USAG Alaska Cultural Resources Annual Report, 2020

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List of Acronyms

AHRS – Alaska Heritage Resources Survey
AR 200-1 – Army Regulation 200-1
ARPA – Archaeological Resources Protection Act
BAX – Battle Area Complex
BP – Before Present
BRTA – Black Rapids Training Area
CEMML – Center for Environmental Management of Military Lands
cm - centimeters
cmbs – centimeters below surface
CRM – Cultural Resources Manager
CRTC – Cold Regions Test Center
DOE – Determination of Eligibility
DTA – Donnelly Training Area
FAI – Fairbanks
GRTA – Gerstle River Training Area
HD – Historic District
ICRMP – Integrated Cultural Resources Management Plan
JPARC – Joint Pacific Alaska Range Complex
m – meter
masl – meters above sea level
NAGPRA – Native American Graves Protection and Repatriation Act
NHL – National Historic Landmark
NHPA – National Historic Preservation Act
NLUR – Northern Land Use Research, Inc.
NRHP – National Register of Historic Places
NWTC – Northern Warfare Training Center
SDZ – Surface Danger Zone
SHPO – State Historic Preservation Officer
TFTA – Tanana Flats Training Area
USAF –United States Air Force
USAG Alaska – United States Army Garrison Alaska
UTM – Universal Transverse Mercator
XBD – Big Delta
XMH – Mount Hayes
YTA – Yukon Training Area

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Introduction

Army Regulation 200-1 (AR 200-1), Chapter 6, instructs installations to make informed decisions regarding cultural resources under their control in compliance with public laws, in support of the military mission, and consistent with sound principles of cultural resources management. In addition to having an updated, 5-year Integrated Cultural Resources Management Plan (ICRMP) and an established government-to-government relationship with Federally-recognized tribes, the Army must comply with three federal laws: the Native American Graves Protection and Repatriation Act (NAGPRA); the Archaeological Resources Protection Act (ARPA); and the National Historic Preservation Act (NHPA). This report provides an annual review of United States Army Garrison Alaska's (USAG Alaska) compliance with AR 200-1 and Federal laws. It is intended to create an administrative record of all program activities.

When NAGPRA was enacted in 1990, it required Federal agencies to return Native American human remains, funerary objects, and objects of cultural patrimony to the lineal decedents and culturally affiliated tribes. USAG Alaska worked with University of Alaska's Museum of the North (the Federally-approved repository for cultural remains discovered on Army-managed lands in Alaska) to ensure there were no items meeting NAGPRA standards in storage. An inadvertent discovery plan that includes ceasing all work when human remains, bones, or artifacts are encountered, noting the coordinates of the remains, notifying the Alaska State Troopers in the event of human remains, and contacting the garrison Cultural Resources Manager (CRM) was enacted. This plan is articulated to project managers, training supervisors, and the public, and is included in all Memorandums of Agreement (MOA) for undertakings impacting historic properties.

ARPA aims to protect archaeological sites on public lands that are at least 100 years old. It stipulates criminal and civil penalties for the looting of archaeological sites and the trafficking of artifacts. It also requires Federal agencies to monitor and protect their archaeological sites from looting and to report violations. While to date USAG Alaska has encountered no ARPA violations, it is also responsible for permitting scientific excavations for research. USAG Alaska has established an application process whereby researchers can request to excavate archaeological sites on Army-managed lands. This permit is signed by the Garrison Commander and is reinforced by a MOA. Summaries of these permits and updates on the excavations are provided in this report.

The NHPA (54 U.S.C. § 470 et seq.) was enacted in 1966 to ensure that every federal agency establishes a preservation program for the identification, evaluation, and care of historic and

archaeological sites. Title I of the statute established the National Register of Historic Places (NRHP), administered by the National Park Service (NPS), and State Historic Preservation Officers (SHPOs), partners of the national historic preservation program. Both Sections 106 and 110 of the statute are contained in Title I. Section 106 requires that federal agencies provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on undertakings that have the potential to impact historic properties on or eligible for the NRHP. It also establishes a procedure (regulated in 36 CFR § 800) determining the effects of an undertaking on historic properties as well as a consultation process to inform stakeholders and resolve adverse effects. USAG Alaska complies with these regulations through annual reporting of undertakings covered by an operations and maintenance Programmatic Agreement (FW-PA-1601) and individual letters on undertakings that include ground disturbance or alterations to historic properties. This report summarizes the undertakings requiring Section 106 consultation for archaeology and historic buildings that took place in 2020.

Section 110 of the NHPA requires that federal agencies establish their own historic preservation programs for the identification, evaluation, and protection of historic properties using standards established by the Secretary of the Interior. Although AR 200-1 requires full compliance with federal law, most Section 110 inventories and evaluations in Army training lands take place in coordination with Section 106 reviews of project undertakings. The USAG Alaska's CRM has established a consultation process with Range Control offices at Fort Wainwright and Donnelly Training Area (DTA) to determine potential development zones (PDZs) based upon projected training needs. These PDZs are located in the major training areas outside Fort Wainwright's Main Post cantonment in areas that the Army plans to develop in the 2 to 10-year time range. Identification of PDZs has allowed the CRM to focus survey efforts, in conjunction with Section 106 reviews, in the areas of the 1.6 million acres managed by USAG Alaska that are considered most critical.

This report summarizes all cultural resources fieldwork conducted on USAG Alaska-managed lands during 2020. First, it describes all activities on USAG Alaska-managed lands that required consultation under NAGPRA or required permitting under ARPA during the current year and provides an update on activities from previous year permits. The report then provides a brief summary of all Army undertakings that took place in 2020 that required Section 106 consultation under the NHPA, including a summary of those that had previously been described in detail in individual letters to the SHPO. Next, it provides descriptions of all buildings surveyed during the year that were not previously tracked by the cultural resources program. It then outlines all cultural resources surveys during 2020 related to future Army project areas under Section 110 of the NHPA that were not described in individual Section 106 letters. All newly found resources on USAG Alaska-managed lands are described in the text and new AHRS cards are found in an appendix. Next, a list of register eligible or not yet determined archaeological

sites, buildings, and structures monitored during the current year and their condition and recommendation is provided along with any new site protection measures installed over the same period. When sites or buildings are monitored, their condition is photo documented. These photos are on file at Fort Wainwright and can be viewed upon request. Determinations of eligibility for archaeological sites, buildings, and structures are then reported. Finally, this report summarizes the total acreage of archaeological surveys since 2002 and total number of archaeological sites or historic buildings known from the Fort Wainwright cantonment and training areas for use in the ICRMP, Federal data calls, and the geographic information systems-based Spatial Data Standards for Facilities, Infrastructure, and Environment (SDSFIE).

This report is organized into sections by USAG Alaska-managed properties. No work took place in the following training areas or other areas managed by USAG Alaska in 2020: Gerstle River Training Area, Black Rapids Training Area, Whistler Creek Training Area, Seward Military Resort, Sears Creek Pump Station, Haines Fuel Terminal, and the Fort Greely cantonment.

All archaeological fieldwork was conducted by Colorado State University's Center for Environmental Management of Military Lands (CEMML) employees under the direct supervision of Julie Esdale, Ph.D., an archaeologist meeting the professional standards outlined in the Secretary of the Interior's Professional Qualifications Standards as defined in 36 CFR § 61 Appendix A. Two crews comprised of three to five archaeologists conducted the fieldwork. All building and structure surveys were conducted by CEMML employees under the direct supervision of Casey Woster, M.A., an architectural historian meeting the professional standards outlined in the Secretary of the Interior's Professional Qualifications Standards as defined in 36 CFR § 61 Appendix A.

Setting

USAG Alaska manages of the Main Post cantonment area, the Yukon Training Area (YTA), the Tanana Flats Training Area (TFTA), and the Donnelly Training Area (DTA), Gerstle River Training Area, Black Rapids Training Area, Whistler Creek Training Area, and miscellaneous outlying properties including Seward Military Resort and remnants of the Haines-Fairbanks pipeline--Sears Creek Pump Station, Tok Fuel Terminal, and Haines Fuel Terminal. The majority of these are located in central Alaska, north of the Alaska Range in the Tanana River Valley (Figure 1). The Main Post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough.

Figure 1. USAG Alaska training lands.

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 USAG Alaska'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. Fort Wainwright's cantonment and associated training 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 13,900[1] year old bison processing site with stone tool resharpening debris (Goebel et al. 2014, Graf et al. 2018) located in the TFTA, as well as Swan Point, dating to 14,150 years ago (Holmes 2011), and Holzman, at 13,600 years ago (Wygal et al. 2018), 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) (Potter 2008a, 2008b). 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 area (Bigelow and Powers 2001). Several sites in areas surrounding Army-managed lands demonstrate that people were well established in Interior Alaska by 13,000 years ago. Significant sites in the Tanana Valley dating between 13,500-12,000 years ago include Healy Lake (Cook 1996), Walker Road (Goebel et al. 1996), Mead (Holmes 2001), Upward Sun River (Potter et al. 2014), Keystone Dune (Reuther et al. 2016), Broken Mammoth (Holmes 1996), and Delta River Overlook (Potter et al. 2018). The Younger Dryas cooling event from 13,000-12,000 years ago may have led to a temporary population decline (Potter 2008a, 2008b) 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[2] (Anderson 1968, 1970) 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 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 Army training areas, 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

[1] All dates are given in calendar years before present.
[2] Anderson called it the "American Palaeoarctic Tradition," but most researchers use the shortened version.

River site is also known for one of the earliest burials in the Americas [Potter 2008a, 2008b; Potter et al. 2008; Potter et al. 2011]). The nearby McDonald Creek site on Army-managed land yielded artifacts in association with bison, waterfowl, and small game (Esdale et al. 2012c, Gaines et al. 2011, Goebel et al. 2014, Graff et al. 2018). 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 bison and wapiti (Potter et al. 2018). 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 Valley (Powers and Hoffecker 1989). This complex began approximately 11,000 years ago with an artifact assemblage that included triangular or teardrop-shaped, bifacially worked projectile points ("Chindadn" points [Cook 1969, 1975; Holmes and Cook 1999]); 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, in and adjacent to Army training areas (Broken Mammoth [Holmes 1996; Yesner et al. 1999], Chugwater [Lively 1996], Donnelly Ridge in DTA [West 1967, 1996], Healy Lake [Cook 1989], Delta River Overlook in DTA [Potter et al. 2018], Mead [Holmes 2007], McDonald Creek in TFTA [Graf et al. 2018], and Swan Point [Holmes et al. 1996; Holmes 1998, 2007]).

The Denali Complex, dated roughly to 10,500 to 8,500 years ago, was originally defined by West (West 1967, 1975) and includes distinctive wedge-shaped microblade cores, core tablets and their derivative microblades, large blades, biconvex bifacial knives, certain end-scraper forms, and burins. West later defined the Denali Complex as a regional variant of the American Paleoarctic Tradition (West 1981). Denali sites in the vicinity of USAG Alaska's training lands include Mount Hayes (West 1996), Swan Point (Holmes et al. 1996; Holmes 1998, 2007), and Gerstle River (Potter 2001). Several sites in DTA and the Tanana Flats have been dated to this period (including Delta River Overlook [Potter et al. 2018] and Hurricane Bluff [Esdale et al. 2015]).

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 complexes (e.g., Dumond 2001), the general understanding of Interior Alaskan archaeologists is that there is a behavioral explanation for the presence or absence of microblades in different assemblages (Holmes 2001; Potter 2008a, 2008b; Yesner and Pearson 2002). Moreover, both Nenana and Denali technology persist in central Alaska throughout the Holocene (Bever 2006).

The site density declined in the areas around USAG Alaska-managed training lands in the early Holocene, suggesting a slight depopulation during a period of climate change that initiated the widespread establishment of spruce forests (Potter 2008a, 2008b). The boreal forest in Interior Alaska was established by 8,000 years ago (Bigelow and Powers 2001). Sites from this time period are less well publicized than the older sites, but include Houdini Creek (c. 8,600 years old) (Bever 2001), Lucky Strike (c. 8,500 years old) (Potter et al. 2007), Blair Lakes in TFTA (c. 8,000 years old) (Esdale et al. 2017), Delta River Overlook (several components) (Potter et al. 2018), Delta Creek (c. 8,000) (Doering pers. comm. 2018), and the Campus Site (c. 7,700 years old) (Pearson and Powers 2001; Potter et al. 2007; Potter 2008). Bison, wapiti, and birds were the most important subsistence game during this period (Potter 2007, 2008a, 2008b).

The site density increased again after about 6,000 years ago in Interior Alaska (Potter 2008a, 2008b). 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 Alaska (Anderson 1968). Alaskan notched points were generally similar to Archaic-age dart points in the contiguous United States. Time has shown middle Holocene assemblages 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 affiliation (Clark 1992; Cook and Gillispie 1986). 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 moose (Potter 2008a, 2008b). Notched point assemblages occur in many sites in Interior Alaska, including over one dozen on Army-managed lands (XBD-00277, XMH-00277, XMH-00283, XMH-00303, XMH-00309, XMH-00874, XMH-00950, XMH-01130, XMH-01168, and XMH-01300). Several sites (XBD-00270, XMH-00915, XMH-00925), including the excavated Banjo Lake site in DTA (XMH-00874), 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 component (Robertson et al. 2008).

Use of microblade and burin-based industries appears to continue through the middle and late Holocene in Interior Alaska (Esdale 2008; Potter 2004). 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 settlements (Potter 2008b). Artifact assemblages do not drastically change until the last millennium of the Holocene when microblades gradually disappear from the archaeological record (Potter 2008a, 2008b).

Linguistic evidence suggests that the Athabascan culture may have appeared in the Tanana Valley as early as 2,500 years ago, or earlier (Kari 2016; Kari and Potter 2010). 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 axes (Clark 1981). A late prehistoric Athabascan occupation is recognized at several sites in and around Army training lands (Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978). Of particular interest in this regard is a copper projectile point found in a buried context at DTA (XBD-00272) (Robertson et al. 2009).

The Athabaskan Tradition includes late prehistoric and proto-historic cultures generally believed to be the ancestors of Athabascan tribes who currently inhabit Interior Alaska. Excavated Athabaskan sites in the interior are rare, but the limited body of evidence allows for several generalizations. The raw material usage was reorganized in the Athabaskan Tradition, which de-emphasized stone tool making and increased the emphasis on the manufacture of items from native copper and organic materials (Dixon 1985). Assemblages include ground and pecked stone artifacts and an increased use of 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 mollusks (McFadyen Clark 1981, 1996; Ream 1986; Sheppard et al. 1991; Shinkwin 1979). 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 opportunities (Andrews 1975, 1977, 1987; McFadyen Clark 1981; VanStone and Goddard 1981).

Athabascan 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 game (Andrews 1975).

Four Athabascan 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 proto-historic times and possibly even prehistoric times (Andrews 1975). 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 Army-managed lands (McKennan 1981). 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 TFTA but has not been found (Dixon 1980; Reynolds 1986). The Blair Lakes Archaeological District (FAI-00335) in TFTA may relate to the prehistory of the Athabaskan Tradition. Euro-American historic archaeological sites are also present (Gamza 1995; Phillips 1984).

