing, food, motor transportation, medical research, photography and communications. The Army Air Corps collected critical information about wing-icing, navigation, maintenance and operations, instruments and controls, radio communication, cold-weather clothing, armament, and other issues related to operating aircraft in arctic conditions. The military incorporated this data into production line requirements for all new aircraft and modification of existing aircraft, making American aircraft operations in arctic weather conditions safer.⁵

ROLE IN THE ALASKAN THEATER

American entry into World War II broadened Ladd Field's mission and resulted in a significant expansion of its capabilities to support war efforts in the Pacific. After the Japanese attack on Pearl Harbor on December 7, 1941, the Army placed Ladd Field on war-time status and evacuated military dependents from Alaska. In May 1942, the Eleventh Air Force took over command of the post and established an air depot at Ladd Field to repair military aircraft used in defending Alaskan territory. The Sixth Air Depot Group and eight attached units, comprising 25 officers and 843 enlisted men, arrived at Ladd Field in July 1942. The Sixth Air Depot had sub-

¹Kathy Price, *World War II Heritage of Ladd Field, Fairbanks, Alaska*, (Fort Collins, Colorado: Center for Environmental Management of Military Lands, Colorado State University), 2004, 13.

²Kathy Price, *World War II Heritage of Ladd Field, Fairbanks, Alaska*, 5-6.

³Kathy Price, *World War II Heritage of Ladd Field, Fairbanks, Alaska*, 22.

⁴Kathy Price, *World War II Heritage of Ladd Field, Fairbanks, Alaska*, 23.

⁵Lauer, *Official History of Ladd Field*, 49-57.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 6**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

posts at Galena, Big Delta, Tanacross, and Northway to support its operations.⁶ Personnel at Ladd Field serviced and repaired military aircraft used in the Aleutian Campaign. After American and Canadian forces drove the Japanese from the western Aleutians in 1943, the size of the Eleventh Air Force decreased, resulting in less work for the depot at Ladd Field. The Sixth Air Depot Group was disbanded in April 1944 and its personnel absorbed into the Air Transport Command.

LEND-LEASE

During the second half of 1942, the Army Air Corps assigned Ladd Field a third mission, to assist in the transport of aircraft from the United States to the Soviet Union. The Lend-Lease Act of March 1941 authorized the president to sell, lease, or lend arms, munitions, food and other defense articles to any country whose defense he deemed vital to the defense of the United States. The program, which ultimately cost \$42 billion, was designed to assist Great Britain. Public opinion at the time did not support U.S. interference in what was at the time a European war, and existing Neutrality Acts prohibited the sale of arms to the warring nations. The Lend-Lease program developed out of the financial aid the U.S. was already providing to Great Britain and served as a method for the provision of much-needed supplies while maintaining a strict policy of non-involvement. The program enabled Congress to "lend" military supplies to Great Britain and France in what President Roosevelt envisioned as an arsenal of democracy. In practice, little if any funds were ever received in exchange for these goods.

After Germany invaded the Soviet Union in June 1941, President Roosevelt extended the Lend-Lease program to include the Soviet Union. The biggest issue with sending supplies to the Soviet Union was in the delivery. Routes for ferrying American goods and aircraft to the Soviet Union included a northern route across the Atlantic to Murmansk (4,000 miles), a southern route from Florida through North Africa, Iraq, and Iran to Moscow (13,000 miles), and a northern route from Great Falls, Montana through Canada, Alaska, and Siberia to Moscow (7,900 miles). The first route was vulnerable to German air and naval forces. The southern route was too long and lacked adequate facilities, leaving the Alaska-Siberia (ALSIB) route as the most feasible alternative. Soviet Premier Joseph Stalin opposed the Alaska-Siberia route as he did not want American bases in Siberia, and he did not want to offend Japan. In July 1942, as the Soviet military situation deteriorated, Stalin agreed to the route and the Americans agreed not to build bases or have its pilots fly in Siberia.⁷

The United States and Canada adapted a series of airfields constructed between 1940 and 1942 for the aircraft ferrying operation. The portion of the route that crossed Canada and Alaska was called the Northwest Staging Route and included eight airfields in Canada and six airfields in Alaska. The Alaskan airfields were at Northway, Tanacross, Big Delta, Fairbanks, Galena, and Nome. Sixty remote outposts were set up in Canada and Alaska to provide weather and communication services for the North American portion of the ALSIB operation. Ladd Field was the most significant base on the route; Ladd Field was the location where the Americans turned over the aircraft to the Soviets. Pilots of the Seventh Ferrying Group, Air Transport Command (ATC), flew the aircraft from Montana to Ladd Field. Ground personnel from this group provided support at airfields along the way.⁸

The first Lend-Lease aircraft, five A-20 Havoc attack bombers, landed at Ladd Field on September 3, 1942. On the following day, officers of the permanent Soviet mission arrived from Siberia. A contingent of Soviet pilots

⁶ Lauer, *Official History of Ladd Field*, 64-65.

⁷ William Hardy McNeill, *America, Britain and Russia: Their Co-operation and Conflict, 1941-1946* (London: Oxford University Press, 1953), 773.

⁸ Kathy Price, *World War II Heritage of Ladd Field, Fairbanks, Alaska*, 35-36.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 7**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

landed at Ladd Field on September 24 to begin five days of training before flying the planes to Soviet Union.

After aircraft arrived at Ladd Field, they were inspected by American and Soviet personnel, serviced and repaired if necessary. Soviet pilots flew the aircraft to Nome for refueling and repairs before crossing the Bering Strait into Siberia. Soviet personnel at Ladd Field generally got along well with the Americans, despite the language barrier, delays in receiving aircraft, and differences in orientation toward aircraft training. Soviet pilots and mechanics had free run of Ladd Field and occupied many of the new hangars and shops erected in 1943. Soviet cargo aircraft delivered Soviet pilots to Fairbanks and carried high priority cargo, such as aircraft engines, parts, and munitions, on the return trip west. This cargo operation was a significant part of the Lend-Lease operation.⁹

The ATC took command of Ladd Field, including the cold weather testing program and air depot functions, on September 30, 1943. The activities of other ATC airfields in Alaska were directed from Ladd Field. The exigencies of war and Lend-Lease operations took precedence over cold weather testing and many of Ladd Field's original facilities were used for Lend-Lease operations. The number of Lend-Lease aircraft flown through Alaska to the Soviet Union increased from 150 planes in 1942, to 2,662 planes in 1943. In June 1944, the Soviets requested that all Lend-Lease aircraft be sent by way of Alaska. The number of aircraft delivered monthly over the route continued to increase, totaling 3,164 planes in 1944 and 2,009 planes through the first seven months of 1945. By September 1945, when the operation ended and the Soviets left Alaska, the United States had delivered 7,926 combat and transport aircraft to the Soviets over the ALSIB route. This included more than 5,000 fighters (mostly P-39s and P-63s), more than 1,300 light bombers (A-20s), about 700 medium bombers (B-25s), and 700 transports (C-47s). The number of aircraft ferried across the ALSIB route to the Soviet Union exceeded the number of aircraft sent to the Soviet Union by all other routes. American aircraft delivered over this route helped the Soviets stop the German invasion of the Soviet Union and contributed to the Soviet victory on the eastern front in Europe.¹⁰

Throughout the war, many important officials from the United States and the Soviet Union traveled the ALSIB route on diplomatic and military missions. Ladd Field played host to many of these dignitaries as they stopped for layovers or meetings in Fairbanks during their travels. Distinguished Soviet visitors to Ladd Field included Ambassador Andrei Gromyko and Foreign Minister Vyacheslav M. Molotov. High ranking American officials who visited the post included presidential candidate Wendell L. Willkie, Vice President Henry A. Wallace, and special presidential envoy Joseph E. Davies.

In 1947, Ladd Field became a U.S. Air Force base. The facility was transferred to the Army in 1961 and renamed Fort Wainwright in honor of General Jonathan M. Wainwright, a Medal of Honor recipient who led the defense of the Bataan Peninsula at the beginning of World War II. Ladd Field, which is located on Fort Wainwright, is still part of an active Army installation.

⁹ Lauer, "Official History of Ladd Field," 83-86.

¹⁰ Haulman, "The Northwest Ferry Route," 324.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 8**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

6. PROPERTY DESCRIPTION AND STATEMENT OF INTEGRITY**Ownership of Property**

Private:
Public-Local:
Public-State:
Public-Federal: X

Category of Property

Building(s):
District: X
Site:
Structure:
Object:

Number of Resources within Boundary of Property:**Contributing**

Buildings: 20
Sites:
Structures: 4
Objects:
Total: 24

Noncontributing

Buildings: 6
Sites:
Structures: 2
Objects:
Total: 8

PROVIDE PRESENT AND PAST PHYSICAL DESCRIPTIONS OF PROPERTY**(Please see specific guidance for type of resource[s] being nominated)**

Ladd Field is nationally recognized as a National Historic Landmark for the role it played in providing support for the Lend-Lease program during World War II. Ladd Field and seven other significant World War II locations in Alaska were nominated in 1984. This original nomination form was prepared by Erwin N. Thompson and approved through the Denver Service Center, NPS in Denver, Colorado before advancing to the final review and approval by the Secretary of the Interior. The NHL documentation standards of the time were less specific and did not provide the list of contributing and non-contributing resources that is expected today. This updated NHL nomination includes information on existing buildings, including historic and new construction, as well as buildings and structures that have been demolished since 1984. Due to demolition and infill construction, the original boundary had been adjusted. Several buildings which were misidentified in 1984 as post-dating the World War II period are also correctly identified in this documentation with correct build dates, and several others have been excluded due to build-dates that post-date the World War II period. Current technology and greater access to building plans, as-builts, and inventories have allowed for the greater accuracy of this nomination.

Ladd Field is part of Fort Wainwright, an active U.S. Army post covering 1.5 square miles of land located 3.5 miles east of the City of Fairbanks. The Chena River divides the post and creates a development barrier on three sides of the airfield. The U.S. Army post developed around the airfield, which served as the central focus of Ladd Field. The historic district includes the airfield; the horseshoe-shaped command and flight service facilities (known as North Post) arranged in a panopticon north of the airfield; and a series of warehouses to the east of the main horseshoe compound. The historic district boundaries encompass 23 buildings and structures from the World War II period, two runways and the northern taxiway, and twenty-one buildings from a later period. Of these, seventeen buildings are considered eligible for inclusion in the Ladd Air Force Base Cold War Historic District, recognized by the Alaska State Historic Preservation Officer as eligible, and four date from the modern period.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 9**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

ASPECTS OF INTEGRITY

Location: Ladd Field NHL remains in its original location, east of Fairbanks. The airfield and surrounding buildings remain the core of the present day Fort Wainwright.

Design: The original design layout of Ladd Field remains intact. The panopticon layout of the World War II buildings that form the administrative core of Post is evident, and the two runways that make up the airfield remain the only two runways and have not been altered in form.

Setting: The setting of Ladd Field remains, as the Post has continually served as an active military facility since construction began.

Materials: There has been loss of integrity of building materials to all buildings within the boundaries of Ladd Field, as materials have been replaced over time to keep the buildings operating at a level necessary for current military demands. Strong efforts have been made to match materials in kind to original materials so as to retain as much integrity as possible.

Workmanship: Ladd Field retains a high level of workmanship. The buildings constructed on Ladd Field consisted of prefabricated and plan form buildings, materials for which were produced in the Lower 48 and shipped to Fairbanks. As such, the replacement of materials over time does not detract from the original workmanship of the buildings.

Feeling: Ladd Field retains a level of feeling, having served as an active military installation since construction began. While technology surrounding military actions has evolved, the primary purposes of Ladd Field remains.

Association: Ladd Field retains a high degree of association, as it is an active military installation. Most of the original World War II structures continue to serve in the capacity they were constructed.

CONSTRUCTION OF THE POST

Initial construction of Ladd Field as a small permanent cold weather test facility began in August 1939. Construction continued throughout World War II as the post's mission broadened from aircraft cold weather testing to serving as an air transport and maintenance facility, and the cantonment expanded as needs necessitated. Early buildings were permanent structures built to support the cold weather testing mission, and included Buildings 1047, 1048, 1049, 1051, 1555, and 1557 (Hangar No. 1). The buildings provided quarters for married officers, bachelor officers, non-commissioned officers, a hospital, laundry, administrative space, and a large aircraft hangar. After the events at Pearl Harbor and the entry of the U.S. into World War II, the purpose and size of Ladd Field shifted. In 1942, Ladd Field became an aircraft repair station to support war efforts in the Aleutians and a forward command center for the Alaska-Siberia (ALSIB) Lend-Lease program. By 1945, Ladd Field had the capacity to garrison 4,555 troops.

The original construction plans called for a 5,000-foot concrete runway, nine buildings for administration and housing of 561 officers and enlisted men, six buildings for technical use, a medical corps building, fuel storage facilities, necessary roads, utilities, drainage, parking aprons, and a railroad spur from Fairbanks. Those facilities made up the core of the North Post area which forms the heart of Ladd Field today. The projected cost of the base was \$20 million. Civilian crews supervised by military personnel began clearing trees for the site and building roads and a rail spur from Fairbanks in late 1938. Stripping and excavating at least two feet of permanently frozen ground for building sites and the runway was slow. In some cases, permanently frozen ground thawed after portions of the runway and some buildings were completed. This necessitated changing some building sites and reconstructing portions of the runway. Eighty percent of the construction, including the power and heating plant and the officers' housing, was completed by January 1941, when the Army Corps of Engineers took over supervision of construction.

During 1942, the Army Air Corps began expanding Ladd Field to establish an aircraft repair station and forward

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 10**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

command center for the Alaska-Siberia (ALSIB) Lend-Lease program that ferried thousands of American-made aircraft to the Soviet Union. New facilities at the post included garrison quarters for 280 officers and enlisted men; motor repair shops and utilities; gasoline storage consisting of thirty-seven 50,000 gallon tanks; an air depot for 911 officers and enlisted men; Ferry Command housing for 500 transients; a Quartermaster truck company of 110 officers and enlisted men; an additional 7,200 feet long southern runway; 500,000 square yards of aircraft parking; 12,000 linear feet of taxiway; 4,400 feet of extension of the original concrete runway; four Birchwood hangars; two Kodiak "T" hangars; and housing for 2,088 Air Transport Command personnel.

Whereas the original post was built on the north side of the runway, these new facilities sprang up all around the perimeter of the airfield. Much of this new construction consisted of Quonset huts and temporary buildings for barracks and workshops and were not fully operational until 1944. They included one-story, steel frame warehouses (Butler Buildings), a variety of prefabricated 800 Series buildings, and wood frame barracks and warehouses locally designed for a limited number of years. Most of these temporary buildings were based on standard design plans to facilitate rapid and economical construction. Most of the 800 Series wood frame buildings and many of the Butler Buildings were torn down in the post-war years.

LAYOUT OF THE HISTORIC DISTRICT

The airfield is the dominant visual and organizational element of the Ladd Field historic district. The airfield is bounded on the east and west by the Chena River and bounded by roads on all sides. It includes two runways, taxiways, and aprons surrounded by open spaces. The north runway was completed in 1941 and the south runway in 1943. Parking areas, taxiways, and 30 hardstands were also constructed during the war years. None of the hardstands remain.

Directly north of the airfield is a collection of flight service facilities, housing, and administrative buildings known as North Post. A rectangular parade ground with a semi-circular park at the north end is the focal point, providing an organizational layout for North Post. The parade ground and the distinctive radiating street layout remain important visual and organizational elements of the North Post area and is classified as a panopticon, providing visual unity and security from the most integral parts of the World War II post. The panopticon layout was utilized during this period in other installations, hospitals, and universities throughout the country. North Post contained approximately 185 buildings in 1945. Nineteen buildings remain from the period of significance and include several original permanent buildings constructed in 1940-1941. Most of the North Post World War II structures demolished over the ensuing years were temporary structures constructed during the building boom of Ladd Field in 1942.

At the south edge of the parade ground is Hangar 1 (Building 1557, FAI-00469), the tallest building on the post during the 1940s. Completed in 1941, it served as the post's headquarters and sheltered aircraft in the cold weather testing program. During the war years, half of the hangar was used by American soldiers to prepare U.S. aircraft to be turned over to Soviet pilots in the Lend-Lease program while the other half was utilized by Soviet pilots for their own work on the aircraft being turned over. At the north end of the horseshoe-shaped open area is the Commander's Quarters (Building 1048, FAI-00446), a two-story, wood frame residence erected in 1941. Facing the east side of the parade ground is Building 1555 (FAI-00467), a U-shaped, two-story building completed in 1942 which served as a combination barracks, hospital, post exchange, and theater. It provided housing for 250 men and a 26-bed hospital. Facing the west side of the parade ground is the Quartermaster Warehouse (Building 1562, FAI-00472), a two-story, gabled roof building. The building was erected in 1942 and housed the fire station, guard station, laundry, commissary, and stockade.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 11**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

Four two-story housing units are arranged like spokes radiating from the semicircular open area north of the parade ground mirroring the pattern of the streets. Murphy Hall (Building 1045, FAI-00452) originally housed 32 personnel as the Bachelor Officers' Quarters (BOQ). The Officers' Quarters (Building 1047, FAI-00453) provided seven apartments for officers with dependents. The two other buildings (Building 1049, FAI-00454 and Building 1051, FAI-00456) provided twelve and fourteen apartments respectively for non-commissioned officers. All four buildings were erected in 1941. The Garage (Building 1046, FAI-00502) is located between Buildings 1045 and 1047 and is a one-story hipped roof structure set back from the parade ground. Building 1046 was erected as a 20-car garage in 1941. The Nurses' Quarters (Building 1021, FAI-00448) is located directly east of Building 1045 and continues the development pattern along the road.

East of Hangar 1 along the northern edge of the airfield are Ladd Field's original flight service facilities. These include a series of eight Butler Buildings, five of which were constructed during the World War II period: Buildings 1533 (FAI-00463), 1534 (FAI-00464), 1537 (FAI-00465), 1538 (FAI-00533), and 1540 (FAI-00466). These one-story, metal-framed buildings were erected between 1942 and 1944 and served a combination of uses including warehouse space, work space, and temporary barracks.

Directly north of the horseshoe are two buildings which supported Ladd Field operations. These are: the MARS Building (Building 1024, FAI-00449), erected in 1939 as the post radio station, and the North Post Chapel (Building 1043, FAI-00451), erected in 1944 to serve the religious needs of soldiers.

Although the overall historic integrity of the district remains intact, there have been changes over time. All of the World War II-era buildings have new siding, roofs, doors, and windows. The changes to the doors and windows on the permanent buildings, such as the hangars, reflect the patterning of the historic fenestration. A number of the temporary buildings, specifically Butler Buildings, have been resided, covering many of the original doors and windows. The massing and scale of these buildings remains unchanged, preserving the qualities of design, setting, feeling, and association with the World War II era.

