Fort Wainwright Cultural Resources Annual Report, 2018

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December 2019

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
FNSB – Fairbanks North Star Borough
GRTA – Gerstle River Training Area
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
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
USARAlaska – US Army 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, ensures that installations 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.

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 was enacted. This plan is articulated to project managers, training supervisors, and the public, and is included in all Memorandums of Agreement (MOA) 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 APRA 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, and State Historic Preservation Officers, partners of the national historic preservation program. Both Section 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. Fort Wainwright complies with these regulations through annual reporting of undertakings covered in the 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 2018.

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. In recent years, Fort Wainwright's Cultural Resources Manager (CRM) has begun a consultation process with Range Control at Fort Wainwright and Donnelly Training Area (DTA) to establish 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 archaeological and historic survey efforts, in conjunction with Section 106 reviews, in the areas of Fort Wainwright's 1.6 million acres considered most critical.

This report summarizes all cultural resources fieldwork conducted on Fort Wainwright training lands during the 2018 field season. 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 2018 that required Section 106 consultation under the NHPA and had previously been described in detail in individual letters to the State Historic Preservation Officer (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 2018 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 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. Determinations of eligibility for historic and archaeological sites, structures, and trails are then reported. Finally, this report summarizes all areas surveyed and archaeological or historic sites 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. This report is organized into sections by Fort Wainwright training areas.

All archaeological fieldwork was conducted by 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 and Environment

Fort Wainwright consists of the Main Post cantonment area and associated training lands, which include three main areas: the Yukon Training Area (YTA), the Tanana Flats Training Area (TFTA), and the Donnelly Training Area (DTA). These are located in central Alaska, north of the Alaska Range in the Tanana River Valley (Figure 1). The post lies 120 miles south of the Arctic Circle near the cities of Fairbanks and North Pole in the Fairbanks North Star Borough. Fort Wainwright has the northern continental climate of the Alaskan interior, characterized by short, moderate summers; long, cold winters; and little precipitation or humidity (Natural Resources Branch 2002).

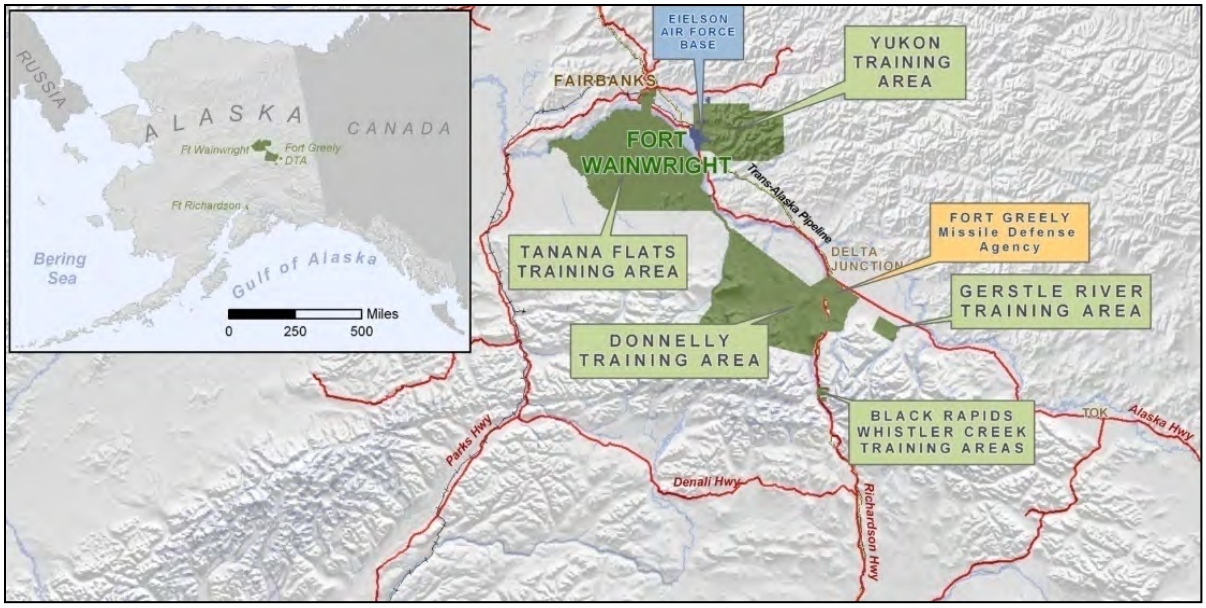


Figure 1. Fort Wainwright training lands.

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 Fort Wainwright's training lands. Interior Alaska's ice-free status during the last glacial period provided a corridor connecting the Bering Land Bridge and eastern Asia to North America. This allowed small bands of nomadic peoples to colonize Alaska, and the rest of the continent, and began a period of habitation in Interior Alaska that has persisted through the entire Holocene, the arrival of European traders in the late 1810s, the Klondike Gold Rush of the late 19th and early 20th centuries, and the military development of the Interior during the middle of the 20th century. Fort Wainwright's cantonment and 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-mananged 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, adjacent to Army training areas (Broken Mammoth [Holmes 1996; Yesner et al. 1999], Chugwater [Lively 1996], Donnelly Ridge in DTA [West 1967, 1996; Donnelly Ridge], 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 Fort Wainwright 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 (circa 8,600 years old) (Bever 2001), Lucky Strike (Potter et al. 2007) (c. 8,500 years old), Blair Lakes FAI-00044 in TFTA (c. 8,000 years old) (Esdale et al. 2017), Delta River Overlook (several components) (Potter et al. 2018), Delta Creek XBD-00110 (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; Andrews 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; McFadyen Clark 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; Andrews 1977; Andrews 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 protohistoric 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, 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 and subsequent military build-up in Alaska. 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). These locations began as Lend-Lease bases and cold weather testing centers, but soon expanded with the increased need for military support during World War II and later during the Cold War.

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 Fort Wainwright. 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.

In 1935, Ladd Field was authorized as a small cold weather testing station that was envisioned by General H. H. Arnold. Construction began 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 some 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 1985, Ladd Field was listed on the NRHP. Ladd Field was designated a National Historic Landmark for the themes of cold weather testing; aircraft repair, supply depot, and air transfer hub; and transfer point for aircraft and cargo transiting the ALSIB route to the Soviet Union.

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 2001, the Ladd AFB Cold War Historic District was determined eligible for the NRHP. It was determined to be significant for its role in the early Cold War missions of the 46th/72nd Air Reconnaissance unit and for the fighter intercept squadrons stationed here.

In 1960, Ladd AFB was transferred to the Army and was 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 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. Since 1986, Fort Wainwright's mission has been to support worldwide 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. 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 700 known archaeological sites, one traditional cultural property, and six archaeological districts. Seventy-two sites are eligible for the NRHP, 526 sites have not been evaluated, and 102 additional sites have been determined ineligible for the NRHP. Of the eligible or un-evaluated sites, 9 are historic and 589 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 Colorado State University's Center for Environmental Management of Military Lands (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 AFB Historic District, World War II, or the Cold War.

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 150 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-one archaeological sites have been identified in YTA. Seventeen of the sites have been determined not eligible for listing in the NRHP and four 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 CEMML archaeologists in 2002. Over 200 new sites were located in the Texas Range, Donnelly Drop Zone, and Eddy Drop Zone in the first half of the decade. In recent years, 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 develoment, however, the archaeology of DTA West is still poorly understood and represents a gap in USAG Alaska's inventory of cultural properties.

To date, 475 archaeological sites have been identified within DTA. Fifty-four sites have been found to be eligible for the NRHP, and 67 were found not eligible. An additional 354 sites remain to be evaluated. Historic archaeology sites are poorly represented in this region, with only four currently known to exist. The Donnelly Ridge Archaeological District (XMH-00388) encompasses Denali Complex sites, 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). Future archaeological studies in DTA will concentrate 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.

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, site Banjo yielded an AMS date of 5720 ± 50 BP from hearth charcoal associated with a microblade component (Esdale et al. 2015, Robertson et al. 2008). A late prehistoric Athabascan occupation is recognized at several sites (e.g., 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 at site XBD-00272 (Robertson et al. 2009). 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. Three of these sites have been found ineligible for the NRHP (TNX-00006, 00007, 00008). These were relocated in 2013 (Esdale et al. 2013b). In 2015 and 2016, surveys of the landform found an additional seven sites. 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 forarchaeological. CEMML archaeologists surveyed small portions of GRTA in 2011 through 2013. Three prehistoric sites (XMH-01359, XMH-01494, and XMH-01509) are known from this training area. One site, XMH-01494 was determined ineligible in 2013 (Esdale et al. 2013b). 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

The Ladd Field National Historic Landmark (NHL) consists of 20 contributing buildings and four contributing structures. Located within the boundaries of the NHL are six noncontributing buildings and two noncontributing structures. The NHL has undergone few changes within the last year, with projects including small undertakings, such as the installation of an electrical switch box, that were determined to not affect the historic character of the NHL. The Ladd Air Force Base Cold War Historic District consists of 37 contributing buildings and structures, with 30 noncontributing buildings and structures. Within the boundaries of the Historic District, one major undertaking occurred in 2018 with the construction of a new Unmanned Aerial Vehicle hangar at the southwest corner of the district, completed in November of 2019.

2018 Cantonment

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place on the cantonment in 2018.

Section 106 Activities

Section 106 consultation took place for two undertakings on buildings or structures on the cantonment in 2018. The SHPO concurred that neither minor repairs to the Bailey Bridge nor the placement of a Relocatable Arms Room within the boundary of the NHL would be adverse effects on 14 August and 4 September, 2018, respectively.

Building and Structure Surveys

No building and structure surveys were conducted on the cantonment in 2018.

Section 110 Archaeological Surveys

No new archaeological surveys were conducted on the cantonment in 2018.

Newly Discovered Archaeological Sites

No new archaeological sites were found on the cantonment in 2018.

Archaeological Site Monitoring and Site Protection Measures

One site was monitored on the cantonment in 2018 (Table 1, Figure 2). FAI-00040 is in good condition and there are no signs of disturbance on the surface. A road is located at the north end of the site. Road expansion or clearing outside the current limits could impact the archaeological site. Site avoidance during road maintenance is the only current protective measure. No further site management is recommended at this time. A current stite photo is provided in Appendix 2.

Table 1. Sites monitored on Fort Wainwright's cantonment in 2018.

Training Area	AHRS #	Last Visit	2018 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction
114	FAI-00040	2012	6/19/2018	no	vegetated, road cut on north side of feature	yes: road maintenance

Figure 2. Sites monitored on Fort Wainwright's cantonment in 2018.

Determinations of Eligibility

One building on the Fort Wainwright cantonment outside of the Ladd Field NHL was found not eligible for the NRHP, Building 4161. In addition, one structure, the Bailey Bridge (FAI-02138) was found eligible for the NRHP by the Army and the SHPO on 22 February 2018.

FAI-01786
Building #: 4161, McKinley Elementary School
Latitude: [redacted]
Longitude: [redacted]
UTM: [redacted]
Determination of Eligibility: Not eligible

Building 4161 was originally known as the McKinley Elementary School. It is located at 4161 8th Street, Fort Wainwright, Alaska (Figure 3). This building was constructed in 1952 and was originally owned by the U.S. Air Force at Ladd Air Force Base, during the Cold War era. It

currently functions as office space for the US Army Corps of Engineers. USAG Alaska finds building 4161 not eligible for the NRHP because it lacks the integrity due to the loss of original materials, design, and association.

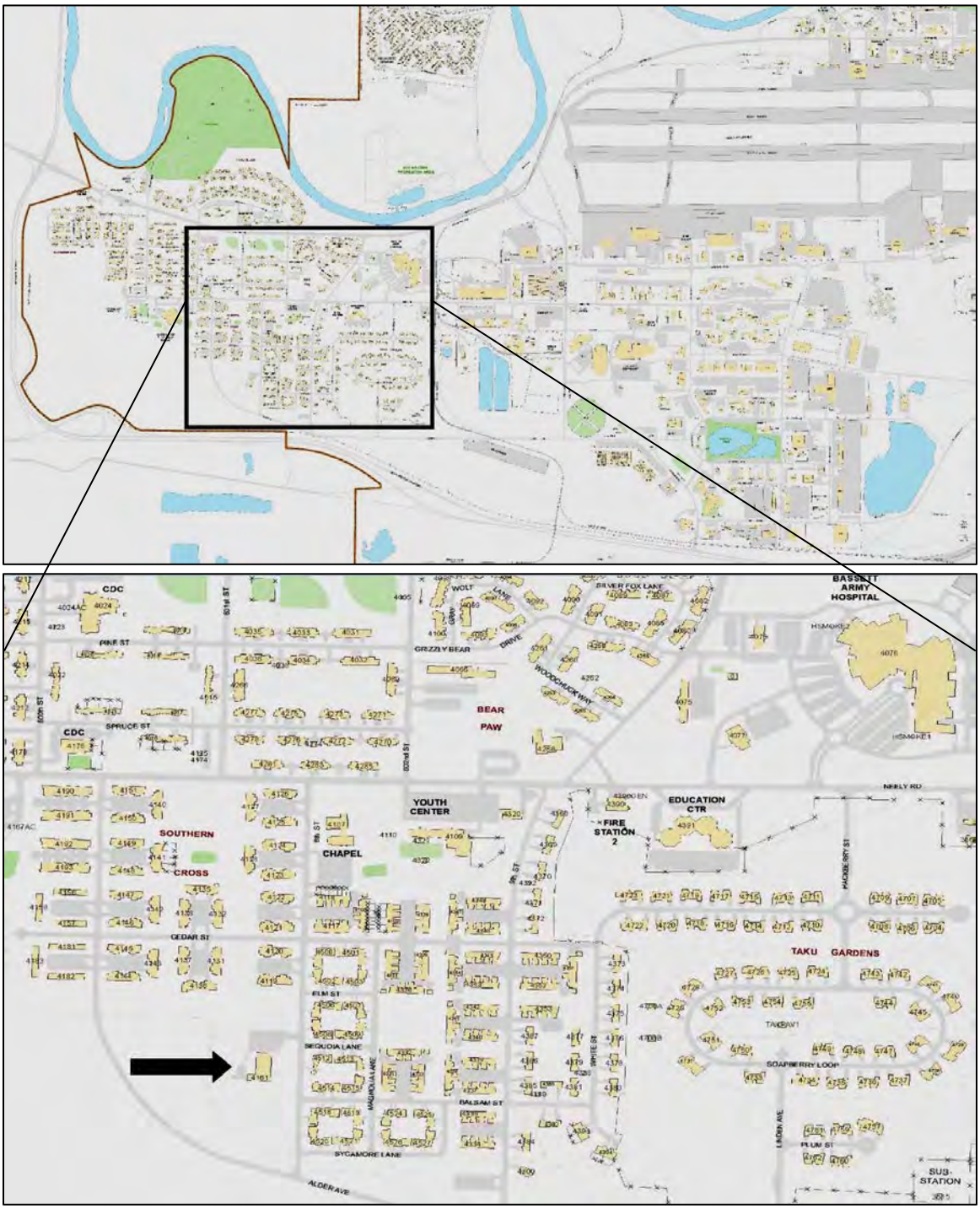


Figure 3. Location of building 4161 on Fort Wainwright.