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. USAG Alaska-managed training lands fall within an area occupied at the time of Euro-American contact by Lower-Middle Tanana Athabascans, including bands described generally as the Salcha, Big Delta-Goodpaster, Wood River, and Chena bands (McKennan 1981; Andrews 1975; Mishler 1986). 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, on berry and root collecting, and in sheep hunting. These activities were frequently communal, with several local bands connected by common interest, geography, and intermarriage. Despite anthropological attempts to define boundaries for the peoples living in

the lower Tanana River Valley, natural terrain served as the only definable boundary to settlement patterns (McKennan 1981).

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 the Alaskan interior 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 (McKennan 1981).

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 or Nuchalawoyya (modern-day Tanana), Belle Isle (modern-day Eagle), and Fort Yukon.

Trade goods introduced by Euro-American settlers influenced the Native lifestyle. Clothing, food, 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.

The 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 logging, 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.

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. Existing trails, such as the Bonnifield, Donnelly-Washburn, and Valdez-Fairbanks 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. 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 Fort Wainwright 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 (Price 2002).

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 shallow-draft boats in summer and sleds in winter. As commerce in the area increased, roads and trails were constructed, sometimes following earlier indigenous routes. The major overland route to the coast was the Valdez-Fairbanks Trail, which began as a military trail from Valdez to Eagle in 1899.

Transportation and communication networks, including the Alaska Railroad, were developed to serve new settlements in Interior Alaska. A branch of the railroad route was extended to Fairbanks in 1904. Roadhouses along the route catered to travelers. Some were located on what are now Army training lands. One property was on the Bonnifield Trail in TFTA, and two roadhouses and a seasonal tent operation existed along the Donnelly-Washburn Trail in the current DTA. Secondary routes connected Fairbanks to the surrounding mining districts.

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, connecting Fairbanks to

Seward and making large-scale dredging operations economically feasible. Aviation also became a key component of Interior transportation, beginning in earnest in the 1920s. However, it was not until 1931 that Weeks Field, originally constructed in 1923, was officially dedicated as an airfield. Industrialized corporate activity became the hallmark of the region's mining in the remaining years before World War II.

The development in the Alaskan interior increased dramatically with the onset of World War II, subsequent military build-up in Alaska, and, later, the beginning of the Cold War. Of particular significance was the development of airfields near Delta Junction (Fort Greely), Fairbanks (Ladd Field, later Fort Wainwright), and North Pole (Eielson Air Force Base).

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 NRHP under these contexts. Several village sites associated with the early contact period have been reported near USAG Alaska-managed lands. One was reported near Wood River Buttes, two just northwest of the installation's boundary, and one near Fairbanks (Reynolds 1986). None have been reported or located on the Main Post.

During the summer of 1934, then Lieutenant Colonel Henry H. (Hap) Arnold lead *The Alaska Flight*, a contingency of ten B-10 bombers, to scout for potential airfield sites. This resulted in selection of land outside Fairbanks being chosen for Ladd Field's authorization by Congress in 1935. Construction began on the small cold weather testing station in 1939; and, by 1940, Ladd Field was operational.

Cold weather testing at Ladd Field helped to improve the aircraft and equipment used by front-line aircrews. The Cold Weather Test Detachment's experimental tests contributed to the development of aircraft design, ground procedures, and personnel equipment with stateside research agencies and manufacturers. After the start of World War II, Ladd Field also served as the transfer point for the Alaska Siberia (ALSIB) Lend-Lease aid to the Soviet Union. From 1942 to the end of the war in 1945, Ladd Field saw 7,926 aircraft and associated cargo change hands. Though it was controversial, the Lend-Lease aid to the Soviet Union played a part in the eventual defeat of Nazi Germany. Ladd Field also served as an air depot for the repair and supply of aircraft under the Air Transport Command, processing thousands of passengers as well as tons of cargo and mail.

In 1947, the Air Force became a separate service and Ladd Field became known as Ladd Air Force Base (AFB). Missions flown out of Ladd AFB played a significant role in the early years of the Cold War confrontation with the Soviet Union. Early in the Cold War, military planners decided on a heartland concept for Alaskan defense, concentrating on bases near Anchorage

and Fairbanks as the strategic anchor points. Ladd AFB became the Northern Sector Headquarters for the Alaskan Air Command, and its foremost missions during the Cold War were air defense, strategic reconnaissance, and arctic research.

Ladd AFB's air defense mission was part of the plan to deter the Soviet Union from taking Alaskan territory and using it as a base from which to threaten the continental United States. Ladd AFB hosted tactical fighter intercept squadrons and combat alert cells. An Air Defense Command Center located on Ladd AFB was responsible for directing air battles in Alaska's northern sector. It also provided support to segments of the Distant Early Warning Line. In the earliest years of the Cold War, Ladd AFB hosted some of the first long-range strategic aerial reconnaissance units.

Ladd AFB was also the scene of significant Cold War arctic research. The cold weather equipment testing, begun during World War II, continued through the Cold War and expanded to include the Arctic Aeromedical Laboratory (AAL). The AAL studied human adaptation to arctic and sub-arctic climates with an eye toward military applications.

In 1960, Ladd AFB was transferred to the Army and renamed Fort Jonathan Wainwright on January 1, 1961. In Alaska, Cold War missions were predominately under the command of the Air Force, with the Army providing ground force defense and logistical supply. The Army also carried out cold weather training tactics and cold weather equipment testing. The onset of the Vietnam War and its high costs drained the Army's resources; troops at Fort Wainwright were reassigned or deployed, causing a significant decrease in the post's population. In 1986, the mission of the post changed once again with the assignment of the 6th Light Infantry Division to Fort Wainwright, promoting the mission to support expeditious worldwide deployment. Management of Fort Wainwright was removed from the mission element and unified with all other installations under the Installation Management Agency in 2002, later transformed into Installation Management Command (IMCOM). Relieved of the burden of day-to-day installation management, U.S. Army Alaska redirected its focus to Army modernization and transformation. As a result, Fort Wainwright is now home to the 1-25th Stryker Brigade Combat Team, 1-25th Attack Reconnaissance Battalion, and 1-52nd General Support Aviation Battalion, continuing a tradition of enabling global deployment.

Status of Archaeological Sites

Archaeological research on Fort Wainwright training areas has resulted in numerous technical reports (Bacon 1978; Bacon and Holmes 1979; Bradley et al. 1973; Carlson et al. 2016; Dixon et al. 1980; Esdale et al. 2020a, 2020b, 2018 a, 2018 b, 2017a, 2017c, 2016, 2015b, 2015c, 2014, 2013, 2012a, 2012b, and 2012c; Esdale and McLaren 2014, 2013; Esdale and Pelto 2017; Esdale

and Robertson 2007; Espenshade 2010; Gaines 2009; Gaines et al. 2010a, 2010b; Hedman et al. 2003; Higgs et al. 1999; Holmes 1979b; Johnson and Bozarth 2008; Marshall 2007; Potter et al. 2018; Potter 2005; Potter et al. 2000, 2007a; Rabich and Reger 1978; Raymond-Yakoubian and Robertson 2006; Raymond-Yakoubian and Robertson 2005; Robertson et al. 2004, 2006, 2007, 2008, 2009b, 2013; Staley 1993), and scientific papers (Esdale et al. 2017 b, 2015a; Holmes and Anderson 1986; West 1967, 1975).

Fort Wainwright and its training lands contain 720 known archaeological sites, one traditional cultural property, and six archaeological districts. Eighty-two sites are eligible for the NRHP, 523 sites have not been evaluated, and 115 additional sites have been determined not eligible for the NRHP. Of the eligible or un-evaluated sites, 6 are historic and 599 are prehistoric sites.

Archaeological surveys of the Fort Wainwright Main Post area began in 1979. Jim Dixon surveyed the north side of the Chena River and Birch Hill area, discovering and relocating several prehistoric archaeological sites (FAI-00040, 00041, 00042, 00043, 00199, and 00200) (Dixon et al. 1980). Surveys of the Main Post building areas continued in the 1980s by Julia Steele (Steele 1992, 1983) and Georgeanne Reynolds (Reynolds 1983, 1985). No sites were found in these previously disturbed areas. John Cook surveyed the River Road pond in 1996 and found one site (FAI-00509), which has failed to be relocated in subsequent attempts. In 2001, the Army began partnering cultural resources surveys and evaluations with CEMML. Surveys by several different principal investigators have 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, CEMML completed survey 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 NRHP 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 the NRHP. This total does not include any historic buildings related to the Ladd Field National Historic Landmark or the Ladd AFB Cold War Historic District.

Archaeological sites were first identified in the TFTA in 1973 by Zorro Bradley and others who conducted a survey in the Blair Lakes area (Bradley et al. 1973). James Dixon continued surveys 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) (Dixon et al. 1980). In 1993, proposed work in the Clear Creek Butte area prompted a contract to relocate several archaeological sites (Staley 1993). These three districts have been revisited by CEMML archaeologists a few times over the last decade, and, notably, 92 new sites were found in 2009-2010 during survey of the Wood River Buttes, Salmon Loaf, and north and east of Blair Lakes.

The district boundaries were adjusted in 2016 to accommodate the new discoveries (Carlson et al. 2017). 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 ago (Esdale et al. 2014, Graf et al. 2018). In total, archaeologists have identified 168 archaeological sites in TFTA. Of these sites, 17 have been determined eligible for inclusion in the NRHP, one site is not eligible (FAI-00053) and 145 remain to be evaluated for eligibility.

The road system in the YTA was the first of many areas to be investigated. Charles Holmes discovered eight sites in a 1978 road survey (Holmes 1979). John Cook conducted a Determination of Eligibility (DOE) evaluation on one of these sites in 1979 (Cook 1979). Michael Kunz surveyed the Stuart Creek area in 1992 but discovered no archaeological sites, and Northern Land Use Research's 1999 survey of Stuart Creek and the YTA road system uncovered one historic site (Higgs et al. 1999). CEMML archaeologists have been surveying portions of YTA in conjunction with construction projects on an annual basis 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-two archaeological sites have been identified in YTA. Seventeen of the sites have been determined not eligible for listing in the NRHP and five have not been evaluated. Surveys continue annually in YTA in association with range control development projects and timber sales.

Archaeological investigations in what is now the DTA began in the 1960s, when Frederick West was searching for sites related to the first Americans (West 1967). He excavated the Donnelly Ridge site (XMH-00005) 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 sites (Rabich and Reger 1978; Bacon 1978; Holmes 1979b; Bacon and Holmes 1979). Julia Steele surveyed various locations in DTA from 1980-1983, finding four additional new sites (Steele 1980a, 1980b, 1982a, 1982b, 1983a, 1983b), and Georgeanne Reynolds surveyed the Donnelly Dome area in 1988, locating one more site (Reynolds 1988). Investigations in DTA from 1992-2002 were made by D. Staley (Staley 1993), T. Gamza (Gamza 1995), A. Higgs (Higgs et al. 1999), and D. Odess (Odess 2002). Sixteen new sites were found during this decade of fieldwork, and attempts were made to relocate old sites.

Concentrated efforts to expand survey coverage of DTA East began with W. Hedman in others in 2002 (Hedman et al. 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, CEMML research aimed to evaluate many known archaeological sites in DTA for inclusion in the NRHP in conjunction with use of the Battle Area Complex (BAX) and its Surface Danger Zone (SDZ). Sites have also been discovered during surveys for road and trail maintenance. Major excavations have taken place in training area that have greatly increased our understanding of the prehistory of the area, including the middle Holocene Banjo Lake site (Esdale et al. 2013) and the multicomponent Delta River Overlook (XMH-00297) and Hurricane Bluff (XMH-00297) sites (Potter et al. 2018).

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 and a lack of military development, however, the archaeology of DTA West is still poorly understood and represents a gap in USAG Alaska's inventory of cultural properties.

To date, 478 archaeological sites have been identified within DTA. Fifty-five sites have been found to be eligible for the NRHP, and 67 were found not eligible. An additional 356 sites remain to be evaluated. Historic archaeology sites are poorly represented in this region, with only five currently known to exist. The Donnelly Ridge Archaeological District (XMH-00388) encompasses Denali Complex sites, identified by Frederick West, 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) (Carlson et al. 2016). Archaeological studies in DTA in recent years have concentrated on completing 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 opening up for expansion of military training activities.

In 2020 USAG Alaska reacquired cultural resources responsibilities for the Fort Greely cantonment. Sixteen prehistoric sites are known from this parcel of land and NRHP evaluations were completed for all sites in 2010 (Gaines et al. 2010a). Sites are situated on outwash deposits west of Jarvis Creek, seven are eligible for the NRHP and nine have been found not eligible.

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 Tradition (Anderson 1970; West 1967, 1981). The oldest dates for human habitation

at DTA are roughly 10,100 years at site XBD-00167 (Higgs et al. 1999) 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 common (Robertson et al. 2004, 2005; Raymond-Yakoubian and Robertson 2005). At DTA, the Banjo Lake site yielded an AMS date of 5720 ± 50 BP from hearth charcoal associated with a microblade component (Esdale et al. 2015, Robertson et al. 2008). Euro-American historic archaeological sites are also present (Gamza 1995; Phillips 1984). 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 present (Potter et al. 2018). 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 time (Potter et al. 2018).

Survey efforts increased in 2013 in the Black Rapids Training Area (BRTA) in advance of military installation of a high-angle marksmanship range. Ten sites, eight of which were discovered during CEMML surveys in 2013, are known from this rocky landscape. Four sites have been determined ineligible for the NRHP, 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 Whistler Creek Training Area (WCTA) to the south of BRTA in 2015.

Six sites were discovered at Tok Fuel Terminal by John Cook in the early 1980s. In recent years, several of these site localities have merged into single sites and new prehistoric sites in other areas have been found. Currently, ten prehistoric sites are located on the Tok Fuel Terminal hill, and two are eligible for the NRHP. One eligible traditional cultural property is also known from this Army-managed property (TNX-00067) (Simon and Gelvin-Reymiller 2002).

The Gerstle River Training Area (GRTA) and Haines Fuel Terminal, also managed by USAG Alaska, have not been thoroughly surveyed for archaeological resources. CEMML archaeologists surveyed small portions of GRTA from 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 not eligible in 2013 (Esdale et al. 2013b). Sears Creek Pump Station and Seward Military Resort are two additional small properties that have not yet been surveyed for archaeological sites. One ineligible historic site is known from Haines Fuel Terminal (SKG-00043), but the property has only been partially surveyed (see Bowers et al. 1998).

Status of Buildings and Structures

Cultural resource management of Ladd Field's structural environment began in earnest with the listing of the National Historic Landmark (NHL) in 1985 (FAI-00236) The NPS produced the *World War II in the Pacific Theme Study* for Congress and the Secretary of the Interior's Advisory Board. The study was in partial fulfillment of PL 95-348 with the purpose evaluating resources and producing recommendations for National Historic Landmark designations. Resources were considered against the subthemes of Japanese Expansion in the Pacific, the United States Home Front, Alaska and the Aleutians, and the United States' Central Pacific Drive.