A number of World War II buildings in the district were demolished or destroyed by fire. These include all of the World War II era buildings south of the airfield and many north of the airfield. What remains presents a cohesion of style and use consistent with the original purpose of supporting World War II activities within Alaska.

CONTRIBUTING RESOURCES

The Ladd Field historic district includes buildings and linear features such as runways and roads. Contributing resources from the years 1940-1945 retain a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association as a historic district. Two types of contributing resources are included. The first are structures associated with the airfield, ground transport, and utilities. The second consists of buildings that were constructed during the period for use as a military facility.

Linear Resources

The airfield includes two parallel concrete runways, taxiways, and aprons, along with surrounding open spaces. The **north runway (FAI-01244)**, constructed in 1939-1940, was originally 150 feet wide and 5,000 feet long. Gravel extensions were laid at each end of the runway in 1943, bringing the overall length to 9,000 feet. These extensions were later paved. The **south runway (FAI-01245)**, constructed in 1943, originally measured 150 feet by 9,000 feet. After 1945, runways were widened to 300 feet and the South Runway shortened by 1,200 feet. The runways, taxiways, and aprons are built of concrete on 2 feet of gravel fill. The original concrete material has been extensively repaired during ensuing decades. The gravel parking aprons were later covered with

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 12**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

concrete and asphalt, but the runways and aprons retain their original configuration from the end of World War II. Both runways retain a high level of integrity in location, design, setting, workmanship, feeling, and association. The runways have been refinished many times, leading to a loss in original material.

The **parade ground (FAI-02677)** is located in the center of the main horseshoe, flanked on the east by Building 1555, on the south by Building 1557, on the west by Building 1562, and on the north by Buildings 1045, 1046, 1047, 1048, 1049, and 1051. The parade ground provides an open area in the center of the main administrative and hangar buildings and served as the main gathering point for official ceremonies. The parade ground retains a high level of integrity in location, design, setting, materials, workmanship, feeling, and association.

The **North Post utilidor system (FAI-01242)** consists of subterranean utilidors linking the principal World War II-era buildings in the North Post area. The first concrete utilidors were built in 1941 and extended as new buildings were constructed during the war. The utilidors vary in height and width. The main trunk lines are 6 feet wide and 8 feet high. They were constructed around the perimeter of the parade ground. The reinforced concrete ceilings serve as sidewalks. Utility lines for water, steam, sewage, electricity, and communications are affixed to shelves along one wall of each utilidor. The floors are concrete with drains. Additional utilidor lines were built as new buildings were erected on the North Post after the war, but the core utilidor trunk lines remain unchanged. They contain lighting and are large enough for pedestrian traffic. Personnel used the utilidors in the North Post area during World War II as subsurface pedestrian routes between buildings during the cold winters. The utilidor system retains a high level of integrity in location, design, setting, materials, workmanship, feeling, and association.

Buildings

Building 1558 (FAI-00470) is a one-story, rectangular plan steel-frame building on a concrete foundation, oriented north/south. The building has two sections: gable-roofed section that measures 75 feet long by 40 feet wide and a shed-roofed addition on the west elevation that measures 75 feet long by 14 feet wide. The exterior walls and roof are clad in standing seam aluminum siding. The north, primary, elevation is accessed via a steel slab personnel door covered by a gable-roofed overhang. The elevation has three, one-over-one single hung windows and a metal louver near the gable end. The east elevation has a shed-roofed covered walkway leading to a centrally located arctic entryway. The elevation features four, one-over-one single hung sash windows. The south elevation, consists, of a gable-roofed arctic entryway with steel slab double door centered under the gable end and overhead door located on the shed roof addition. Fenestration on the south elevation consist of three one-over-one aluminum sash windows, two to the left of the arctic entryway and one to the right. The west elevation is accessed by a small wood staircase leading to steel personnel door with vision light. Above the entrance is a flat-roofed overhang. The gable roof contains a metal ridge cap. Building 1558 retains a high degree of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, windows, and doors, leading to a loss of integrity of original materials.

Hangar 1 (Building 1557, FAI-00469) is a three-story hangar clad in corrugated metal completed in 1941. It was the largest type of hangar built in Alaska during World War II. It has a concrete foundation and floor, and a steel truss gambrel roof supported by steel columns with concrete footings. The overall dimensions of the building are 271 feet by 327 feet. The open floor of the hangar measures 268 feet by 263 feet. Two-story wings measuring 29 feet by 271 feet containing offices and shops are located on the north and south sides. The building has pronounced stairwell towers with flat roofs at each corner. The east elevation has two large hangar door openings and the west elevation has one large hangar door opening. The original hangar doors were replaced in 1989. The north and south elevations have paired windows evenly spaced the length of the first and

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 13**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

second floors with a belt course at sill and head height mimicking a window band. In 1979, 277 windows were removed. Just under half the window frames were replaced with aluminum ones, while the remaining openings were blocked as part of an energy conservation renovation. In 2007, 40 windows were replaced again on the north and south elevations, creating a mixture in window style and material. The hangar was re-sided with corrugated metal in the mid-1980s. Building 1557 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of windows and siding, leading to a loss of integrity in original materials.

Building 1556 (FAI-00468) is a one-story, rectangular plan, steel-frame building on a concrete foundation oriented east to west and was built in 1942. Measuring 160 feet long by 40 feet wide, the gable-roofed building is clad in vertical, standing-seam aluminum siding. The roof is channel lock metal and contains a metal ridge cap. The east elevation contains a large centrally located overhead door, a metal louver in the gable end, and steel slab personnel door north of the overhead door. The west elevation has a large centered overhead door with metal louver in the gable end. Two steel personnel doors flank the overhead door and there is a one-over-one aluminum sash window between the overhead door and the personnel door on the south side of the elevation. Eight one-over-one aluminum sash windows are situated in the north elevation. Building 1556 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

The **Barracks and Post Hospital (Building 1555, FAI-00467)** is a U-shaped, two-story, metal frame building with a full daylight basement and hipped roof. It was completed in 1942, although sections of the building were in use in 1941. The building has a cement foundation and concrete floors. Copper roofing was removed in 1967 and replaced with batten seam aluminum roofing. The roofing was replaced again in 1993. The main portion of the building measures 63 feet by 265 feet and contains a central entry in the west elevation and a double personnel door at the north and south ends. A two-story hipped roof wing is attached to and perpendicular to the ends of the main portion of the building. The wings measure 45 feet by 220 feet. All elevations have one-over-one sash windows evenly spaced on each floor. The original siding was replaced with metal siding in 1986. Building 1555 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

Murphy Hall (Building 1045, FAI-00452) was also built in 1941, and is identical to Buildings 1047, 1049, and 1051. Building 1045 is a rectangular building, divided into two parts with the western portion of the building wider than the eastern portion. It is a two-story, wood frame building on a concrete foundation, oriented east/west. The building is clad in vinyl drop siding, the largest section of the building, the eastern portion, measures 258 feet long by 37 feet, 6 inches wide. The western portion measures 96 feet long by 37 feet, 5 inches wide. Clad in asphalt composition shingle, the cross-hipped roof contains a metal ridge cap and features two gable-roof projections on the south elevation. All elevations of the roof contain metal louvers enclosed in cross gable dormers. The ridgeline of the roof nearest to the primary elevation features a red brick chimney. The east, or primary elevation, contains a single, centrally located steel door with vision light. The entry is flanked by two octagon-shaped, fixed-windows and a single fixed light located above door. Above the primary entry point is a sign that says "Murphy Hall," the historic name of the building. The first and second floors of the elevation feature evenly spaced one-over-one single-hung sash windows. The first and second floors of the south elevation are characterized by evenly spaced one-over-one single-hung sash windows and two-over-two single-hung sash windows. A pair of evenly spaced entry points extend from the plane of the building, and feature a slightly recessed entrance leading to a steel slab door. Both entrances are framed with quarter-round stylized columns and architrave. The first and second stories of the east elevation feature five, evenly spaced one-over-

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 14**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

one single-hung sash widows respectively. The north elevation is fenestrated in a similar fashion to the south elevation. The elevation features two, evenly spaced steel slab doors consistent with the other entry points, but differ with having gable-roof covered entrances. At the west end of the north elevation is a hipped-roof arctic entry with a steel slab door. The original siding on the building was replaced with aluminum in the late 1970s and early 1980s, and the original windows were replaced in the 1980s. Building 1045 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **Garage (Building 1046, FAI-00502)** is a one-story, wood frame building constructed in 1942. It has a concrete pony foundation and concrete floor. The building measures 51 feet by 99 feet and has a hipped roof and exterior covered with sheet metal. Building 1046 has garage doors flanked by octagonal windows on the east and west elevations. It has six two-over-two sash windows and personnel doors on the north and south elevations. The original siding was replaced with metal siding in 1979 and the garage doors were replaced in 1987. Building 1046 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **Officers' Quarters (Building 1047, FAI-00453)** is a two-story, seven-apartment wood frame building with a concrete foundation and wood floors. It was built in 1941 and measures 29 feet by 215 feet. The hipped roof and exterior are covered with metal. The northwest elevation contains four evenly spaced gabled roof arctic entries. The southeast elevation has four enclosed, hip roofed, evenly spaced enclosed porches measuring 8 feet by 12 feet. Evenly spaced one-over-one sash windows are located on both floors of each elevation. The building was re-sided with aluminum in 1979 and the original windows were replaced in 1988. Building 1047 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **Commander's Quarters (Building 1048, FAI-00446)** is a two-story, wood frame residence measuring 23 feet by 63 feet with projecting center bay. It was built in 1941 and minimally adheres to the French Revival style in use for officers' quarters on installations across the U.S. from 1915 to 1940. The building has a concrete foundation, a full basement, and an attic. The house has aluminum lap siding and asphalt shingled roof. The south elevation has a centered arctic entry flanked on either side by paired one-over-one sash windows. The second floor of the south elevation has a one-over-one sash window centered over the entry with paired one-over-one sash windows on either side. A small dormer containing louvers is centered on south side of the roof. The north elevation is symmetrical to the south elevation, although the arctic entry on the south side is translated as a two-car garage on the north elevation. The east and west elevations, slightly recessed from the central bay on the south elevation, have paired one-over-one sash windows evenly spaced on the first and second floors. A brick chimney rises from the peak of the roof of the west elevation. Building 1048 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, leading to a loss of integrity in original materials.

The **Non-Commissioned Officers Quarters (Building 1049, FAI-00454)** was also built in 1941 in the same design as Building 1047, containing twelve apartments. It is identical in design, massing, and fenestration to Buildings 1047, 1045, and 1051. Building 1049 is a two-story, rectangular plan, wood frame building on a concrete foundation, oriented at an angle southeast to northwest. The building is clad in aluminum drop siding and measures 241 feet, 6 inches long by 32 feet, 5 inches wide. The hipped-roof is covered in channel lock metal panels, with all elevations of the roof containing metal louvers enclosed in cross gable dormers. The east, primary elevation, contains six, evenly spaced gable-roofed arctic entryways. Each entryway has a side-by-side

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 15**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

multi-panel door, a pair of multi-light windows in the transom, decorative frieze and broken pediment. Window fenestration along the east elevation consists of two-by-two single-hung sash windows spaced evenly along the upper and lower stories, with one-over-one single-hung sash windows placed in pairs between the two-by-two windows along the upper story. Under each set of double windows is a decorative rectangular panel with a smaller raised rectangular band on the inside of the panel. The west elevation has six, evenly spaced hipped-roofed arctic entryways; each entryway has a single, centrally located multi-panel door and a one-over-one single-hung sash window in the north and south elevations of the entryways. Window fenestration along the west elevation consists of evenly spaced one-over-one single-hung sash windows along the upper and lower stories and evenly spaced one-over-one sliding windows along the basement level. The north and south elevations are virtually identical with each having two, one-over-one single-hung sash windows spaced evenly across the upper and lower stories and similar decorative panels under the one-over-one sash windows. The original siding on the building was replaced with aluminum in the late 1970s and early 1980s, and the original windows were replaced in the 1980s. Building 1049 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The second **Non-Commissioned Officers Quarters (Building 1051, FAI-00456)** was built in 1941 along the same design as Building 1047 and contained fourteen apartments. It is identical in design, massing, and fenestration to Buildings 1047, 1049, and 1045. Building 1051 is a rectangular plan, two-story, wood frame building on a concrete foundation oriented east/west. The building is clad in aluminum drop siding and measures 241 feet, 6 inches long by 32 feet, 5 inches wide. The hipped-roof is covered in channel lock metal panels, with all elevations of the roof containing metal louvers enclosed in cross gable dormers. The south, or primary elevation, contains seven, evenly spaced gable-roof arctic entryways; each entryway has a side-by-side steel slab door with vision light, a pair of multi-light windows in the transom, and a broken pediment. Window fenestration along the south elevation consists of two-by-two single-hung sash windows spaced evenly along the upper and lower stories, with one-over-one single-hung sash windows placed in pairs between the two-by-two windows along the upper story. Under each set of double windows is a decorative rectangular panel with a smaller raised rectangular band on the inside of the panel. The north elevation has seven, evenly spaced hipped-roof arctic entryways. Each entryway has a single, centrally located steel slab door with vision light and a one-over-one single-hung sash window in the east and west elevations of the entryways. Window fenestration along the north elevation consists of evenly spaced one-over-one single-hung sash windows along the upper and lower stories and evenly spaced one-over-one sliding windows along the basement level. Under each set of windows on the second story is a decorative rectangular panel with a smaller raised rectangular band on the inside of the panel. The east and west elevations are virtually identical with each having two, one-over-one single-hung sash windows spaced evenly across the upper and lower stories. Building 1051 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **Quartermaster Warehouse (Building 1562, FAI-00472)** is a two-story, gabled roof building with one-story hipped roof additions at the north and south ends. It was completed in 1942. It has a concrete foundation, walls and floors. The exterior and roof are covered with sheet metal. The central portion of the building measures 36 feet by 98 feet. The additions each measure 34 feet by 51 feet. Fenestration consists of bands of one-over-one sash windows on each floor of the main building and evenly spaced one-over-one sash windows on the two additions. When completed in 1942, the building included the additions. The two-story portion measured 63 feet by 282 feet. A storm entry was added in 1951. A fire destroyed about 246 feet of the west end of the two-story part of the building in 1962. The windows in the building were replaced in 1980 and the siding and roofing were replaced in 1987. Building 1562 retains a high level of integrity in location, design, setting,

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 16**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **Nurses' Quarters (Building 1021, FAI-00448)** is a one-story, wood frame temporary building on a concrete pad foundation. It was constructed in 1943. The exterior is covered with shiplap and the gable roof is covered with aluminum. The building measures 31 feet by 61 feet. Fenestration on the north and south elevations consists of evenly spaced one-over-one sash windows. The east and west gable ends have centered personnel doors flanked by one-over-one sash windows. A gabled roof arctic entry covers each personnel door. In 1980, the exterior doors were replaced. Some windows were removed and blocked at that time while others were replaced. Building 1021 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

The **MARS Building (Building 1024, FAI-00449)** is a one-story, wood frame building with a concrete foundation. It was built in 1939. Its steep gable roof is covered with copper sheeting. The building measures 33 feet by 34 feet. A garage measuring 32 feet by 20 feet is attached to the west gable end. The exterior is covered with shiplap siding. The front elevation faces south and contains a personnel door at the top of a stoop. The door is flanked on each side by a six-over-six sash window. The east elevation contains a pair of six-over-six sash windows. The west elevation has an overhead garage door and a six-over-six sash window. The north elevation has two evenly spaced six-over-six sash windows. The MARS Radio Building is the only original North Post building that still has a copper roof, an important defining feature. The siding, windows and roof were repaired in 1995, and the copper roof was replaced in 2001. The building underwent asbestos abatement in 1990. Building 1024 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

The **North Post Chapel (Building 1043, FAI-00451)** is a one-story, wood frame building measuring 37 feet by 78 feet and built in 1943 with a concrete foundation. It has a raised seam metal gabled roof and aluminum lap siding. The front steeple is flush with the building's south gable elevation and has a tar paper and plywood peaked roof. An enclosed entry with a gabled roof, measuring 8 feet by 11 feet, is centered on the south elevation. The front elevation has a two leaf door with transom windows. A triple window, featuring three multi-light fixed sash windows, is centered in the south gable. The east and west elevations have five fixed sash windows, with one-over-one sash windows on the north and south end of the east and west elevations. The north elevation is plain. The original felt roof was replaced with metal roofing in 1950. In 1988, the wood siding was replaced with metal siding and windows were replaced. In 2017, emergency funds were approved for immediate work on the chapel, including a new drainage system, asbestos abatement, and sealing of the utilidor to limit moisture exposure in the building, in order to halt the growth of molds in the building. Building 1043 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding, roofing, and windows, leading to a loss of integrity in original materials.

Building 1533 (FAI-00463) is a Butler Building constructed in 1944. Building 1533 is a one-story, rectangular plan, steel-frame building on a concrete foundation, oriented east/west. Measuring 80 feet long by 40 feet wide, the gable-roof building is clad in vertical, standing-seam aluminum siding. The channel lock metal roof contains a metal ridge cap. The east and west elevations are similar, both contain a single, centrally located overhead door, steel slab personnel door with vision light and a metal louver situated above the overhead door. The north and south elevations are unadorned. Building 1533 retains a high level of integrity in location, design, setting,

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 18**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

CONTRIBUTING RESOURCES

Building 1021 (FAI-00448)
 Building 1024 (FAI-00449)
 Building 1043 (FAI-00451)
 Building 1045 (FAI-00452)
 Building 1046 (FAI-00502)
 Building 1047 (FAI-00453)
 Building 1048 (FAI-00446)
 Building 1049 (FAI-00454)
 Building 1051 (FAI-00456)
 Building 1533 (FAI-00463)
 Building 1534 (FAI-00464)
 Building 1537 (FAI-00465)
 Building 1538 (FAI-00533)
 Building 1540 (FAI-00466)
 Building 1555 (FAI-00467)
 Building 1556 (FAI-00504)
 Building 1557 (FAI-00469)
 Building 1558 (FAI-00470)
 Building 1562 (FAI-00472)
 North Runway (FAI-01244)
 South Runway (FAI-01245)
 Utilidor (FAI-01242)
 Parade Ground (FAI-02677)

NON-CONTRIBUTING RESOURCES

Buildings 1531, 1532, 1535 (FAI-01321), 1539 (FAI-00510), 1563 (FAI-01323), and 1566 (FAI-01324): these buildings either post-date the World War II period or were moved to their present location at a later date.
 Buildings 1620 and 1621: contemporary structures on the airstrip.