Architectural Information

HABS Documentation: N/A	
Arch. Style: Military vernacular	Stories: 3
Ancillary Structure: N/A	Plan: Rectangular
Structural System: Other	Roof Shapes: Flat
Other Materials: N/A	
Exterior Wall Materials: Concrete/EIFS/metal	Roof Features: N/A
Special Features: N/A	
Foundation Materials: Concrete	Roof Materials: Metal

Summary: Building 4161 is as two-story Mid-Century Modern, Curtain Wall style, concrete and brick, flat-roofed, "L-shaped" building constructed in 1952 and designed by Lee S. Linck. For the majority of its existence, Building 4161 served as the McKinley Elementary School. It later served as the headquarters of the 9th Army Band after 1989 and, as of 2017, serves as office space for the US Army Corps of Engineers. Building 4161 has two original significant character defining features, the first being the large groups of windows above the entrances on the north and east elevations. The second character-defining feature is the brickwork around the east elevation entrance. Brickwork is very rare in Alaska, and its unaltered state in this building is important. The building is outside the boundaries of the Ladd Field National Historic Landmark and the Ladd Air Force Base (AFB) Cold War Historic District and, though the building has supported the families of the service members of Ladd Air Force Base and Fort Wainwright, it did not directly contribute to the Cold War missions of either the United States Air Force or Army. Building 4161 lacks the integrity necessary for inclusion on the NRHP due to the loss of original materials, design, and association.

Architectural Description: Building 4161 is a one and a half story, concrete and brick, "L-shaped" building (Figure 4). The roof is flat with a continuous ribbed corrugated metal fascia and concrete foundation (Figure 5, Figure 6). Though the original building was nearly rectangular, an addition was constructed after 2009 (Figure 7, Figure 8). The building measures approximately 152' north-south by 65' east-west and 17'6" from ground to roofline. The addition to the building is on the southwest corner and measures approximately 34'10" north-south by 43' east-west. Building 4161 sits on a concrete pad foundation (Figure 9, Figure 10).

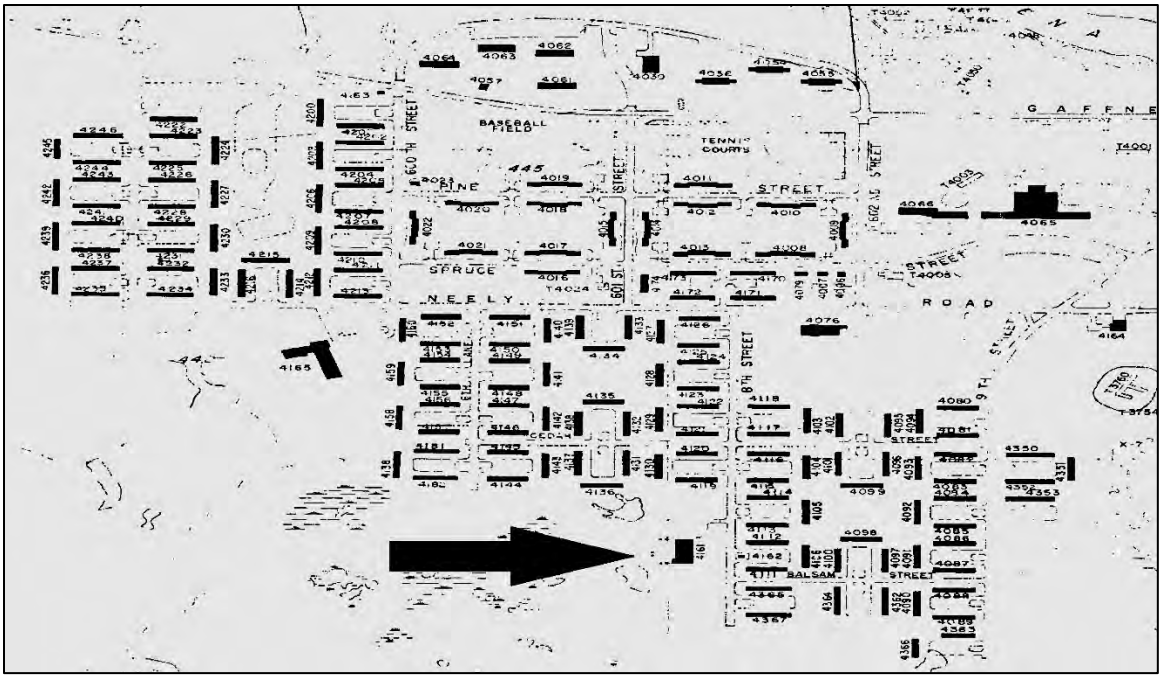


Figure 4. Building 4161 in Ladd Airfield map, 1958.

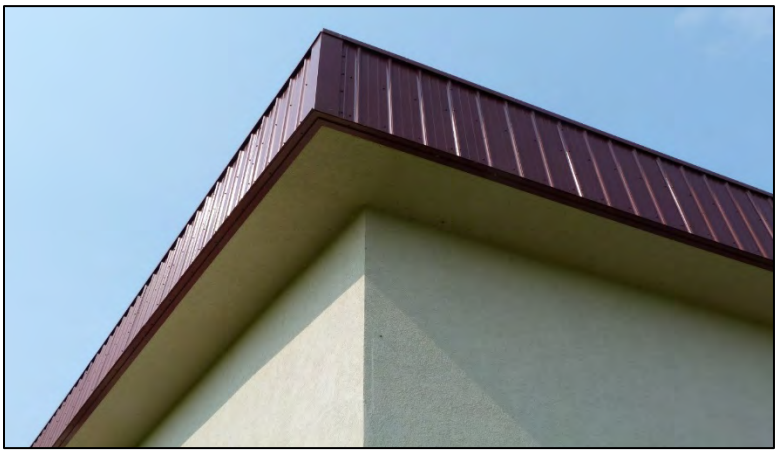


Figure 5. Building 4161, roofline, July 2017.

Figure 6. Building 4161, roofline. ca. 2009.

Figure 7. Building 4161, southwest corner, ca. 2009.

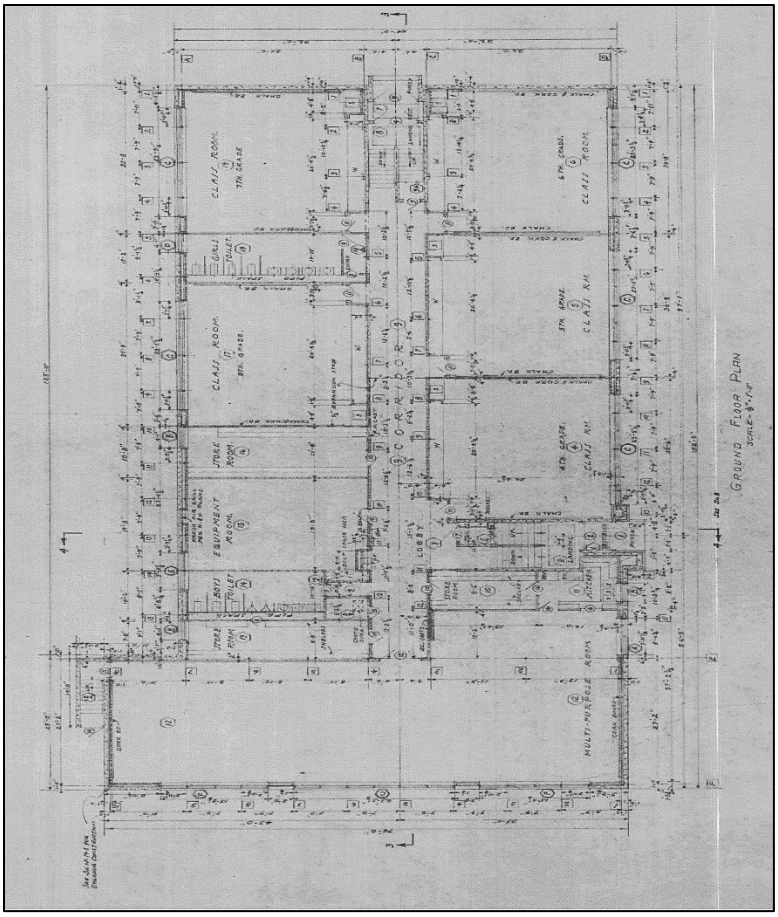


Figure 8. Building 4161, floor plan, 1952.

Figure 9. Building 4161, west elevation, ca. 2009.

Figure 10. Building 4161, foundation, July 2017.

The north elevation of Building 4161 is covered in sandblasted plywood-patterned architectural concrete with one entrance and one bay of windows (Figure 11 through Figure 14). The north elevation entrance is a set of outward opening, half-glass, steel paneled, double doors (). Each door measures approximately 6’8” high by 2’9” wide with a 1” frame, the windows measure approximately 2’9” high by 2’2” wide and contain diamond-patterned, wire mesh glass. This type of glass is popular for schools as it prevents large shards of glass from causing injury in the event that the window is broken. The entry is recessed approximately 3’10” creating a weather protected porch with a raised concrete slab and single step, approximately 1’ from the ground (Figure 15, Figure 16). Above the doors is a concrete porch roof extending approximately 2’ from the building and measuring approximately 6’ thick. Above the porch roof is a transom bay of four fixed, horizontal, rectangular thermopane windows, measuring approximately 1’8” high by 6’ wide, with metal frame and horizontal muntin (Figure 17). The second from the bottom window-light of glass is covered in a gold mirrored window film. Like the doors, the windows on the north elevation are recessed approximately 3’10 from the face of the building. Horizontal linear recess divides the façade of the building in two, approximately 3’ from the ground.

Figure 11. Building 4161, north context, July 2017.

Figure 12. Building 4161, north elevation, July 2017.

Figure 13. Building 4161, north elevation, ca. 2009.

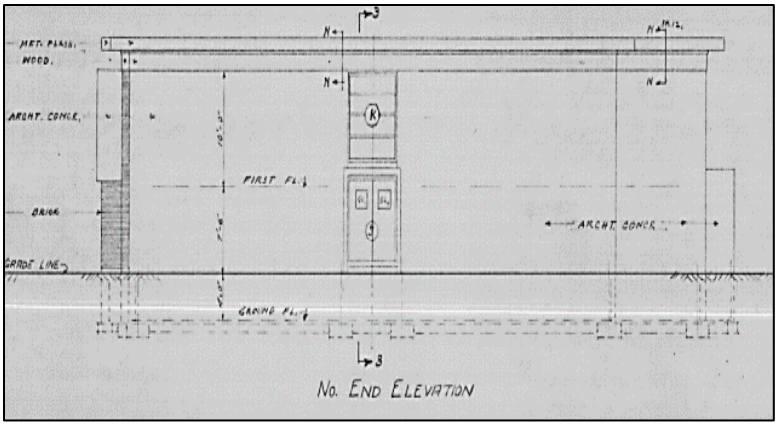


Figure 14. Building 4161, north elevation, 1952.

Figure 15. Building 4161, doors. July 2017.

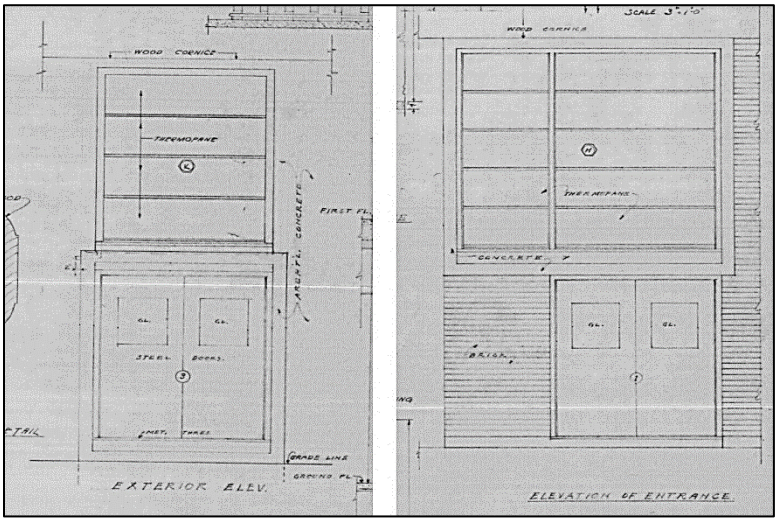


Figure 16. Building 4161, north entrance (left) and east entrance (right), 1952.

Figure 17. Building 4161, north entrance windows, July 2017.

The east elevation of Building 4161 has one entrance of the same steel, half glass, double-doors described above (Figure 18 through Figure 21). Above the doors is a large ten-light, asymmetrical, metal and thermopane window (Figure 22, Figure 23). The right side of the window consists of the same horizontal rectangular, vertically stacked windows present on the north elevation. To the left of the large windows is a set of five horizontal rectangular, vertically stacked windows about half the length of the larger windows. The windows are divided by one mullion and horizontal muntins. Two of the large window-lights and four of the smaller window-lights are covered in gold mirrored window film. The windows, like the doors are recessed into the building. Unlike the windows on the north elevation, the east elevation windows are surrounded by a concrete frame protruding from the building approximately 2'9". This concrete frame serves as a porch roof. The entrance and the above window is located left of center of the elevation. Framing the entryway are two, protruding, red brick mould. The brickwork on the right side of the entryway protrudes away from the building approximately 1' and measures approximately 4' north-south. The brick on the right side of the entryway extends from the ground, nearly to the roofline, thus also bordering the right side of the concrete frame of the entryway windows. The left side brickwork protrudes away from the building approximately, 2'5" and measures 4' north-south. Unlike the brick on the right side, the brick on the left extends only to the height of the concrete patio roof/window frame. The brickwork on the right side of the entryway supports the concrete window frame, and helps to emphasize the asymmetrical nature of the east elevation. The east elevation has two other styles of windows that are combined into sets of ribbon windows. The both of these types of windows measure approximately 2'6" high by 3'8" wide with a 2" metal frame. These rectangular windows are either fixed or awning with an interior window-light with sliding areas allowing for access to the latches. The ground level windows on the north half of the elevation are in a configuration of three sets of windows is four fixed and two awning windows. The

second floor sets of windows are, from north to south, five fixed with two awning, seven fixed with two awning, two fixed and one awning, and two fixed and one awning. The ground level windows of the southern half of the elevation are a single fixed and a fixed with an awning window (Figure 24, Figure 25). The second floor windows consist of two fixed and one awning, and one fixed (Figure 26). All of the windows on this elevation are set approximately 11” into the wall, and there is a metal window sill.

Figure 18. Building 4161, northeast corner, July 2017.

Figure 19. Building 4161, east elevation, July 2017.

Figure 20. Building 4161, east elevation, ca. 2009.

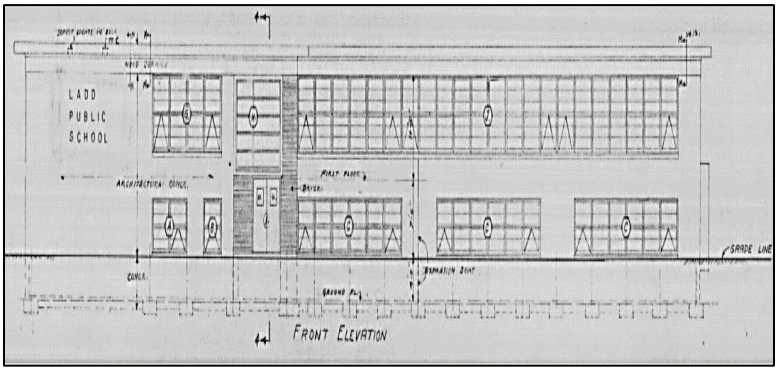


Figure 21. Building 4161, east elevation plans, 1952.