Ladd Field was recommended under the subtheme of Alaska and the Aleutians, along with Sitka Naval Base and Coastal Defenses, Kodiak Naval Base and Coastal Defense, and Dutch Harbor Naval Base and Coastal Defense. The nomination forms were prepared by Erwin N. Thompson, a historian with the NPS-Denver Service Center, and dated June 18, 1984. These locations were recommended "because they represent the build-up of Alaska's defenses from almost nothing in 1938 to a position of increasing strength by the time of the Japanese attack on Dutch Harbor and occupation of the western Aleutians in 1942." (Thompson, 1984) In particular, Ladd Field was recognized as being established as a cold weather testing station and as a critical site for American Lend-Lease planes from American to Soviet crews. The original nomination included 23 buildings and structures.

Following the NHL designation, a flurry of undertakings involved the demolition of many World War II and Cold War era temporary structures as the installation prepared for the standing up of the 6th Infantry Division (Light). Stationing of a Combat Aviation Brigade in the mid-2000s resulted in additional vast new construction within the NHL boundary. The stationing of the Gray Eagle UAV unit required construction of the most recent new and sympathetic construction within the NHL in 2017. As of 2020, there are 20 buildings and 4 structures contributing to the NHL and 6 buildings and 2 structures noncontributing to the NHL. A re-evaluation of the NHL has been conducted in fulfillment of a stipulation in agreement document FW-MOA-1401. It is currently being processed by the NPS's regional office for forwarding to and review by the NPS National Historic Landmarks Committee.

In 2000, the historic context *Northern Defenders: Cold War Context of Ladd Air Force Base Fairbanks, Alaska, 1947-1961* evaluated buildings from the vast build-up that occurred in the 1950s (Price, 2001). During the Cold War period of significance, approximately 500 World War II era buildings were demolished and 300 permanent buildings were constructed, two-thirds of which were Capehart housing (Sackett, nd). The Alaska SHPO concurred with the historic district evaluation prepared by CEMML historians on March 14, 2001. The themes of significance

included the stationing of the 46th/72nd Reconnaissance Squadron and Fighter Intercept Squadrons. The Ladd AFB Cold War Historic District (HD) (FAI-01288) nomination originally included 68 contributing resources. Currently, there are 37 contributing and 30 noncontributing properties in the historic district. A re-evaluation of the district is expected to be performed prior to 2022 in fulfillment of a stipulation in agreement document FW-MOA-1803.

Additionally, three building and one structure on Fort Wainwright were determined individually eligible for the NRHP. Building 4070 (the Arctic Aeromedical Laboratory, FAI- 01283) was concurred eligible in 2001. Building 4391 (Chena Elementary School, FAI-01789) was concurred eligible by the Alaska SHPO in 2010. Building 1060 (Air Defense Command Communication Center, FAI-01257) was determined eligible in 2010, but lost its eligibility due to a loss of integrity in 2015. The Bailey Bridge (FAI-02138), having previously been determined not eligible, was re-evaluated and determined eligible in 2018. This structure was demolished in 2020 due to its not meeting mission requirements.

Surveys of building interiors within the NHL and HD were conducted in 2012. DOEs for 25 interiors were submitted and 6 of those were concurred to be contributing to the NHL and HD. An additional interior, Building 1048, is also considered to have a historic interior, but is under the jurisdiction of the installation privatized housing partner.

The Base Realignment and Closure Act (BRAC) of 1995 slated the closure and future dismantling of Fort Greely. In preparation of the installation properties leaving Federal ownership, correspondence with the Alaska SHPO negotiated a MOA that included stipulations for recording a majority of the installation's Cold War era mission buildings. The MOA also described a Fort Greely New Post Historic District that was later considered eligible for the National Register with 23 contributing resources (XMH-01275). The timeline of determination for this district is somewhat murky and, for working purposes, has been determined to coincide with the MOA's execution in March 1999. Mitigation included in the MOA was HABs-like recordation of 23 buildings, which was completed.

In August 1999 in preparation for the BRAC process, Tetra Tech, Inc. and Charles M. Mobley, and Associates prepared the *Inventory and Evaluation of Military Structures at Fort Greely, Delta Junction, Alaska*. This volume evaluated 208 structures, 20 of which dated to World Wat II, 188 of which were from the Cold War era (of which 60 were residential), and 168 of which were subject to disposal. Currently one resource, P606 (SM-1A nuclear reactor, XMH-00670) has been determined eligible for the NRHP. Is it slated for decommissioning and final demolition beginning in 2023.

USAG Alaska assumed management of the cultural resources at Fort Greely in 2020 and began with a re-evaluation of the known historic district and any other resources over 50 years of age. The intent of this process is to clear up the status of properties and assist with future management.

Programmatic evaluation of buildings and structures of 45 years of age on the two cantonments is practiced. Beginning in 2019, program emphasis on ensuring a complete survey of buildings on all of the non-cantonment USAG Alaska-managed properties began. These efforts continue with the goal of folding those properties into the programmatic evaluation schedule.

2020 Fort Wainwright Cantonment

Section 106 Activities

Section 106 consultation took place for five projects on the cantonment in 2020. These were consulted in individual letters and are summarized here: the SHPO concurred on a finding of No Historic Properties Adversely Affected for the B1557 Installation of Physical Training Space on 12 March, 2020; the SHPO concurred on a finding of No Historic Properties Adversely Affected for the B1045 Reroofing on 31 August, 2020; the SHPO concurred on a finding of No Historic Properties Adversely Affected for the B1047 Kitchen-to-Office Conversion undertaking on 31 August, 2020; the SHPO concurred on a finding of No Historic Properties Adversely Affected for the B1043 Transom Replacement project on 30 November, 2020; and the SHPO concurred on a finding of ineligible for the Bear Paw Ballfield determination of eligibility on 18 December, 2020.

Section 110 Activities

No building and structure or archaeological surveys were conducted on the cantonment in 2020.

Newly Discovered Archaeological Sites

No new archaeological sites were found on the cantonment in 2020.

Post-Review Discoveries

No post review discoveries took place on the cantonment in 2020.

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place on the cantonment in 2020.

Archaeological Site Monitoring and Site Protection Measures

No archaeological sites were monitored on the cantonment in 2020

Determinations of Eligibility

No archaeological sites or historic buildings on the cantonment were evaluated for the NRHP during the 2020 field season.

Summary of Archaeological Surveys and Sites

A 100% survey of Fort Wainwright's cantonment and adjacent areas (Farmer's Loop and the Permafrost Tunnel) was completed in 2013 (Figure 2). These surveys include 12,500 acres of training lands and undisturbed areas (13,525 acres total including the disturbed Ladd Field footprint). Of the 11 archaeological and historic sites discovered during these surveys, only one prehistoric site (FAI-00040) is eligible for the NRHP. Ten sites have been found not eligible.

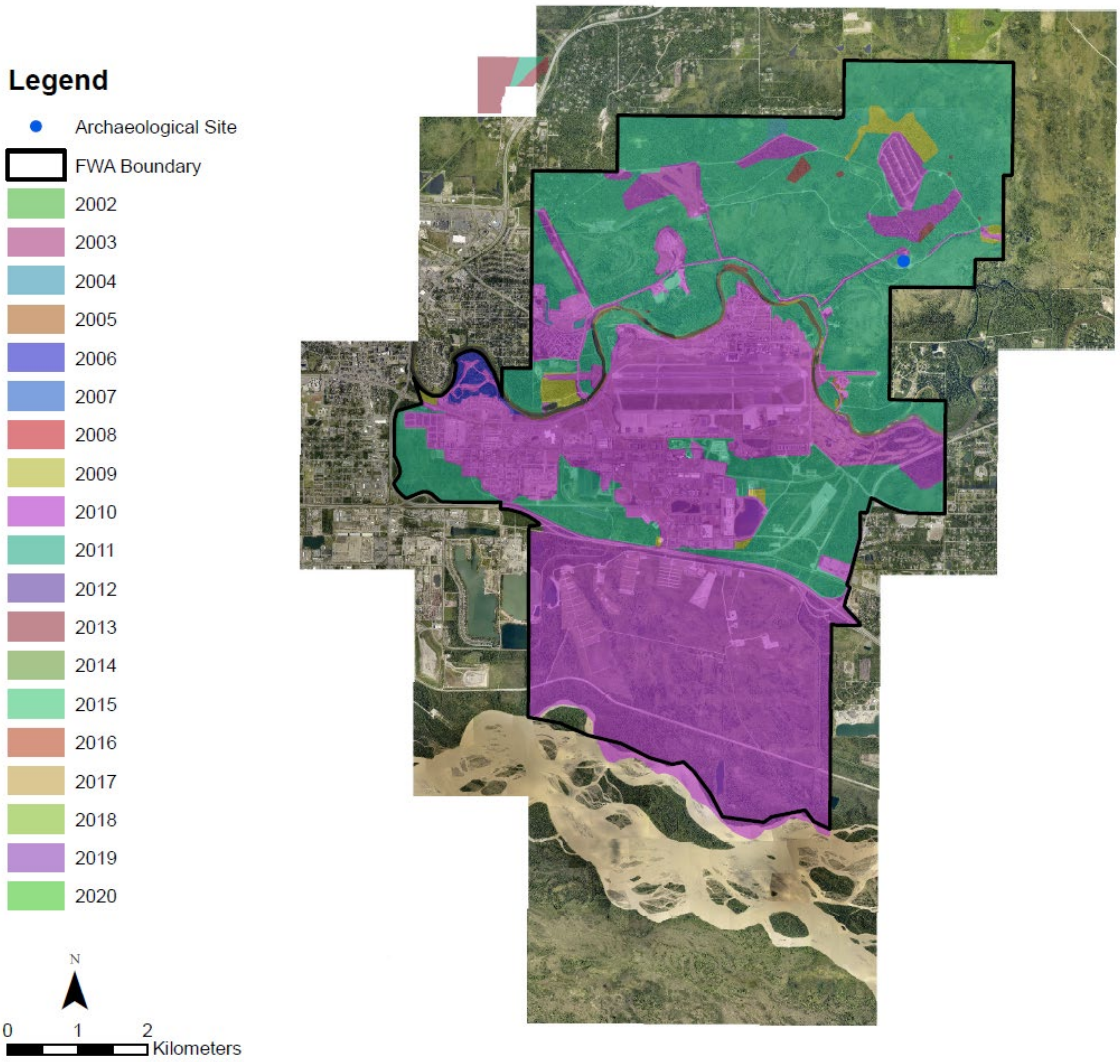

Figure 2. Archaeological sites and surveys on the cantonment, all years.

2020 Tanana Flats Training Area

Section 106 Activities

No section 106 correspondence regarding cultural resources in TFTA occurred in 2020.

Section 110 Activities

No building and structure or archaeological surveys were conducted in TFTA in 2020.

Newly Discovered Archaeological Sites

One new site was discovered in TFTA in 2020 (Figure 3).

FAI-02743
Latitude: [redacted]
Longitude: -[redacted]
UTM: Zone 6 [redacted] (WGS 84)
Determination: Not evaluated

This site is located on the western butte of Wood River Buttes along a rise on the northeast trending portion of the landform (Figure 3). There are two small unnamed kettle lake to the northwest. The site has a wide viewshed spanning the Tanana Flats and Fairbanks hills to the north and the Nenana Bluff to the west. On a clear day, the Alaska Range is visible to the south and south west, and the Wood River is present 7 km to the west. The site is covered in grasses and low scrub, and the mineral surface is visible in many areas (Figure 4).

The site was found through pedestrian survey in 2020 during relocation and monitoring efforts of other sites located on the Wood River Buttes. Over 150 artifacts were found covering the exposed surface of the knoll (Figure 5). The flakes ranged from bifacial thinning flake and small and large core reduction flakes to retouched flakes. Materials included a variety of cherts (green, gray, and black), multiple colors of rhyolite (gray, tan, and purple), quartz, chalcedony, and obsidian. A total of 21 obsidian flakes, one obsidian scraper, two black chert scrapers, and two tan rhyolite scrapers were collected (Table 1). Two small triangular points made of good quality chert or chalcedony were also collected. These bifacial tools were the size of a nickel. No subsurface testing occurred.

The site has been initially classified as a large lithic scatter. It likely contains additional surface and subsurface cultural material that could contribute important information to our understanding of the prehistory of the region and to the Wood River Buttes Archaeological

District. This site contains as much cultural material as three adjacent sites in the district with eligible NRHP statuses (FAI-00171, FAI-00177 and FAI-00182). The landform contains extensive silt deposits underscoring the possibility for intact stratigraphy and buried archaeological remains away from the peak of the landform.

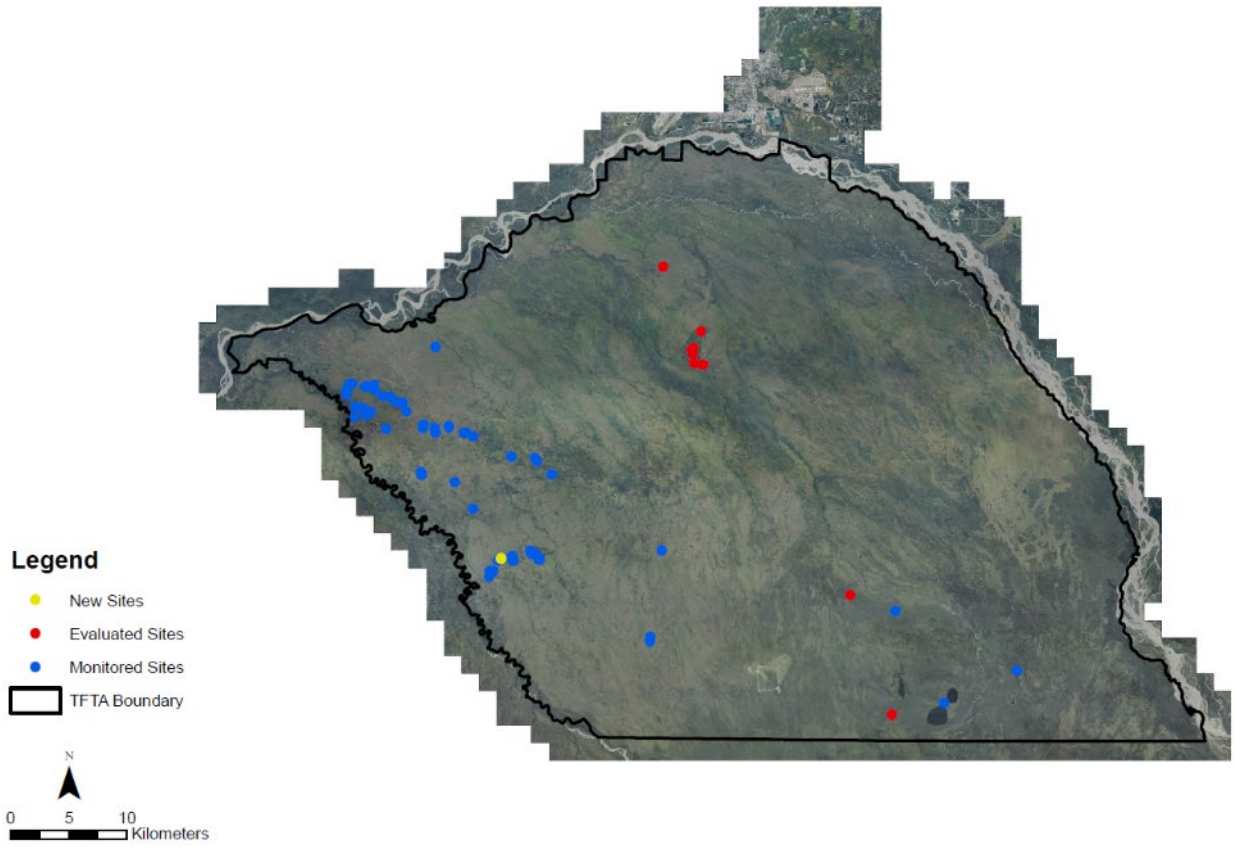

Figure 3. Archaeological sites found, evaluated, and monitored in TFTA in 2020.