RESOURCES ADDED TO THE NOMINATION

Buildings 1533 (FAI-00463), 1534 (FAI-00464), 1537 (FAI-00465), 1538 (FAI-00533), and 1540 (FAI-00466) (Butler Buildings): these buildings date to the World War II period and were overlooked in the original nomination.
 Building 1556 (FAI-00468): constructed 1943, originally misidentified by construction date.
 Building 1558 (FAI-00470): constructed 1942, originally misidentified by construction date.
 Parade Ground (FAI-02677): The parade ground is an original World War II linear feature.

RESOURCES REMOVED FROM THE NOMINATION

Building 1541 (FAI-00503): constructed 1954, outside the World War II period.
 Building 1542 (Kodiak-T Hangar): demolished.
 Building 1543 (Kodiak-T Hangar): demolished.
 Building 1560: demolished.
 Building 1561 (Power Plant): demolished.
 Building 2077 (Hangars 7&8, FAI-00504): constructed 1956, outside the World War II period.
 Building 2085 (Hangar 6, FAI-00487): demolished.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 17**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

Building 1534 (FAI-00464) is a Butler Building constructed in 1944. Building 1534 is a one-story, rectangular plan, steel-frame building on a concrete foundation, oriented east/west. Measuring 80 feet long by 40 feet wide, the gable-roof building is clad in vertical, standing-seam aluminum siding. The channel lock metal roof contains a metal ridge cap. The east and west elevations are similar, both contain a single, centrally located overhead door, steel slab personnel door with vision light, fixed contemporary light and a metal louver situated above the overhead door. The north and south elevations are unadorned. Building 1534 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

Building 1537 (FAI-00465) is a Butler Building constructed in 1942. Building 1537 is a one-story, rectangular plan, steel-frame building on a concrete foundation, oriented east/west. Measuring 80 feet long by 40 feet wide, the gable-roof building is clad in vertical, standing-seam aluminum siding. The channel lock metal roof contains a metal ridge cap. The east and west elevations are similar, both contain a single, centrally located overhead door, steel slab personnel door with vision light, fixed contemporary light and a metal louver situated above the overhead door. The west elevation differs from the east with a one-over-one single-hung sash window situated left of the personnel door. The north and south elevations are unadorned. Building 1537 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

Building 1538 (FAI-00533) is a Butler Building constructed in 1942. Building 1538 is a one-story, rectangular plan, steel-frame building on a concrete foundation, oriented east/west. Measuring 80 feet long by 40 feet wide, the gable-roofed building is clad in vertical, standing-seam aluminum siding. The channel lock metal roof contains a metal ridge cap. The east elevation contains a single, centrally located overhead door, steel slab personnel door with vision light, fixed contemporary light and a metal louver situated above the overhead door. The west elevation contains a vinyl-clad, one-over-one single-hung sash window situated left of a centrally located steel slab personnel door. The east and west elevations both have a metal sign that identifies the building as the "Alaska Fire Service Communications." The north and south elevations are unadorned. Building 1538 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

Building 1540 (FAI-00466) is a one-story Butler Building, the most common type of World War II building in the Ladd Field district. Butler Buildings are 40 feet wide and vary in length in standard 20-foot section deviations. These buildings have concrete foundations and floors, shallow gable roofs, and exteriors covered with metal siding. Building 1540 was constructed in 1942 and is 80 feet long. It is one of the better preserved examples of this type. The gabled end elevations have a centered overhead door flanked on each side by a one-over-one sash window. A personnel door is to the right of the overhead door. The side elevations contain a row of evenly spaced one-over-one sash windows. Building 1540 retains a high level of integrity in location, design, setting, workmanship, feeling, and association. The building has undergone replacement of siding and windows, leading to a loss of integrity in original materials.

The following is a list of all contributing resources, non-contributing resources, resources added to the nomination that were not included in the original nomination, and a list of resources removed from the original nomination due to demolition or mistaken information.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD

Page 19

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

Building 2106 (Double Hangar): demolished.

Building 3005 (Hangar 3, FAI-00482): demolished.

Building 3008 (Hangar 2, FAI-00485): demolished.

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 20**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

7. BIBLIOGRAPHICAL REFERENCES AND OTHER DOCUMENTATION

- Haulman, Daniel L. "The Northwest Ferry Route," in Fern Chandonnet, editor, *Alaska At War: The Forgotten War Remembered; Papers from the Alaska at War Symposium, Anchorage, Alaska, November 11-13, 1993*, Anchorage: Alaska At War Committee, 1995, 319-325.
- Lauer, B.C. *Official History of Ladd Field, Fairbanks, Alaska: Fall 1938-31 January 1944*. Alaska Division, Air Transport Command, 1944.
- Price, Kathy. *The World War II Heritage of Ladd Field, Fairbanks, Alaska*. Fort Collins, Colorado: Center for Environmental Management of Military Lands, Colorado State University, 2002.
- Thompson, Erwin N. *Ladd Field National Historic Landmark Nomination*. Department of the Interior: National Park Service, 1984.

Previous documentation on file (NPS):

- ☒ Previously listed in the National Register (fill in 1 through 6 below)
- ☐ Not previously listed in the National Register (fill in **only** 4, 5, and 6 below)

1. NR #: 85002730
2. Date of listing: 1985
3. Level of significance: National
4. Applicable National Register Criteria: A ☒ B ☐ C ☐ D ☐
5. Criteria Considerations (Exceptions): A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐
6. Areas of Significance: World War II in the Pacific: Alaska and the Aleutians

- ☐ Previously Determined Eligible for the National Register: Date of determination:
- ☒ Designated a National Historic Landmark: Date of designation: 1985
- ☐ Recorded by Historic American Buildings Survey: HABS No. AK-36
- ☐ Recorded by Historic American Engineering Record: HAER No.
- ☐ Recorded by Historic American Landscapes Survey: HALS No.

Location of additional data:

State Historic Preservation Office:

Other State Agency:

Federal Agency: Environmental Division, Fort Wainwright, Alaska

Local Government:

University:

Other (Specify Repository):

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD

Page 21

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

8. FORM PREPARED BY

Name/Title: Elizabeth A. Cook, Cultural Resources Manager

Address: Directorate of Public Works
Environmental Division
ATTN: IMFW-PWE (Cook)
1046 Marks Road
Fort Wainwright, AK 99703

Telephone: (907) 361-3002

E-mail: elizabeth.a.cook80.civ@mail.mil

Date: 21 November 2018

Edited by: Casey Woster, Architectural Historian

Telephone: (907) 361-9685

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 22**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

PHOTOGRAPHS

1. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska
 Date of Photograph: 2016
 Description: Building 1021 (Nurses' Quarters, FAI-00448), view to the northeast

2. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska
 Date of Photograph: 2016
 Description: Building 1024 (MARS Building, FAI-00449), view to the north

3. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska
 Date of Photograph: 2016
 Description: Building 1043 (North Post Chapel, FAI-00451), view to the northwest

4. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska
 Date of Photograph: 2016
 Description: Building 1045 (Murphy Hall, FAI-00452), view to the northeast

5. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska
 Date of Photograph: 2016
 Description: Building 1046 (FAI-00502), view to the west

6. Name of Property: Ladd Field National Historic Landmark
 City or Vicinity: Fort Wainwright, Alaska
 County: Fairbanks North Star Borough
 Name of Photographer: Casey Woster, Architectural Historian
 Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 23**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

Date of Photograph: 2016

Description: Building 1047 (Officers' Quarters, FAI-00453), view to the west

7. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1048 (Commander's Quarters, FAI-00446), view to the northwest

8. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1049 (Officers' Quarters, FAI-00454), view to the west

9. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1051 (Officers' Quarters, FAI-00456), view to the northwest

10. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1533 (Butler Building, FAI-00463), view to the southeast

11. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1534 (Butler Building, FAI-00464), view to the southeast

12. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD**Page 24**

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1537 (Butler Building, FAI-00465), view to the northwest

13. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1538 (Butler Building, FAI-00533), view to the northwest

14. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1540 (Butler Building, FAI-00466), view to the northwest

15. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1555 (Barracks and Post Hospital, FAI-00467), view to the east

16. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1556 (FAI-00504), view to the south

17. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1557 (Hangar 1, FAI-00469), view to the southwest

18. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-934 (Rev. 12-2015)

OMB Control No. 1024-0276 (Exp. 01/31/2019)

LADD FIELD

Page 25

United States Department of the Interior, National Park Service

National Historic Landmarks Nomination Form

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1558 (FAI-00470), view to the south

19. Name of Property: Ladd Field National Historic Landmark

City or Vicinity: Fort Wainwright, Alaska

County: Fairbanks North Star Borough

Name of Photographer: Casey Woster, Architectural Historian

Location of Original Digital File: Environmental Division, Fort Wainwright, Alaska

Date of Photograph: 2016

Description: Building 1562 (FAI-00472), view to the southwest

Appendix F. Reports on USAG Alaska-Managed Lands

HISTORIC PROPERTIES

Barger, Cleeta, et. Al. 1994. *Sullivan's Roadhouse Relocation Plan*. Division of Parks and Outdoor Recreation, Anchorage, AK.

Blythe, Jeff. 1998. *Cold War Resources Inventory United States Army Alaska: Fort Richardson, Fort Wainwright, Fort Greely*. Prepared by: Center for Ecological Management of Military Lands, Colorado State University, Fort Collins, CO and Gene Stout & Associates, Loveland, Co.

Blythe, Jeff. 1999. Historic American Building Survey Written Reports Ladd Field: Building #1050 (Post Office) AK-36-0, Building #1129 (Commissary Warehouse) AK-36-P, Building #1560 (Garage and Maintenance Building) AK-36-Q, Building #2060 (Fire Station) AK-36-R, Building #3007 (Warehouse) AK-36-S, Building #3200 (Ammunition Storage Igloo) AK-36-T, Building #3201 (Ammunition Storage Igloo) AK-36-U, Building #3203 (Ammunition Storage Igloo) AK-36-V, Building #3204 (Ammunition Storage Igloo) AK-36-W, Building #3725 (Machine and Welding Shop) AK-36-X; U.S. Army Alaska, Fort Wainwright, Alaska. Loveland, CO: Gene Stout & Associates.

Buzzell, Rolfe. 1998. *Ladd Field National Historic Landmark*. Boundary Review and Re-Nomination. Anchorage, Alaska: Office of History and Archaeology, Alaska Department of Natural Resources.

Chattey, Paul W. 1996. *Historic American Building Survey of Five Buildings at Ladd Field: Radio Transmitter Building (1024), Air Corps Gas and Oil Storage (1559), Garage and Maintenance Building (1560), 14-Unit N.C.O. Quarters (1051) and Nurses Quarters (1021)*. Seattle, Washington: Technical Center of Expertise for Preservation of Structures and Buildings, Seattle District, US Army Corps of Engineers.

Command Information Officer. 1976. *The U.S. Army in Alaska*. Pamphlet 360-5. 172 Infantry Brigade (Alaska).

Hollinger, Kristy. 2003. *The Haines-Fairbanks Pipeline*. CEMML TPS 03-04. Fort Collins, CO: Center for Environmental Management of Military Lands, Colorado State University.

Kerns, J. D. 1991. *The Early History of Ladd Field 1938-1943*. Fort Wainwright, Alaska: Natural Resources Office.

Kracker, Erica Z. and Edward B. Kiker. 1978. *Sullivan's Roadhouse National Register of Historic Places Nomination*. Anchorage, Alaska: Office of History and Archaeology.

Lauer, B. C. *Official History: Ladd Field – Fairbanks, Alaska, Fall 1938 – 31 January 1944*. In files of the Elmendorf Air Force Base Command Historian's Office.

Neely, Ronald "Burr. 2000. *Early Mining on Fort Wainwright and Fort Greely*. CEMML TPS 01-3. Fort Collins, CO: Center for Ecological Management of Military Lands, Colorado State University.

Neely, Ronald "Burr. 2003. *Early Transportation Routes Fort Wainwright, Alaska*. CEMML TPS 02-10. Center for Ecological Management of Military Lands, Colorado State University.

Price, Kathy. *Northern Defenders: Cold War Context of Ladd Air Force Base Fairbanks, Alaska, 1947-1961*. CEMML-TPS 01-2. Fort Collins, Co.: Center for Ecological Management of Military Lands, Colorado State University.

Price, Kathy. 2000. *Fort Wainwright Homesteads*. CEMML-TPS 02-9. Fort Collins, CO: Center for Environmental Management of Military Lands, Colorado State University, 2002.

Sackett, Russell H. 2002. "Living in a Landmark: Ladd Field National Historic Landmark." Paper presented at the Annual Alaska Historical Society Meetings, Fairbanks, Alaska September 16-18.

Thompson, Erwin N. 1984. *National Register of Historic Places Nomination for Ladd Field Historic Landmark, Alaska*. Denver Service Center, National Park Service, Denver, CO.

U.S. Army Alaska. 1995. *The Army in Alaska* Printed by Blake Publishing Company, Inc., Anchorage, AK.

Waddell, Karen. 2003. *Cold War Historical Context 1951-1991, Fort Richardson, Alaska United States Army Alaska*. CEMML TPS 02-5. Center for Environmental Management of Military Lands, Colorado State University, Fort Collins, CO.

ARCHAEOLOGICAL REPORTS

Bacon, G.H. 1979. *Final Report on the Archaeological Survey of the XM-1 Tank Range, Fort Greely, Alaska*. Fairbanks, Alaska: Alaskarctic.

Bacon, G.H. 1980. Letter report on archaeological survey of the cantonment area, Fort Greely. On file at the U.S. Army Corps of Engineers, Alaska District.

Bacon, G.H. and C.E. Homes. 1979. *Archaeological Survey and Inventory of Cultural Resources at Fort Greely*. Fairbanks, Alaska: Alaskarctic.

Bacon, G.H., J.A. Ketz, and C.M. Mobley. 1986. *Historic Preservation Plan for U.S. Army Lands in Alaska*. Alaska Heritage Research Group, Inc., Fairbanks, AK.

Carlson, E.S., J.A. Esdale, J.J. Lynch. 2016. *Archaeological Districts on Fort Wainwright*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Cook, J.P. 1979. *Site XBD-094: Aircraft Assault Strip Fort Wainwright, Alaska*. Final Report to U.S. Army Corps of Engineers. Fairbanks, Alaska: University of Alaska Fairbanks.

Dixon, E.J., G.S. Smith and D.C. Plaskett. 1979. *Archaeological Survey and Inventory of Cultural Resources, Fort Wainwright, Alaska, Preliminary Report on 1979 Field Work*. Fairbanks, Alaska: University of Alaska Museum.

Dixon, E.J., G.S. Smith and D.C. Plaskett. 1980. *Archaeological Survey and Inventory of Cultural Resources, Fort Wainwright, Alaska*. Fairbanks, Alaska: University of Alaska Museum.

Esdale, J.A., H.D. Hardy, J.J. Lynch, and W.E. McLaren. 2018. Fort Wainwright Archaeology Annual Report, 2017. Prepared by the Center for Environmental Management of Military Lands, Colorado State University.

Esdale, J.A., and W.E. McLaren. 2018. Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area; 2017 Annual Report. Prepared by the Center for Environmental Management of Military Lands, Colorado State University.

Esdale, J.A., H.D. Hardy, J.J. Lynch, G.J. Henderson, J.K.T. Smith, W.E. McLaren, and K.S. Yeske. 2017a. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2015 and 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., C.E. Holmes, and K.S. Yeske. 2017b. Core and Blade Technology at the Fort Greely Entrance Site. *Research Notes. Alaska Journal of Anthropology* 14(1-2):114-120.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2017c. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2016. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2015*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A. A. Robertson, and W. Johnson. 2015a. "Banjo Lake: A Middle Holocene Site in the Tanana Valley." *Alaska Journal of Anthropology* 13(1):35-56.

Esdale, J.A., K.S. Yeske, H. D. Hardy, J. Lynch and W.E. McLaren. 2015b. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2015c. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2014*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., K.S. Yeske, H. D. Hardy, W.E. McLaren, J. Lynch and L. Sample. 2014. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2013*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and W.E. McLaren. 2014. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2013*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and W.E. McLaren. 2013. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2012*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., K.S. Yeske, W.E. McLaren, H. Hardy, M.S. Sweeney, and J. Quinn. 2013. *Section 110 Report: Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2012*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and A.C. Robertson. 2007. *Final Report: Archaeological Data Recovery for Sites XMH-00284 and XMH-00881, 33-Mile Loop Road Gravel Source Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2007*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and A.S. Pelto. 2017. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area: Annual Report 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., J. Quinn, K.S. Yeske, and W.E. McLaren. 2012a. *2011 Archaeological Survey and Report of CRTC Project Areas in Donnelly Training Area for the Cold Regions Test Center*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., E.P. Gaines, W.E. McLaren, and J. Quinn. 2012b. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area: Annual Report 2010 and 2011*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., E.P. Gaines, K.S. Yeske, W.E. McLaren, M. Shimel, and J.F. Kunes. 2012c. *Section 110 Report, Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands: 2010 and 2011*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Espenshade, C.T. 2010. *Archaeological Investigations, Donnelly Training Area near Delta Junction, Alaska*. Greensboro: Prepared by New South Associates. Technical Report 1922.

Frizzera, A. 1973. *Preliminary Survey Report, Blair Lakes Alaska*. Fairbanks, Alaska: University of Alaska Fairbanks, Anthropology Department.

Gaines, E.P. 2009. *Report: Archaeological Survey and Evaluation Fort Wainwright and Fort Richardson, Alaska 2008*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gaines, E.P., H. Hardy, and H. Brown. 2010a. *Final Report: Determination of National Register Eligibility for Eleven Archaeological Sites at Fort Greely, Alaska 2010*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gaines, E.P., K.S. Yeske, S.J. Shirar, W.C. Johnson, and J.F. Kunes. 2011. "Pleistocene Archaeology of the Tanana Flats, Eastern Beringia." *Current Research in the Pleistocene* 29:42-44.

Gaines, E.P., K.S. Yeske, and S.J. McGowan. 2010b. *Annual Report: Cultural Resources Survey and Evaluation, Fort Wainwright, Alaska 2009*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gaines, E.P., H. Hardy, and H. Brown. 2010. *Determination of National Register Eligibility for Eleven Archaeological Sites at Fort Greely, Alaska 2010*. Prepared by the Center for Environmental Management of Military Lands, Colorado State University, Fort. Collins.

Gamza, T. *Excavation and Evaluation of Sullivan's Roadhouse (XBD-061), Fort Greely, Alaska, 1994*. Final report prepared for the Office of History and Archaeology, Division of Parks and Recreation, Alaska Department of Natural Resources, Anchorage.

Hedman, W., A. Robertson, N. Fichter, and K. Anderson. 2003. *Interim Report: Archaeological Survey & Evaluation Fort Richardson & Fort Wainwright*. Center for

Environmental Management of Military Lands, Colorado State University, Fort Collins, CO.