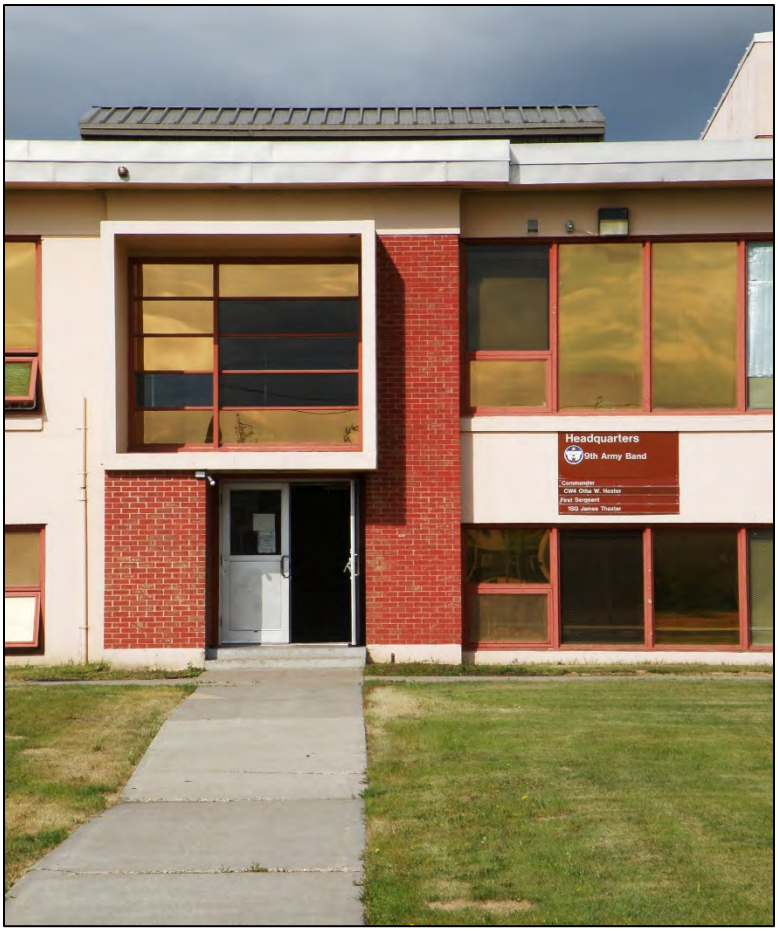


Figure 22. Building 4161, east entrance. ca. 2009.

Figure 23. Building 4161, east entrance windows, July 2017.

Figure 24. Building 4161, first floor windows. ca. 2009.

Figure 25. Building 4161, first floor windows, July 2017.

Figure 26. Building 4161, second floor windows, July 2017.

The south elevation of Building 4161 consists of two rows of windows (Figure 27 through Figure 32). The ground floor and second floor windows are the same as those described on the east elevation. The ground floor configuration, from east to west, consist of three fixed and one awning, four fixed and two awning, and three fixed and one awning window. The second floor window configuration, from east to west, consists of five fixed with two awning, and six fixed with two awning windows. The current southern elevation extends to the west beyond the original design. The extension is only one story high and thus has a roofline lower than the rest of the building. The southern elevation has an access ladder to roof.

Figure 27. Building 4161, southeast corner, July 2017.

Figure 28. Building 4161, southeast corner, ca. 2009.

Figure 29. Building 4161, south elevation, July 2017.

Figure 30. Building 4161, south elevation, ca. 2009.

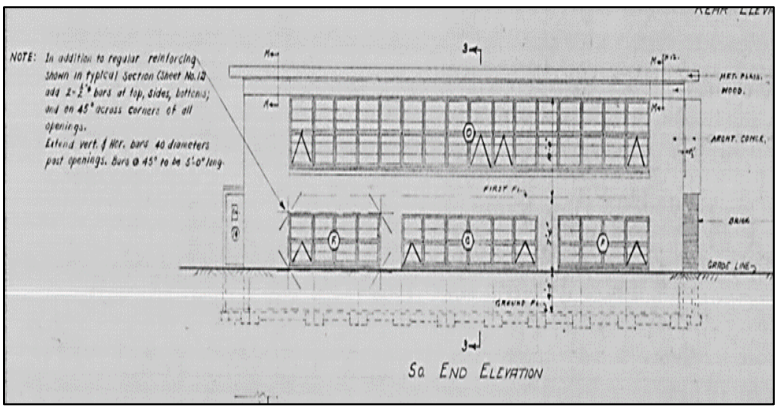


Figure 31. Building 4161, south elevation, 1952.

Figure 32. Building 4161, south roof access, July 2017.

The west elevation can be seen in two sections. (Figure 33 through Figure 38) The first section is the northern portion, and the second, the southern new construction that forms the L-shape. The northern section of the western elevation has the same windows described above. The ground floor configuration, from north to south, is four fixed with two awning, a single fixed, four fixed with two awning and an awning window. The second floor configuration, from north to south, consists of five fixed with two awning, a single fixed, six fixed with two awning, six fixed with two awning, a fixed and final fixed window. The extension of the western elevation is approximately 34’ north-south by 43’ east-west. This extension includes a loading dock and three doors. The loading dock measures approximately 34’10” north-south by 5’ east west, wrapping around the north side of the extension and continuing 14’feet. The loading dock is approximately 2’8” high. The east end of the loading dock has a set of stairs extending 3’6”. The loading dock has metal pipe handrails surrounding the majority of the dock. Centered on the western elevation of the loading dock is an aluminum overhead door, measuring approximately 9’ high by 9’ wide, and inset 1’3” into the wall. To the north of the overhead door is a single metal personnel door with window, that swings outward and to the north. The personnel door measures approximately 6’8” high by 3’ wide and the window of the door measures approximately 1’8” high by 5” wide. On the north side of the building extension is a set of outward swinging, metal, personnel double-doors, each measuring approximately 6’8” high by 3’ with a 1’8” high by 5” wide window.

Figure 33. Building 4161, southwest corner, July 2017.

Figure 34. Building 4161, southwest corner, ca. 2009.

Figure 35. Building 4161, west elevation, July 2017.

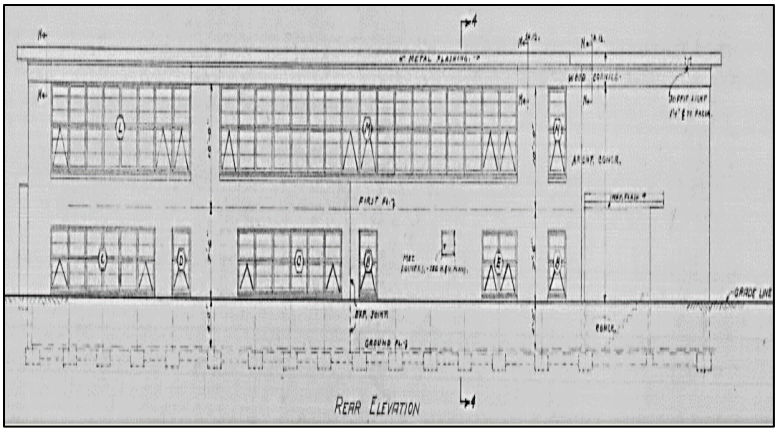


Figure 36. Building 4161, west elevation blue print, 1952.

Figure 37. Building 4161, south west extension, July 2017.

Figure 38. Building 4161, southwest corner, ca. 2009.

Historical Context

Following the end of World War II in 1945, the alliance between the United States and the Soviet Union rapidly deteriorated. This worsening of relations came to be known as the Cold War, and lasted from approximately 1947-1991. The Cold War can be viewed in three stages. The first stage, 'onset and containment' generally falls during the Truman administration (1946-1952) and is associated with foreign policy themes of limiting the spread of communism, and is marked by events such as the Berlin Airlift (1948), the detonation of the Soviet Union's first atomic weapon (1949), and the Korean War (1950-1953). On September 18, 1947, President Harry S. Truman signed the National Security Act, which, among other things, established the United States Air Force as a separate entity from the United States Army. The Cold War ended the idea of geographical safety for the United States, as technology advanced the capabilities of bombers and missiles. As a result the Department of Defense (DoD) adopted a strategy known as the 'Polar Concept' which established the arctic as a theater of military operation. With this concept in mind, the Alaskan Command (ALCOM) adopted the 'Heartland' strategy which resulted in the disposal of outlying posts such as many of those located on the Aleutian Islands in order to concentrate resources, equipment, and military power. Over the next two years, the Army and Air Force divided resources, equipment, and personnel into their new roles. The new 11th Air Force's Air Defense Command became the Alaska Air Command (AAC) and was responsible for operations in the north of Alaska. During this transition, the Army's Ladd Field became Ladd AFB. ALCOM was based out of Anchorage, while North Sector Command of the AAC was based at Ladd AFB.

During the early period of both the Cold War, and subsequently the early period of Ladd AFB, the Air Force was tasked with several different missions including, reconnaissance, arctic

research, development of polar navigation, arctic topography, air defense and the testing of the effects of cold weather on equipment and personnel. Though the base belonged to the Air Force, the Army reestablished a presence in 1948 with a ground defense force from the 2nd Infantry Division. Among the advancements to come out of Ladd AFB the proof concept for aviation navigation based on a grid system rather than magnetic navigation. This yielded a flight over the North Pole, provable by scientific instrumentation, which took place on March 1, 1947 by the 46th/72nd Reconnaissance Squadron.

As the Cold War escalated in the Eisenhower administration the 'massive retaliation' period took hold for the remainder of the 1950s. This period was dominated by the position that an attack by the Soviet Union upon the United States or an allied country would result in a nuclear response upon the Soviet Union itself. The development of the Intercontinental Ballistic Missile (ICBM) in 1954 meant that nuclear missiles could strike with little warning. This in turn caused a shift in the requirements of the Air Force and its needs for Ladd AFB.

In 1952, the 5001st Composite Wing of the Air Force, based out of Ladd AFB, took over roles of operations, administration, and logistical support for a series of forward stations around Alaska including the Air Control Warnings (AC&W), Distant Early Warning Line (DEW Line), the White Alice Communication Network (WACS), ice station research, Air Force geophysics research, as well as expanded roles in air defense, tactical ground support, fighter escort, search and rescue, arctic training and base defense provided by the Army's 4th Infantry Division-through 1956. In order to accommodate the expansion of its supporting missions, Ladd AFB underwent a period of facility building and increased personnel numbers.

After 1957, the increased role of ICBMs and the launch of satellites, the roles of AC&W, the DEW Line, and White Alice were downsized, and budget reductions caused the Air Force to evaluate its position in Alaska. In 1947, the air field known as "Mile 26", located southwest of Ladd, became its own entity and was renamed Eielson AFB. As Ladd AFB expanded in the 1950s, so too did Eielson, including an expanded runway to accommodate the gargantuan B-36 'Peacemaker'. While Ladd was responsible for air defense, search and rescue, and logistics, Eielson was responsible for Strategic Air Command (SAC) bomber and refueling operations. Given the closeness in proximity to one another, the Air Force decided to consolidate its resources in order to save money. As a result, the process to abandon Ladd AFB and relocate critical operations to Eielson AFB and Elmendorf AFB outside Anchorage began in 1959. By 1960, the Air Force stopped flying out of Ladd, and announced that the Army would once again take control of the post. The task of inventorying all 671 buildings on the installation fell to the 5060th Engineering Squadron. On January 1, 1961 the Army officially took possession of Ladd, and renamed the installation Fort Wainwright.

The early years of the Cold War, 1947-1961, caused many international and national changes. These shifts in foreign policy, and the military support of those policies, resulted in new requirements and roles for various arms of the Department of Defense. The Air Force was forced to face these changing requirements and adapt their resources, equipment, and personnel to the evolving geopolitical climate. Ladd AFB was not only directly impacted by these changes, but was a critical component in the facilitation of supporting the efforts of a variety of offensive and defensive missions and capabilities.

The larger historical context of the Cold War directly caused Ladd Air Field to transform into Ladd AFB and resulted in a significant permanent installation. This shift is particularly evident in the transition from temporary structures established in World War II to permanent buildings. The shift from temporary to permanent meant that the base was able to accommodate not only a larger military role but also a larger civilian population. In the late 1940s and early 1950s Alaska was viewed as significantly underdeveloped and thus was unable to fully perform its strategic mission. As a result, increased military necessity fostered the building of support systems for families including recreational facilities like hobby shops, theaters, libraries, and bowling alleys, and housing.

The construction boom and increased population of service members and their families had a huge impact on the local economy. Over a billion dollars was pumped into the Alaska Territory for construction alone. Civilian contractors, under the direction of the Army Corps of Engineers performed most of the construction. The building on Ladd and Eielson and the increased military population, in turn, grew the township of Fairbanks into a city. Important infrastructure elements such as the Richardson Highway, Alaska Railroad, and the CANOL Pipeline all benefited from the impact of the Cold War upon the Air Force and its relationship with Ladd and Fairbanks. The success of these impacts, in turn, fostered advances in reconnaissance, search and rescue, cold weather testing, medical science, and polar navigation.

Context of School Architecture in Fairbanks: School construction throughout the Fairbanks area fit within larger national trends, reflecting the influences of educational theory and modern architecture upon each other. The Old Main School [FAI-00244], located at 800 Cushman Street, in downtown Fairbanks, was built in 1932. Old Main represents the first example of a modern concrete school in the Alaska Territory and embraces a design style that Cutler terms the “citadel of mass education” (Cutler 1989, NRHP 90001472). The Art Deco, three-story construction of Old Main closely modeled that of the nearby courthouse and post office located at 250 Cushman Street, and represents the impressive nature of publicly funded, Great Depression-era buildings, of ‘American’ architecture on the mostly one-story, wood construction, landscape of the Alaska Territory (Old Federal Building, NRHP 78003422).

The growth experienced in the early Cold War period in Alaska, and in particular Fairbanks, also resulted in the construction of many new schools. As Amy Ogata explains, “the public school, as an agent for national renewal and the cultivation of democracy, has long been a cultural symbol of American aspiration” (Ogata 2008:562-591). The local military presence of Ladd and Eielson Air Force Bases, met the challenges of growth and countering Communism through construction of five schools in the first decade of the Cold War: Aurora and McKinley Elementary Schools (1952), Birch [FAI-01315] and Taylor Elementary Schools (1956), and Eielson Jr. High School [FAI-01147] (1958). This trend of building schools took place at the same pace in Fairbanks itself with the construction of: Denali, Nordale, Hunter [FAI-02419], Barnette, and Joy [FAI-01985] Elementary Schools, and Lathrop High School. As demand for more space and shifts in the educational needs of the region changed, schools continued to be built and additions were constructed on existing schools including, Aurora (1954), Birch (1964), and Chena [FAI-01789] (1964).

These schools all represent the significant shift in educational theory and architectural style to Modernist or International styles and desire for flexible educational space. As Ogata explains, “unlike most earlier public school buildings, postwar schools exploited steel framing, plate glass, and low rise horizontal massing” (Ogata 2008:562-563). Ogata continues, “the notion of school as an enchanted experience of discovery, a core belief of progressive education, had implications for both pedagogy and architecture” (Ogata 2008:575).

The pinnacle of the Modernist style in Fairbanks schools is Joy Elementary School (1961), located at 20 Margaret Ave, Fairbanks. Joy Elementary was designed by Lee S. Linck of the Alaska Architecture and Engineering Company (AA&E). Linck, grew up in Fairbanks, graduated from the University of Alaska-Fairbank in 1940. In 1945, Linck, who served in the Army Corps of Engineers at Ladd Field, started the AA&E with two partners. By 1949 Linck was the sole owner. In over 35 years, Linck’s AA&E conducted hundreds of projects. Not all of the projects were new construction, many repair and renovation jobs were performed for the Fairbanks North Star Borough (FNSB) School District, Fort Wainwright, and Eielson AFB. Linck’s company designed 28 schools throughout the country. Additionally, he designed Aurora, Birch, McKinley, Chena, and Pennell Elementary Schools.

Joy Elementary is a circular building with a domed and gabled roof, with large glass windows. The building had 14 classrooms around a large multipurpose room and was designed with future expansion in mind. Linck’s design for Joy Elementary was recognized by the American Association of School Administrators and the American Institute of Architects, and was an award winning design at the 1962 World’s Fair Expo in Seattle.