Figure 4. FAI-02743 site overview.

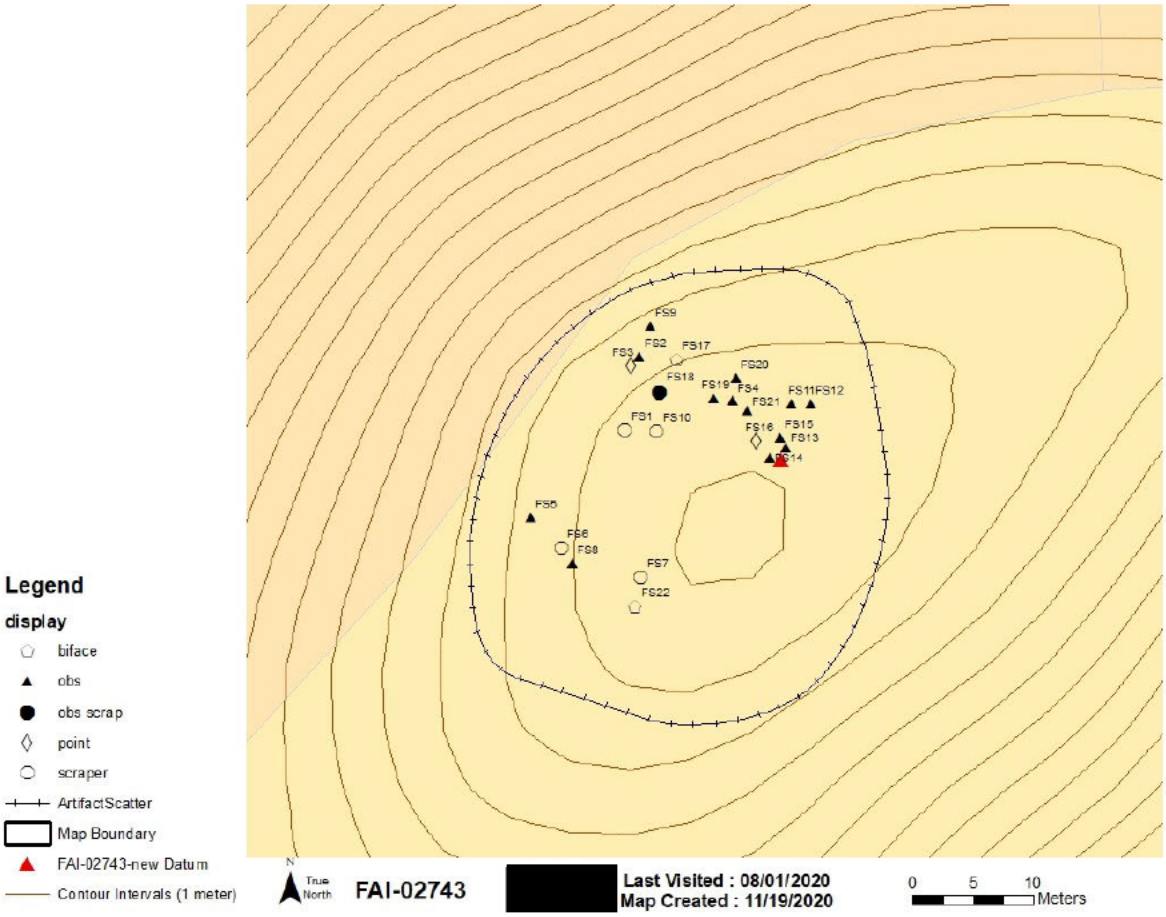

Figure 5. FAI-02743 site map.

Table 1. FAI-02743 accession log.

Accession #	Provenience	Quantity	Artifact Type	Raw Material
UA2020-104-1	444408E 7149838N, surface	1	scraper	tan rhyolite
UA2020-104-2	444409E 7149845N, surface	3	flakes	obsidian
UA2020-104-3	444409E 7149844N, surface	1	bifacial projectile point	gray chalcedony
UA2020-104-4	444417E 7149841N, surface	3	flakes	obsidian
UA2020-104-5	444400E 7149831N, surface	2	flakes	obsidian
UA2020-104-6	444403E 7149829N, surface	1	scraper	tan rhyolite
UA2020-104-7	444409E 7149826N, surface	1	scraper	black chert
UA2020-104-8	444404E 7149827N, surface	1	flake	obsidian
UA2020-104-9	444410E 7149847N, surface	1	flakes	obsidian
UA2020-104-10	444411E 7149838N, surface	1	scraper fragment	black chert
UA2020-104-11	444422E 7149841N, surface	1	flake	obsidian
UA2020-104-12	444423E 7149841N, surface	1	flake	obsidian
UA2020-104-13	444421E 7149837N, surface	1	flake	obsidian
UA2020-104-14	444420E 7149836N, surface	1	flakes	obsidian
UA2020-104-15	444421E 7149838N, surface	1	flakes	obsidian
UA2020-104-16	444419E 7149838N, surface	1	thin biface fragment	tan rhyolite
UA2020-104-17	444412E 7149844N, surface	1	bifacial projectile point	gray chalcedony
UA2020-104-18	444411E 7149842N, surface	1	scraper	obsidian
UA2020-104-19	444415E 7149841N, surface	1	flakes	obsidian
UA2020-104-20	444417E 7149843N, surface	1	flakes	obsidian
UA2020-104-21	444418E 7149840N, surface	1	flakes	obsidian
UA2020-104-22	444409E 7149824N, surface	1	biface preform	tan rhyolite

Post-Review Discoveries

No post-review discoveries were found in TFTA in 2020.

NAGPRA and ARPA Activities

No activities related to NAGPRA took place in TFTA in 2020. Although excavations were planned by Texas A&M University at the McDonald Creek site under ARPA Permit 2016-2 and FW-MOA-1409, the COVID 19 pandemic prevented travel and the field plans were cancelled.

Archaeological Site Monitoring and Site Protection Measures

Seventy sites were monitored in TFTA in 2020 (Table 2, Figure 3). Two sites, FAI-00171 and FAI-00177, could use protection in the near future from military activities, especially from use as helicopter landing areas. Site evaluations should be competed for these two sites to determine required measures.

Table 2. Archaeological sites monitored in TFTA in 2020.

TA	AHRS #	Last Visit	2020 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction	Protection
207	FAI-00055	2002	8/20/20	No	Vegetated, push piles and disturbed areas, trail bisects the site	Potential erosion from trail use	
205	FAI-00059	1979	8/18/20	Yes	Vegetated with some surface exposure and rock outcrops	Minor wind erosion	
205	FAI-00060	1979	8/18/20	No	Vegetated	None	
205	FAI-00171	1979	8/18/20	Yes	Large exposed landing zone with artifacts eroding from surface	High erosion from wind and aerial landing gear	Needs DOE and/or disuse as a landing zone
205	FAI-00176	1979	8/10/20	Yes	Vegetated	None	
205	FAI-00177	1979	8/10/20	No	Vegetated with some surface exposure	Minor wind erosion and disturbance from Military activities	Needs DOE
205	FAI-00178	1979	8/10/20	Yes	Vegetated with some surface exposure	None	
205	FAI-00179	1979	8/18/20	No	Vegetated with some surface exposure	None	
205	FAI-00180	1979	8/10/20	No	Vegetated with some surface exposure	None	
205	FAI-00181	1979	8/18/20	No	Vegetated with some surface exposure	None	
205	FAI-00182	1979	8/18/20	Yes	Vegetated with some surface exposure	None	
205	FAI-00183	1979	8/17/20	No	Vegetated with some surface exposure	None	
205	FAI-00186	1979	8/17/20	Yes	Vegetated with some surface exposure	None	
205	FAI-00188	1979	8/17/20	No	Vegetated with some surface exposure	None	
205	FAI-00189	1979	8/17/20	Yes	Vegetated with some surface exposure	None	
205	FAI-00191	1979	8/17/20	No	Vegetated with some surface exposure	None	
205	FAI-00192	1979	8/17/20	Yes	Vegetated with some surface exposure	None	
205	FAI-00193	1979	8/17/20	No	Vegetated with some surface exposure	None	
206	FAI-00194	2018	6/25/20	Yes	Cleared area vegetated with grasses, used a landing zone, some surface exposure	Moderate erosion from use as a landing zone	
206	FAI-00195	1979	6/25/20	Yes	Cleared area vegetated with grasses, used a landing zone, some surface exposure	Moderate erosion from use as a landing zone	

206	FAI-00196	1979	6/29/20	No	Vegetated	None	
206	FAI-00197	2012	6/29/20	Yes	Cleared area vegetated with grasses, used a landing zone, some surface exposure	Moderate erosion from use as a landing zone	
206	FAI-00198	2018	6/25/20	No	Vegetated	None	
205	FAI-02005	2009	6/30/20	No	Vegetated	None	
205	FAI-02006	2009	6/30/20	No	Vegetated	None	
205	FAI-02007	2009	6/30/20	No	Vegetated	None	
205	FAI-02008	2010	6/30/20	No	Vegetated	None	
205	FAI-02009	2010	6/29/20	No	Vegetated	None	
205	FAI-02010	2009	6/29/20	No	Vegetated	None	
205	FAI-02011	2009	6/30/20	No	Vegetated	None	
205	FAI-02012	2009	6/30/20	No	Vegetated	None	
205	FAI-02013	2010	6/30/20	No	Vegetated	None	
205	FAI-02014	2009	6/30/20	No	Vegetated	None	
204	FAI-02020	2010	7/1/20	No	Vegetated	None	
205	FAI-02021	2009	7/1/20	No	Vegetated	None	
205	FAI-02022	2009	7/1/20	No	Vegetated	None	
205	FAI-02023	2009	6/30/20	No	Vegetated	None	
205	FAI-02024	2009	6/30/20	No	Vegetated	None	
205	FAI-02025	2009	7/1/20	No	Vegetated	None	
205	FAI-02026	2010	7/1/20	No	Vegetated	None	
205	FAI-02027	2009	7/1/20	No	Vegetated	None	
205	FAI-02028	2009	6/30/20	No	Vegetated	None	
205	FAI-02029	2009	6/30/20	No	Vegetated	None	
205	FAI-02030	2009	7/1/20	No	Vegetated	None	
205	FAI-02031	2009	7/1/20	No	Vegetated	None	
204	FAI-02032	2009	7/1/20	No	Vegetated	None	
204	FAI-02033	2009	7/1/20	No	Vegetated	None	
207	FAI-02050	2010	8/6/20	No	Vegetated	None	
207	FAI-02062	2010	7/9/20	No	Vegetated with 25% surface exposure	None	DOE 2020
205	FAI-02079	2010	6/30/20	No	Vegetated	None	
205	FAI-02080	2010	6/30/20	No	Vegetated	None	
205	FAI-02081	2010	6/30/20	No	Vegetated	None	

205	FAI-02082	2010	6/30/20	No	Vegetated	None	
205	FAI-02083	2010	6/30/20	No	Vegetated	None	
205	FAI-02084	2010	6/30/20	No	Vegetated	None	
204	FAI-02085	2010	7/1/20	No	Vegetated	None	
205	FAI-02086	2010	7/1/20	No	Vegetated	None	
205	FAI-02087	2010	7/1/20	No	Vegetated	None	
205	FAI-02088	2010	7/1/20	No	Vegetated	None	
205	FAI-02089	2010	7/1/20	No	Vegetated	None	
205	FAI-02090	2010	7/1/20	No	Vegetated	None	
205	FAI-02091	2010	6/30/20	No	Vegetated	None	
206	FAI-02092	2010	7/1/20	No	Vegetated	None	
206	FAI-02093	2010	7/1/20	No	Vegetated	None	
205	FAI-02094	2010	7/1/20	No	Vegetated	None	
205	FAI-02095	2010	8/17/20		Vegetated with some surface exposure and use as a hunting camp	Minor disturbance from digging	DOE 2020
206	FAI-02097	2010	7/1/20	No	Vegetated	None	
206	FAI-02199	2018	6/25/20	No	Vegetated landing zone	Minor erosion from helicopter landing gear	DOE 2020
205	FAI-02241	2009	6/25/20	No	Vegetated	None	
207	FAI-02321	2014	7/7/20	No	Vegetated	None	DOE 2020

Determinations of Eligibility

Fieldwork for four site evaluations was completed in TFTA in 2020: FAI-02062, 02095, 02199, and 02321 (Figure 3). Results of this fieldwork will be presented in a multi-property NRHP site evaluation report.

Summary of Archaeological Surveys and Sites

Between 2002 and 2020, CEMML archaeologists conducted systematic archaeological survey on 29,356 acres of land in TFTA (Figure 6). This accounts for approximately 4.4% of available survey areas (not including impact areas). The majority of upland locations in the training area have had at least preliminary survey but historic features are also known from lowland areas.

There are a total of 168 archaeological sites one historic trail known in the training area and. The majority of the sites are found within three archaeological districts (Blair Lakes Archaeological District: FAI-00335; Clear Creek Buttes Archaeological District: FAI-00336; and

Wood River Buttes Archaeological District: FAI-00337). Of the sites located in TFTA, 17 are eligible for the NRHP and 145 have not been evaluated. Six sites site have been found not eligible.