Higgs, A. S., B. A. Potter, P. M. Bowers and O. K. Mason. 1999. *Cultural Resource Survey Report of the Yukon Training Area and Fort Greely Army Lands Withdrawal, Alaska*. 2 Volumes Prepared for ABR, Inc. and U.S. Army Cold Regions Research and Engineering Laboratory and U.S. Army Alaska. Fairbanks, Alaska: Northern Land Use Research, Inc.

Holmes, C.E. 1979. *Report on Archaeological Reconnaissance: Yukon Training Command Withdrawal Area. Fort Wainwright*. Report prepared for the U.S. Army Corps of Engineers under Contract DACA85-79-M-0001.

Holmes, C.E. 1979. *Archaeological Reconnaissance Report for Fort Wainwright, Fort Greely, and Fort Richardson Withdrawal Lands, Alaska*. Fairbanks, Alaska: Alaskarctic.

Johnson, W.C., and S.R. Bozarth. 2008. *Geoarchaeology and Environmental Reconstruction at XMH-874, Fort Wainwright Donnelly Training Area*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Marwill, T. 2007. *Archaeological Survey and Evaluation: Fort Wainwright, 2006*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Neely, B., and K. Price. 2001. *Field Report: Archaeological Reconnaissance Survey, Donnelly Training Area West, June 26th and 27th, 2001*. Manuscript on file, Environmental Resources Department, Fort Richardson, Alaska.

Odess, D. 2002. *Preliminary Report of Archaeological Investigations on Military Lands in the Vicinity of Donnelly Dome, Alaska under TCC Contract #DAPC49=01-D-0004*. Report on file with the Tanana Chiefs Conference, Fairbanks.

Potter, B.A. 2005. *Site Location Model and Survey Strategy for Cultural Resources in the Alaska Railroad Northern Rail Extension Project Area*. Report submitted by Northern Land Use Research, Inc. and ICF Consulting Services, LLC.

Potter, B.A., J.A. Esdale, J.D. Reuther, H.J. McKinney, C.E. Holmes, C.R. Holloway, C.R., and C.L. Glassburn. 2018. *Archaeological Investigations at Delta River Overlook, Central Alaska*. Archaeology GIS Laboratory, Report #7. Department of Anthropology, University of Alaska Fairbanks.

Potter, B.A., E. Gaines, P.M. Bowers, and M. Proue. 2006. *Results of the 2006 Cultural Resource Survey of Proposed Alaska Railroad Northern Rail Extension Routes and Ancillary Facilities, Alaska, Volume I*. Report submitted by Northern Land Use Research, Inc. Fairbanks, Alaska.

Potter, B.A., E. Gaines, P.M. Bowers, and M. Proue. 2006. *Results of the 2006 Cultural Resource Survey of Proposed Alaska Railroad Northern Rail Extension Routes and Ancillary Facilities, Alaska, Volume II*. Report submitted by Northern Land Use Research, Inc. Fairbanks, Alaska.

Potter, B.A., S.C. Gerlach, A.S. Higgs, and P.M. Bowers. 2000. *Cultural Resource Survey: Fort Greely, Yukon Training Area (Fort Wainwright), Alaska*. Report submitted for the National Missile Defense Program, for USAR Space and Missile Defense Command, by Northern Land Use Research, Inc. Fairbanks, Alaska.

Potter, B.A., J.D. Reuther, P.M. Bowers, and C. Gelvin-Reymiller. 2007. *Results of the 2007 Cultural Resource Survey of Proposed Alaska Railroad Northern Rail Extension Routes, Alaska*. Report submitted by Northern Land Use Research, Inc. Fairbanks, Alaska.

Rabich, J.C., and D.R. Reger. 1977. *Archaeological Excavations at the Gerstle River Quarry Site*. In *Archaeological Survey Projects 1977*. OHA Miscellaneous Publication 18. Anchorage, Alaska: Office of History and Archaeology.

Raymond-Yakoubian, J. 2006. *Annual Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2005*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Raymond-Yakoubian, J., and A. Robertson. 2005. *Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2004*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Reynolds, G.L. 1978. Site Report, FAI-165. Manuscript on file at the Office of History and Archaeology, Anchorage.

Reynolds, G.L. 1983. *Archaeological Reconnaissance of Four Borrow Pits, Fort Wainwright, Alaska*. Anchorage, Alaska: Corps of Engineers.

Reynolds, G.L. 1984. *Archaeological Survey of Portions of the Fairbanks Petroleum, Oils, and Lubricants (POL) Terminal, Fort Wainwright, Alaska*. Manuscript on file at the U.S. Army Corps of Engineers, Alaska District.

Reynolds, G.L. 1985. *Survey of Construction Projects, Fort Wainwright Cantonment*. Manuscript on file at the Office of History and Archaeology, Anchorage.

Reynolds, G.L. 1998. *Archaeological Site Report Fort Greely Cantonment Area*. Manuscript on file at the Office of History and Archaeology, Anchorage.

Robertson, A.C. 2010. *Archaeological Survey and Data Recovery: Donnelly Training Area, Fort Wainwright, Alaska 2009*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Robertson, A.C., J. Esdale, W.C. Johnson, S.R. Bozarth, M. Proue, C.K. Paraso, S. Shirar, and P. Gilbert. 2009. *Final Report: 2006-2007 Archaeological Data Recovery for Site XMH-00874 Battle Area Complex (BAX) Mitigation, Donnelly Training Area, Fort Wainwright, Alaska*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Robertson, A.C., J. Esdale, M. Proue, S. Shirar, C.K. Paraso, and C. Ciancibelli. 2008. *Archaeological Survey and Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2007*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Robertson, A.C., N. Fichter and K. Anderson. 2004. *Annual Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright 2003*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO, and U.S. Army Garrison Fort Wainwright, Alaska.

Robertson, A.C., E.P. Gaines, S.J. Meitl, D. White, P. Gilbert, and C. Ciancibelli. 2009. *Archaeological Survey and Evaluation: Donnelly Training Area, Fort Wainwright, Alaska 2008*. Center for Environmental Management of Military Lands (CEMML), Colorado State University, Fort Collins, CO, and U.S. Army Garrison Fort Wainwright, Alaska.

Robertson, A.C., M. Proue, P. Hall, S. Shirar, and C.K. Paraso. 2007. *Survey, Evaluation, and Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2006*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Robertson, A.C., M. Proue, C.K. Paraso, S. Shirar, and P. Gilbert. 2008. *Archaeological Data Recovery for Site XMH-00874, Battle Area Complex (BAX) Mitigation, Donnelly Training Area, Fort Wainwright, Alaska 2007*. Center for Environmental Management of Military Lands (CEMML), Colorado State University, Fort Collins, CO, and U.S. Army Alaska Garrison Fort Wainwright, Alaska.

Robertson, A.C., J. Raymond-Yakoubian, M. Proue, S. Shirar, J. Burr, H. Robbins, and D. Cory. 2006. *Annual Report: Archaeological Survey and Evaluation, Donnelly Training Area, Fort Wainwright, Alaska, 2005*. Prepared by the Center for Environmental Management of Military Lands, Fort Collins, CO.

Shaw, R.D. 2000. *Historic Properties and Paleontological Resources Survey for Realignment of the Alaska Railroad Corporation Tracks Across Elmendorf Air Force Base and Fort Richardson, Alaska*. Anchorage, Alaska. Alaska Railroad Corporation.

Staley, D.P. 1993. *A Phase 1 Cultural Resources Survey of 19 Locations for the Proposed Yukon Measurement and Debriefing System in Interior Alaska*. Albuquerque, New Mexico: Mariah and Associates.

Steele, J.L. 1980. *Fort Greely Bison Trail Archaeological Survey, Fort Greely, Alaska*. Anchorage, Alaska: Alaska District, U.S. Army Corps of Engineers.

Steele, J.L. 1980. *Archaeological Assessment of Squad Assault Range, Powerline Extension, and M-16 Record Fire Range, Fort Greely, Alaska*. Anchorage, Alaska: Alaska District, U.S. Army Corps of Engineers.

Steele, J.L. 1982. *Archaeological Assessment of Proposed Range Control Headquarters Building, Fort Wainwright, Alaska*. Manuscript on file at the U.S. Army Corps of Engineers, Alaska District.

Steele, J.L. 1982. *Cultural Resource Assessment for a Quarry Site at Donnelly Dome, Fort Greely, Alaska*. Manuscript on file at the U.S. Army Corps of Engineers, Alaska District.

Steele, J.L. 1983. *Cultural Resources Assessment of Proposed Borrow Area, Fort Wainwright, Alaska*. Manuscript on file at the U.S. Army Corps of Engineers, Alaska District.

Steele, J.L. 1983. *Cultural Resource Assessment of a Powerline Extension: Fort Greely, Alaska*. Manuscript on file at the U.S. Army Corps of Engineers, Alaska District.

Steele, J.L. and L. Boyer. 1980. *Cultural Resource Reconnaissance of the South Bank of the Tanana River for the Chena River Lakes Project*. Anchorage, Alaska: Alaska District, U.S. Army Corps of Engineers.

Appendix G. Summary of National Register of Historic Places Criteria

As provided in 36 CFR § 60.4, the National Register Criteria for Evaluation are as follows:

Criteria: The quality of **significance** in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important in prehistory or history.

Criteria Considerations (used to evaluate normally excluded properties): Some kinds of properties are normally excluded from National Register eligibility. These include religious properties, properties that have been moved, birthplaces and graves, cemeteries, reconstructed properties, and properties less than fifty years old. However, exceptions can be made for these kinds of properties if they meet one of the standard criteria above *and* fall under one of the seven special “criteria considerations” listed below:

- a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his or her productive life; or
- a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- a property achieving significance within the past 50 years if it is of exceptional importance.

Integrity: In addition to significance, a cultural resource must possess “integrity” to be eligible for the National Register. Integrity is the ability of the resource to convey its significance, to reveal to the viewer the reason for its inclusion in the National Register. Integrity is a subjective quality but must be judged based on how the cultural resource’s physical features relate to its significance. Seven aspects are used to define integrity. Some, if not all, should be present for the resource to retain its historic integrity: location, design, setting, materials, workmanship, feeling, and association. These concepts are defined as follows:

- Location: the place where the historic property was constructed or the place where the historic event occurred. The relationship between a historic property and its location is important to conveying the sense of historic events and persons and to understanding why the historic property was created or why the event occurred. Moved historic properties are usually not considered eligible (see Criteria Considerations for exceptions).
- Design: the combination of elements that create the form, plan, space, structure, and style of a historic property. Design is the result of conscious decisions made during the original conception and planning of the historic property and includes elements such as organization of space, proportion, scale, technology, ornamentation, and materials. For districts, design includes the way sites, buildings, structure, or objects are related; for example, spatial relationships between major features; visual patterns of a landscape, etc.
- Setting: the physical environment of a cultural resource. This quality refers to the character of the resource’s location. It involves how the historic property or site is situated and its relationship to surrounding features and open space. Setting can include such features as topography, vegetation, manmade features, and relationships between buildings and other features or open space. For districts, setting is important not only within the boundaries of the district, but also between the district and its surroundings.
- Materials: the physical elements that were combined or deposited during a particular period of time and, in particular, the pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of the creator(s) and suggest the availability of particular types of materials and technologies. A historic property must retain the key exterior materials dating from the period of its historic significance. If rehabilitated, those materials must have been preserved. Re-creations are not considered eligible for the National Register.
- Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history (post-contact) or prehistory (pre-contact). Workmanship is the evidence of artisans’ labor and skill in constructing or altering a site, building, structure, object, or district and may apply to the historic property as a whole or to individual components. This aspect of integrity provides evidence for the technology of a craft, illustrates the aesthetic principles of a historic (post-contact) or prehistoric (pre-contact) period, and reveals individual, local, regional, or national applications of both technological practices and aesthetic principles.

- Feeling: a historic property's expression of the aesthetic or historic sense of a particular period of time. Feeling results from the presence of physical features that, taken together, convey the property's historic character.
- Association: the direct link between an important historic event or person and a cultural resource. A resource retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

Historic Context: Historic context provides the framework for evaluating specific properties. Historic context consists of the patterns and trends in history or prehistory, organized by theme, place and time, which allow a property to be understood. Contexts can be local, regional, or national in scope, and their themes can range widely to include prehistory, economics, technology, cultural affiliation, architecture, transportation and other topics. Historic contexts identify property types that represent the past activity and are often prepared as formal studies. Examples include *Historic Context for DoD Installations, 1790 to 1940*; and *Early Mining History: Fort Wainwright and Fort Greely*. Resources may be evaluated under multiple contexts. It is possible for a resource that is not eligible for the National Register under one historic context to be found eligible under another, or for a property to be eligible under multiple contexts.

Appendix H. Five-Year Plans for Site Monitoring, Survey, and Evaluation

Five-Year Site Monitoring Plan

Table 8. Five-year site monitoring plan

Year 1				Year 2		Year 3	Year 4	Year 5
DTA E	DTA E	DTA E	DTA E	TFTA	TFTA	YTA	DTA W	Tok
XBD-00271	XMH-00939	XMH-01110	XMH-01279	FAI-00044	FAI-02044	XBD-00162	HEA-00685	TNX-00007
XBD-00272	XMH-00940	XMH-01111	XMH-01280	FAI-00045	FAI-02045	XBD-00364	XBD-00033	TNX-00008
XBD-00273	XMH-00941	XMH-01114	XMH-01281	FAI-00046	FAI-02046	XBD-00368	XBD-00061	TNX-00010
XBD-00333	XMH-00942	XMH-01115	XMH-01282	FAI-00047	FAI-02047	XBD-00370	XBD-00106	TNX-00023
XMH-00001	XMH-00944	XMH-01116	XMH-01283	FAI-00048	FAI-02048	XBD-00406	XBD-00108	TNX-00231
XMH-00005	XMH-00945	XMH-01118	XMH-01285	FAI-00049	FAI-02049	XBD-00408	XBD-00109	TNX-00232
XMH-00006	XMH-00947	XMH-01119	XMH-01286	FAI-00050	FAI-02050	GRTA	XBD-00110	TNX-00233
XMH-00007	XMH-00948	XMH-01120	XMH-01287	FAI-00052	FAI-02051		XBD-00187	TNX-00234
XMH-00008	XMH-00949	XMH-01121	XMH-01288	FAI-00054	FAI-02052	XMH-01359	XBD-00188	TNX-00235
XMH-00009	XMH-00950	XMH-01122	XMH-01289	FAI-00055	FAI-02053	XMH-01509	XBD-00189	TNX-00236
XMH-00010	XMH-00951	XMH-01123	XMH-01290	FAI-00059	FAI-02054	BRTA	XBD-00335	TNX-00256
XMH-00011	XMH-00953	XMH-01124	XMH-01291	FAI-00060	FAI-02055		XBD-00425	
XMH-00012	XMH-00955	XMH-01125	XMH-01292	FAI-00086	FAI-02056	XMH-01501	XBD-00426	
XMH-00016	XMH-00956	XMH-01126	XMH-01293	FAI-00087	FAI-02057	XMH-01503	XBD-00427	
XMH-00019	XMH-00957	XMH-01128	XMH-01294	FAI-00088	FAI-02058	XMH-01504	XBD-00428	
XMH-00020	XMH-00958	XMH-01129	XMH-01295	FAI-00170	FAI-02059	XMH-01506	XBD-00429	
XMH-00023	XMH-00959	XMH-01130	XMH-01296	FAI-00171	FAI-02060	XMH-01507	XBD-00430	
XMH-00265	XMH-00960	XMH-01131	XMH-01297	FAI-00172	FAI-02061	XMH-01508	XBD-00431	
XMH-00266	XMH-00961	XMH-01133	XMH-01298	FAI-00173	FAI-02062	WCTA	XBD-00432	
XMH-00267	XMH-00962	XMH-01134	XMH-01299	FAI-00174	FAI-02063		XBD-00433	
XMH-00268	XMH-00963	XMH-01135	XMH-01300	FAI-00175	FAI-02064	XMH-01538	XBD-00434	
XMH-00269	XMH-00964	XMH-01136	XMH-01301	FAI-00176	FAI-02065		XBD-00435	
XMH-00270	XMH-00966	XMH-01137	XMH-01302	FAI-00177	FAI-02066		XBD-00436	
XMH-00272	XMH-00967	XMH-01138	XMH-01303	FAI-00178	FAI-02067		XBD-00437	
XMH-00274	XMH-00968	XMH-01139	XMH-01332	FAI-00179	FAI-02068		XBD-00438	
XMH-00277	XMH-00969	XMH-01140	XMH-01333	FAI-00180	FAI-02069		XBD-00439	
XMH-00278	XMH-00971	XMH-01141	XMH-01334	FAI-00181	FAI-02070		XBD-00440	
XMH-00279	XMH-00973	XMH-01143	XMH-01335	FAI-00182	FAI-02071		XBD-00441	
XMH-00280	XMH-00975	XMH-01144	XMH-01336	FAI-00183	FAI-02072		XBD-00442	
XMH-00281	XMH-00976	XMH-01145	XMH-01356	FAI-00184	FAI-02073		XBD-00443	
XMH-00282	XMH-00977	XMH-01146	XMH-01357	FAI-00185	FAI-02074		XBD-00444	
XMH-00283	XMH-00978	XMH-01147	XMH-01358	FAI-00186	FAI-02075		XBD-00445	
XMH-00284	XMH-00979	XMH-01148	XMH-01360	FAI-00187	FAI-02076		XBD-00446	
XMH-00285	XMH-00980	XMH-01149	XMH-01361	FAI-00188	FAI-02077		XBD-00447	
XMH-00286	XMH-00992	XMH-01150	XMH-01362	FAI-00189	FAI-02078		XBD-00448	
XMH-00292	XMH-00993	XMH-01151	XMH-01363	FAI-00190	FAI-02079		XBD-00449	
XMH-00294	XMH-00994	XMH-01152	XMH-01364	FAI-00191	FAI-02080		XBD-00450	
XMH-00295	XMH-00995	XMH-01153	XMH-01365	FAI-00192	FAI-02081		XBD-00451	
XMH-00296	XMH-00996	XMH-01154	XMH-01366	FAI-00193	FAI-02082		XBD-00452	
XMH-00297	XMH-00997	XMH-01155	XMH-01367	FAI-00194	FAI-02083		XBD-00453	
XMH-00323	XMH-00998	XMH-01156	XMH-01368	FAI-00195	FAI-02084		XBD-00454	
XMH-00838	XMH-00999	XMH-01157	XMH-01369	FAI-00196	FAI-02085		XBD-00455	
XMH-00843	XMH-01051	XMH-01158	XMH-01370	FAI-00197	FAI-02086		XBD-00456	
XMH-00871	XMH-01052	XMH-01159	XMH-01371	FAI-00198	FAI-02087		XBD-00457	
XMH-00874	XMH-01053	XMH-01162	XMH-01372	FAI-01356	FAI-02088		XBD-00458	
XMH-00878	XMH-01054	XMH-01163	XMH-01373	FAI-01357	FAI-02089		XBD-00459	
XMH-00881	XMH-01055	XMH-01168	XMH-01374	FAI-01885	FAI-02090		XBD-00460	
XMH-00887	XMH-01056	XMH-01169	XMH-01375	FAI-01886	FAI-02091		XBD-00461	
XMH-00890	XMH-01057	XMH-01170	XMH-01376	FAI-01887	FAI-02092		XBD-00462	
XMH-00891	XMH-01058	XMH-01175	XMH-01377	FAI-01888	FAI-02093		XBD-00463	
XMH-00894	XMH-01061	XMH-01176	XMH-01378	FAI-01889	FAI-02094		XBD-00464	
XMH-00895	XMH-01062	XMH-01194	XMH-01379	FAI-01998	FAI-02095		XBD-00465	
XMH-00896	XMH-01067	XMH-01195	XMH-01380	FAI-02001	FAI-02097		XBD-00466	
XMH-00897	XMH-01068	XMH-01196	XMH-01381	FAI-02002	FAI-02199		XBD-00467	
XMH-00899	XMH-01069	XMH-01197	XMH-01382	FAI-02003	FAI-02200		XBD-00468	
XMH-00900	XMH-01070	XMH-01198	XMH-01383	FAI-02004	FAI-02234		XBD-00469	
XMH-00901	XMH-01071	XMH-01199	XMH-01384	FAI-02005	FAI-02235		XBD-00470	
XMH-00902	XMH-01074	XMH-01200	XMH-01455	FAI-02006	FAI-02236		XBD-00471	
XMH-00903	XMH-01075	XMH-01201	XMH-01456	FAI-02007	FAI-02237		XBD-00472	
XMH-00904	XMH-01076	XMH-01202	XMH-01458	FAI-02008	FAI-02238		XBD-00473	