Joy Elementary represents several key concepts important to our contexts. First, Joy represent the peak of Modernist style architecture in Fairbanks. The exterior walls embrace the curtain wall style, bringing in a substantial amount of windows, heavily prevalent all of the Fairbanks area schools of the 1950s, however, the sharp lines, protruding roofline, and symmetry provide an early look at New Formalism. “Hexagonal, pentagonal, and round clusters of school rooms break up the forbidding massiveness of yesterday’s schoolhouse and invite the pupil to enjoy education” (Educational Facilities Laboratory 1960:33). At the same time, this mix of architecture rejects Brutalism, a style intended to offer postwar utopian optimism. Brutalism’s use of blocky, unpainted concrete is claustrophobic, cold, intimidating in feel, uncompromising and fixed in form and utility. This was the complete opposite of the educational theory that the modern school was intending to be. According to the American Institute of Architects, “in most modern school buildings, and especially those that are thoughtfully and skillfully designed, color often makes strongest impact on first-time visitors of any physical parts of the building” (Pawley 1962:102). As Ogata states, “the progressive values that expanded in the postwar era, especially at the primary level, endowed the material and special qualities of the postwar school have with social and psychological importance” (Ogata 2008:575). This emphasis on the importance of a school looking and functioning in an ‘inviting’ way is present with the postwar school buildings in Fairbanks.

McKinley in Context: In 1959, Alaska achieved statehood. In the State Constitution, borough schools were called to organize into school districts. The organization was generally ignored until the 1963 Mandatory Borough Act. The new legislation forced the creation of the FNSB School District (FNSB School District 1989).

Building 4161, McKinley Elementary, was an early example of Modernist architecture, and its success almost certainly influenced later designs by Linck’s AA&E. However, by 1956 the prevailing ideas about the functionality of schools was shifting away from those incorporated into McKinley. Shifting national trends of school design favored attractive environments, with self-contained classrooms, lower ceilings, and no corridors (McClurkin 1964).

The schools of Ladd AFB/Fort Wainwright were not incorporated into the school district until 1975, however, this did not stop collaboration between military-associated and non-military-associated schools from taking place. In 1973, Birch Elementary School, a Ladd AFB school, was the first school in Fairbanks to have special education classes. In 1975, approximately half of the student population of Fort Wainwright Elementary School were from non-military families from the Badger Road area of Fairbanks. Also in 1975, a fire destroyed the interior of Chena Elementary School forcing the district to move students to McKinley and Aurora until 1976. The Chena Elementary fire was likely arson and linked to two smaller previous school fires from

earlier in the year at North Pole Elementary and Lathrop High School. No one was ever officially charged in the 1975 school fires. In 1986, Joy Elementary was shut down as a result of asbestos, reopening in 1989. While Joy was closed, the students moved McKinley Elementary, earning the nickname "McJoy". The school district was also forced to adapt to a large influx of students in 1990 and bus students off post, much to the frustration of parents (Arctic Warrior 190:28). While the city of Fairbanks and the military post of Fort Wainwright are very different entities, the various examples of collaboration between schools, on and off post, represent the important codependent nature of these two communities- events or tends impacted both sides of the gates.

By the end of the Cold War, the FNSB School District was facing two significant issues. The first was a rapidly expanding population due to the addition of the 6th Light Infantry Division at Fort Wainwright, and aging facilities in need of significant and expensive renovations. The second edition of 1989 *Base/Post School Building Survey* (1990) stated:

> All five existing Fort Wainwright schools have a combined DOE (Department of Education) capacity of 1957, which is insufficient for 5 year projections. However, because of the many code and program deficiencies at McKinley Elementary, this facility is now closed and not considered a suitable candidate for continuing use by the School District. The combined DOE capacity for the four remaining schools is 856. In other words, the Ft. Wainwright schools are now at 94 percent of their DOE capacity, and by 1994-1995, will be at 129 percent, based on full-time equivalent numbers. Unless additional educational space is provided, the District will have to consider one of the following options in order to meet the demands of a growing student population: Double shifting, Portables, Redistricting and bussing to Ticasuk Brown Elementary (USKH 1989:104).

Of greatest concern was McKinley Elementary, the oldest of the on post schools. In fact, the 1989 *Base/Post School Building Survey* report estimated that if all the proposed renovations for McKinley Elementary were undertaken it would cost $1.7 million (USKH 1990:27). The report further concluded that, "McKinley Elementary has serious programmatic deficiencies including narrow corridors, small classrooms, inadequate multi-purpose room, and a non-handicapped accessible split level floor plan. Additionally, it is in the worst condition of any school surveyed. It is not considered to be worthy of renovation" (USKH 1990:27). As a result, the School District decided to close McKinley Elementary and turn the building over to the Army.

McKinley Elementary, no longer serving as a school, became known by its building number, 4161. Building 4161 served as a facility for the 9th Army Band beginning in 1990. (Figure 37) After 2009, Building 4161 received several significant alterations, most significantly new

windows and a new roofline. As a result of downsizing of the military and Army restructuring, the 9th Army Band was repositioned to Joint Base Elmendorf-Richardson near Anchorage, in October of 2016. Building 4161 sat empty until it was used as office space, beginning in the summer of 2017. In 2018, the building was relabeled as Building 4511.

Alterations

Table 2. Alterations on Building 4161.

Year	Description	Comments
2007	Loading dock initial survey constructed	BND-00037-J
2009	Repair and replace roof	DPW-00165-9J
2009	HVAC installation	BDN-00001-0J
2010	Replace heat exchanger/boiler	BND-00017-0J
2011	Paint interior	DPW-10051-1J
2011	Loading dock construction approved	
2011	Replace windows, doors, interior renovations, roof alterations	
2012	Replace flooring	BND-00013-9J
2017	Repair doors ADA	DPW-17085-7J
2017	Repair for admin space	DPW-17086-7J
2017	Repair exterior	DPW-17093-7J

Statement of Significance

Building 4161 was a significant school in the FNSB School District for several reasons. First, for nearly forty years, McKinley supported the larger Fairbanks community by taking in students from the overflowing, damaged, or unsafe schools from around Fairbanks. Building 4161 was significant to the history of education in Alaska, and in particular Fairbanks.

Secondly, the lessons learned from the McKinley Elementary building would be implemented into the other schools of Linck's firm. A decade later, Linck's willingness to learn and adapt earlier designs and features yielded the award-winning design of Joy Elementary. Therefore, even though the building does not represent an example of Linck's work during his period of significance, the building does represent one of the earlies examples of Modernist architecture in Fairbanks.

The most important character defining features of the building, the windows above the north and east elevation entrances, and the brickwork around the east elevation entrance are very rare architectural features in the interior of Alaska. The size and number of windows, configured in such long ribbons is also rare for Alaskan architecture as they do not retain heat in the harsh winter, and allow for overpowering amounts of sunlight and heat in the long days of summer. The replacement of the windows attempted to minimize these effects by installing

smaller windows but maintain some historical character by maintaining ribbons of windows. The attempt to minimize the visual impact on the building is noted but significantly adverse. The building has also suffered adverse effects as a result of the addition of the loading dock, despite taking into account the Secretary of the Interiors Standards by placing the addition on a non-character defining elevation because it has a different roofline, removed one entrance and added three more, and significantly altered the generally rectangular shape of the building and turning it into a clearly "L-shaped" building. The historical significance of the building as a Cold War era school has undergone minimal negative effects but has not operated as a school since the end of the Cold War. The building is an early example of the AA&E of Fairbanks, designed by George A. Crosman and Lee Linck, but despite the later significance of Linck for his design of the Joy Elementary School in Fairbanks, Building 4161 does not represent his later period of significance and is therefore not eligible under Criteria C for the association with him. According to National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation:

A property is not eligible as the work of a master, however, simply because it was designed by a prominent architect. For example, not every building designed by Frank Lloyd Wright is eligible under this portion of Criterion C, although it might meet other portions of the Criterion, for instance as a representative of the Prairie style.

NRHP Criteria

__**YES**__A. Property is Associated with events that have made a significant contribution to the broad patterns of our history.

__NO__B. Property is associated with the lives of persons significant in our past.

__**YES**__C. Property embodies the distinct characteristics of a type, period, or method of construction.

__NO__D. Property has yielded, or is likely to yield, information important in pre-contact or contact period history.

NHL Criteria

_NO__ 1. Property is associated with event that has made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of the United States history.

_NO_2. Property is associated with the life of an important person nationally significant to the history of the United States.

_NO_ 3. Property represents some great idea or ideal of the American people.

_NO_ 4. Property embodies the distinguishing characteristics of an architectural type specimen exceptionally valuable for a period, style, or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction.

_NO_ 5. Property is composed of integral part of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture.

_NO_ 6. Property has yielded or may likely yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Property has yielded or may likely yield data affecting theories, concepts and ideas to a major degree.

Areas of Significance

Alaskan Architecture, Mid-Century School.

Period of Significance: Cold War (1949-1989)

Cultural Affiliation: Euro-American

Level of Significance: Low

Criteria Considerations: A and C

Research Potential: Low

Integrity

Location: Maintains integrity. The location of Building 4161 has not changed since its construction, (Figure 3, Figure 4).

Design: Degraded integrity. Building 4161 has undergone significant alterations that have resulted in adverse effects on its design. The building has lost the two superstructures. (Figures 18 and 19) These two superstructures were not original to the building, as seen in the blueprints, their removal is not an adverse effect. (Figure 20) The roof of Building 4161 has been replaced. Like the original, the current roof is flat with a metal fascia, however, the new roof is taller, with a higher fascia. The material of the fascia is still metal, however the flat sheet metal has been replaced with vertically ribbed corrugated metal. (Figures 23 and 24) Replacement of the style of metal covering the fascia is not a significant alteration as it is not

permanent, but the expansion of the fascia is a significant alteration. Though difficult to notice without a comparison image, and visually there is little impact on the architectural style of the building as a whole, the replacement of the roof resulting in a higher roofline is a significant change to the historical fabric of the building.

Most significant is the replacement of the majority of the windows on the primary elevation, particularly the east (Figures 7, 8, 11, 12, 18, 19, 31-36). Like today, the original window configuration for Building 4161 was rectangular windows, grouped in ribbons, and present on the first and second floors. The current windows are significantly different than the originals in number, size, configuration, type, and material. The original windows were vertically rectangular ribbon windows. There were eighteen, single-light, fixed wood framed picture windows on the second floor, and eight vertical rectangular, two-light, wood framed, fixed over awning style windows. The fixed over awning style windows consisted of a larger rectangular window-light, making up about two-thirds of the entire window, over a smaller awning window of about one-third of the total window. The original first floor windows are also different in number, sized, material, style, and configuration. The first floor originally had thirteen, single-light, fixed, vertically rectangular, wood-framed, picture windows. The first floor also had eight, two-light, wood-framed, fixed over awing style windows. The fixed over awning windows appeared to be divided approximately half and half between a fixed upper-light and the awning window-light on the bottom. Many of the first floor windows on the east, south, and west elevations were diamond pattern, wire-mesh glass, and the new windows are tempered glass. The first floor windows were also shorter than the second floor windows. The alterations changed not only the windows themselves, but altered the façade of the building. The new windows are significantly shorter than the originals, resulting in significant building infill. The new windows also alter the original long ribbon configuration by adding four irregularly spaced, vertical infills. These infills cause significant adverse effects on the building. Though they do not alter the overall architectural style of the building, there is significant adverse effects on the historical fabric of the building as the materials, shape, style, configuration, and number have all changed, as well as the significant infill that has taken place around the windows. The south elevation has experienced significant adverse effect alterations similar to the east elevation. Like the east elevation, the new windows are smaller, of different material, style, configuration and result in about half the physical window space of the original.

More significantly than the window and roof alterations is the addition of the loading dock on the west elevation, extending the south elevation approximately 40’. (Figures 21 and 22) The addition to the building did take into account the architectural style and materials of the building, but is only one story and thus causes a second, lower roofline. The though the addition was constructed on the non-character defining western elevation, the south elevation

could be considered character defining and the loading dock extension does cause a significant change to the elevation. The addition changes the building from a nearly rectangular building to an “L-shape”, causing an adverse effect to the building. The western elevation, though not a character defining elevation, has undergone the same adverse alterations seen on the east and south elevations. Of particular note are the changes to the roof, replacement of windows with those of different size, material, style, and configuration, building infill to accommodate the new smaller windows, and most significantly the addition of the loading dock. The loading dock addition adversely effects the elevation by adding a second, and lower, roofline, extends the elevation to the west, removes the original entrance, adds a set of double doors on the north elevation of the loading dock, and adds an overhead door, personnel door, and a raised concrete dock.

Setting: The setting of Building 4161 retains much of its integrity, though alterations have taken place. To the north of the building is a green space bordered by an early Cold War era, family housing neighborhood. To the south and west is, with the exception of a bike path, an undeveloped area of marsh and woods. This landscape is generally original. To the east is the most significant alteration to the setting of Building 4161. The early Cold War era family housing, still present to the north, has been replaced with new family housing. The replacement of old housing with new housing has a minimal adverse effect on Building 4161, as the landscape maintains its original usage.

Materials: Building 4161 maintains much of its material integrity. While the new windows have replaced wood frames with metal, and this causes a significant adverse effect, the vast majority of the materials used for the construction of 4161 are still intact. The fascia has been replaced, and though the change in style, the material is still sheet metal.

Workmanship: The workmanship of Building 4161 generally maintains its integrity. The alterations to the building, including the loading dock addition, are consistent with early Cold War construction.

Feeling: The feeling of Building 4161 maintains its integrity. The building is still located in at the edge of family housing neighborhoods and thus maintains the feeling of a Cold War era suburb.

Association: Building 4161 has lost some association with Fort Wainwright as it ceased to be a school in 1989, and was subsequently turned into the headquarters for the 9th Army Band and late office space for an installation tenant.

Summary

Building 4161 is a Mid-Century, early Cold War era, one and a half story, Mid-Century Modern, Curtain Wall style, concrete and brick school, with a flat roof. The building has had significant adverse effects to it with the replacement of the roof, the replacement and infill of windows, and loading dock addition to the west elevation. The most important character defining features of the building, the entrances on the north and east elevations, are un-altered and maintain their window features and present a rare example of brickwork in the interior of Alaska. These two character defining features are significant to the architectural history of Alaska. Building 4161 is significant locally and at the State level for its role in larger historical trends in education. Building 4161 is not closely linked with the historic district or historic landmark. However, the lack of integrity of association, original materials, and design negate a positive eligibility determination as per National Register Bulletin 15.

Geographical Data

Acreage of Property: Building footprint 5731 square feet = 0.136 acres.

Boundary Description: Building 4161 is bordered by an open field and playground to the north, south of the Southern Cross housing area. To the east is 8th street and family housing. To the south is a wooded area and Alder Avenue. To the west is a wooded area and Alder Avenue.

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 39). 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.