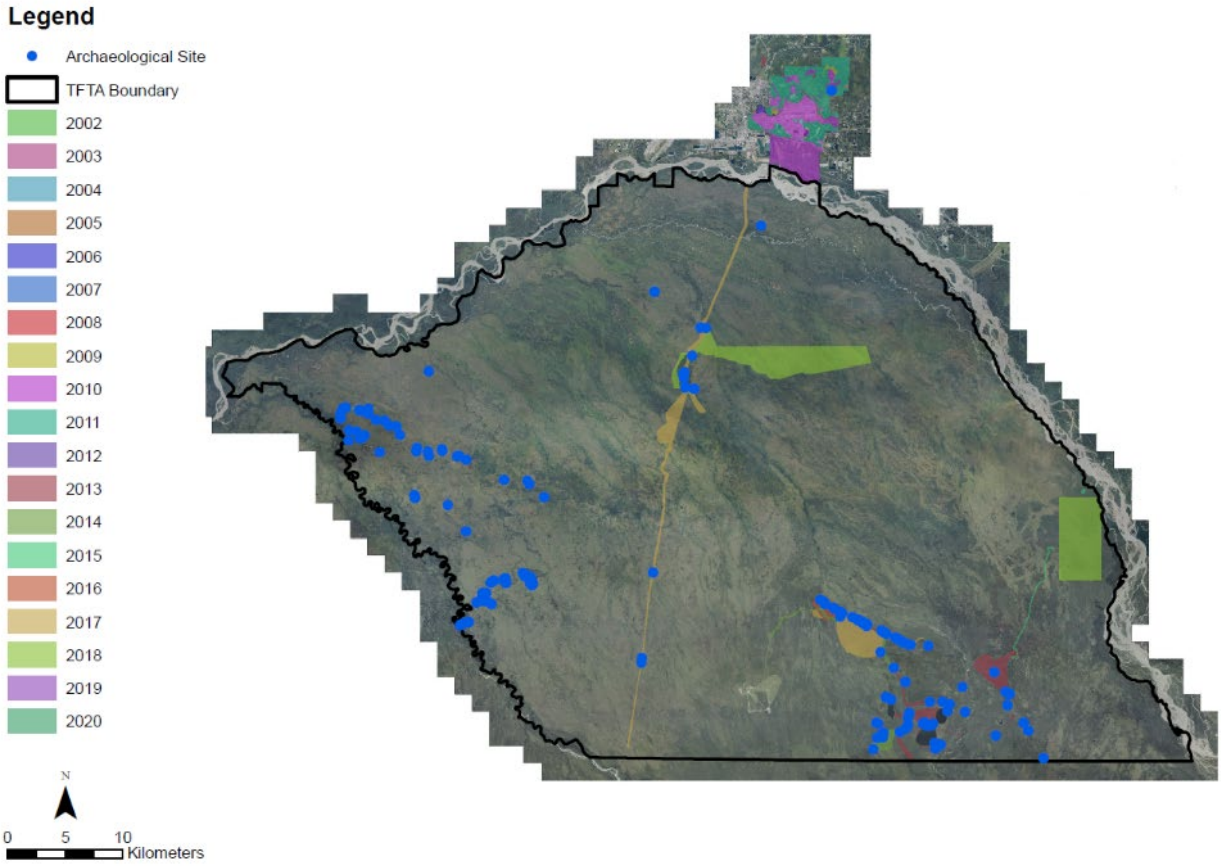

Figure 6. Archaeological sites and surveys in TFTA, all years.

2020 Yukon Training Area

Section 106 Activities

One archaeological survey took place for an upcoming Army project in 2020. Portions of Skyline Road are planned for rerouting. Surveys of 478 acres of land encompassed the APE for this project and ridgelines immediately to the west (Figure 7). The SHPO concurred with a finding of No Historic Properties Adversely Affected for this project on 29 June, 2020.

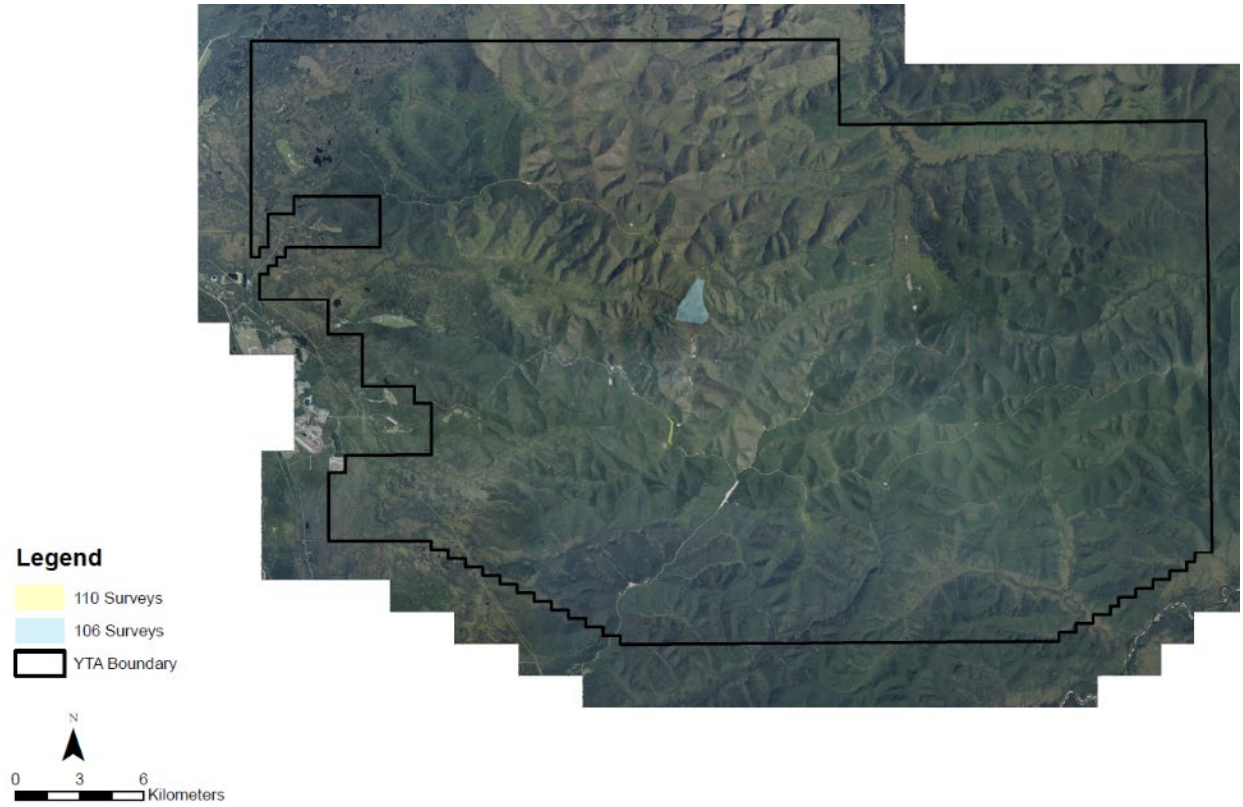

Figure 7. Section 106 and Section 110 surveys in YTA during 2020.

Section 110 Activities

No building and structure surveys were conducted in YTA in 2020.

A total of 44 acres of land in YTA were surveyed for archaeological sites during the 2020 field season outside of those covered by the Skyline Road Reroute project (Figure 7). These surveys were in support of trail maintenance activities. The 2020 surveyed areas marked in Figure 7 were covered by pedestrian transects, and shovel testing occurred in upland locations. In the TA 311 survey, a previously unsurveyed dirt road corridor leading 200 m from the Quarry Road

to a top of a dome was examined. The dome was thought to be a high potential area for archaeological sites in the YTA, but was disturbed prior to modern Section 106 with buildings and a small parking area. Three shovel tests were placed on an overlook at the southern end of the survey area (Figure 8, Figure 9). They encountered a thick organic layer over silts and bedrock gravels to a maximum depth of 25 cm (Figure 10). No cultural material was encountered.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered in YTA during 2020.

Post-Review Discoveries

No post-review discoveries were found in YTA in 2020.

Figure 8. View to the south from shovel test area.

Figure 9. Shovel test area outside of road bed (see person standing in background).

Figure 10. Thin deposits in the testing area.

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place in YTA in 2020.

Archaeological Site Monitoring and Site Protection Measures

No sites were monitored in YTA in 2020.

Determinations of Eligibility

No sites in YTA were evaluated in 2020.

Summary of Archaeological Surveys and Sites

Between 2002 and 2020, CEMML archaeologists have conducted systematic archaeological survey on 66,333 acres of land in YTA (Figure 11). This accounts for approximately 25.6% of available survey areas. The road system and major training locations have been examined and surveys are expanding into areas of future Range Control development. A total of 22 archaeological sites have been found in the YTA. Seventeen of these have been found not eligible for the NRHP and five sites have not yet been evaluated.

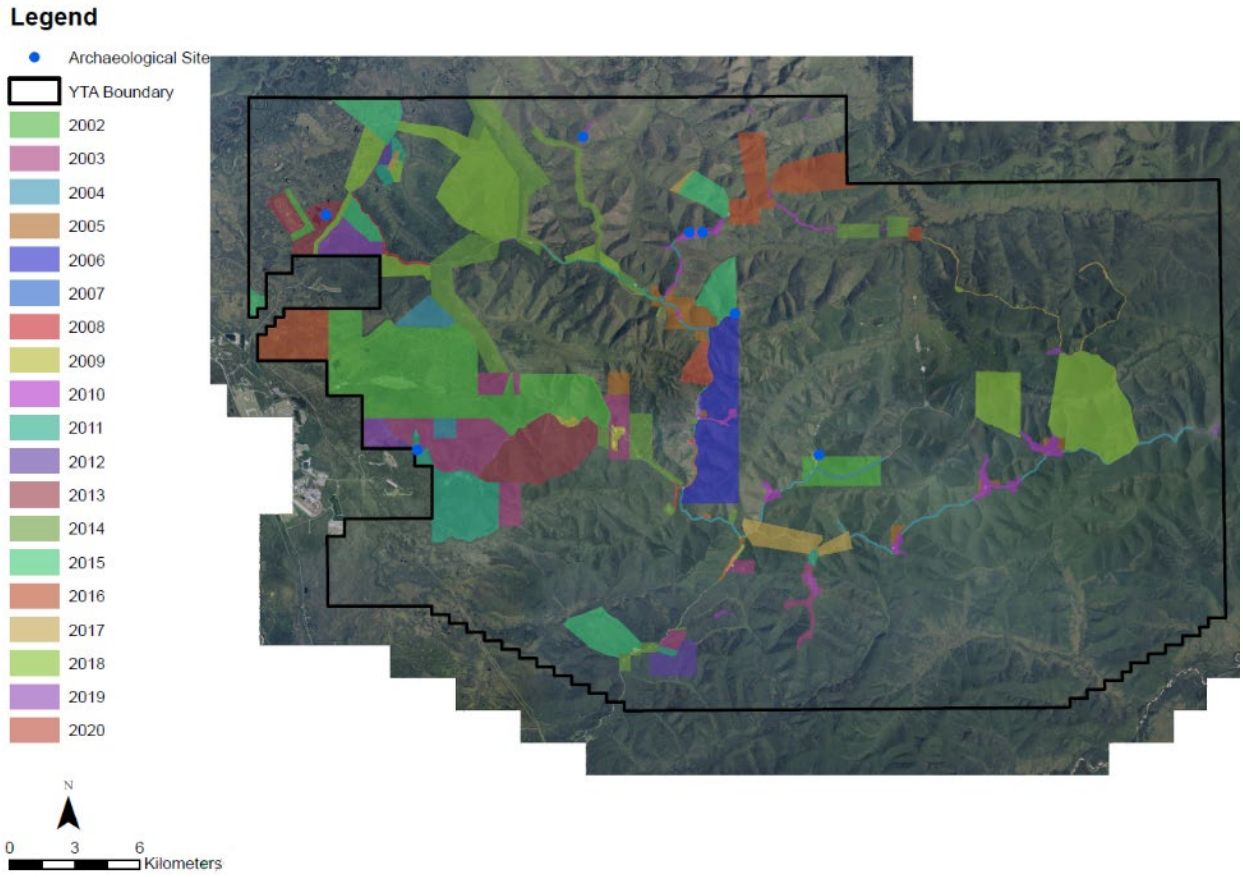

Figure 11. Archaeological sites and surveys in YTA, all years.

2020 Donnelly Training Area

Section 106 Activities

Four actions involving individual letters to the SHPO related to activities in DTA occurred during 2020. The SHPO concurred with re-evaluating three archaeological sites found eligible for the NRHP in the 1980s (XMH-00009, XMH-00010, and XMH-00294) as resolution for an incident involving hydro-axing over these known sites on 8 January, 2020. The SHPO concurred that archaeological site XMH-00923 was eligible for the NRHP on 9 September, 2020. USAG Alaska sent two submittals (an excavation report for site XMH-00292 and XMH-00923 and a Children's Archaeological Activity Book) under FW-MOA-1726 to the SHPO on 1 December, 2020. Finally, the SHPO accepted a final report for the XMH-00281 Site Capping Experiment on 23 December, 2020.

Section 110 Activities

No surveys for undocumented buildings and structures occurred in DTA in 2020.

In 2020, 2,702 acres of archaeological surveys were conducted in DTA East in support of Range Control Potential Development Areas and toward completing a 100% survey of this heavily used training area (Figure 12). From east to west the surveys are; the 2475 acre TA 505 Completion survey; the 37 acre TA 519 Forward Arming and Refueling Point (FARP) survey; and the 190 acre OP Road Survey.

Much of TA 505 is composed of a low-lying floodplain adjacent to the Delta Moraine. It is not easily accessed from 33-Mile Loop Road in DTA east. Instead the pedestrian survey approach was from a trail on State of Alaska-managed land just to the east. The area is forested with black spruce and poplar and has little topographic relief (Figure 13). Four shovel tests, ranging from 10-60 cm above gravels, did not encounter any cultural material (Figure 14).

Figure 12. Archaeological surveys in DTA East in 2020.

Figure 13. TA 505 survey area, near test pit BT20-14 (facing south).

Figure 14. Shovel test BT20-14 in TA 505.

The small FARP survey cleaned up a small sliver of land that was left out of previous survey efforts. This area has been heavily used by the military in the past (Figure 15). The majority of the survey parcel had been previously leveled to gravel with a bulldozer. Shovel tests in undisturbed land at the edge of the parcel did not recover any cultural material (Figure 16, Figure 17).

The last survey area is located near the OP Road in DTA west. This area is a smaller portion of a larger future PDZ. The Army and Air Force are interested in locating gravel sources in this area with plans to repair and reroute sections of the OP Road in the future. Section 106 correspondence will be conducted in the event that the plans become more concrete. For now, the PDZ status of the area allows for survey around the kames and kettles of the hummocky moraine along the north edge of the impact area. This area has high potential for locating archaeological sites. Twenty shovel tests were excavated in upland locations in the survey area (Figure 18). Shovel tests depth ranged from 10-60 cm depending on landscape position (Figure 19). One site (XBD-00454) was located during the brief survey in 2020 (see below).

Figure 15. TA 519 survey area (facing west).

Figure 16. TA 519 survey area (facing north).

Figure 17. Shovel test BT20-11

Figure 18. TA 546 survey area (facing north).

Figure 19. Shovel test BT20-22.

Newly Discovered Archaeological Sites

One new archaeological sites was discovered in DTA West in 2020, a prehistoric lithic scatter (XMH-00454) (Figure 20).