XMH-00905	XMH-01077	XMH-01203	XMH-01459	FAI-02009	FAI-02239		XMH-01440
XMH-00906	XMH-01078	XMH-01204	XMH-01460	FAI-02010	FAI-02240		XMH-01441
XMH-00907	XMH-01084	XMH-01206	XMH-01487	FAI-02011	FAI-02241		XMH-01442
XMH-00909	XMH-01085	XMH-01207	XMH-01493	FAI-02012	FAI-02242		XMH-01443
XMH-00910	XMH-01086	XMH-01208	XMH-01511	FAI-02013	FAI-02243		XMH-01445
XMH-00913	XMH-01087	XMH-01209	XMH-01512	FAI-02014	FAI-02244		XMH-01446
XMH-00914	XMH-01088	XMH-01210	XMH-01524	FAI-02016	FAI-02245		XMH-01447
XMH-00915	XMH-01089	XMH-01211	XMH-01525	FAI-02018	FAI-02246		XMH-01449
XMH-00917	XMH-01090	XMH-01213	XMH-01526	FAI-02019	FAI-02247		XMH-01450
XMH-00919	XMH-01091	XMH-01214	XMH-01527	FAI-02020	FAI-02248		XMH-01451
XMH-00920	XMH-01092	XMH-01215	XMH-01532	FAI-02021	FAI-02250		XMH-01452
XMH-00921	XMH-01093	XMH-01216	XMH-01533	FAI-02022	FAI-02319		XMH-01453
XMH-00923	XMH-01095	XMH-01217	XMH-01535	FAI-02023	FAI-02320		XMH-01454
XMH-00924	XMH-01096	XMH-01218	XMH-01536	FAI-02024	FAI-02321		XMH-01491
XMH-00925	XMH-01097	XMH-01219	XMH-01537	FAI-02025	FAI-02322		XMH-01544
XMH-00926	XMH-01098	XMH-01220	XMH-01539	FAI-02026	FAI-02361		XMH-01545
XMH-00927	XMH-01099	XMH-01221	XMH-01546	FAI-02027	FAI-02368		XMH-01549
XMH-00928	XMH-01100	XMH-01222	XMH-01547	FAI-02028	FAI-02391		XMH-01550
XMH-00929	XMH-01104	XMH-01224	XMH-01548	FAI-02029	FAI-02392		XMH-01551
XMH-00930	XMH-01105	XMH-01225	XMH-01554	FAI-02030	FAI-02393		
XMH-00931	XMH-01106	XMH-01226	XMH-01555	FAI-02031	FAI-02394		
XMH-00932	XMH-01107	XMH-01227		FAI-02032			
XMH-00933	XMH-01108	XMH-01237		FAI-02033			
XMH-00934	XMH-01109	XMH-01278		FAI-02043			

Five-Year Archaeological Survey Plan

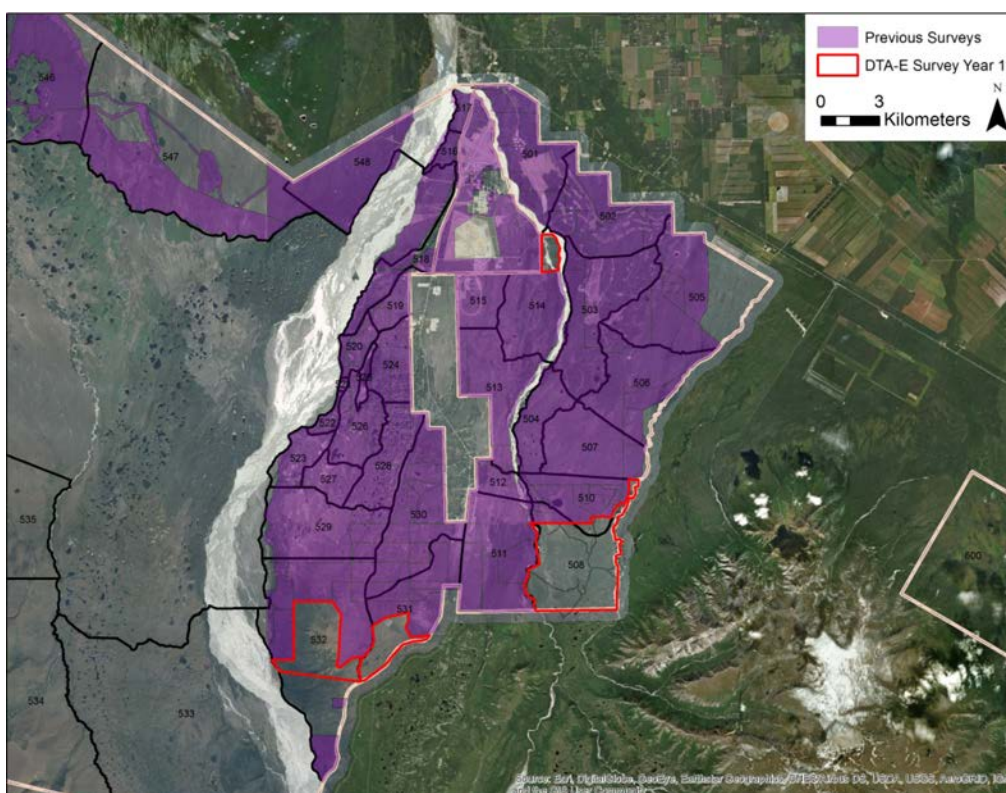


Figure 5. Year 1 (2019) archaeological survey plan.

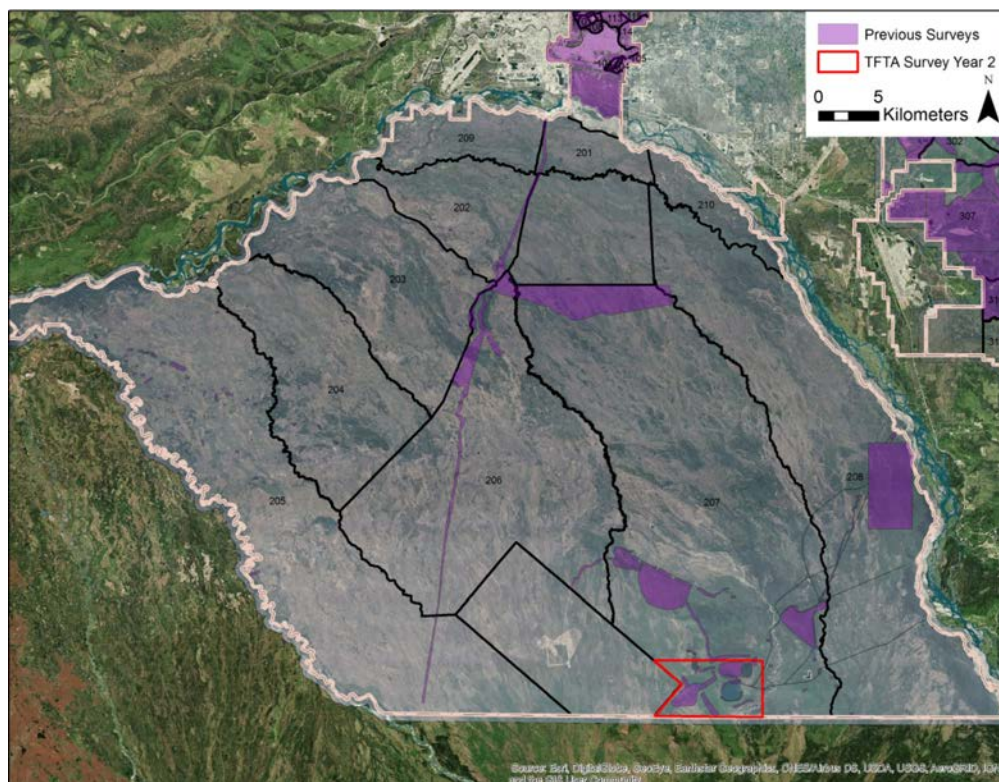


Figure 6. Year 2 (2020) archaeological survey plan.

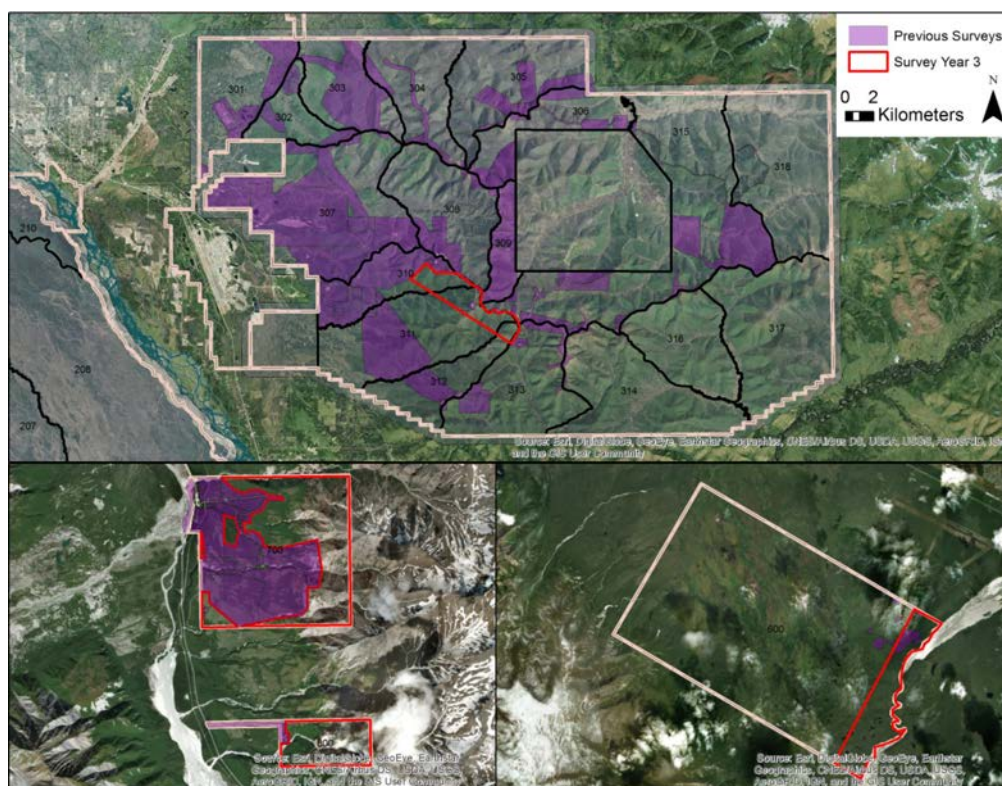


Figure 7. Year 3 (2021) archaeological survey plan.

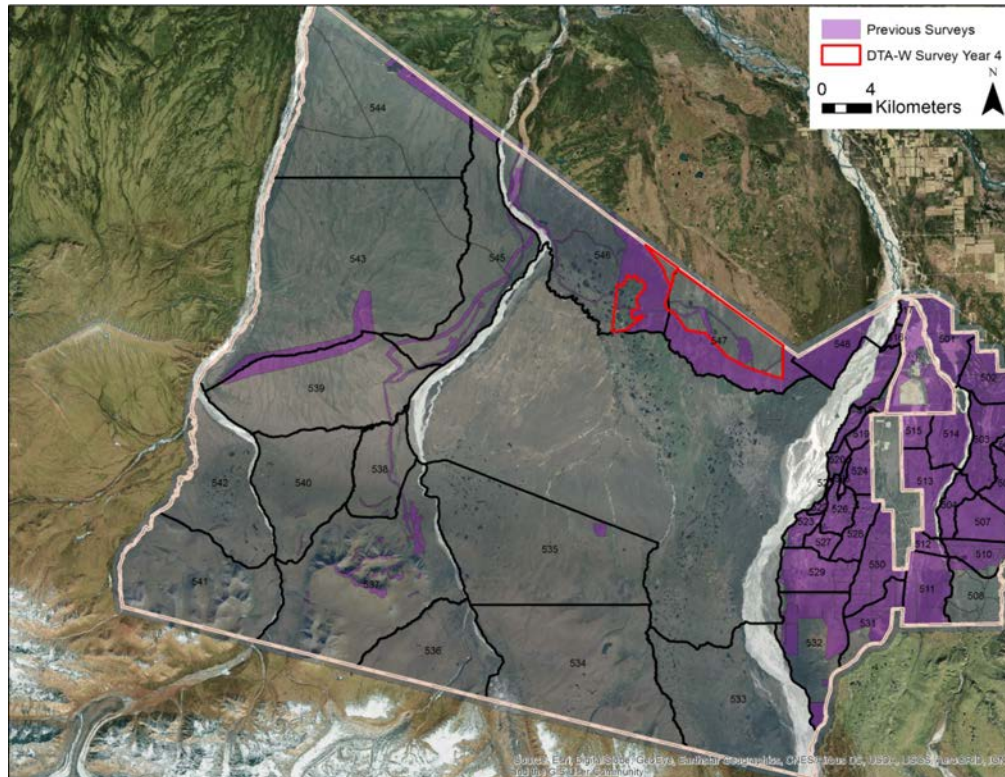


Figure 8. Year 4 (2022) archaeological survey plan.

Year 5 (2023) archaeological survey plan to be determined as needed for mission.

Five-Year Site Evaluation Plan

Table 9. Five-year site evaluation plan

Year 1				Year 2			Year 3	Year 4	Year 5
DTA E	DTA E	DTA E	DTA E	TFTA	TFTA	TFTA	YTA	DTA W	Tok
XBD-00271	XMH-01058	XMH-01298	XMH-01381	FAI-00047	FAI-02061	FAI-02319	XBD-00368	XBD-00033	TNX-00008
XBD-00272	XMH-01076	XMH-01360	XMH-01382	FAI-00055	FAI-02065	FAI-02320	XBD-00370	XBD-00106	TNX-00231
XBD-00273	XMH-01078	XMH-01361	XMH-01384	FAI-00087	FAI-02066	FAI-02321	GRTA	XBD-00108	TNX-00232
XMH-00016	XMH-01084	XMH-01362	XMH-01487	FAI-00088	FAI-02067	FAI-02322		XBD-00109	TNX-00233
XMH-00268	XMH-01130	XMH-01363	XMH-01511	FAI-00189	FAI-02068	FAI-02361	XMH-01509	XMH-00226	TNX-00234
XMH-00269	XMH-01144	XMH-01364	XMH-01524	FAI-00192	FAI-02069	FAI-02391	BRTA	XMH-01437	TNX-00256
XMH-00270	XMH-01153	XMH-01365	XMH-01526	FAI-01888	FAI-02071	FAI-02392	XMH-01503	XMH-01438	
XMH-00272	XMH-01154	XMH-01366	XMH-01527	FAI-02001	FAI-02072	FAI-02393	XMH-01505	XMH-01439	
XMH-00274	XMH-01155	XMH-01367	XMH-01539	FAI-02002	FAI-02075		XMH-01506	XMH-01452	
XMH-00281	XMH-01156	XMH-01368	XMH-01547	FAI-02003	FAI-02076		XMH-01508	XMH-01453	
XMH-00286	XMH-01157	XMH-01369	XMH-01555	FAI-02004	FAI-02078		WCTA		
XMH-00296	XMH-01158	XMH-01370		FAI-02049	FAI-02097				
XMH-00323	XMH-01159	XMH-01371		FAI-02050	FAI-02199		XMH-01538		
XMH-00955	XMH-01198	XMH-01372		FAI-02051	FAI-02235				
XMH-00957	XMH-01203	XMH-01373		FAI-02054	FAI-02236				
XMH-00958	XMH-01206	XMH-01374		FAI-02055	FAI-02237				
XMH-00960	XMH-01220	XMH-01375		FAI-02056	FAI-02238				
XMH-00969	XMH-01278	XMH-01377		FAI-02057	FAI-02239				
XMH-00971	XMH-01291	XMH-01378		FAI-02058	FAI-02246				
XMH-00973	XMH-01292	XMH-01380		FAI-02059	FAI-02247				

Appendix I. O&M PA Streamlined Review Process Criteria

Once informed of an undertaking¹¹⁴, the cultural resources manager (CRM) and relevant qualified cultural resources management staff will determine if the undertaking meets the threshold of review under 54 U.S.C. § 306108 (Section 106) of the National Historic Preservation Act. If so, the undertaking will be assessed for applicability of the Streamlined Review Process (Stipulation II.D). During this process the undertaking will be compared to the following criteria—A through E and all parts therein. If the undertaking 1) meets one (1) or more of criteria A through E approved under the Streamlined Review Process and 2) is found by the CRM or qualified CRM staff to result in a finding of “no historic properties affected” or “no adverse effect,” the undertaking will be considered as covered by the terms of this Programmatic Agreement (PA) and no further consultation will be required unless specifically requested by the Signatories or Concurring Parties to this PA, Tribes, the Advisory Council on Historic Preservation (ACHP), certified local governments, or other interested parties. Undertakings reviewed under the Streamlined Review Process will be documented for annual reporting under Stipulation VIII.