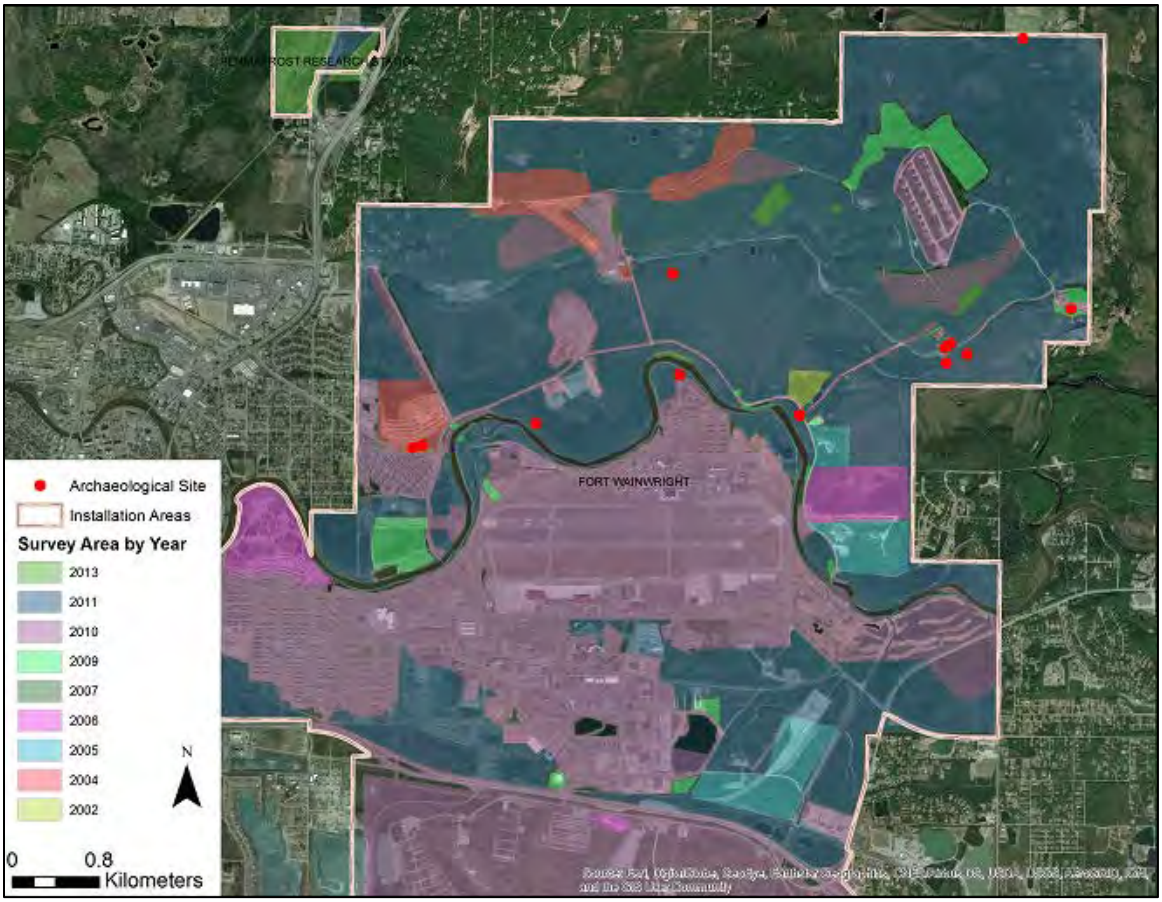


Figure 39. Archaeological sites and surveys on the cantonment, all years.

2018 Tanana Flats Training Area

NAGPRA and ARPA Activities

No activities related to NAGPRA took place in TFTA in 2018. Under ARPA Permit 2016-2 and FW-MOA-1409, a Texas A&M University team led by Kelly Graf continued excavations at the late Pleistocene and Holocene McDonald Creek site located northeast of Blair Lakes. During the 2018 field season, Graf opened no new excavation squares, but continued to excavate the squares opened in 2017, a 21-m^2 block in total. During the first three weeks, the team removed the 2017 back dirt from the block, cleaned the surface of the excavation from 2017 field work, and worked to remove the 5-10 cm of archaeologically-sterile sediment to expose the component 1 layer and living floor (the deepest and oldest archaeological living surface). During the final three weeks of the 2018 field season, they carefully excavated cultural component 1 in 19 m^2 of the 20 m^2 block. During the 2018 field season approximately 10,000 lithic artifacts, 1000 bones, and several fire-cracked rocks and charcoal samples were found. Two fire-hearth features, one possible dwelling feature, and one bone trash pile/pit feature associated with component 1 were also discovered. Plans for 2019 include completing component 1 excavations and continuing down through the profile to make sure no other older cultural layers exist in this block.

Section 106 Activities

No undertakings requiring section 106 consultation took place in TFTA in 2018.

Building and Structure Surveys

Twenty-seven buildings and structures were identified and surveyed in the TFTA in 2018 (Table 3, Figure 40). Most of the structures on the training lands do not have Master Planning building numbers. Only those buildings that are thought to be greater than or approaching fifty years old were given AHRS numbers. Buildings and structures are identified by “ID” in Table 3. This number is also used by the Natural Resources coordinator and Alaska Fire Service to identify potential assets to protect from wildfire on the training lands. One site in TFTA met this criteria (FAI-02693).

Table 3. Buildings and structures surveyed in TFTA in 2018.

ID	Training Area	Location	Latitude/ Longitude	Name	Building #	Description	AHRS
91	201	North of Alpha Impact Area	[redacted]	Wooden Observation Tower	N/A	Four story, square plan, wooden tower with ladder leading to platform at the top. Tower is deteriorated.	FAI-02693
94	201	North of Alpha Impact Area	[redacted]	Metal Observation Tower	N/A	Four story, square plan, metal tower with railed platform.	No
95	206	Clear Creek Butte	[redacted]	Fiberglass box, solar panel & plastic barrel	N/A		No
96	205	Wood River Buttes	[redacted]	Fiberglass box, solar panel & plastic barrel	N/A		No
97	208	East of Alpha Impact Area	[redacted]	Metal Observation Tower	N/A	Four story, square plan, metal tower with railed platform.	No
98	207	East of Blair Lakes Impact Area	[redacted]	Metal Observation Tower	N/A	Seven story, square planned.	FAI-01560
99	207	East of Blair Lakes Impact Area	[redacted]	Trespass cabin	N/A	Former cabin is now a pile of boards.	No
120	203	Willow Creek	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No
121	205	Wood River	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No
122	202	Clear Creek & Salchaket Slough	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No
123	201	Salchaket East	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No
124	208	Five-Mile Clear Creek	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No

236	207	Clear Creek Assault Strip	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No
237	206	Blair Lakes Complex	[redacted]	Metal Structure, new air traffic control tower	N/A	Half story, rectangular plan, concrete slab foundation, balloon framed, corrugated metal siding, shed roof clad in corrugated metal. Attached to air traffic control tower.	No
237	206	Blair Lakes Complex, near main building	[redacted]	Metal Fuel Pump Structure	USAF 451	One story, rectangular plan, concrete slab foundation, balloon framed, corrugated metal siding, shed roof clad in corrugated metal. Main façade does not have siding, left open.	No
237	206	Blair Lakes Complex	[redacted]	Main Building	N/A	Two story, irregular plan, concrete slab foundation, reinforced CMU/metal framed, CMU/metal siding, flat roof with BUR.	No
237	206	Blair Lakes Complex, southeast of main building	[redacted]	Small Metal Building	N/A	One story, rectangular plan, horizontal metal beam foundation, metal framed, sheet metal siding, gable roof clad in corrugated metal.	No
237	206	Blair Lakes Complex, near main building	[redacted]	Wood shed #1	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, gable roof clad in asphalt shingles.	No
237	206	Blair Lakes Complex, north of main building	[redacted]	Metal Storage Structure	N/A	One story, rectangular plan, horizontal metal beam foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
237	206	Blair Lakes Complex	[redacted]	Wood Shed #2	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, gable roof clad in asphalt shingles.	No
237	206	Blair Lakes Complex, by air	[redacted]	Wood Building	N/A	Half story, rectangular plan, concrete slab foundation, balloon framed, vertical	No

		traffic control tower				groove plywood siding, shed and gable roof clad in corrugated metal.	
237	206	Blair Lakes Complex	[redacted]	Air Traffic Control Tower	USAF 106	Three story, irregular plan, unknown foundation, metal framed, corrugated metal siding, flat and gable roof clad in corrugated metal and asphalt shingles.	No
289	206	North Fork Willow Creek, Bonnifield Trail	[redacted]	North Fork Willow Creek Bridge	N/A	Metal bailey truss system, water barrel foundation, plywood floor.	No
290	206	Willow Creek, Bonnifield Trail	[redacted]	Willow Creek Bridge	N/A	Metal bailey truss system, water barrel foundation, plywood floor.	No
291	206	Angie Crossing, Bonnifield Trail	[redacted]	Angie Crossing Bridge	N/A	Metal bailey truss system, water barrel foundation, plywood floor.	No
292	206	Salmon Loaf, near landing zone	[redacted]	Conex Building/ tower	N/A	Two story, rectangular plan, conex container structure.	No
293	206	Salmon Loaf & Clear Creek	[redacted]	Survival Cabin	N/A	Half story, unknown foundation, balloon framed, wood drop (shiplap) siding, gable roof clad in standing seam metal.	No

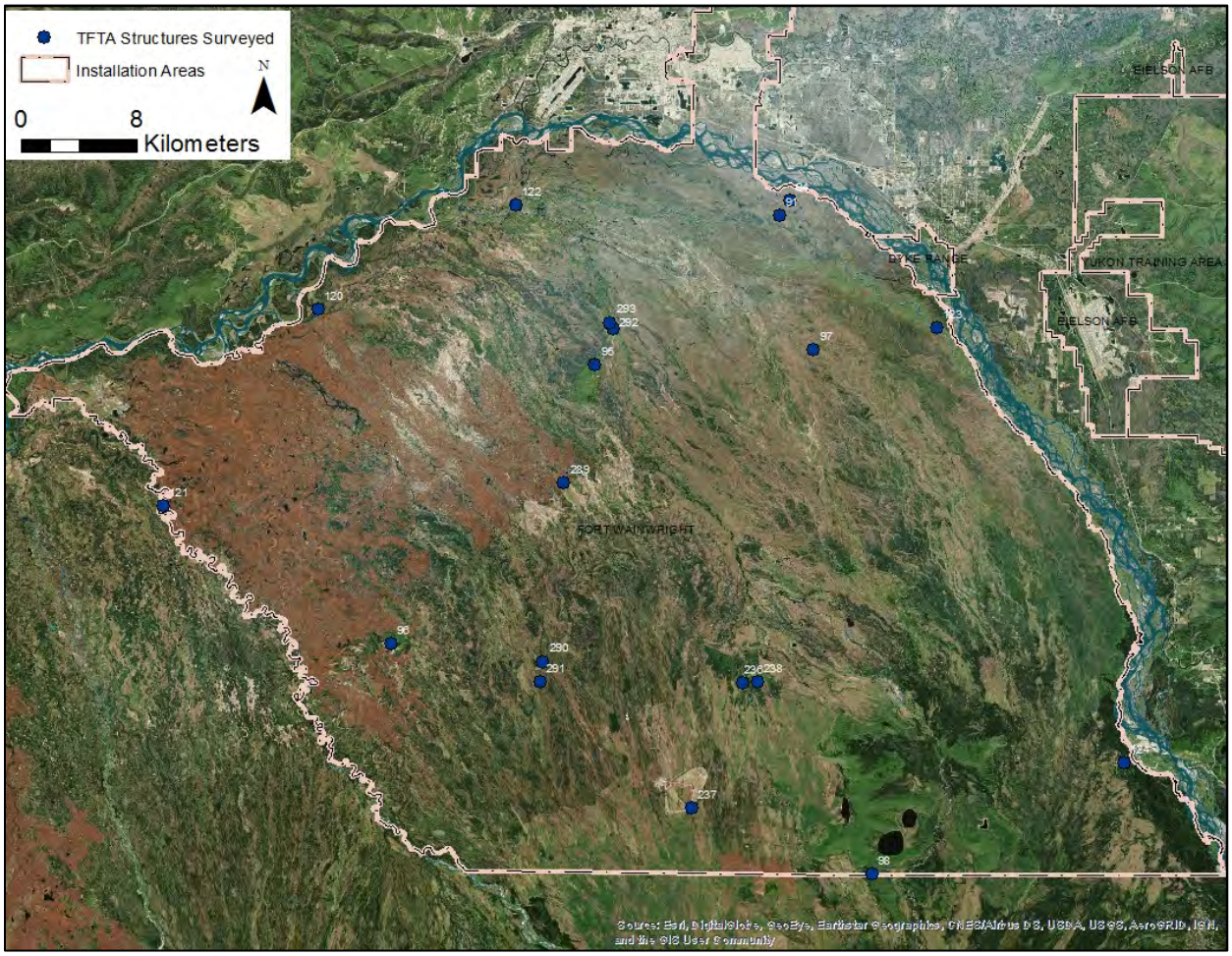


Figure 40. Buildings and structures surveyed in TFTA in 2018.

FAI-02693
Resource ID: 91
Resource Type: Tower
Building Number: N/A
Latitude: [redacted]
Longitude [redacted]
UTM: 474195 E, 7179406 N, Zone 6 (WGS 84)
Construction Date: Unknown
Determination of Eligibility: Not evaluated

This site is a tower structure located in the northern portion of the Tanana Flats, 7.6 km south of Fort Wainwright and 0.7 km north of the Alpha Impact Area (Figure 40). The tower is a

square plan, four plus-story, wood framed structure, with an unknown foundation (Figure 41). The structure is crossed braced and contains a metal railing surrounding the platform at the top. A centrally located metal ladder leads to the top of the platform on one of the façades. The tower is likely of military construction, but the date is unknown. The boards are experiencing weathering and the structure is deteriorated.

Figure 41. Overview of tower structure FAI-02693 in TFTA.

Section 110 Archaeological Surveys

In advance of potential future projects in TFTA by Range Control, a total of 14,290 acres of land were surveyed for archaeological sites and historic features during 2018 (

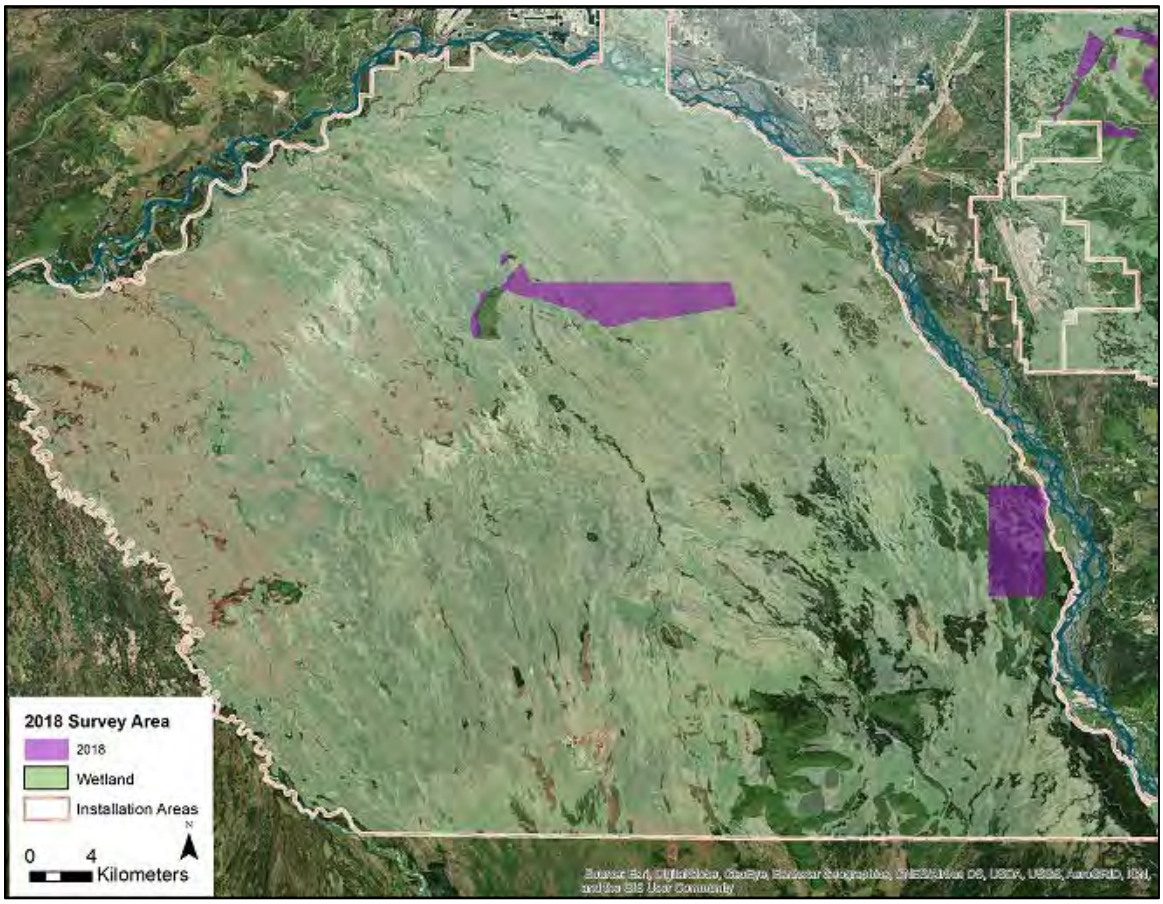


Figure 42). Surveys in 2018 were in support of the proposed Alpha Impact Area Firebreak (7340 acres) (Figure 43), the Clear Creek Buttes and Salmon Loaf bivouac development (424 acres) (Figure 44), and the of TA 208 boundary reconfiguration (6526 acres) (Figure 45). The majority of the area is covered by wetlands (United States Fish and Wildlife Service 2017). The Alpha Impact Area Firebreak location is covered 100% by wetlands and was surveyed by helicopter. The bivouac development projects are located at the base of two upland buttes. They were surveyed with pedestrian transects, but no shovel testing occurred in this area because the buttes themselves have already been extensively surveyed for archaeological sites. The TA 208 boundary reconfiguration area is located partially in wetlands and partially within the modern floodplain of the Tanana River, and was also surveyed by helicopter.