XBD-00454
Latitude: [redacted]
Longitude: [redacted]
UTM: [redacted], Zone 6 (WGS 84)
Determination of Eligibility: Not evaluated

This site is located 24 km west southwest of Delta Junction on a large moraine surrounded by five kettle lakes including Bear Lake 200 m to the East and Boot Lake to the north (Figure 20). One Hundred Mile Creek runs northwest and turns to the south 2 km south of the landform. This small archaeological site is located on a moraine feature in Fort Wainwright's Donnelly Training Area West (Figure 21). The location provides 180° view to the west where much of the landform is scarred by a forest fire from past years. The eastern half of the landform is covered in standing and living yet partially burned birch and spruce trees, though the understory is recently vegetated with grasses, ferns, low scrub and raspberry bushes allowing surface visibility to be estimated at 30-50 percent. The site consists of a single chert flake found in a shovel test pit, 20-40 cmbs (Figure 22). Two other shovel tests were excavated on the same landform however yielded no additional cultural material. A thin organic layer overlaid four layers of silt (10-38cmbs) above a sandy silt layer, the pits were concluded when olive brown sands were met at depths of 61 cmbs, 102 cmbs, and 76 cmbs (Figure 23, Figure 24).

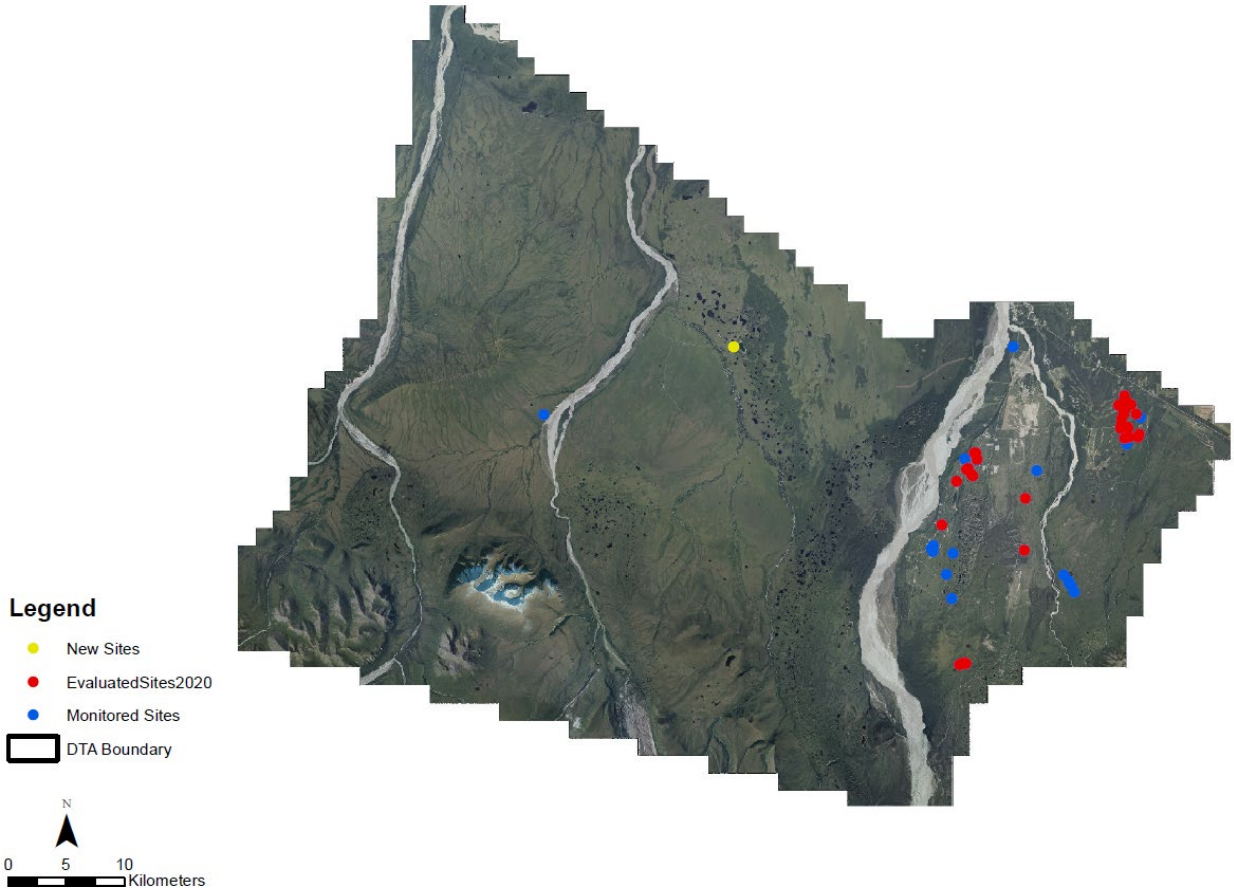

Figure 20. Archaeological sites found, monitored, and evaluated in DTA in 2020.

Figure 21. FAI-02743 site overview.

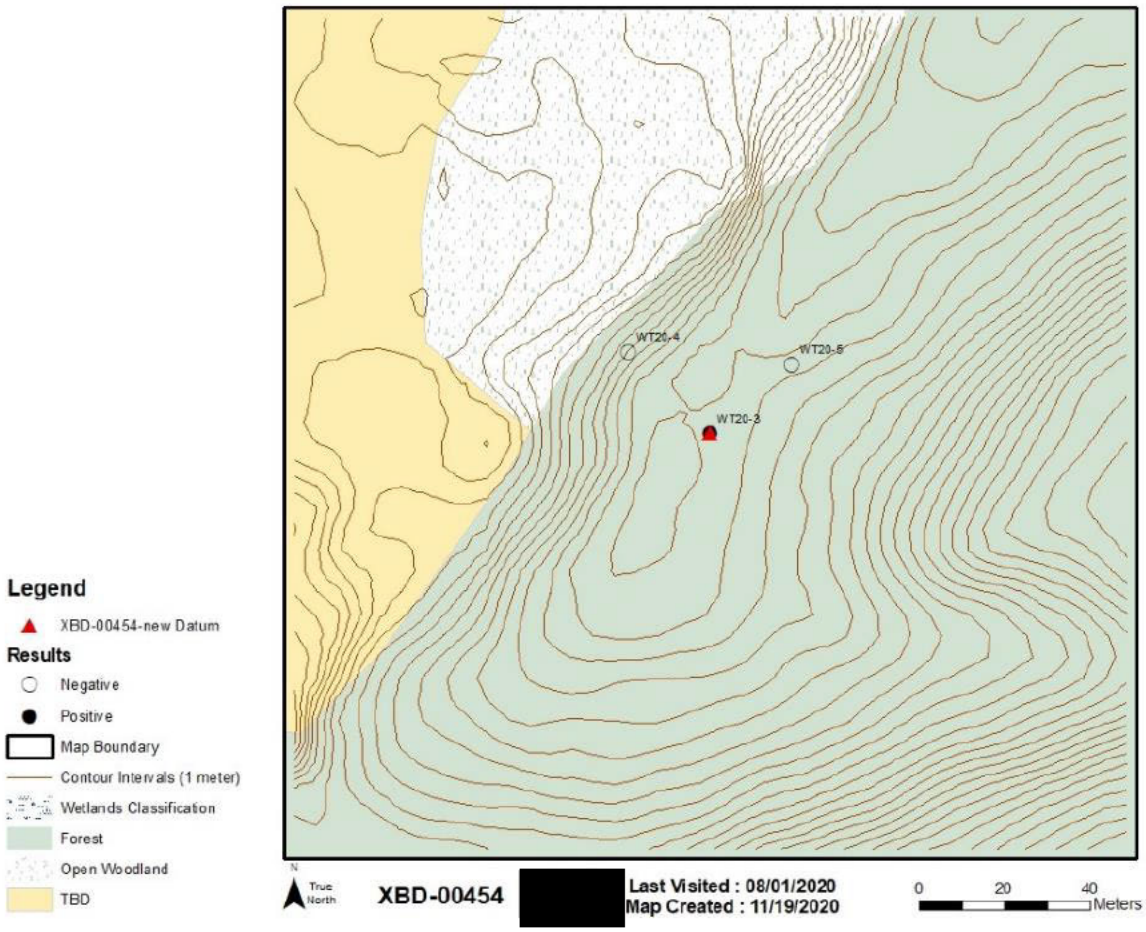

Figure 22. FAI-02743 site map.

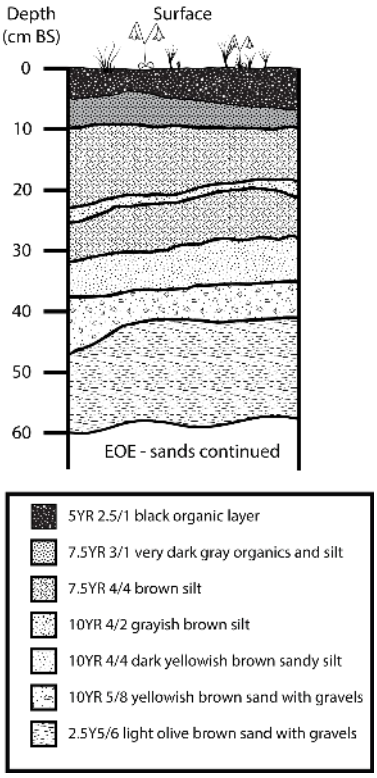

Figure 23. XMH-00454 stratigraphic profile.

Figure 24. XMH-00454 shovel test pit.

Post-Review Discoveries

No post-review discoveries were found in DTA in 2020.

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place in DTA in 2020.

Archaeological Site Monitoring and Site Protection Measures

Fifty-one sites were monitored in DTA in 2020 (Figure 20, Table 3). Of these, 15 sites show moderate to major disturbance or erosion. Site evaluation fieldwork was completed for several of these during the 2020 field season. It is recommended that one site is re-evaluated (XMH-00282). Protection of this site is very difficult because two gravel roads bisect the site. It is also recommended that five other sites get evaluations in the near future to determine protection measures (XBD-000333, XMH-00323, XMH-00940, XMH-00950, and XMH-00977). Seibert Stakes were placed on fourteen sites in DTA during the field season to prevent or minimize future disturbance (XBD-00333, XMH-00282, XMH-00931, XMH-00939, XMH-00940, XMH-00948, XMH-00950, XMH-00977, XMH-01130, XMH-01145, XMH-001288, and XMH-01302).

Table 3. Sites monitored in DTA in 2020.

TA	AHRS #	Last Visit	2020 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction	Protection
517	XBD-00333	2005	7/6/20	No	Vegetated with exposed bluff edge, old excavation units exposed	Moderate wind erosion along bluff	Seibert Stakes, needs clean up and DOE
531	XMH-00009	2019	8/12/20	No	Vegetated with large areas of exposed gravel, trail bisects site	Site destroyed	DOE 2020
531	XMH-00010	2019	6/15/20	No	Vegetated with 2% surface visibility, trail bisects site	Moderate disturbance from trail use and hydroaxing	DOE 2020
512	XMH-00282	2018	7/6/20	No	Vegetated but bisected by gravel roads, exposed surface in roadway	Significant erosion from road use	Seibert Stakes, needs mitigation or reevaluation
531	XMH-00294	2019	6/16/20	No	Vegetated with large areas of exposed gravel, trail bisects site	Heavy disturbance from trail use and hydroaxing	DOE 2020
295	XMH-00295	2019	6/22/20	No	Vegetated with large areas of exposed gravel, trail bisects site	Heavy disturbance from trail use and hydroaxing	DOE 2020
505	XMH-00323	2018	7/6/20	No	Exposed surface, bisected by road	Heavy erosion from vehicle use of road	Needs DOE

						and road maintenance	
503	XMH-00896	2018	6/22/20	Yes	Vegetated with some exposed areas, trail bisects site	Minor erosion from ATV use and foot traffic	DOE 2020
503	XMH-00897	2018	6/3/20	Yes	Vegetated with some exposed areas, trail bisects site	Minor erosion from ATV use and foot traffic	DOE 2020
503	XMH-00899	2019	6/9/20	No	Vegetated	None	DOE 2020, Seibert Stakes
503	XMH-00901	2019	6/17/20	No	Vegetated	None	DOE 2020
503	XMH-00902	2017	7/14/20	Yes	Vegetated	None	DOE 2020
503	XMH-00903	2017	6/30/20	No	Vegetated with 5% surface exposure	Minor erosion from animal activity	DOE 2020
526	XMH-00931	2019	7/7/20	No	Vegetated with exposed areas, trail bisects site	Minor erosion from vehicle use on trails	Seibert Stakes
526	XMH-00939	2019	7/7/20	No	Vegetated	None	Seibert Stakes
527	XMH-00940	2019	7/7/20	No	Vegetated with some surface exposure in bison wallows	Moderate erosion from vehicles and large animals moving through site	Seibert Stakes, needs DOE
527	XMH-00948	2019	7/8/20	No	Vegetates, one foxhole	Minor erosion and Military use	Seibert Stakes
527	XMH-00950	2019	7/8/20	No	Partially vegetated, 80% surface exposure, trail bisects the site	Moderate erosion from wind and trail use	Seibert Stakes, needs DOE
528	XMH-00977	2016	7/7/20	No	Partially vegetated, 90% surface exposure, trail bisects the site	Moderate erosion from wind and trail use	Seibert Stakes, needs DOE
503	XMH-00980	2019	6/10/20	No	Vegetated	None	DOE 2020, Seibert Stakes
502	XMH-00992	2018	6/23/20	Yes	Vegetated with 5% surface exposure	None	DOE 2020
502	XMH-00993	2018	8/25/20	Yes	Vegetated with some surface exposure, animal trail bisects site	Minor erosion from animal activity and proximity to Military firing range	DOE 2020, Seibert Stakes
502	XMH-00994	2018	7/29/20	No	Vegetated, animal trails bisect site	Minor erosion from animals	DOE 2020
502	XMH-00995	2016	7/6/20	Yes	Vegetated with large exposed patches, fire ring, adjacent to Military range	Moderate erosion from Military use	DOE 2020
502	XMH-00996	2016	6/15/20	Yes	Vegetated with some exposed areas, fire ring	None	DOE 2020
502	XMH-00997	2018	9/22/20	Yes	Vegetated with some surface exposure, animal trails bisect site, adjacent to Military range	Minor erosion by animals and Military use	DOE 2020, Seibert Stakes

502	XMH-00998	2018	8/20/20	Yes	Vegetated with some surface exposure, animal trails bisect site, adjacent to Military range	Minor erosion by animals and Military use	DOE 2020
502	XMH-00999	2016	7/14/20	No	Vegetated	None	DOE 2020
502	XMH-01051	2016	6/16/20	Yes	Vegetated with large exposed patches, fire ring, adjacent to Military range	Moderate erosion from Military use	DOE 2020
514	XMH-01070	2008	9/10/20	No	Vegetated with large exposed areas	Minor erosion from wind and animal activity	
513	XMH-01145	2019	7/9/20	No	Vegetated with large exposed areas, bisected by trail	Minor erosion from vehicle use on trails	Seibert Stakes
524	XMH-01169/1170	2018	8/11/20	Yes	Vegetated with large surface exposures	Moderate erosion from wind	DOE 2020
502	XMH-01196	2016	8/25/20	No	Vegetated, animal trails bisect site	Minor erosion from animal activity	DOE 2020
519	XMH-01221	2016	9/10/20	No	Vegetated with some exposed areas	None	DOE 2020
519	XMH-01222	2016	8/6/20	No	Vegetated	None	DOE 2020
519	XMH-01280	2018	9/7/20	No	Vegetated	None	DOE 2020
529	XMH-01288	2019	7/7/20	No	Vegetated with large exposed areas	Minimal erosion from weather	Seibert Stakes
519	XMH-01293	2016	9/3/20	No	Vegetated with 10% surface exposure	Moderate erosion from weather and animal activity	DOE 2020
519	XMH-01300	2016	8/12/20	No	Vegetated with some exposed areas	None	DOE 2020
519	XMH-01302	2019	7/7/20	No	Vegetated with large exposed areas	Minimal erosion from weather	Seibert Stakes
505	XMH-01332	2018	7/27/20	Yes	Vegetated with some surface exposure, bisected by animal trail	Minor erosion from wind and animal activity	DOE 2020
505	XMH-01333	2018	7/9/20	Yes	Vegetated with some surface exposure	None	DOE 2020
520	XMH-01358	2016	9/6/20	No	Vegetated	None	DOE 2020
510	XMH-01360	2019	7/6/20	No	Vegetated with some surface exposure, trail bisects site	Minor erosion from trail use	
508	XMH-01369	2019	7/6/20	No	Vegetated with some surface exposure, trail bisects site	Minor erosion from trail use	
508	XMH-01370	2019	7/6/20	No	Vegetated with some surface exposure, trail bisects site	Minor erosion from trail use	
508	XMH-01371	2019	7/6/20	No	Vegetated with some surface exposure, trail bisects site	Minor erosion from trail use	

508	XMH-01372	2019	7/6/20	No	Vegetated with some surface exposure, trail bisects site	Minor erosion from trail use	
505	XMH-01524	2019	7/6/20	No	Vegetated, animal trails bisect site	Minor erosion from animal activity	
505	XMH-01525	2017	6/9/20	No	Vegetated, animal trails bisect site	None	DOE 2020
502	XMH-01527	2016	8/5/20	Yes	Vegetated, game trail and road bisect site, previous ground disturbance	Highly disturbed from road maintenance	DOE 2020

Determinations of Eligibility

Fieldwork for evaluations of 33 sites was completed in DTA in 2020 (Figure 20, Table 4). The results of these investigations in will be presented in a multi-property NRHP DOE report in 2020.