A. Undertakings with areas of potential effects (APEs) that have been surveyed for cultural resources, but that do not include historic properties¹¹⁵ qualify for the streamlined review if the undertaking will not alter the character-defining features of a historic property, especially the Ladd Field National Historic Landmark (NHL), the Ladd Air Force Base Cold War Historic District (HD), and their contributing properties.

B. Undertakings with APEs that have been surveyed for cultural resources, but that do not include historic properties which are determined eligible for inclusion on the National Register of Historic Places qualify for streamlined review.

C. Undertakings determined to pose an imminent threat to human health and safety qualify for streamlined review. APEs of these undertakings that have not yet been surveyed for cultural resources, will be surveyed, if permitted under Army regulation. Such activities include:

1. In-place destruction of unexploded ordnance
2. Destruction of ordnance in existing open burning/open detonation units
3. Emergency response to releases of potentially hazardous substances, pollutants, and contaminants

¹¹⁴ *Undertaking* means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including — (A) those carried out by or on behalf of the agency; (B) those carried out with federal financial assistance; (C) those requiring a federal permit license, or approval; and (D) those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency.

¹¹⁵ All properties within the APE older than 45 years must be, prior to the undertaking, evaluated for eligibility to the National Register of Historic Places. This includes archaeological and structural resources. U.S. Army Garrison Fort Wainwright (USAG FW) must have received concurrence from the SHPO on the determinations of eligibility (DOE). Properties within the APE that are less than 45 years do not need DOE unless there is a potential that they are exceptionally significant properties.

4. Environmental restoration surveys within restoration operational units as indicated on the map in Exhibit I or as designated by the USAG FW's Restoration and Compliance personnel

5. Continued military use and operation of dudded impact areas¹¹⁶, active firing ranges, and other designated surface danger zones¹¹⁷ that are in active use

6. Installation or removal/decommissioning of small scale, temporary and/or permanent environmental monitoring units within restoration operational units for the mitigation of hazardous materials

7. Replacement or removal of broken and leaking tanks which contain hazardous substances and that are not historic properties or contributing features within the NHL or HD.

D. The following undertakings qualify for streamlined review **only if** they meet Criteria A and/or B and the potential visual impact will not alter the character-defining features of a historic property including the NHL and HD and their contributing properties as determined by personnel who meet the appropriate Secretary of the Interior's Professional Qualifications Standards and the undertaking is in compliance with the Installation Design Guidelines

1. Construction, expansion, replacement, maintenance, repair, or removal of existing surface or buried linear non-building infrastructure, including surface utility lines, transmission lines, other minor linear features such as fences, streets, trails, bike paths, parking areas (including headbolt heaters), railroad crossings, runways and associated features such as curbs and drains when using in-kind or visually similar materials with existing historic materials retained as much as possible

2. In-kind replacement, maintenance, repair, or removal of properties within the HD and NHL determined non-contributing with concurrence from the SHPO

3. Small-scale additions on non-contributing, stand-alone objects or structures such as small antennas, weather observation equipment, utility meters, or interpretive panels that are not visible beyond the immediate area

4. Vegetation management practices including removal or replacement of trees and other shrubs with historically similar (in type, height, and mass) plantings

5. Routine military training and deployment activities involving no ground disturbance or occurring in previously surveyed areas

¹¹⁶ *Dudded* impact areas are those defined as an area with designated boundaries within which ammunition rounds or explosives have failed to fire or detonate.

¹¹⁷ *Surface danger zones* are designated areas outside of expected target locations that are used as a buffer and have potential for existence of UXO. They are considered dangerous only when live firing is occurring.

6. Installation of smoke detectors or other environmental monitoring devices in a manner that is reversible and causes minimal damage to the historic fabric of a building as determined by qualified CRM staff.

7. Installation of energy saving devices and measures, such as attic insulation, modern heating and cooling devices, and duct work in a manner that is not externally visible

8. Removal of pests and the material associated with their presence

9. Installation of monitoring devices and security measures, such as window bars, security lighting, and emergency lighting, that is reversible and causes minimal alteration of the historic fabric of a building as determined by qualified CRM staff.

10. Repainting buildings using the same or similar paint type and color

11. Temporary use of objects such as signage, road blocks, and jersey barriers to ensure public safety or to support large events

12. Installation of temporary wildlife management devices for scientific or health and welfare purposes

13. Installation, replacement, maintenance, and removal of items necessary for public safety such as street signs or light poles

E. **Applicable to historic properties only**, undertakings qualify for streamlined review that are considered routine repairs and replacement of materials and conform to the Secretary of the Interior's Standards for the Treatment of Historic Properties and do not include alterations to the character-defining features of the historic property as determined under review by qualified CRM staff with comparison against the Installation Design Guidelines. These undertakings include:

1. **Repair**—*when the physical condition warrants additional work*—of roofs, siding, windows, porches, doors, stairs, decking, flooring, footings/foundations, retaining walls, gutters, and other structural components that are regularly maintained. In this case, repair methods include the least degree of intervention possible, such as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading historical materials according to recognized preservation methods and the limited replacement in kind—or with compatible substitute material—of extensively deteriorated or missing parts of features when there are surviving prototypes. Although use of the same material is preferred, substitute material is acceptable if the form, design, and substitute material convey the visual appearance of the remaining parts of the feature and finish.

2. **Replacement**—*when the level of deterioration or damage of materials precludes repair*—of roofs, siding, windows, porches, doors, stairs, decking, flooring,

footings/ foundations, retaining walls, gutters, and other structural components when the replacement of the entire feature is done in kind, that is, with the same material. Because this may not always be technically or economically feasible, the use of a compatible substitute material, though not preferred, may be considered.

3. Repair or replacement of elements related to plumbing, electrical, and mechanical systems that are necessary to maintain a building

4. Expansion, replacement, maintenance, repair, or removal of interior features if the features are not historically significant

Appendix J. Government-to-Government Consultation and Coordination

1) Purpose:

To establish agency Standard Operating Procedure (SOP) and Best Management Practices (BMPs) for conducting government-to-government consultation and coordination between the USAG Alaska / USAG Greely and federally-recognized Alaska Native tribal governments.

2) Background:

The foremost principle of United States Indian law is the *trust* doctrine. Tribes are recognized as *domestic dependent nations* with inherent sovereignty. The unique historical relationship between these nations and the United States government results in federal acceptance of certain trust responsibilities, including the protection of tribal rights and resources. Forty percent, or 229, of the nation's 566 federally-recognized tribal governments reside within the state of Alaska. These governmental bodies, according to federal policy, must be engaged on a government-to-government basis.

Executive Order (EO) 13175: *Consultation and Coordination with Indian Tribal Governments* (6 November 2000) embodies the President's acknowledgement of the federal government's trust responsibility and the right of Native American tribes to self-governance / self-determination, while outlining the Federal government's support for tribal sovereignty through government-to-government interaction. This EO requires federal agencies to respect these principles through the promotion of meaningful and timely consultation with federally recognized tribal governments during the development of agency projects and policies.

The *Department of Defense American Indian and Alaska Native Policy* [DoD AI/AN] (20 October 1998) outlines DoD's support of and approach to these principles and emphasizes the responsibility of personnel, the importance of understanding and addressing tribal concerns, and the input tribes should have on agency policies that may potentially affect protected tribal resources, tribal rights, or Indian lands.

Other federal requirements that drive the government-to-government relations or most commonly trigger government-to-government consultation include, but are not limited to those described in Section 7 below.

Despite the number of legal mandates either requiring or suggesting consultation with tribal governments, consultation is not explicitly defined in any statute or regulation. The common understanding of the term is *to seek information or advice; to have discussion or confer with, typically before undertaking a course of action*. Consultation should not be confused with notification, obtaining consent, or arriving at consensus. Consultation is intended to address issues at the leadership level and find resolution that is—through negotiation and discussion—acceptable to all parties. Army representatives should offer consultation to tribal governments before decisions have been made and with a willingness to listen and take input into account. Without this pre-decisional approach, consultation may be viewed as disingenuous.

3) Responsible Parties:

The Garrison Commander is responsible for ensuring compliance with EO 13175 and the DoD AI/AN for all relevant USAG Alaska activities. The Garrison Commander will direct the designated Native Liaison to collaborate with appropriate personnel to meet tribal consultation needs.

The *DoD AI/AN: Alaska Implementation Guidance* encourages the creation of a Native Liaison Officer position to carry out the DoD policy and the Alaska Guidance on behalf of the installation. DA PAM 200-4 recommends that each Army installation appoint a Native American Coordinator for the installation. A Department of the Army civilian employee should be used in this capacity to provide longevity and consistency as a point of contact (POC) and to enable greater authority to speak on the Army's behalf, better meeting the needs to the government-to-government relationship.

NLO duties include, but are not limited to:

- Serve as the USAG Alaska POC for tribal governments.
- Serve as advisor to the Garrison Commander and personnel, providing briefings on current issues involving tribes and potential conflicts, before any meeting with tribal representatives, and—following Changes of Command—on historical relationships and the current operational environment.
- Draft correspondence to tribes for the Garrison Commander and Directorate head. Make all follow-up emails, calls, and faxes to tribes, as needed.
- Maintain accurate data for Alaska Native federally recognized tribal governments, including personnel, regulation, and protocol information.
- Identify garrison entities and personnel who develop and implement projects with potential to affect tribal governments, resources, and interests.
- Disseminate project or event-related pertinent information to tribes in a timely manner.
- Facilitate Army personnel training on American Indian/Alaska Native legal, cultural, and other issues of importance to tribal governments.
- Engage in efforts—in cooperation with designated tribal representatives—to improve and enhance government-to-government relations.
- Organize working groups of tribal representatives, Army subject matter experts, and command to increase Army transparency and develop substantive relationships.
- Interface with USARAK and garrison protocol entities to maintain tribal government representatives are included in appropriate special and public events.
- Maintain administrative record for tribal contact for each tribe.

4) Consultation Participants:

Government-to-government consultation and coordination participants may include, but are not limited to the Garrison Commander; Cultural Resources Manager/Native Liaison; Federally recognized tribal representatives (including tribal Chiefs/Presidents/

Chairpersons or their designees including, but not limited to, Tribal Administrators and Environmental Directors); Other Alaska Native organizations and entities, as deemed appropriate through consultation with tribal governments; and USAG Alaska staff members who are subject matter experts regarding USAG Alaska activities and the potential effects of those activities.

The Alaska Native Claims Settlement Act (ANCSA) of 1971 established regional and village corporations to select and manage lands and to manage the financial compensation provided in exchange for the extinguishment of aboriginal title. Individual Alaska Native citizens are shareholders in these ANCSA corporations. In some cases, proposed military activities may affect land owned by ANCSA corporations and consulting with corporate entities may be appropriate. ANCSA corporations, like other Native organizations, may be invited to participate in consultations as interested parties and with the consent of the relevant tribal governments. The government-to-government relationship, however, is not applicable to these corporations and dialogue with them is not considered government-to-government consultation. When not specifically invited by a tribe to join consultation and when activities are not occurring on ANCSA corporation-owned lands, these corporations are given the same consideration as public stakeholders.

5) Consultation Timing and Purpose:

Army-withdrawn lands in Alaska hold resources customarily and currently utilized by Alaska Native citizens. Consequently, tribal governments have an interest in the current management, past activity, restoration, and future action proposals on those lands. Establishing general and frequent consultation outside of specific action proposals is effective in developing relationships that promote meaningful consultation when specific projects arise and a response is needed.

When Army actions have potential to affect the tribal rights or resources of federally recognized tribal governments and/or their citizens, the garrison must provide potentially interested tribal governments an opportunity to participate in the decision-making process regarding that action. An early offer of consultation will ensure tribal interests are given due consideration in a manner consistent with tribal sovereign authority and DoD policy.

6) Consultation Protocol:

Each tribe is a discreet, sovereign government with a unique cultural identity and, therefore, may have preferential ways of conducting business that should be accommodated as resources allow. The USAG Alaska, however, proposes the following BMPs for the consultative process.

- Ensure consultation goes beyond mere notification. Tribes must be engaged prior to decision-making and early in the planning process to allow for better inter-governmental relations, more meaningful input, and an unobstructed mission.
- Allow for adequate time and resources to support consultation and deliberation. Tribal consultation may require more time than consultation with the public. Written

correspondence followed by other forms of contact will ensure tracking. Consultation early in any planning process is required to ensure tribal governments have multiple opportunities to participate and comment

- Hold face-to-face meetings and village-location meetings whenever possible. Face-to-face communication fosters trust and supports substantive, long-term relationships. Meetings held in village locations demonstrate concern/interest and can be cost-effective. .
- Initiate government-to-government consultation with only with federally recognized tribal governments. Native non-governmental organizations are included in the coordination process, only if sanctioned by all involved tribes.
- Practice inclusivity when deliberating which tribes may have potential interests in Army actions. Consideration should be given to potentially effected subsistence resources and their territories; lands of customary tribal use; and the extent of effect of military activities, among other issues that may arise from specific proposals. Tribal sovereignty implies that tribes are in the best position to decide if they have an interest or may be affected by installation activities. Current village proximity should not predetermine tribal inclusivity to consultative processes.
- Honor all made agreements and do not promise more than can be delivered.
- Approach consultation with an openness to hear and discuss tribal concerns, including those not originally scheduled for discussion. This demonstrates a willingness to understand tribal perspective; provides information about how the Army is perceived; fosters trust leading toward meaningful relationships; and provides needs assessment data for future beneficial interaction.
- Accept that agency urgencies may not be tribal government urgencies. Consultation may take time and flexibility or contingency consultation plans may be necessary, as the military activity timeline may outpace the timeline required for consultation.
- Do not expect immediate decisions by tribal leadership/staff should. Tribal leadership may need to discuss decisions and input with their councils.
- Understand Memorandums of Agreement (MOA) or Cooperative Agreements (CA) currently in effect between the Army and individual tribes. Also regard internal tribal regulations, ordinances, and protocols addressing government-to-government consultation.
- Plan meetings with the seasonal round of subsistence activities in mind. Resource gathering holds precedence over most other activities and will cause tribal representatives to be unavailable at certain times. Plan ahead.
- Send all consultation offers from the garrison commander level via US Mail. Utilize fax, email, and phone calls to ensure receipt and understanding.
- Provide tribes with all necessary background information far in advance of meeting – who is attending, description of topics, decisions requiring consideration, etc.
- Clarify if government-to-government consultation is not desired by the tribe. Written notice of declination or requests for informational meeting is preferred
- Hold meetings at mutually agreed upon locations and set agendas cooperatively.

- Escort tribal representatives when invited to the installation and facilitate travel.
- Ensure meetings are documented using appropriate means – sign in sheet, court reporter, notes takers, etc.
- Ensure participants understanding that comments written or recorded during meetings are not privileged in all cases from disclosure under law. The USAG Alaska may be required to disclose information under the provisions of the Freedom of Information Act (FOIA). Exceptions include information about sacred or archaeological sites and traditional cultural properties exempted from disclosure to the public under the NHPA (36 CFR 800.11(c)), the ARPA, and EO 13007.
- Provide “official courtesies” when traveling to villages or hosting meetings, the Garrison Commander (or highest ranking Army official authorized) should provide “official courtesies” to “authorized guests” in the spirit of AR 37-47 and DoDI 7250.13, to honor the hospitality offered to Army staff by the tribe. It may be appropriate to provide tokens of appreciation to the host tribe. Food should be provided at meetings as a culturally-appropriate demonstration of courtesy and respect
- Reimburse tribal governments for their representatives’ travel to meetings – mileage, accommodations, meals – as funding allows.
- Follow up meetings with notes for consideration sent to attendees and tribal leadership.
- Ensure a complete administrative record of meeting notes, photos, sign in sheets, and other meeting materials.

7) Relevant Regulations and Guidelines (presented alphabetically)

American Indian Religious Freedom Act (the AIRFA) (11 August 1978)

The AIRFA calls for an evaluation of federal policies and procedures in consultation with Native traditional leaders to determine appropriate changes necessary to protect and preserve Alaska Native religious and cultural rights and practices. Alaska Native religious practices may involve requirements to access sacred sites on installations, to use and possess sacred objects, and/or to worship through traditional ceremonies and rites. Compliance with the meaning and intention of the AIRFA can only be achieved through a consultative process. Sensitive issues of disclosure and confidentiality may be encountered during the consultation process and precautions should be taken to avoid compromising information of a sensitive or otherwise restricted nature.

Archaeological Resources Protection Act (the ARPA) (11 May 2001)

The ARPA establishes a permit process for the excavation of cultural sites on installation lands. The ARPA also regulates access to archaeological resources on federal and Indian lands and creates penalties for unauthorized excavation or destruction. Surveys of installation land identifying possible archaeological sites are crucial to compliance with the mandates of the ARPA. The USAG Alaska Cultural Resources Manager (CRM) will, with the USAG Alaska Native Liaison, ensure that tribal consultation has occurred.

Army Regulation 200-1: Environmental Protection and Enhancement (AR200-1) (13 December 2007)

AR 200-1 outlines policies, procedures and responsibilities for meeting cultural resources compliance and management requirements for the Department of the Army. The scope of this regulation includes multiple pieces of legislation and policies affecting cultural resources management. This regulation is designed to ensure that Army installations make informed decisions regarding the cultural resources under their control in compliance with public laws, in support of the military mission and consistent with sound principles of cultural resource management.

Department of the Army Pamphlet 200-4: Cultural Resources Management (DA PAM 200-4) (1 October 1998)

DA PAM 200-4 is the implementing document for AR 200-4.

Department of the Army American Indian and Alaskan Native Policy (24 October 2012)

The Department of the Army American Indian and Alaskan Native Policy was written and signed to recognize the Army's responsibilities to federally recognized tribes and to institutionalize principles for Army interaction with these tribes.

Department of Defense American Indian and Alaska Native Policy (DoD AI/AN Policy) (20 October 1998)

The DoD AI/AN Policy provides guidelines for government-to-government relations between military agencies and tribal governments based on the trust relationship, federal policy, treaties, and federal statutes and in support of tribal self-governance. It specifies that DoD personnel must consider the "unique qualities of individual tribes when applying these principles, particularly at the installation level" (*DoD AI/AN Policy, preamble*). The policy recognizes and emphasizes the importance of increasing understanding and addressing tribal governments' concerns prior to reaching decisions on "matters that may have the potential to significantly affect protected tribal resources, tribal rights, or Indian lands" (*Ibid.*). For USAG Alaska, these resources include those found in plant harvesting, hunting and fishing areas on Army-managed lands, including wildlife that migrates through Army lands.

Department of Defense American Indian and Alaska Native Policy: Alaska Implementation Guidance (11 May 2001)

The DoD AI/AN Policy: Alaska Implementation Guidance outlines specific guidelines for implementing the DoD AI/AN Policy for Alaska agencies.