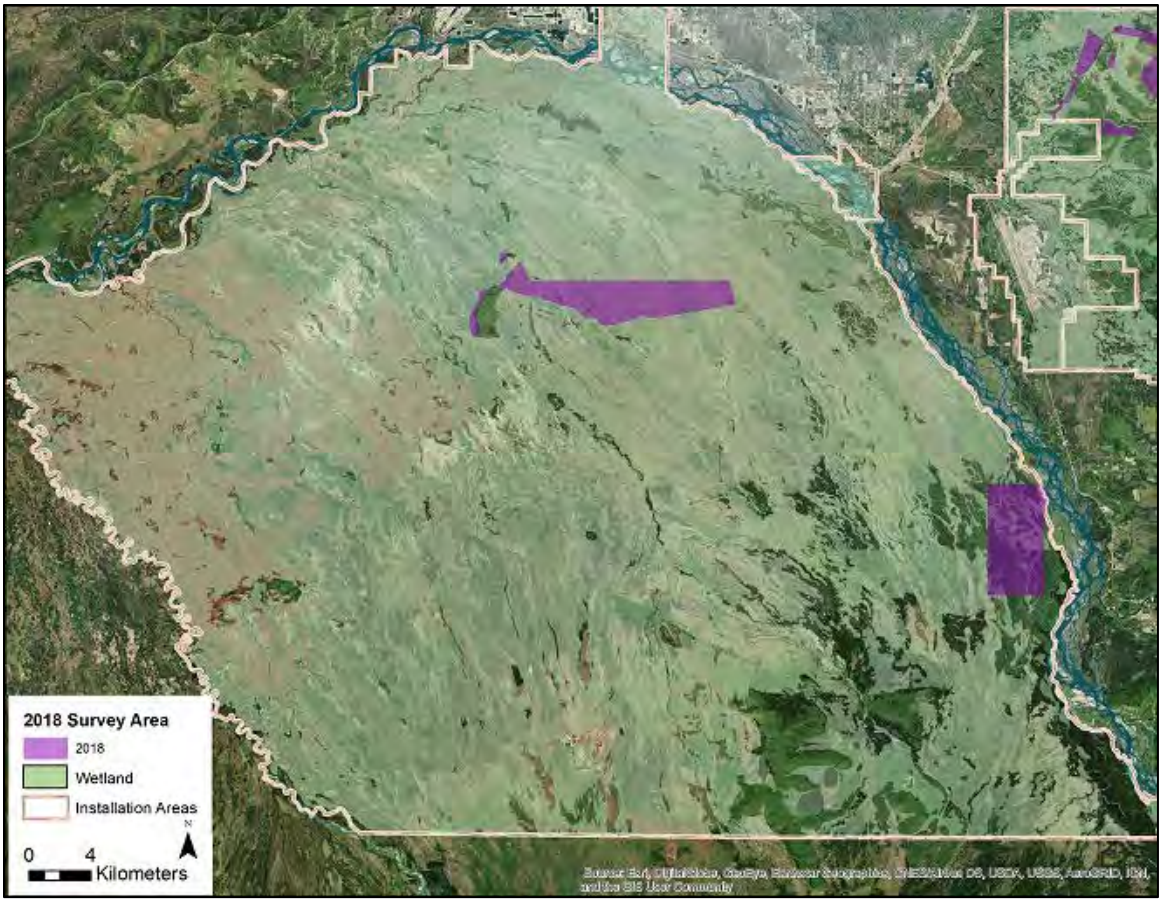


Figure 42. Archaeological surveys in TFTA in 2018.

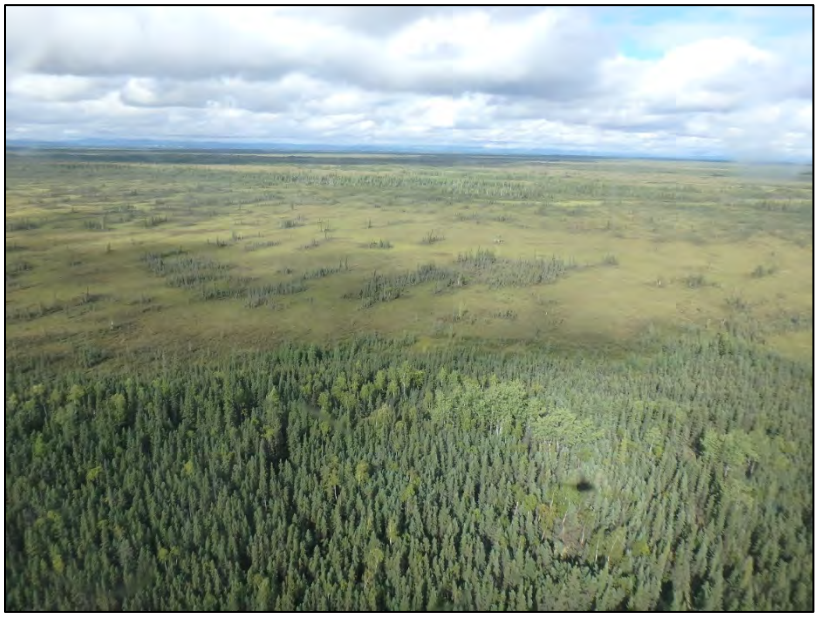


Figure 43. Wetland fens with black spruce of Alpha Impact Area survey area.

Figure 44. Base of butte in bivouac survey area.

Figure 45. Black spruce forested floodplain of the TA 208 reconfiguration survey.

Newly Discovered Archaeological Sites

No new sites were discovered in the TFTA during 2018.

Archaeological Site Monitoring and Site Protection Measures

Sixteen sites were monitored in TFTA in 2018 (Table 4, Figure 46). Five of these sites showed evidence of human disturbance including FAI-01357, FAI-01888, FAI-02095, FAI-02200, and FAI-02361. None of these sites has any existing protective measures and none have been evaluated for the NRHP. Only FAI-01357, FAI-02200, and FAI-02361 show significant disturbance and site evaluations are recommended within the near future. FAI-01357, located on the east side of Salmon Loaf Butte, is heavily used by the army for helicopter landings and take-offs as well as mortar firing into the Alpha impact area. Sediments are exposed in places by use of the site and a foot trail running down the centerline. Early investigations found diagnostic artifacts (including microblades) buried from 0-60 cm below surface. FAI-02200 is the Nelson Trapping Cabin. Current site photos are provided in Appendix 2.

Table 4. Sites monitored in TFTA in 2018.

Training Area	AHRS #	Last Visit	2018 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction
207	FAI-00194	2008	8/15/2018	yes	low vegetation over site	no
206	FAI-00195	2008	8/15/2018	no	low vegetation over site	no
206	FAI-00196	2008	8/15/2018	no	forested	no
206	FAI-00197	2012	8/15/2018	yes	previously cleared but vegetated	no
206	FAI-00198	1980	8/15/2018	no	burned tree fall, young growth	no
202	FAI-01357	2012	8/15/2018	no	previously cleared but vegetated, foot path through site, one structure on site	yes: continued regular foot traffic will expand and deepen the path
202	FAI-01888	2012	8/15/2018	no	forested with old ATV trail	yes: regular use of the ATV trail will cause erosion
202	FAI-01889	2012	8/15/2018	no	cleared firebreak, young growth	no
207	FAI-02043	2017	7/1/2018	no	forested	no
207	FAI-02050	2010	8/17/2018	no	burned area, low vegetation	no

207	FAI-02063	2012	8/14/2018	no	forested with exposure near terrace edge from erosion	no
207	FAI-02074	2010	8/15/2018	no	forested	no
202	FAI-02095	2010	8/15/2018	no	forested, recent use trash	yes: surface erosion from camping
206	FAI-02199	2012	8/15/2018	no	previously cleared but vegetated	no
202	FAI-02200	2012	8/17/2018	yes	deteriorated semi-subterranean cabin, recent clearing, fallen trees	yes: further deterioration of structure by rot, rust, and tree fall
207	FAI-02361	2016	8/14/2018	no	forested with ATV trail through the site, recent trash near trail	yes: heavy use of the trail by ATVs will result in further erosion

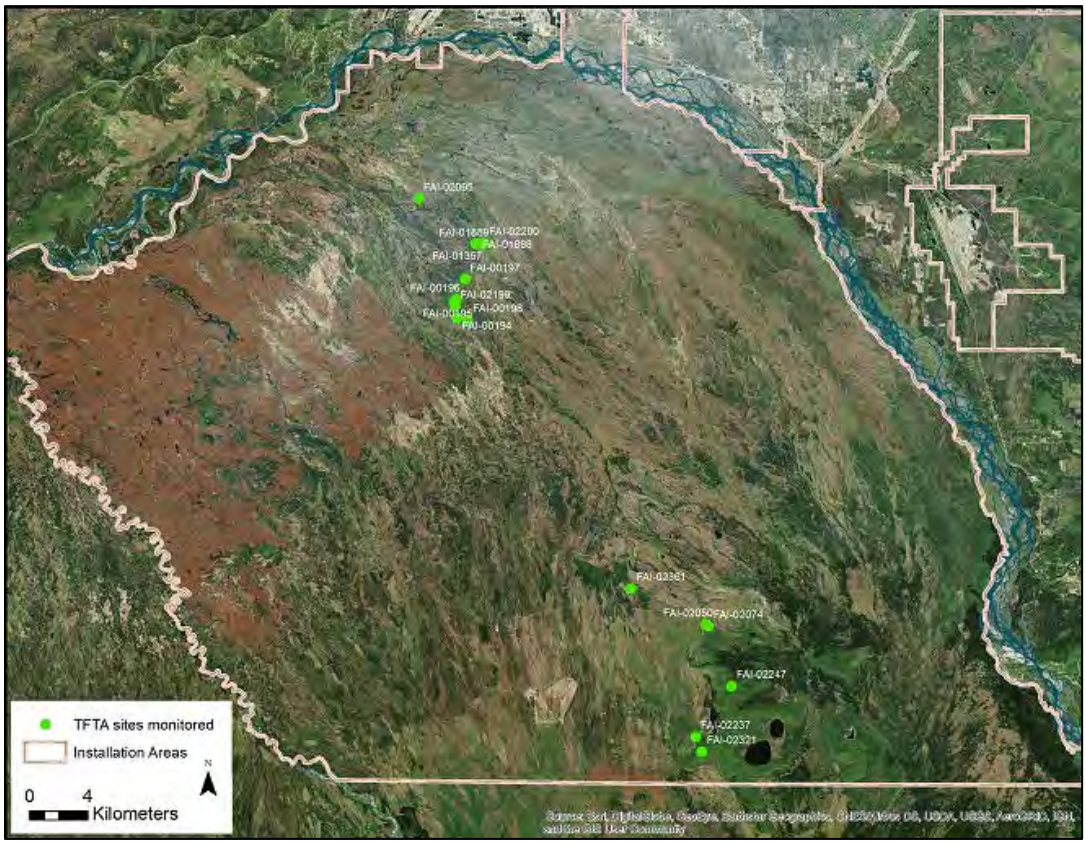


Figure 46. Sites monitored in TFTA in 2018.

Determinations of Eligibility

FAI-02368
Site: F-82H Twin Mustang 46-497 Crash Site
Latitude: [redacted]
Longitude: [redacted]
UTM: [redacted]
Determination of Eligibility: Eligible

Located approximately 5 miles southwest of Fort Wainwright is the crash site of an extremely rare North American Aviation F-82H Twin Mustang, tail number 49-497 (Figure 47, Figure 48. Though heavily damaged and looted, the crash site is eligible for the NRHP under Criterion A as possibly the last remaining example of the H model of the F-82, and as an F-82, represents the singular transitionary aircraft from piston-driven propulsion to the Jet Age. The site is important for significant developments in aircraft technology, and represents a significant doctrinal development, such an organization's response to changing technology and tactics. The site is also eligible under Criterion A for the significance of the aircraft type in the development of military aviation history.

Figure 47. F-82 during World War II.

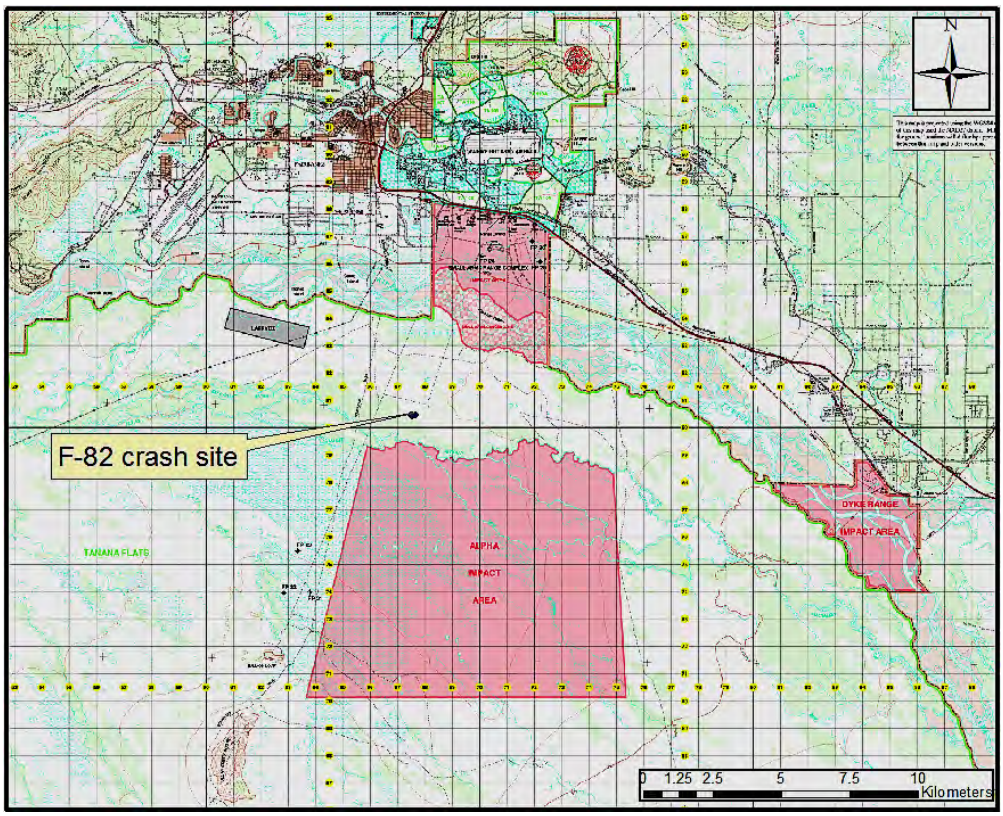


Figure 48. Location of F-82 crash site in TFTA.

Description

The crash site contains wreckage of a Cold War era, North American Aviation (NAA) F-82H Twin Mustang, long-range, ground attack, night fighter, tail number 46-497. The F-82 is a twin fuselage, twin cockpit, heavier-than-air, military plane with inward retracting landing gear. The aircraft was powered by two, outward turning, Allison V-1710-145 liquid-cooled, inline piston-driven engines. This particular F-82H variation is a special winterized version of the E variant. The E variant is an escort, all-weather day fighter re-designated in 1948 (Table 5).