Table 4. Sites with evaluation fieldwork completed in DTA in 2020.

AHRS Numbers of Evaluated Sites				
XMH-00009	XMH-00901	XMH-00995	XMH-01170	XMH-01332
XMH-00010	XMH-00902	XMH-00996	XMH-01196	XMH-01333
XMH-00294	XMH-00903	XMH-00997	XMH-01221	XMH-01358
XMH-00295	XMH-00980	XMH-00998	XMH-01222	XMH-01525
XMH-00896	XMH-00992	XMH-00999	XMH-01280	XMH-01527
XMH-00897	XMH-00993	XMH-01051	XMH-01293	
XMH-00899	XMH-00994	XMH-01169	XMH-01300	

Summary of Archaeological Surveys and Sites

A total of 129,670 acres of land have been surveyed in DTA between 2002 and 2020 (Figure 25). This accounts for 20.4% of the total land area. The majority of survey has been in DTA East and only portions of 508, and 532 are incomplete. Army trainings and development activities continue to expand in DTA East. A total of 478 archaeological sites have been found in DTA. Five sites are historic and 473 are prehistoric. Of the total sites, 55 have been found eligible for the NRHP, 67 are not eligible, and the remaining 356 have not yet been evaluated.

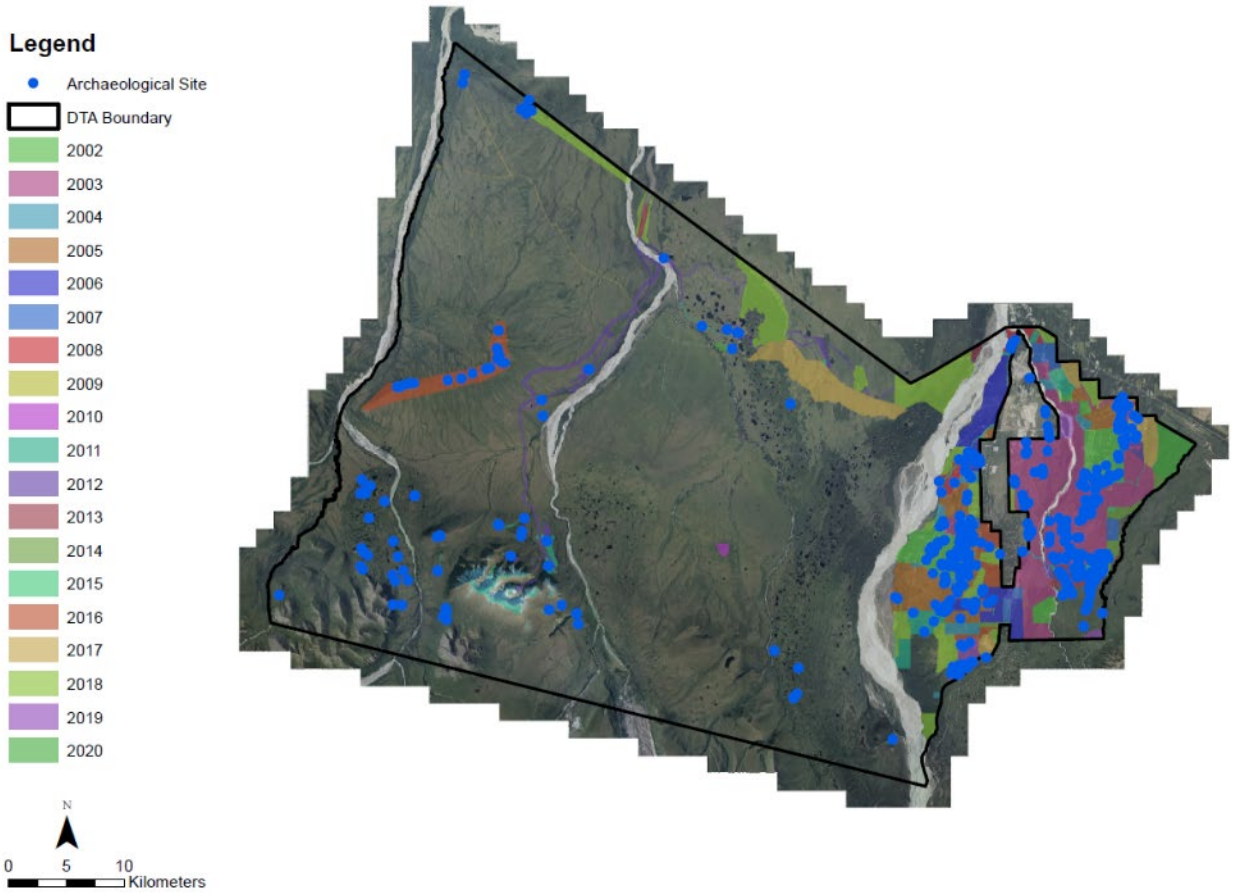

Figure 25. Archaeological sites and surveys in DTA, all years.

2020 Tok Fuel Terminal

Section 106 Activities

No undertakings requiring section 106 consultation took place at Tok Fuel Terminal in 2020.

Section 110 Activities

Just under 6 acres of land were surveyed for archaeological sites at Tok Fuel Terminal in 2020. This survey aimed to complete all survey of undisturbed land at the Terminal. One shovel test was excavated on a high ridge in the northwestern corner of the property. The test was shallow, encountering bedrock at 10 cmbs. No cultural material was discovered.

Figure 26. Archaeological survey location at Tok Fuel Terminal in 2020.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered at Tok Fuel Terminal in 2020.

Post-Review Discoveries

No post-review discoveries were found at Tok Fuel Terminal in 2020.

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place at Tok Fuel Terminal in 2020.

Archaeological Site Monitoring and Site Protection Measures

Three archaeological sites were monitored at Tok Fuel Terminal in 2020 (Figure 27, Table 5). Two of these sites have minor erosion from vehicle traffic and the fieldwork for site evaluations was completed on two of the sites during the 2020 field season. No other immediate protections are recommended.

Figure 27. New, evaluated, and monitored archaeological sites at Tok Fuel Terminal in 2020.

Table 5. Archaeological sites monitored at Tok Fuel Terminal in 2020.

AHRS #	Last Visit	2020 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction	Protection
TNX-00008	2017	9/16/20	Yes	Vegetated with 6% surface exposure and exposed bedrock, trail bisects site	Minor erosion from vehicle use on trails	
TNX-00233	2019	9/15/20	No	Vegetated	None	DOE 2020
TNX-00256	2016	9/17/20	No	Vegetated, trail bisects site	Erosion from vehicle use of trail	DOE 2020

Determinations of Eligibility

Field work for two site evaluations was completed at Tok Fuel Terminal in 2020 (TNX-00233 and TNX-00256) (Figure 27). The results of these investigations in will be presented in a multi-property NRHP DOE report.

Summary of Archaeological Surveys and Sites

To date the entire 62 undisturbed acres of land (100%) have been surveyed at Tok Fuel Terminal (Figure 28). Another 140 acres of land are managed by Fort Wainwright, but these areas have been heavily disturbed by past activities related to the fuel terminal. There are 10 prehistoric sites located within the fuel terminal boundary. One site has been found ineligible for the NRHP, two sites have been found eligible, and seven sites have not yet been evaluated.

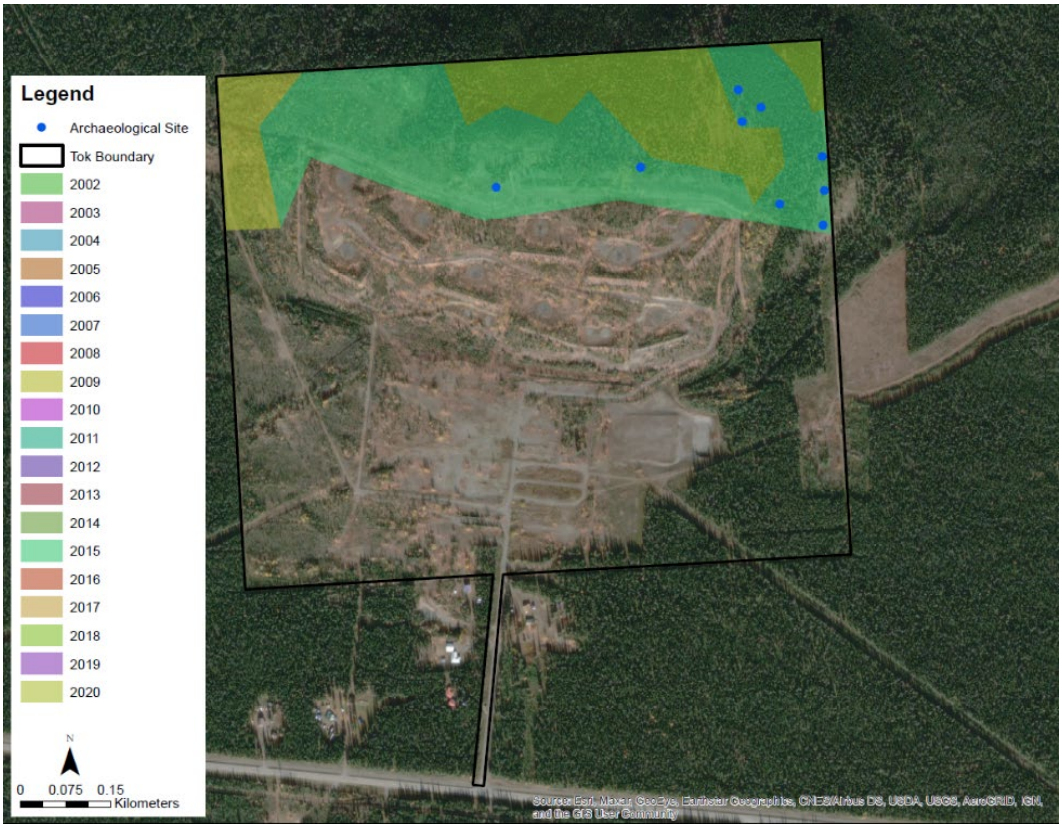

Figure 28. Archaeological sites and surveys at Tok Fuel Terminal, all years.

Summary

In summary, ten Section 106 consultations for Army undertakings in addition to activities covered under the O&M PA took place in 2020, five on the cantonment (Building 1557 Physical Training Space, Building 1045 Reroofing, Building 1047 Office Conversion, Building 1043 Transom Replacement, and Bear Paw Ball Field DOE), one in YTA (Skyline Road Reroute), and four in DTA (DTA Hydroaxing Site Re-evaluation, XMH-00923 Eligible, FW-MOA-1726 Submittals, XMH-00281 Site Capping Final Report).

No structures were located on USAG Alaska training lands and surveyed in 2020.

Just over 3,200 acres of land on USAG Alaska-managed lands were surveyed in 2020 (Table 6). Two new archaeological sites were found (FAI-02743 and XBD-00454). A total of 14.7% of USAG Alaska-managed lands has been surveyed for archaeological sites and historic structures. Seven hundred four sites have been recorded (Table 7).

Table 6. Archaeological surveys.

Training Area	2020 Acres Surveyed	Total Acres Surveyed	Percent Surveyed
Cantonment	0	12,500	100
TFTA	0	29,356	4.4
YTA	522	66,333	25.6
DTA	2,702	129,670	20.4
GRTA	0	279	1.3
BRTA & WCTA	0	1,589	47.9
Tok Fuel Terminal	6	62	100
Seward Military Resort	0	0	0
Sears Creek Pump Station	0	0	0
Haines Fuel Terminal	0	94	45.2
Total	**3,230**	**239,883**	**14.7**

Exactly 124 archaeological sites were monitored on USAG Alaska -managed training lands in 2020 (Table 8). The majority of these were located in TFTA and DTA. Of the monitored sites, it was found that seven sites were good candidates for site evaluations in the immediate future. After evaluations, site protection measures can be determined. One site is very difficult and a re-evaluation is recommended.

Table 7. Archaeological sites and eligibility status.

Training Area	2020 Sites	Total Sites	Eligible	Not Eligible	Not Evaluated
Cantonment	0	11	1	10	0
TFTA	1	168	17	6	145
YTA	0	22	0	17	5
DTA	1	478	55	67	356
GRTA	0	3	0	1	2
BRTA & WCTA	0	11	0	4	7
Tok Fuel Terminal	0	10	2	1	7
Seward Military Resort	0	0	0	0	0
Sears Creek Pump Station	0	0	0	0	0
Haines Fuel Terminal	0	1	0	1	0
Total	**2**	**704**	**75**	**107**	**522**

Table 8. Archaeological sites monitored.

Training Area	2020 Sites Monitored
Cantonment	0
TFTA	70
YTA	0
DTA	51
GRTA	0
BRTA & WCTA	0
Tok Fuel Terminal	3
Seward Military Resort	0
Sears Creek Pump Station	0
Haines Fuel Terminal	0
Total	**124**

One historic property was evaluated and found eligible for the NRHP in 2020 (Table 9).