Department of Defense Instruction 4710.02: Department of Defense Interactions with Federally Recognized Tribes (DoDI 4710.02) (24 September 2018)

DoDI 4710.02 implements DoD AI/AN Policy, assigns responsibilities and provides procedures for DoD interactions with federally recognized tribes. DoDI 4710.02 defines consultation triggers (laws, regulations, and executive orders) and provides consultation guidelines. It requires base commanders at installations that have on-going consultation and coordination with tribes through an assigned staff member, serving as

a tribal liaison. DoDI 4710.02 requires tribal consultation on ICRMPs and INRMPs that may affect tribal rights, land or resources and provides measures of merit for the NAGPRA.

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (11 May 2011)

EO 12898 requires federal agencies to consider any disproportionately high and adverse environmental and human health effects of their actions on minority and low-income populations. If any disproportionate effects are found, the EO requires public outreach to affected communities in order to establish alternatives or mitigation measures to the proposed action. Although public participation with affected communities requires outreach extending beyond representatives of tribal governments to residents of the community, outreach efforts should first be coordinated through tribal governments out of respect for tribal sovereignty.

Executive Order 13007: Indian Sacred Sites (24 May 1996)

The term *sacred site* is defined in EO 13007 as any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or individual Indian determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion. The tribe or authoritative representative must inform USAG Alaska of the existence of a site in order for the site to meet this definition. Sacred sites may include, but are not limited to funerary areas and graves, purification sites, healing sites, special floral, faunal, or mineral areas that contain resources used in religious ceremonies, vision quest sites, and sites associated with specific historic or traditional events.

EO 13007 articulates no specific consultation requirements, but as a practical matter compliance is only accomplished by consultation with Native tribes and/or individuals.

The Garrison Commander, as the land manager, may impose reasonable restrictions on access to such sites in order to protect the safety of Alaska Native users or to avoid interference with the military mission or national security according to DA PAM 200-4. To the extent practicable and permitted by law and not clearly inconsistent with the Army mission or essential Army functions, USAG Alaska will:

- Accommodate access to and ceremonial use of Alaska Native sacred sites by Alaska Native religious practitioners;
- Avoid adversely affecting the physical integrity of such sacred sites; and
- When requested, maintain the confidentiality of sacred sites.

Executive Order 13175: Consultation and Coordination with Indian Tribal Governments (6 November 2000)

EO 13175 requires federal agencies to support tribal self-determination by implementing an effective process to ensure meaningful and timely consultation with tribes during the development of policies with potential tribal impacts. The mandates of EO 13175 apply whenever federal agency actions have substantial direct effects on a tribe, on the relationship between the federal government and a tribe, or on the distribution of power and responsibilities between the U.S. and tribal governments. EO 13175 reiterates the

policy of government-to-government interactions and applies specifically to federally recognized tribal governments. The USAG Alaska is mandated to implement EO 13175 through:

- Identifying USAG Alaska staff and programs that develop and implement programs, projects and activities with potential to affect tribal governments, lands, resources, and interests;
- Promoting substantive communication between the USAG Alaska and tribal governments through regular meetings and correspondence regarding department activities and plans, appropriate to each sovereign tribal government;
- Engaging in active efforts to improve and enhance government-to-government relations with tribal governments through outreach, regular and open dialogue and partnering agreements (as authorized); and
- Educating agency staff about the legal status/rights of and issues of concern to tribal governments and the methods for establishing effective communication and consultation with tribal groups.

National Environmental Policy Act (NEPA) (1 January 1970)

The NEPA created a prescribed means for federal agencies to analyze the effects of proposed actions on the environment. The process is designed to promote the use of citizen involvement and input, as well as other independent analysis, by agency decision-makers. The USAG Alaska must seek the input from Alaska Native federally recognized tribes, Alaska Native corporations, and Alaska Native organizations, as appropriate, in the NEPA decision-making process. The USAG Alaska Environmental Planner, through the USAG Alaska Native Liaison, will ensure that government-to-government coordination with federally recognized tribes in Alaska and any other consultation requirements/needs under NEPA occur. Relevant SOPs for tribal coordination involved in the NEPA process and the preparation of an Environmental Impact Statement (EIS) includes:

- Offering tribal governments formal, government-to-government consultation concurrent to the scoping phase;
- Inclusion of tribal representatives in the scoping process for assessing environmental impacts on Native rights and resources;
- Government-to-government coordination with federally recognized tribes separate from the public participation process, including tribe-specific scoping and draft comment meetings with subject matter experts present for dialogue regarding questions and concerns held concurrently with the agency and public meetings;
- Supplying hard copies of draft and final documents to tribes for ease in review, with additional efforts made to assist involved tribes with the organization and content of the draft EIS before tribes are asked to provide comment;
- Ensuring extended comment times for large documents (similar to agency review timeline);

- Inclusion of individual tribes as cooperating agencies for the preparation of the EIS when the undertakings directly affect Native lands or interests and this level of participation is desired by the tribe; and
- Inclusion of other Native organizations, Alaska Native corporations, or specific individuals (such as traditional cultural leaders) if approved by all federally recognized tribes involved or if corporation lands are directly affected (in the case of corporations).

NOTE: It is important to remember that cultural resources do not need to be designated eligible for the National Register of Historic Places to be considered in the NEPA process. As the Native community often does not distinguish between *natural* and *cultural* resources, geographical places (such as collection areas for basket materials) may be considered a cultural resource. Accommodations should be made to recognize that tribal interests in and understandings of the term *cultural* resources may exceed those explicitly considered under or defined by NEPA, the NHPA, and other federal and state regulations.

National Historic Preservation Act (the NHPA) (15 October 1966)

Section 106 of the NHPA prescribes that any federal undertaking (projects with federal funding, federal permit, federal license or direct federal involvement) must take into account its effects on historic properties. Historic properties are those listed on or determined eligible for listing on the National Register individually or as part of a larger district. Included in the NHPA are procedures for consulting with and receiving technical expertise from federally recognized tribes when the potentially affected historic properties are of importance to a tribe.

Historic properties may be archaeological (both prehistoric and historic) sites, historic buildings and structures, and properties of traditional, religious or cultural significance that are eligible for inclusion in the National Register, as evaluated according to 36 CFR § 60.4. A Traditional Cultural Property (TCP) can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history and (b) are important in maintaining the continuing cultural identity of the community. The existence and significance of such locations generally can be determined only through consultation with tribes, although issues of privacy and nondisclosure often arise in these situations. The NHPA specifically provides an exemption of sensitive information regarding archaeological and TCP information from the Freedom of Information Act disclosure requirements. Revealing the location of archaeological sites and TCPs can compromise their integrity and leave such sites vulnerable to looting (Section 304 of the NHPA). It is acknowledged that archaeological excavation of burials and prehistoric or historic (when directly associated with tribes) archaeological sites, while sanctioned in law, may not be supported by the Native community.

Native American Graves Protection and Repatriation Act (the NAGPRA) (16 November 1990)

The NAGPRA was passed in response to concern over desecration and exploitation of Native American gravesites and appropriation of cultural items. The NAGPRA addresses how remains and items should be transported for repatriation, or otherwise

documented and studied. The NAGPRA requires the USAG Alaska and its employees to employ proper respect, as determined in consultation with concerned tribes and in accordance with cultural traditions and beliefs. The NAGPRA also directs the development of Plans of Action (POA), in consultation with tribes, regarding the inadvertent discovery of human remains or items of cultural.

Presidential memorandum: Government-to-government Relations with Native American Governments (29 April 1994)

President Clinton signed a presidential memorandum to clarify the responsibilities of the federal government agencies to foster government-to-government relationship with federally recognized tribes toward building stronger day-to-day working relationships in respect to tribal self-governance and sovereignty.

Presidential memorandum: Tribal Consultation (5 November 2009)

President Obama signed a memorandum on tribal consultation to acknowledge the unique legal and political relationship between the tribes and federal agencies. Its signing was in response to concerns that federal agencies had frequently failed in their mission to include the voices of tribal officials in the creation of policy. It prescribed the reporting of federal, agencies to the President's Office of Management and Budget (OMB) on the results of consultation in consistency with EO 13175, 90 days after the memorandum's signing and annually thereafter

8) Federally recognized tribes that may be affected by USAG Alaska activities

While there are 7 primary tribes addressed for consultative purposes because of their direct connection to or interest in specific land holdings or Army activities. These include Chilkoot Indian Association (Haines), Village of Dot Lake, Healy Lake Village, Nenana Native Association, Northway Village, Native Village of Tanacross, and Native Village of Tetlin.

Others may express interest in Army undertakings and actions. These may be addressed for purposes of transparency or may be included in the consultation process.

Alatna Village; Allakaket Village; Anvik Village; Arctic Village (See Native Village of Venetie Tribal Government); Beaver Village; Birch Creek Village; Chalkyitsik Village; Chilkat Indian Village (Kluckwan); Circle Native Community; Native Village of Eagle; Evansville Village (AKA Bettles Field); Native Village of Fort Yukon; Galena Village (AKA Loudon Village); Organized Village of Grayling (AKA Holikachuk); Holy Cross Village; Hughes Village; Huslia Village; Village of Kaltag; Koyukuk Native Village; Manley Hot Springs Village; McGrath Native Village; Native Village of Minto; Nikolai Village; Nulato Village; Rampart Village; Native Village of Ruby; Shageluk Native Village; Skagway Village; Native Village of Stevens; Takotna Village; Native Village of Tanana; Telida Village; Village of Venetie (See Native Village of Venetie Tribal Government) Native; and Village of Venetie Tribal Government (Arctic Village and Village of Venetie).

Appendix K. Citations

Anderson, D.D. 1968. "A Stone Age Campsite at the Gateway to America." *Scientific American* 218(6): 24-33.

Anderson, D.D. 1970. "Microblade Traditions in Northwestern Alaska." *Arctic Anthropology* 7(2): 2-16.

Andrews, E.F. 1987. "Archaeological Evidence of European Contact: The Han Athabascans near Eagle, Alaska." *High Plains Applied Anthropologist* 7(2): 51-64.

Andrews, E.F. 1977. *Report on the Cultural Resources of the Doyon Region, Central Alaska: Volumes I and II*. Fairbanks: Anthropology and Historic Preservation, Cooperative Park Studies Unit, University of Alaska Occasional Paper No. 5.

Andrews, E.F. 1975. *Salcha: an Athabaskan Band of the Tanana River and its Culture*. M.A. Thesis, Fairbanks: Department of Anthropology, University of Alaska.

Bacon, G.H. 1978. *Final Report on the Archeological Survey of the XM-1 Tank Range, Fort Greely, Alaska*. Fairbanks: Prepared for the U.S. Army Corps of Engineers, Alaska District, by Alaskaarctic.

Bacon, G.H., and C.E. Holmes. 1979. *Archaeological Survey and Inventory of Cultural Resources at Fort Greely*. Fairbanks: Prepared by Alaskaarctic.

Bever, M.R. 2001a. "An Overview of Alaskan Late Pleistocene Archaeology: Historical Themes and Current Perspectives." *Journal of World Prehistory* 15(2): 125-191.

Bever, M.R. 2001b. "Stone Tool Technology and the Mesa Complex: Developing a Framework of Alaska Paleoindian Prehistory." *Arctic Anthropology* 38(2): 98-118.

Bever, M.R. 2006. "Too Little, Too Late? The Radiocarbon Chronology of Alaska and the Peopling of the New World." *American Antiquity* 71(4): 595-620.

Bigelow, N.H., and R.W.M. Powers. 2001. "Climate, Vegetation, and Archaeology 14,000-9000 Cal Yr B.P. In Central Alaska." *Arctic Anthropology* 38(2): 171-195.

Bradley, Z., J. Cook, and A. Frizzera. 1973. *Preliminary Survey Report, Blair Lakes Alaska*. Fairbanks: University of Alaska Fairbanks, Anthropology Department.

Buchanan, B., and M. Collard. 2008. "Phenetics, Cladistics, and the Search for the Alaskan Ancestors of the Paleoindians: a Reassessment of Relationships Among the Clovis, Nenana, and Denali Archaeological Complexes." *Journal of Archaeological Science* 35: 1683-1694.

Bureau of Land Management and U.S. Army. 1994. *Fort Wainwright Fort Greely: Resource Management Plan, Final Environmental Impact Statement*. Anchorage: Bureau of Land Management, Steese/White Mountains District and U.S. Army, 6th Infantry Division.

Carlson, E.S., J.A. Esdale, J.J. Lynch. 2016. *Archaeological Districts on Fort Wainwright*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Clark, D.W. 2001. "Microblade-Culture Systematics in the Far Interior Northwest." *Arctic Anthropology* 38(2): 64-80.

Clark, D.W. 1981. "Prehistory of the Western Subarctic." In *The Handbook of North American Indian: Subarctic, Volume 6*, by J. Helm, 120. Washington, D.C.: Smithsonian Institution.

Clark, D.W. 1992. "The Archaic in the Extreme Northwest of North America." *Revista de Arqueologia Americana* 5: 71-99.

Cook, J.P. 1975. "Archaeology of Interior Alaska." *Western Canadian Journal of Anthropology* 3: 125-133.

Cook, J.P. 1996. "Healy Lake." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 323-327. Chicago: University of Chicago Press.

Cook, J.P. 1989. "Historic Archeology and Ethnohistory at Healy Lake, Alaska." *Arctic* 42(3): 109-118.

Cook, J.P. 1979. *Site XBD-094: Aircraft Assault Strip Fort Wainwright, Alaska*. Fairbanks: Final Report to U.S. Army Corps of Engineers.

Cook, J.P. 1969. *The Early Prehistory of Healy Lake, Alaska*. Ph.D. Dissertation, Madison: Department of Anthropology, University of Wisconsin.

Cook, J.P., and T.E. and Gillispie. 1986. "Notched Points and Microblades." 13th Annual Meeting of the Alaska Anthropological Association. Fairbanks: Alaska.

Dixon, E.J. 1985. "Cultural Chronology of Central Interior Alaska." *Arctic Anthropology* 22: 47-66.

Dixon, E.J., G.S. Smith, and D. Plaskett. 1980. *Archeological Survey and Inventory of Cultural Resources, Fort Wainwright, Alaska*. Prepared for the U.S. Army Corps of Engineers, Alaska District.

Dumond, D.E. 2001. "The Archaeology of Eastern Beringia: Some Contrasts and Connections." *Arctic Anthropology* 38(2): 196-2005.

Esdale, J.A. 2008. "A Current Synthesis of the Northern Archaic." *Arctic Anthropology* 45(2): 3-38.

Esdale, J.A., H.D. Hardy, J.J. Lynch, and W.E. McLaren. 2018. Fort Wainwright Archaeology Annual Report, 2017. Prepared by the Center for Environmental Management of Military Lands, Colorado State University.

Esdale, J.A., and W.E. McLaren. 2018. Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area; 2017 Annual Report. Prepared by the Center for Environmental Management of Military Lands, Colorado State University.

Esdale, J.A., H.D. Hardy, J.J. Lynch, G.J. Henderson, J.K.T. Smith, W.E. McLaren, and K.S. Yeske. 2017a. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2015 and 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., C.E. Holmes, and K.S. Yeske. 2017b. Core and Blade Technology at the Fort Greely Entrance Site. *Research Notes. Alaska Journal of Anthropology* 14(1-2):114-120.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2017c. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2016. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2015*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A. A. Robertson, and W. Johnson. 2015a. "Banjo Lake: A Middle Holocene Site in the Tanana Valley." *Alaska Journal of Anthropology* 13(1):35-56.

Esdale, J.A., K.S. Yeske, H. D. Hardy, J. Lynch and W.E. McLaren. 2015b. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2014*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., A.S. Pelto, and W.E. McLaren. 2015c. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2014*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., K.S. Yeske, H. D. Hardy, W.E. McLaren, J. Lynch and L. Sample. 2014. *Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2013*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and W.E. McLaren. 2014. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2013*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and W.E. McLaren. 2013. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area. Annual Report 2012*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., K.S. Yeske, W.E. McLaren, H. Hardy, M.S. Sweeney, and J. Quinn. 2013. *Section 110 Report: Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands 2012*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and A.C. Robertson. 2007. *Final Report: Archaeological Data Recovery for Sites XMH-00284 and XMH-00881, 33-Mile Loop Road Gravel Source Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2007*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., and A.S. Pelto. 2017. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area: Annual Report 2016*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., J. Quinn, K.S. Yeske, and W.E. McLaren. 2012a. *2011 Archaeological Survey and Report of CRTC Project Areas in Donnelly Training Area for the Cold Regions Test Center*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., E.P. Gaines, W.E. McLaren, and J. Quinn. 2012b. *Battle Area Complex Surface Danger Zone Archaeological Site Monitoring, Donnelly Training Area: Annual Report 2010 and 2011*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Esdale, J.A., E.P. Gaines, K.S. Yeske, W.E. McLaren, M. Shimel, and J.F. Kunesh. 2012c. *Section 110 Report, Cultural Resources Survey and Evaluation, Fort Wainwright and Training Lands: 2010 and 2011*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Espenshade, C.T. 2010. *Archaeological Investigations, Donnelly Training Area near Delta Junction, Alaska*. Greensboro: Prepared by New South Associates. Technical Report 1922.

Gaines, E.P. 2009. *Report: Archaeological Survey and Evaluation Fort Wainwright and Fort Richardson, Alaska 2008*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gaines, E.P., H. Hardy, and H. Brown. 2010a. *Final Report: Determination of National Register Eligibility for Eleven Archaeological Sites at Fort Greely, Alaska 2010*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gaines, E.P., K.S. Yeske, S.J. Shirar, W.C. Johnson, and J.F. Kunesh. 2011. "Pleistocene Archaeology of the Tanana Flats, Eastern Beringia." *Current Research in the Pleistocene* 29:42-44.

Gaines, E.P., K.S. Yeske, and S.J. McGowan. 2010b. *Annual Report: Cultural Resources Survey and Evaluation, Fort Wainwright, Alaska 2009*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Gamza, T. 1995. *Excavation and Evaluation of Sullivan's Roadhouse (XBD-061), Fort Greely, Alaska 1994*. Anchorage: Final Report, Prepared for the Office of History and Archaeology, Division of Parks and Recreation, Alaska Department of Natural Resources.

Goebel, T., J. Esdale, M. Mueller, and C. Ketron. 2014. *New Prehistoric Archaeological Research in the Blair Lakes Area, Tanana Valley, Alaska*. Paper presented at the 41st Annual Meeting of the Alaska Anthropology Association. Fairbanks.

Goebel, T., W.R. Powers, N.H. Bigelow, and A.S. Higgs. 1996. "Walker Road." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by Frederick H. West, 356-363. Chicago: University of Chicago Press.