The design of the F-82 was influenced by the North American P-51 Mustang, and the Northrup P-61 Black Widow. While the aircraft looks like a simple join of two P-51s, in reality the F-82 utilizes less than a quarter of the same parts. Of note, the F-82 has a longer length than the P-51. An additional characteristic of note is the center wing connecting the fuselages which also contains the standard six Browning M2 .50 caliber machine guns. The centrally located machine guns differ from the P-51 which has three guns in each wing.

Table 5. Specifications of the F-82 Twin Mustang.

Component	Description
Crew	2
Overall Length	42.42’ (12.93m)
Overall Width	51.25’ (15.62m)
Overall Height	13.85 (4.22m)
Weight (empty)	15,997 lbs (7,256kg)
Weight MTOW	25,951 lbs (11,771kg)
Max Speed	461 mph (742 kph, 401 knots)
Max Range	2,239 mi (3,604km)
Service Ceiling	38,898 ft (11,856m, 7.37mi)
Rate-of-Climb	3,770 ft-per-minute (1,149m/min)
Armament	Six .50 cal M2 Browning machine guns in center wing
Optional	Pod of 8 additional .50 cal machine guns, 4,000lbs bombs, 25 x 5” rockets

Statement of Significance

FAI-02368 is the crash site of an extremely rare North American Aviation F-82H Twin Mustang, tail number 49-497. Though heavily damaged and looted, the crash site is eligible for the NRHP under Criterion A as possibly the last remaining example of the H model of the F-82, and as an F-82, represents the singular transitionary aircraft from piston-driven propulsion to the Jet Age. The site is important for significant developments in aircraft technology, and represents a significant doctrinal development, such an organization’s response to changing technology and tactics. The site is also eligible under Criterion A for the significance of the aircraft type in the development of military aviation history.

NRHP Criteria

__**YES**__ A. Property is Associated with events that have made a significant contribution to the broad patterns of our history.

__NO__ B. Property is associated with the lives of persons significant in our past.

__NO__ C. Property embodies the distinct characteristics of a type, period, or method of construction.

__NO__ D. Property has yielded, or is likely to yield, information important in pre-contact or contact period history.

NHL Criteria

**YES** 1. Property is associated with event that has made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of the United States history.

_NO_ 2. Property is associated with the life of an important person nationally significant to the history of the United States.

_NO_ 3. Property represents some great idea or ideal of the American people.

_NO_ 4. Property embodies the distinguishing characteristics of an architectural type specimen exceptionally valuable for a period, style, or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction.

_NO_ 5. Property is composed of integral part of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture.

**YES** 6. Property has yielded or may likely yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Property has yielded or may likely yield data affecting theories, concepts and ideas to a major degree.

Areas of Significance

Archaeology, Engineering, Military

Period of Significance: Cold War

Cultural Affiliation: Military

Level of Significance: Moderate

Criteria Considerations: B- Moved Properties “Aircraft, like ships, are transportation vehicles designed to move during operation. Because aircraft are designed to be moved, they do not need to meet Criteria Consideration B (and the consideration should not be checked on the National Register registration form).” (NPS 1998)

Research Potential: Moderate

Integrity

"An aviation wreck is any aircraft that has been crashed, ditched, damaged, stranded, or abandoned. The wreck may be intact or scattered, may be on land or in water, may be-in NRHP terms- a structure or a site. A "structure" remains relatively intact, while a wreck "site" lacks the structural integrity of an aircraft, although the site may contain the structural elements of an aircraft." (NPS 1998)

Location: Maintains integrity. Aircraft are inherently mobile. The NRHP recognizes that aircraft are likely not located in the original construction location. The majority of the wreckage of the aircraft is still located at the crash site (Figure 49).

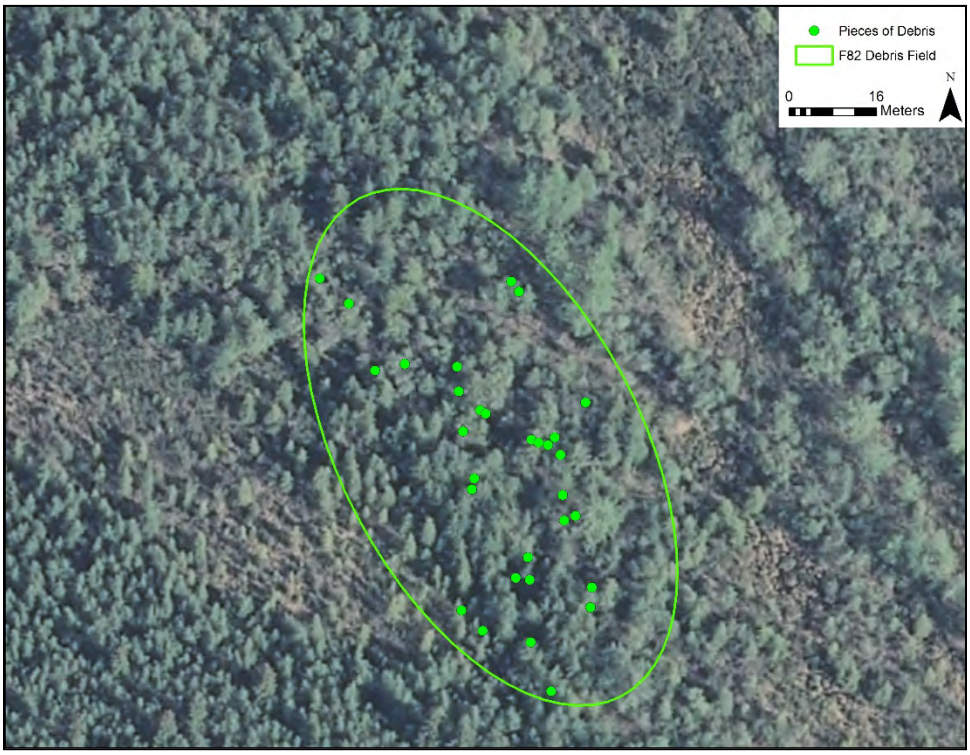


Figure 49. F-82 debris field perimeter.

Design: Maintains integrity.

"Aircraft are also subject to continual modification in their service lives. As operational expertise is gained, changes are made to the original design. If these changes become substantial the design may be identified with a new model designation thus the existence of bot F6F-3 Hellcat and F6F-5 Hellcat aircraft designations. Although the above aircraft may

have been updated, it is still the same aircraft that flew in Vietnam." "If possible, changes that were incorporated over time should be identified in documenting an aircraft for National Register nomination." (NPS 1998)

At the time of the crash, 46-497 was an F-82H, a special winterized version of the F-82. One piece of examined wreckage from the fuselage has the part number prefix for the F-82E model. In 1948, the 449th Squadron of F-82s was modified and re-designated as the H model. Similarly to the example given by the National Park Service, the crash site does not lose integrity because the designation of the aircraft changed from E to H because the aircraft itself is still 46-497.

"As long as an aircraft retains the majority of its original structural members, it should be considered the authentic aircraft. Spars, stringers, longerons and other structural parts are not usually changed in an aircraft's existence. Some repair work may be done that replaces ribs or stringer sections but never comprehensively." (NPS 1998)

"An aircraft crash site that does not contain all of the aircraft parts (a debris field) may still have integrity as an archeological site." (NPS 1998)

"Other components, such as systems parts (fuel systems, hydraulic systems, power plant, flight control systems, etc.) are more readily changed. Engines, pumps, actuators, reservoirs, cables, etc., are likely to have been repeatedly changed if an aircraft had a long operational life. Integrity of materials therefore should be interpreted in this light, i.e., contemporary replacement parts would be acceptable versus original parts; if possible verify the historical replacement of the part versus a modern reconstruction."(NPS 1998)

The crash site of 46-497 has been looted. At this time it is believed that the tail section, some landing gear components, and the central wing were the pieces illegally obtained by the B-25 Group. Despite the loss of these components, many other major components are still at the site and visible from the surface. Table 6 is an inventory of the known components at the site. A zero does not indicate that the component is not present, simply that it has not yet been accounted for.

Table 6. Major components of the F-82 recorded at the crash site (Figure 50-Figure 66).

Major Group	Subgroup	Number Total	Known Number at Site
Fuselage	Cockpit	2	1 and parts of 2nd
Fuselage	Tail	2	0-Believed looted
Wings	Center	1	0-Believed looted
Wings	Stabilizers-Vert	4	2-Tail believed looted
Wings	Stabilizers-Horizontal	2	0-Tail believed looted
Wings	Flaps	8	2-Believed looted
Powerplant	Engine	2	2

Powerplant	Props	2	2
Landing Gear	Front	2	0- At least one believed looted
Landing Gear	Rear	2	0-Tail believed looted
Cockpit	Controls	Various	Yes
Cockpit	Control Panels	2	1
Cockpit	Radio	1	1
Systems	Hydraulic	Various	Yes
Systems	Electric	Various	Yes
Systems	Pneumatic	Various	Yes

Figure 50. Fuselage pieces.

Figure 51. “Buzz” Numbering FQ-497 (FQ=North American F-82, 3 Digits= aircraft number).

Figure 52. USAF wing marking (top or underside).

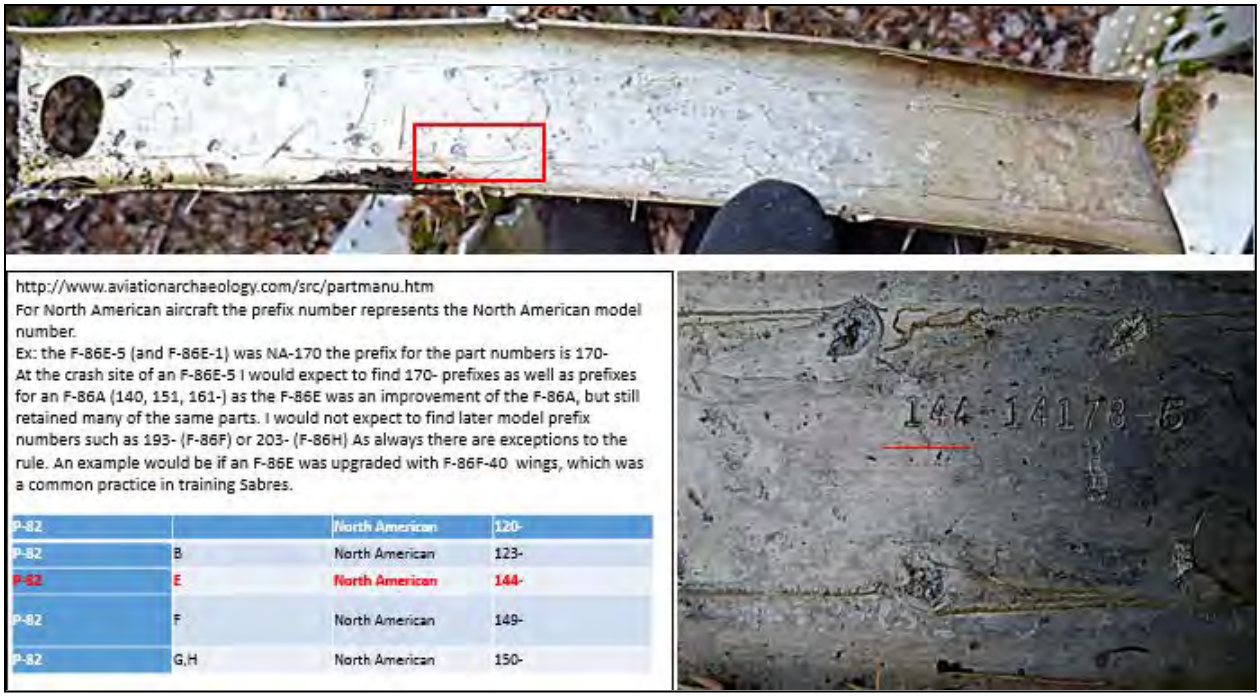
Figure 53. Exterior panel.

Figure 54. Aluminum-alloy sheeting.

Figure 55. Carburetor intakes.

Figure 56. Propellers.

Figure 57. Allison engines.



http://www.aviationarchaeology.com/src/partmanu.htm
For North American aircraft the prefix number represents the North American model number.
Ex: the F-86E-5 (and F-86E-1) was NA-170 the prefix for the part numbers is 170-
At the crash site of an F-86E-5 I would expect to find 170- prefixes as well as prefixes for an F-86A (140, 151, 161-) as the F-86E was an improvement of the F-86A, but still retained many of the same parts. I would not expect to find later model prefix numbers such as 193- (F-86F) or 203- (F-86H) As always there are exceptions to the rule. An example would be if an F-86E was upgraded with F-86F-40 wings, which was a common practice in training Sabres.

P-82		North American	120-
P-82	B	North American	123-
P-82	E	North American	144-
P-82	F	North American	149-
P-82	G,H	North American	150-

Figure 58. Part number linking to F-82 original variant.

Figure 59. Radiators.

Figure 60. RT-34/APS-13 tail warning radar.

Figure 61. Radio receiver.

Figure 62. Western Electric antenna equipment RC-286.

Figure 63. Oil temperature regulator.

Figure 64. Oxygen bottles.

Figure 65. Unknown tank

Figure 66. Instrument panel.

Setting: Maintains integrity.

> "What is required of these movable properties, in order to be eligible, is that the structure (as the NRHP categorizes ships, railroad cars, trolleys, and aircraft) must have an appropriate setting. This requirement applies both to historic aircraft which are still being flown and those which are not." (NPS 1998)

The above statement relates to aircraft located in museum like settings. The crash site of 46-497 maintains setting integrity for two reasons. First, the area around the crash site has changed little, the area is still wooded, with no development in the vicinity. Second, the Tanana Flats is today, as it was at the time of the crash, a training area for the military associated with Ladd Field.

Materials: Maintains integrity. As this is a crash site and no attempt to repair, replace, or conserve has taken place, no inappropriate practices have taken place. Therefore, the materials at the 46-497 crash site are intact and retain integrity.

Workmanship: Maintains integrity. The crash site of 46-497 demonstrates at least one individually specific piece of workmanship, and many examples of key technological features. Individually, at least one piece of aircraft sheet metal with part of the "Buzz" number is still present at the site. The two Allison engines and props are examples of technological features developed for the end of the piston-driven age of military aircraft. Though the engines and props appear to be the same, they are actually designed to work together by spinning in

opposite directions, helping to keep the aircraft stable. This design feature was an adaptation from prototype aircraft that had engines and props that spun in the same direction. The site is littered with many different pieces modeled off of P-51 Mustang components but uniquely designed for the F-82 Twin Mustang.

Feeling: Maintains moderate integrity. An aircraft crash site is difficult to convey feeling. Often at first glance, piles of twisted metal littering the ground do not appear to be anything more than scrap. Upon further examination however, many identifiable individual pieces and intact components begin to transform hunks of metal into its former self.

In the case of 46-497, the integrity has been damaged for a few reasons. First, the looting of the tail section, a character defining feature of the F-82 is a significant blow to this aircraft. Second, the extreme nature of the crash has rendered simple identification as an F-82 Twin Mustang, very difficult, but not impossible. Two piston-driven engines and props as well as many pieces of aircraft metal clearly demonstrate that the site is of a wrecked aircraft. Therefore, the site retains some integrity in this category.

Association: Maintains Integrity. The crash site of 46-947 retains a high level of association integrity with the Ladd Air Force Base Cold War Historic District. This aircraft was part of the final USAF piston-driven fighter aircraft. The F-82 flew during an important transitionary time in military aviation history. 46-497 was part of the 449th Squadron, part of the 5001st Composite Wing, based out of Ladd Air Force Base. Though the crash site is not located on the historic district, the fact that the aircraft was based, and took off from Ladd AFB allows the wreck to retain its integrity.