Table 9. Historic properties evaluated for the NRHP.

Site Number	Determination	Applicable Criteria
XMH-00923	Eligible	D
Total	**1**	

This report summarizes all cultural resources activities completed on Fort Wainwright, Fort Greely, and associated training lands during 2020. Archaeological site evaluations will follow in a separate report.

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Appendix 1: 2020 AHRS Cards

Alaska Heritage Resources Survey Site Form

Date Received:

Alaska Department of Natural Resources, Office of History and Archaeology
550 W. 7th Ave., Suite 1310 Anchorage, AK 99501-3565
Phone: (907) 269-8718; Fax (907) 269-8908
http://www.dnr.state.ak.us/parks/oha/index.htm

1. **Type of Form**: New

2. **AHRS Number**: FAI-02743

3. **Site Name**: W20-2

4. **Description**: This large surface lithic scatter is located in the Wood River Buttes in Fort Wainwright's Tanana Flats Training Area There is a great viewshed from the site spanning full view of the flats to the north bordered by the Nenana Bluff to the west and all of the Fairbanks hills to the north. This site contains just as much if not more cultural material than the three sites already included eligible within the Wood River Archaeological District (FAI-00171, FAI-00177 and FAI-00182). The site has of over 150 surface artifacts that cover the exposed surface of the knoll. Additional flakes continued to be located while collection efforts for tools and obsidian were made. The flakes ranged from retouched flakes, core reduction flakes, and small and large reduction flakes. Materials included multiple grades of chert in green, gray and black, multiple colors of rhyolite including gray, tan and purple with some presenting cortex, quartz, chalcedony and obsidian. Of the artifacts located, 22 field samples were collected because they were tools or for XRF testing. A total of 21 obsidian flakes (FS 2, 4, 5, 8, 9, 11-15, 19-21) were collected and a single obsidian scraper was collected (FS18). Four additional scrapers were collected (FS 1, 6, 7, 10) two were black chert and two of tan rhyolite. Two small projectile points were also collected each of fine grade chert or chalcedony and smaller than a quarter (FS 3 &16). No sub surface testing was done at this time.

5. **Cultural Significance**: This is a large surface scatter with rare and exotic raw materials, formal tools, rare projectile point types, and abundant lithic debitage. It may also contain subsurface information. This site is likely to provide important information about the prehistory of the Wood River Buttes area.

6. **Associations**: FAI-00337

7. **Location Information**: The site is located on the western butte of Wood River Buttes along a rise on the N- E trending portion of the Butte before it drops further in elevation moving west to the southern portion of said butte. There is a small unnamed Kettle Lake to the northwest with an additional small kettle lake further southwest of that.

8. **Location Reliability**: Location Exact and Site Existence Verified (1)

9. **AHRS Resource Nature**: Site

10. **Resource Nature Subtype**: Default Site

11. **Resource Keywords**: Lithic scatter

12. **Site Area (Acres):** 1

13. **Period Codes**: Prehistoric Choose an item. Choose an item.

14. **Associated Dates**: Click or tap here to enter text.

15. **Cultures**: Click or tap here to enter text.

16. **Prehistoric/Historic Function**: Camp

17. **Current Function**: Defense, unoccupied land

18. **Condition Code**: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

19. **Destruct Codes**: None Reported Choose an item. Choose an item.

20. **Destruct Year**: Click or tap here to enter text.

21. **Owner Info**: USDOD

22. **Source Reliability**: Professional Reports, Records, and Field Studies (A)

23. **Form Author**: Whitney McLaren

24. **Date Completed**: 11/25/2020

25. **Record Status**: Complete

26. **Other Number(s)**: Click or tap here to enter text.

27. **Artifact Repository**: University of Alaska Museum of the North

28. **Attachments** (File Name): Click or tap here to enter text.

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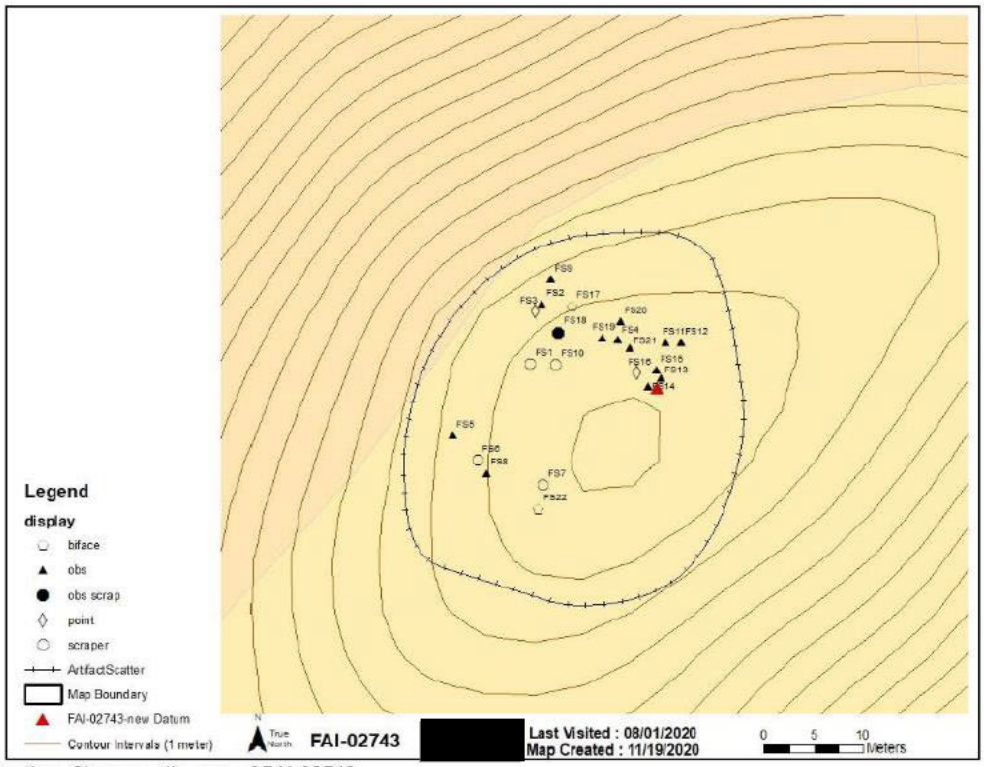
http://www.dnr.state.ak.us/parks/oha/index.htm

29. **Location Information** (Decimal Degrees, NAD 83 Datum): [redacted]

30. **Attach a portion of appropriate Aerial Photograph and U.S.G.S Quad Map** or detailed sketch map showing the location of the site relative to surrounding natural landforms, water bodies and/or city or town landmarks. (Either include it in the space provided or attach in a separate file).



Caption: Close up site map of FAI-02743

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Caption: FAI-02743 on Wood River Butte West.

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31. **Summary Artifact Tables** (Insert table that notes artifact type, material, count, and any notes, including associated date ranges, if appropriate). Replace representative table if appropriate.

Accession Number	Object Name	Material Type	Description	Lot Count	General Provenience	Northing	Easting
UA2020-104-1	1	tan ryolite	scrapper	1	surface	7149838.48	444408.0662
UA2020-104-2	2	obsidian	flakes	3	surface	7149844.618	444409.3204
UA2020-104-3	3	gray chalcedony	biface (bird point)	1	surface	7149843.873	444408.6268
UA2020-104-4	4	obsidian	flakes	3	surface	7149840.942	444416.9963
UA2020-104-5	5	obsidian	flakes	2	surface	7149831.23	444400.33
UA2020-104-6	6	tan ryolite	scrapper	1	surface	7149828.612	444402.819
UA2020-104-7	7	black chert	scrapper	1	surface	7149826.279	444409.4194
UA2020-104-8	8	obsidian	flake	1	surface	7149827.448	444403.7403
UA2020-104-9	9	obsidian	flakes	1	surface	7149847.119	444410.2123
UA2020-104-10	10	black chert	scraper fragment	1	surface	7149838.382	444410.7147
UA2020-104-11	11	obsidian	flake	1	surface	7149840.63	444421.8193
UA2020-104-12	12	obsidian	flake	1	surface	7149840.669	444423.4426
UA2020-104-13	13	obsidian	flake	1	surface	7149837.088	444421.3722
UA2020-104-14	14	obsidian	flakes	1	surface	7149836.242	444420.0929
UA2020-104-15	15	obsidian	flakes	1	surface	7149837.895	444420.8824
UA2020-104-16	16	tan ryolite	thin bifave fragment	1	surface	7149837.637	444418.9499
UA2020-104-17	17	gray chalcedony	biface (bird point)	1	surface	7149844.338	444412.3564
UA2020-104-18	18	obsidian	scraper	1	surface	7149841.648	444410.927
UA2020-104-19	19	obsidian	flakes	1	surface	7149841.101	444415.442
UA2020-104-20	20	obsidian	flakes	1	surface	7149842.838	444417.2548
UA2020-104-21	21	obsidian	flakes	1	surface	7149840.157	444418.2152
UA2020-104-22	22	tan ryolite	biface preform	1	surface	7149823.805	444408.9467

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32. **Representative Site Photos** (Caption photos, note direction taken, add as many as necessary)

Caption: Site Overview looking east

Caption: Site overview looking southwest

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Phone: (907) 269-8718; Fax (907) 269-8908
http://www.dnr.state.ak.us/parks/oha/index.htm

1. **Type of Form**: New

2. **AHRS Number**: XBD-00454

3. **Site Name**: W20-1

4. **Description**: This small archaeological site is located on a moraine feature in Fort Wainwright's Donnelly Training Area west. The location provides 180° view to the west where much of the landform is scarred by a forest fire from past years. The eastern half of the landform is covered in standing and living yet partially burned birch and spruce trees, though the understory is recently vegetated with grasses, ferns, low scrub and raspberry bushes allowing surface visibility to be estimated at 30-50 percent. The site consists of a single chert flake found in a shovel test pit. Found 20-40 cmbs. Two other shovel tests were excavated on the same landform however yielded no additional cultural material. A thin organic layer overlaid four layers of silt (10-38cmbs) above a sandy silt layer, the pits were concluded when olive brown sands were met at depths of 61 cmbs, 102 cmbs and 76 cmbs.

5. **Cultural Significance**: This site may have a larger subsurface expression than was noted in initial testing. It may provide information about the prehistory of the Tanana River Area.

6. **Associations**: This site is located 24 km west southwest of Delta Junction on a large moraine surrounded by five kettle lakes including Bear Lake 200 m to the East and Boot Lake to the north. One Hundred Mile Creek runs northwest and turns to the south 2 km south of the landform.

7. **Location Information**: Click or tap here to enter text.

8. **Location Reliability**: Location Exact and Site Existence Verified (1)

9. **AHRS Resource Nature**: Site

10. **Resource Nature Subtype**: Default Site

11. **Resource Keywords**: lithic scatter

12. **Site Area (Acres):** 1

13. **Period Codes**: Prehistoric Choose an item. Choose an item.

14. **Associated Dates**: Click or tap here to enter text.

15. **Cultures**: Click or tap here to enter text.

16. **Prehistoric/Historic Function**: Camp

17. **Current Function**: Defense, unoccupied land

18. **Condition Code**: Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

19. **Destruct Codes**: None Reported Choose an item. Choose an item.

20. **Destruct Year**: Click or tap here to enter text.

21. **Owner Info**: USDOD

22. **Source Reliability**: Professional Reports, Records, and Field Studies (A)

23. **Form Author**: Whitney McLaren

24. **Date Completed**: 11/25/2020

25. **Record Status**: Complete

26. **Other Number(s)**: Click or tap here to enter text.

27. **Artifact Repository**: University of Alaska Museum of the North

28. **Attachments** (File Name): Click or tap here to enter text.

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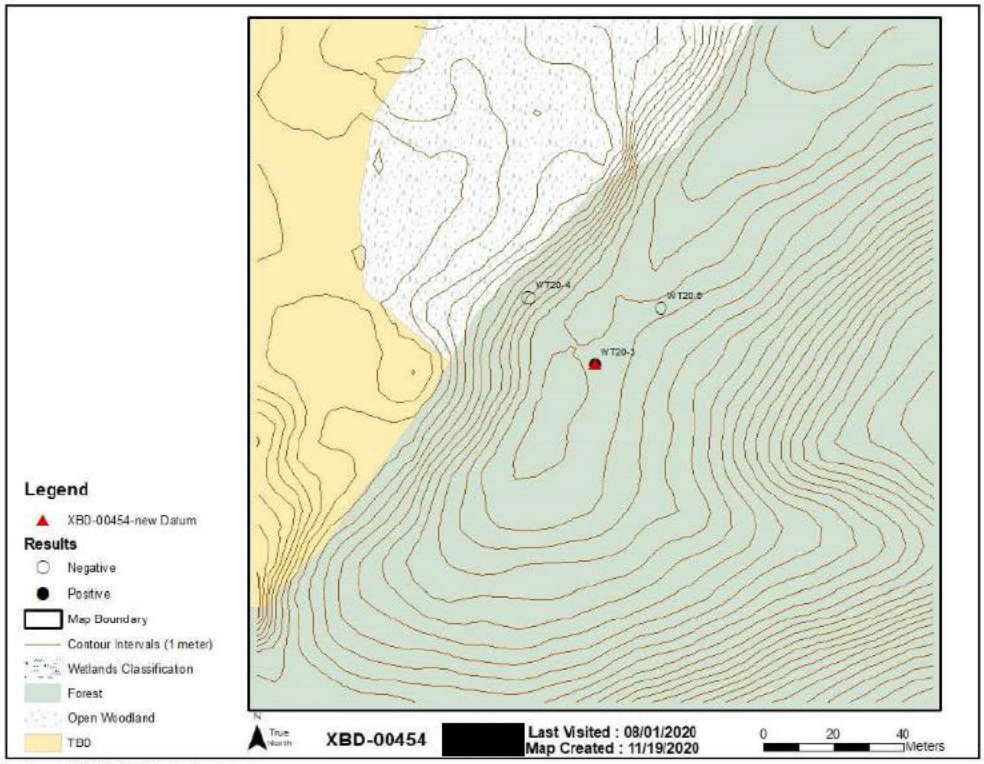
29. **Location Information** (Decimal Degrees, NAD 83 Datum):
[redacted]

30. **Attach a portion of appropriate Aerial Photograph and U.S.G.S Quad Map** or detailed sketch map showing the location of the site relative to surrounding natural landforms, water bodies and/or city or town landmarks. (Either include it in the space provided or attach in a separate file).



Caption: XBD-00454 site map

Caption: XBD-00454 in relation to Bear Lake and Delta Creek.

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31. **Summary Artifact Tables** (Insert table that notes artifact type, material, count, and any notes, including associated date ranges, if appropriate). Replace representative table if appropriate.

Accession Number	Object Name	Material Type	Description	Lot Count	General Provenience	Northing	Easting
UA2020-108-1	1	Gray chert	Flake	1	WT20-1, 20-40 cmbs	7098585	5376354

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32. **Representative Site Photos** (Caption photos, note direction taken, add as many as necessary)

Caption: Site Overview looking northwest

Caption: Site overview looking northeast with Bear Lake in the background