Graf, K., J.A. Esdale, and T. Goebel. 2018. 2017 Excavations at McDonald Creek (FAI-2043), a Multicomponent, Open-Air Site in the Tanana Flats Training Area, Fort Wainwright, Central Alaska. Paper presented at the 83rd Annual Meeting of the Society for American Archaeology, Washington, D.C.

Haynes, T.L., and W.E. Simeone. 2007. *Upper Tanana Ethnographic Overview and Assessment, Wrangell St. Elias National Park and Preserve*. Juneau: Alaska Department of Fish and Game, Division of Subsistence.

Hedman, W., A. Robertson, N. Fichter, and K. Anderson. 2003. *Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2002*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Higgs, A.S., B.A. Potter, P.M. Bowers, and O.K. Mason. 1999. *Cultural Resource Survey Report of the Yukon Training Area and Fort Greely Army Lands Withdrawal, Alaska. Vol. 2.* Fairbanks: Prepared by Northern Land Use Research, Inc.

Holmes, C.E. 1979a. *Report on Archeological Reconnaissance: Yukon Training Command Withdrawal Area. Ft. Wainwright.* Report prepared for the U.S. Army Corps of Engineers under Contract DACA85-79-M-0001.

Holmes, C.E. 1979b. *Archaeological Reconnaissance Report for Fort Wainwright, Fort Greely, and Fort Richardson Withdrawal Lands, Alaska.* Fairbanks: Prepared for the 172nd Infantry Brigade.

Holmes, C.E. 1996. "Broken Mammoth." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 312-318. Chicago: University of Chicago Press.

Holmes, C.E. 1998. "New Data Pertaining to Swan Point, the Oldest Micoblade Site Known in Alaska." *Current Research in the Pleistocene* 15: 21-22.

Holmes, C.E. 2001. "Tanana River Valley Archaeology Circa 14,000 to 9,000 B.P." *Arctic Anthropology* 38(2): 154-170.

Holmes, C.E. 2007. "The East Beringian Tradition and the Transitional Period: New Data from Swan Point." 34th Annual Meeting of the Alaskan Anthropological Association. Fairbanks.

Holmes, C.E. 2011. The Beringian and Transitional Periods in Alaska: Technology of the East Beringian Tradition as Viewed from Swan Point. In *From the Yenisei to the Yukon*, edited by T. Goebel and I. Buvit. College Station: Texas A&M University Press.

Holmes, C.E., and J. Anderson. 1986. *Archaeology and Paleoecology of the Delta River Area, Interior Alaska.* . Anchorage: National Science Foundation Project Summary Manuscript on file at the State Historic Preservation Office.

Holmes, C.E., and J.P. Cook. 1999. "Tanana Valley Archaeology ca. 12,000 to 10,000 yrs B.P." 64th Annual Meeting of the Society for American Archaeology.

Holmes, C.E., R. VanderHoek, and T.E. Dilley. 1996. "Swan Point." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 319-323. Chicago: University of Chicago Press.

Holmes, G.W. 1965. *Geologic Reconnaissance Along the Alaska Highway, Delta River to Tok Junction, Alaska. Bulletin B 1181-H.* Anchorage: U.S. Geological Survey.

Johnson, W.C., and S.R. Bozarth. 2008. *Geoarchaeology and Environmental Reconstruction at XMH-874, Fort Wainwright Donnelly Training Area*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Kari, J.M., and J.A. Fall. 2016. *Shem Pete's Alaska (Revised Third Edition)*. Fairbanks: University of Alaska Press.

Kari, J.M., and B.A. Potter, eds. 2010. *The Dene-Yeniseian connection*. Department of Anthropology, University of Alaska Fairbanks.

Lively, R.A. 1996. "Chugwater." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 308-311. Chicago: University of Chicago Press.

Marshall, T. 2007. *Archaeological Survey and Evaluation: Fort Wainwright, 2006*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

McFadyen Clark, A. 1981. "Koyukon." In *Handbook of North American Indians, Volume 6: Subarctic*, by J. Helm, 582-601. Washington, D.C.: Smithsonian Institution.

McFadyen Clark, A. 1996. *Who Lived in This House? A Study of Koyukuk River Semi Subterranean Houses*. Hull: Mercury Series Archaeological Survey of Canada Paper 153. Canadian Museum of Civilization.

McKenna, R.A. 1981. "Tanana." In *Handbook of North American Indians, Volume 6: Subarctic*, by J. Helm. Washington, D.C.: Smithsonian Institution.

Meltzer, D.J. 2001. "Late Pleistocene Cultural and Technological Diversity of Beringia: A View from Down Under." *Arctic Anthropology* 38(2): 206-213.

Mishler, C.W. 1986. *Born With the River: An Ethnographic History of Alaska's Goodpaster and Big Delta Indians*. Fairbanks: Alaska Department of Natural Resources, Division of Geological and Geophysical Surveys Reports, Public Data File 68-14.

Muhs, D.R. and J.R. Budahn. 2006. Geochemical evidence for the origin of late Quaternary loess in central Alaska. *Canadian Journal of Earth Science* 43: 323-337.

Natural Resource Conservation Service. 2010. *Soil Survey for Alaska: Fort Greely and Donnelly Training Area*. Palmer: Natural Resource Conservation Service.

Odess, D. 2002. *Preliminary Report of Archaeological Investigations on Military Lands in the Vicinity of Donnelly Dome, Alaska, Under TCC Contract #DAPC49-01-D-0004*. Fairbanks: Report on file with the Tanana Chiefs Conference.

Odess, D., and J.T. Rasic. 2007. "Toolkit Composition and Assemblage Variability: The Implications of Nogahabara I, Northern Alaska." *American Antiquity* 72(4): 691-717.

Pearson, G.A., and W.R. Powers. 2001. "The Campus Site Re-Excavation: New Efforts to Unravel Its Ancient and Recent Past." *Arctic Anthropology* 38(1): 100-119.

Phillips, W.T., Sr. 1984. *Roadhouses of the Richardson Highway, the First Quarter Century: 1898-1923*. Anchorage: State of Alaska, Alaska Historical Commission,

Pink, T. 2005. *Soil Survey of Fort Greely and Donnelly Training Area, Alaska*. Washington D.C.: USDA-Natural Resources Conservaiton Service.

Potter, B.A. 2008a. "Exploratory Models of Intersite Variability in Mid to Late Holocene Central Alaska." *Arctic* 61(4): 407-425.

Potter, B.A. 2004. "Modeling Intersite Variability in Interior Alaska: Overcoming Conceptual Ambiguity Through Pattern Recognition." 60th Annual Meeting of the Society for American Archaeology. Montreal.

Potter, B.A. 2007. "Models of Faunal Processing and Economy in Early Holocene Interior Alaska." *Environmental Archaeology* 12(1): 3-23.

Potter, B.A. 2008b. "Radiocarbon Chronology of Central Alaska: Technological Continuity and Economic Change." *Radiocarbon* 50(2): 181-204.

Potter, B.A. 2001. "Recent Investigations at the Gerstle River Site, a Multicomponent Site in Central Alaska." *Current Research in the Pleistocene* 18: 52-54.

Potter, B.A. 2005. *Site Location Model and Survey Strategy for Cultural Resources in the Alaska Railroad Northern Rail Extension Project Area*. Fairbanks: Report submitted by Northern Land Use Research, Inc. and ICF Consulting Services, LLC.

Potter, B.A., J.A. Esdale, J.D. Reuther, H.J. McKinney, C.E. Holmes, C.R. Holloway, C.R., and C.L. Glassburn. 2018. Archaeological Investigations at Delta River Overlook, Central Alaska. Archaeology GIS Laboratory, Report #7. Department of Anthropology, University of Alaska Fairbanks.

Potter, B.A., J.A. Esdale, C.E. Holmes, J.D. Reuther, and H.J. McKinney. 2016. Delta River Overlook: A terminal Pleistocene-late Holocene multicomponent site in central Alaska. Paper presented at the 43st Annual Meeting of the Alaska Anthropology Association. Sitka.

Potter, B.A., J.D. Irish, J.D. Reuther, C.I. Gelvin-Reymiller, and V.T. Holliday. 2011. "A Terminal Pleistocene Child Cremation and Residential Structure from Eastern Beringia." *Science* 331: 1058-1062.

Potter, B.A., J.D. Reuther, P.M. Bowers, and C. Gelvin-Reymiller. 2008. "Little Delta Dune Site: A Late-Pleistocene Multicomponent Site in Central Alaska." *Current Research in the Pleistocene* 25: 132-135.

Potter, B.A., J.D. Reuther, P.M. Bowers, and C. Gelvin-Reymiller. 2007a. *Results of the 2007 Cultural Resource Survey of Proposed Alaska Railroad Northern Rail Extension Routes, Alaska*. Fairbanks: Report submitted by Northern Land Use Research, Inc.

Potter, B.A., P.M. Bowers, J.D. Reuther, and O.K. Mason. 2007b. "Holocene Assemblage Variability in the Tanana Basin: NLUR Archaeological Research, 1994-2004." *Alaska Journal of Anthropology* 5(1): 23-42.

Potter, B.A., S.C. Gerlach, A.S. Higgs, and P.M. Bowers. 2000. *Final Cultural Resources Survey: Fort Greely, Yukon Training Area (Fort Wainwright), Alaska for the National Missile Defense Program, for USAR Space and Missile Defense Command*. Fairbanks: Report prepared by Northern Land Use Research, Inc.

Powers, W.R., and J.F. Hoffecker. 1989. "Late Pleistocene Settlement in the Nenana Valley, Central Alaska." *American Antiquity* 54(2): 263-287.

Price, K. 2002. *Homesteads on Fort Wainwright, Alaska*. Fort Collins: Center for Environmental Management of Military Lands, Colorado State University.

Price, K. 2004. *World War II Heritage of Ladd Field, Fairbanks, Alaska*. Fort Collins: Center for Environmental Management of Military Lands, Colorado State University

Rabich, J.C., and D.R. Reger. 1978. *Archaeological Excavations at the Gerstle River Quarry Site*. In, *Archaeological Survey Projects 1977*. Anchorage: OHA Miscellaneous Publications 18, Office of History and Archaeology.

Racine, C.H., R. Lichvar, B. Murray, G. Tande, R. Lipkin, and M. Duffy. 1997. *A Floristic Inventory and Spatial Database for Fort Wainwright, Interior Alaska*. Fairbanks: U.S. Army Cold Regions Research and Engineering Laboratory, Special Report 97-23.

Raymond-Yakoubian, J., and A. Robertson. 2005. *Annual Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2004*. Annual Report, Fort Collins: Center for Environmental Management of Military Lands (CEMML).

Raymond-Yakoubian, J., and A. Robertson. 2006. *Annual Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright, 2005*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Ream, B.A. 1986. *Old Fish Camp: an Ethnohistoric and Archeological Analysis of a Lower Yukon Koyukon Athapaskan Winter Village, Khotol River, Alaska*. M.A. Thesis, Department of Anthropology, Western Washington University.

Reynolds, G.L. 1983. *Archaeological Reconnaissance of Four Borrow Pits, Fort Wainwright, Alaska*. Anchorage: Submitted to the U.S. Army Corps of Engineers.

Reynolds, G.L. 1988. *Archaeological Site Report Fort Greely Cantonment Area*. Anchorage: Manuscript on file at the Office of History and Archaeology.

Reynolds, G.L. 1986. *Inventory of Cultural Resources and Overview, Phase I*. Prepared for the 172nd Infantry Brigade by Georgeanne Reynolds, Fairbanks: Alaska Heritage Group, Inc.

Reynolds, G.L. 1985. *Survey of Construction Projects, Fort Wainwright Cantonment*. Anchorage: Manuscript on file at the Office of History and Archaeology.

Robertson, A.C. 2009. *U.S. Army Alaska's Monitoring and Data Recovery Plan for Cultural Resources within the Battle Area Complex Surface Danger Zone, Fort Wainwright, Donnelly Training Area, 2009*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., J. Esdale, J. Quinn III, H. Hardy, and V. Aziz. 2013. *Archaeological Data Recovery, Battle Area Complex, Donnelly Training Area, Fort Wainwright, Alaska 2009*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., J. Esdale, W.C. Johnson, S.R. Bozarth, S. McGowan, M. Proue, C.K. Paraso, S. Shirar, and P. Gilbert. 2009a. *Final Report: 2006-2007 Archaeological Data Recovery for Site XMH-00874 Battle Area Complex (BAX) Mitigation, Donnelly Training Area, Fort Wainwright, Alaska*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., J. Raymond-Yakoubian, M. Proue, S. Shirar, J. Burr, H. Robbins, D. Cory. 2006. *Annual Report: Archaeological Survey and Evaluation, Donnelly Training Area, Fort Wainwright, Alaska, 2005*. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., M. Proue, C.K. Paraso, S. Shirar, and P. Gilbert. 2008. *Archaeological Data Recovery for Site XMH-00874, Battle Area Complex (BAX) Mitigation, Donnelly*

Training Area, Fort Wainwright, Alaska, 2007. Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., M. Proue, P. Hall, S. Shirar, and C.K. Paraso. 2007. *Archaeological Survey, Evaluation, and Mitigation: Donnelly Training Area, Fort Wainwright, Alaska 2006.* Fort Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., N. Fichter, and K. Anderson. 2004. *Annual Report: Archaeological Survey and Evaluation, Fort Richardson and Fort Wainwright 2003.* Ft. Collins: Prepared by the Center for Environmental Management of Military Lands.

Robertson, A.C., S.J. Meitl, D. White, P. Gilbert, and C. Ciancibelli. 2009b. *Archaeological Survey and Evaluation: Donnelly Training Area, Fort Wainwright.* Ft. Collins: Prepared by the Center for Environmental Management of Military Lands.

Simon, J. and C. Gelvin-Reymiller. 2002. ALCANGO (Haines-Gairbanks Pipeline) Tok Terminal Traditional Cultural Property Evaluation Report. Prepared for the US Army Corps of Engineers, Alaska District. Prepared by Tanana Chiefs Conference, Inc. Fairbanks.

Sheppard, W., A.F. Seffian, D.P. Staley, and N.H. Bigelow. 1991. *Late Holocene Occupations at the Terrace Site, Tok, Alaska.* Final Report, Fairbanks: Prepared for U.S. Air Force Over-the-Horizon Backscatter Radar Program.

Shinkwin, A.D. 1979. *Dakah De'nin's Village and the Dixthada Site: a Contribution to Northern Alaskan Prehistory.* National Museum of Man Mercury Series NO. 91.

Staley, D.P. 1993. *A Phase 1 Cultural Resources Survey of 19 Locations for the Proposed Yukon Measurement and Debriefing System in Interior Alaska.* Albuquerque: Mariah and Associates.

Steele, J.L. 1982a. *Archaeological Assessment of Proposed Range Control Headquarters Building, Fort Wainwright, Alaska.* Anchorage: Alaska District, U.S. Army Corps of Engineers.

Steele, J.L. 1980a. *Archaeological Assessment of Squad Assault Range, Powerline Extension, and M-16 Record Fire Range, Fort Greely, Alaska.* Anchorage: Alaska District, U.S. Army Corps of Engineers.

Steele, J.L. 1982b. *Cultural Resource Assessment for a Quarry Site at Donnelly Dome, Fort Greely, Alaska.* Anchorage: Alaska District, U.S. Army Corps of Engineers.

- Steele, J.L. 1983a. *Cultural Resource Assessment of a Powerline Extension: Fort Greely, Alaska*. Anchorage: Alaska District, U.S. Army Corps of Engineers.
- Steele, J.L. 1983b. *Cultural Resources Assessment of Proposed Borrow Area, Fort Wainwright, Alaska*. Anchorage: Report on file at the Office of History and Archaeology.
- Steele, J.L. 1980b. *Fort Greely Bison Trail Archaeological Survey, Fort Greely, Alaska*. Anchorage: Alaska District, U.S. Army Corps of Engineers.
- Tanana Chiefs Conference, Inc. 1993. *Forest Resources of Bureau of Land Management and Military Lands Within a 100 Mile Radius of Fairbanks, Alaska*. Fairbanks: Prepared for the Bureau of Land Management.
- U.S. Army Garrison, Alaska (USARAK). 2007. *Integrated Natural Resources Management Plan 2007-2012, Volume 1*. Fort Wainwright: Environmental Office, Directorate of Public Works.
- U.S. Army Garrison, Alaska (USARAK). 2002. *Integrated Natural Resources Management Plan 2002-2006, Volume 1: Fort Greely and Donnelly Training Area*. Fort Wainwright: Environmental Division, Directorate of Public Works.
- VanStone, J.W., and I. Goddard. 1981. "Territorial Groups of West-Central Alaska Before 1898." In *Handbook of North American Indians, Volume 6: Subarctic*, by J. Helm, 556-561. Washington D.C.: Smithsonian Institution.
- Viereck, L.A., and E.L., Jr. Little. 1972. *Alaska Trees and Shrubs*. Washington, D.C.: Agricultural Handbook 410. U.S. Forest Service.
- West, F.H. 1975. "Dating the Denali Complex." *Arctic Anthropology* 12: 76-81.
- West, F.H. 1996. "Donnelly Ridge." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 302-307. Chicago: University of Chicago Press.
- West, F.H. 1996. "Other Sites in the Tangle Lakes." In *American Beginnings: The Prehistory and Palaeoecology of Beringia*, by F.H. West, 403-408. Chicago: University of Chicago Press.
- West, F.H. 1981. *The Archaeology of Beringia*. New York: Columbia Press.
- West, F.H. 1967. "The Donnelly Ridge Site and the Definition of an Early Core and Blade Complex in Central Alaska." *American Antiquity* 32(2): 360-382.

Wygall, B.T., K.E. Krasinski, C.E. Holmes, and B.A. Crass. 2018. Holzman South: A Late Pleistocene Archaeological Site along Shaw Creek, Tanana Valley, Interior Alaska. *PaleoAmerica* 4(1):90-93.

Yarborough, L.F. 1978. *Chena River Lakes Project Cultural Resource Investigation*. Final Report, Fairbanks: Prepared for the U.S. Army Corps of Engineers, Alaska District.

Yesner, D.R. 2001. "Human Dispersal into Interior Alaska: Antecedent Conditions, Mode of Colonization, and Adaptations." *Quaternary Science Reviews*: 315-327.

Yesner, D.R., and G.A. Pearson. 2002. "Microblades and Migrations: Ethnic and Economic Models in the Peopling of the Americas." In *Thinking Small: Global Perspectives on Microlithization*, by R.G. Elston and S.L. Kuhn, 133-161. Arlington: Archaeological Papers of the American Anthropological Association Number 12.

Yesner, D.R., C.E. Holmes, and G. Pearson. 1999. "Recent Excavations at the Broken Mammoth Site, Big Delta, Alaska: Reflections on Activity Patterning and Artifact Assemblages." 64th Annual Meeting of the Society for American Archaeology. Chicago.