Summary

FAI-02368 is the crash site of an extremely rare North American Aviation F-82H Twin Mustang, tail number 49-497. Though heavily damaged and looted, the crash site is eligible for the NRHP under Criterion A as possibly the last remaining example of the H model of the F-82, and as an F-82, represents the singular transitionary aircraft from piston-driven propulsion to the Jet Age. The site is important for significant developments in aircraft technology, and represents a significant doctrinal development, such an organization's response to changing technology and tactics. The site is also eligible under Criterion A for the significance of the aircraft type in the development of military aviation history.

FAI-02497
Building #: Bonnifield Trail
Starting Latitude/Longitude: [redacted]
Ending Latitude/Longitude: [redacted]

UTM: [redacted]

Determination of Eligibility: Not eligible

The Bonnifield Trail is a winter-access route leading from Fairbanks, Alaska to the Bonnifield mining region in the foothills of the Alaska Range (Figure 67). It has been in continuous winter usage since the Bonnifield mining region was established in 1903. The region was never a major gold producer, however, and the geography of the terrain limited use to winter months only. Currently, the trail is used for public access to hunting, fishing, and recreation areas. The limited use of the Bonnifield trail and the regions it serves does not have an association with a significant event or trend in history (Criterion A), does not demonstrate a significance of design or construction (Criterion C), and does not have the potential to yield important information in the future (Criterion D). The trail is named for the access it gave to the Bonnifield mining region, established by Samuel and John Bonnifield in the early days of the Interior gold rush period. The Bonnifield brothers were significant figures in the early gold rush period of Fairbanks. The region was more easily accessible from the west, however, and the association of the trail with the Bonnifield brothers is coincidental as there is no evidence that they either established the trail or used it exclusively to access their mining claims.

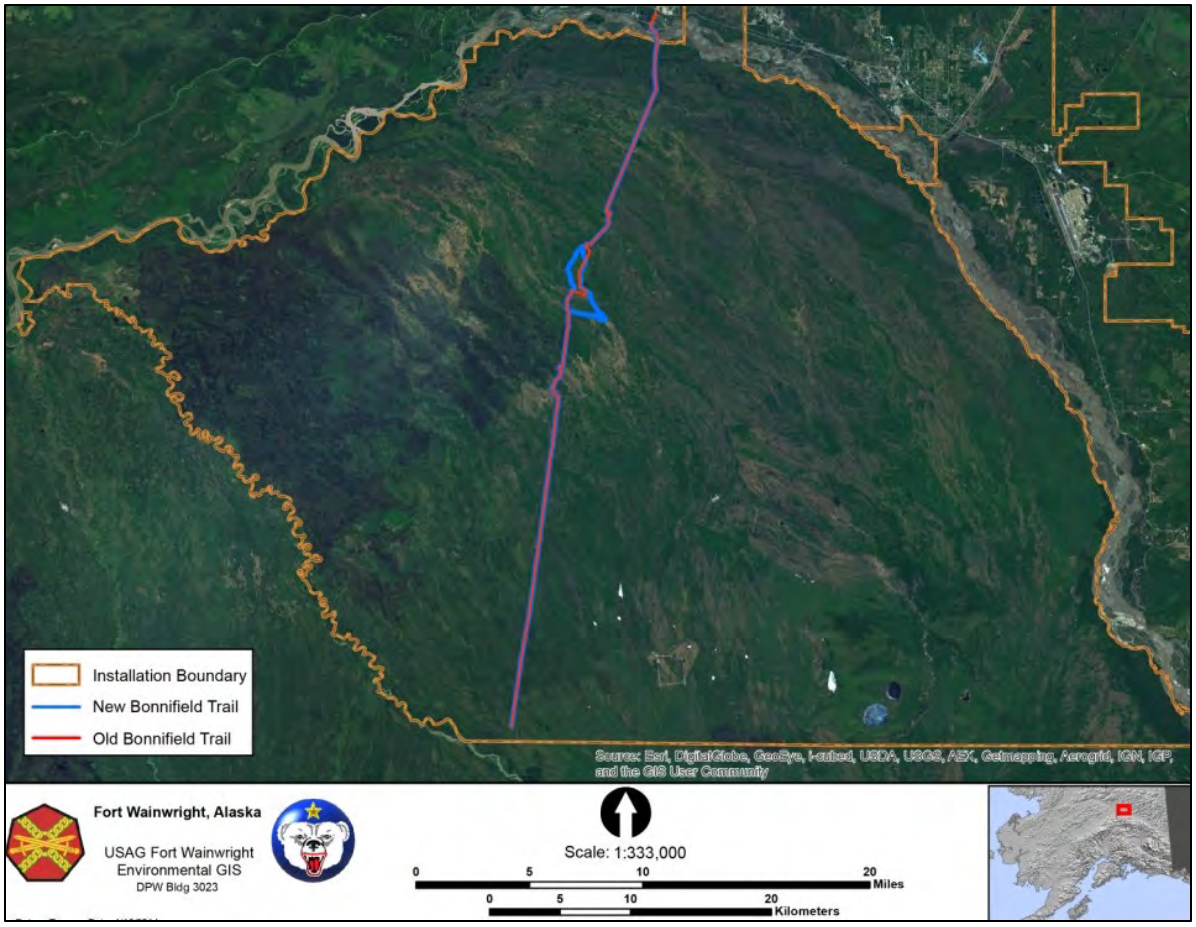


Figure 67. Bonnifield Trail winter access route.

Description

The Bonnifield Trail is a recreational use trail that runs approximately 52 miles from the Tanana River to Gold King Creek in the Bonnifield district. The northern most 32 miles (approximately) of the trail traverse the USAG Alaska-managed TFTA. The trail starts on the south bank of the Tanana River near the Tanana Lakes Recreation Area at the south end of Cushman Street in Fairbanks and runs south-southeast in a nearly straight line to the Wood River in the Bonnifield mining region beyond the southern edge of the TFTA (Figure 67). The flat and open nature of the Tanana Flats negates the need for grading and affords the rarity of being mostly straight. The trail shifts slightly to the west as it skirts the eastern edge of Salmon Loaf Butte and turns south again along the western edge of Clear Creek Buttes. The trail is maintained by the Army for training purposes and is cleared of brush to a width of approximately 8 feet for the full length of the trail as it crosses TFTA. The trail is used primarily during the winter months, as the landscape of the TFTA consists of boggy flood plain, making travel in the summer difficult. In

the winter, the trail is mainly used by the Army and recreational snow machiners and skiers (Figure 68).

Figure 68. Aerial views of portions of the Bonnifield Trail in TFTA during winter months.

Historical Context

The Bonnifield Mining District encompasses the northern foothills of the Alaska Range, stretching between the Delta River in the east and the Nenana River in the west. The area contains veins of gold-bearing quartz material and low-grade lignite coal. Due to the difficulty of transportation of goods into and out of the region, the difficultly of mining the gold from the quartz, and the low quality of the coal, the area was never fully developed and gold production remained steady but low (Capps 1912). Areas to the east of the gold-bearing Bonnifield region rich in higher grade coal have been developed, as they are reached easily from the Parks Highway and Alaska Railroad in the west.

The Bonnifield region was first actively explored during the initial Alaskan gold rush period, and the first gold was reported at Gold King Creek in 1903. The region was never a major gold producing area, largely owing to the difficulty of transportation to and from the region. The Bonnifield Trail was originally built by area prospectors as an avenue to get goods into and out of the region; however, due to the nature of the river flats south of the Tanana River, this trail

could only be utilized during the winter months when the wetlands were frozen. The trail was officially surveyed by the Alaska Road Commission (ARC) in 1909 at a cost of $1,226.78 and was classified in the ARC annual report as a sled road (Figure 69). The ARC defined a sled road as an "inexpensive form of construction adapted to the requirements of winter travel in portions of the Interior" (Board of Road Commissioners 1912). Sled roads were only wide enough to accommodate a double team with principal stumps and surface inequalities removed. Sled roads were only intended for use between October and April each year, and were common in low-lying boggy areas throughout Alaska. During the 1909 survey, it was determined that the cost of upgrading the Bonnifield Trail to a more substantial year-round road would be "prohibitive under current conditions" (Board of Road Commissioners 1912). A U.S. Geological Survey Report published in 1912 noted that production in the Bonnifield region had been stagnant since 1906 and the number of men working the region was diminishing (Capps 1912).

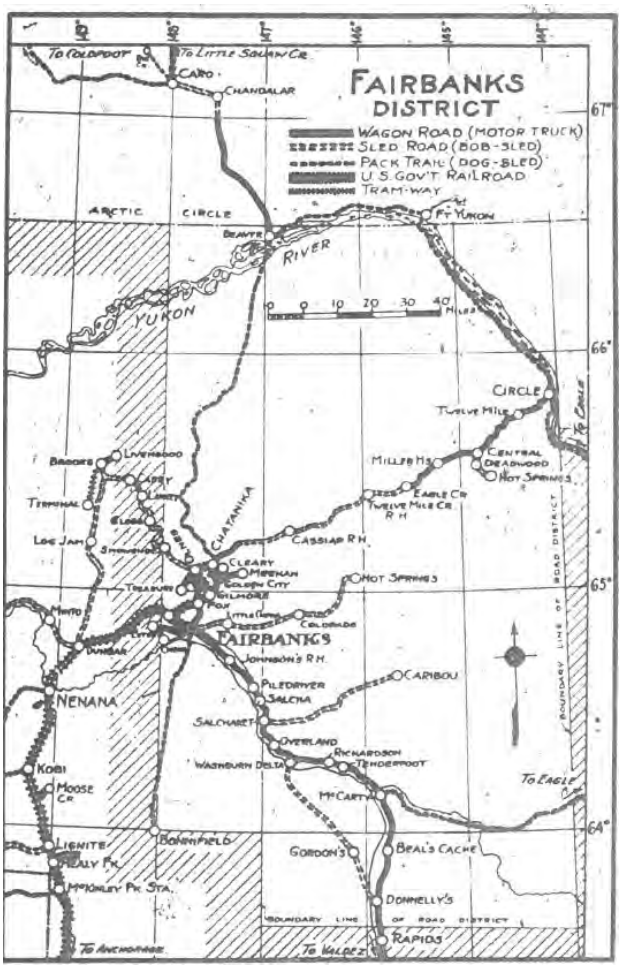


Figure 69. Historic map of trails in the region, including the Bonnifield Trail (from Neely 2003).

Summer access to the Bonnifield region was possible by way of Broad Pass and the Nenana River from the west. The western area of the region was also rich in low-grade coal, and coal mining enterprises soon outpaced gold prospecting activities. The coal could be transported from the area that is now Healy and Nenana to Fairbanks at a reasonable rate, providing Fairbanks and surrounding areas with a cheap source of fuel. These activities diminished the importance of the gold producing areas, further minimizing the need for improvements to the Bonnifield Trail. Once the railroad began to operate from Fairbanks south, almost all transportation in and out of the region was accomplished by railroad, and the Bonnifield Trail was relegated to a recreation trail by the 1920s. In 1941, the TFTA was withdrawn from public land status for use by the War Department for training purposes under Executive Order 8847. The area was closed to all activity, including trapping, timber permits, hunting, homesteading, and any other recreational form of activity for safety concerns as the military proceeded to use sections of the 625,000 acre reserve for aerial bombing practice.

The Bonnifield Trail continues to be a recreational trail. It was granted RS 2477 right-of-way status for public access. The Tanana Flats provide good hunting and trapping opportunities, and the trail is used by recreational snowmachiners accessing property beyond the TFTA and by cross-country skiers looking for flat terrain.

The Bonnifield region and the access trail are named for Samuel and John Bonnifield, brothers from Kansas who were among the first to stake claims in the Bonnifield region. Samuel Bonnifield was an early stampeder to the Klondike, and operated a successful saloon in Dawson City in addition to prospecting nearby creeks (Dawson Daily News 1900). In an account given to the San Francisco Examiner in September 1897, Samuel Bonnifield first arrived in the Klondike and Alaska in 1892. John Bonnifield arrived in Alaska in 1903, following the report of gold strikes in the Interior at what would be Fairbanks. Both Bonnifield brothers had been involved in banking enterprises in Kansas, and Samuel Bonnifield founded the First National Bank of Fairbanks in 1905, an establishment that would become part of Key Bank in the 1980s. In 1909, Samuel Bonnifield was determined to be insane by a court in Seattle, Washington following several instances of erratic behavior (Whitehorse Daily Star 1909). John Bonnifield was named guardian, and all of Samuel's holdings were transferred into his brother's name. During the insanity proceedings, it was discovered that in a matter of eighteen months, Samuel had given away everything he had earned during his stay in the Klondike and Alaska, which reports tallied to be between $150,000 and $300,000. Samuel Bonnifield returned to Fairbanks in 1910, but was arrested again for insanity in late October 1911. According to reports in the Fairbanks Daily Times and the Alaska Miner, Samuel Bonnifield had withdrawn a substantial sum of money from the First National Bank of Fairbanks, where he served as president, and proceeded to distribute money to laborers around town. At the time of his arrest, he was found playing with

the remaining money on the bank of the Chena River (Fairbanks Daily Times 1911). Determined to be insane, he was sent to Morningside Sanitorium in Oregon where he remained in treatment for a period of two years. Deemed cured in early 1914, Samuel returned to Fairbanks in August 1915. His return prompted a brief write up in the Fairbanks Daily Times, referring to him as a "prominent citizen of Fairbanks during the early days of the camp" (Fairbanks Daily Times 1915). The next mention of either Bonnifield brother in area news items is a brief mention of Samuel Bonnifield residing in Seattle in 1940 "at over 80 years of age" (Fairbanks Daily News-Miner 1940). In addition to the Bonnifield mining region and the Bonnifield Trail, Bonnifield Street in Fairbanks is named for the Bonnifield brothers, currently running from 1st to 9th Avenues in downtown Fairbanks.

Resource in Context

The Bonnifield Trail provided access to the Bonnifield mining region. The trail was established in 1903 by area prospectors following the discovery of gold in the Bonnifield region south of Fairbanks. Deemed a sled road by the ARC during survey activities in 1912, the sled road has only minimally been upgraded since that time. Upgrading the road for year-round use was deemed to be cost-prohibitive in 1912, a determination that remains in place to this day as the land the trail crosses consists of boggy wetlands that doesn't lend itself to permanent construction. The trail originally provided transportation from the gold mining hub of Fairbanks to the Bonnifield mining region; the lack of output from the Bonnifield combined with the difficulties of transportation during summer months meant that the trail was left a winter sled road and used mainly by recreational users. The trail has seen little modification compared to other area trails, and has only been slightly widened for use by the military.

NRHP Criteria

__NO__A. Property is Associated with events that have made a significant contribution to the broad patterns of our history.

__NO__B. Property is associated with the lives of persons significant in our past.

__NO__C. Property embodies the distinct characteristics of a type, period, or method of construction.

__NO__D. Property has yielded, or is likely to yield, information important in pre-contact or contact period history.

NHL Criteria

_NO_ 1. Property is associated with event that has made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of the United States history.

_NO_ 2. Property is associated with the life of an important person nationally significant to the history of the United States.

_NO_ 3. Property represents some great idea or ideal of the American people.

_NO_ 4. Property embodies the distinguishing characteristics of an architectural type specimen exceptionally valuable for a period, style, or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction.

_NO_ 5. Property is composed of integral part of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture.

_NO_ 6. Property has yielded or may likely yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Property has yielded or may likely yield data affecting theories, concepts and ideas to a major degree.

Areas of Significance

The Bonnifield Trail is associated with the gold rush period of Interior Alaska. It provided access to the Bonnifield Mining Region and recreational access for hunters and fishermen beginning in the 1910s. However, the trail was never a major access route for either purposes, and so has no significance in these areas.

Period of Significance: 1903 onwards

Cultural Affiliation: Euro-American

Level of Significance: None

Criteria Considerations: None

Research Potential: Limited

Integrity

Location: The trail retains its original location and routing.

Design: The trail retains original design.

Setting: The trail retains original setting.

Materials: The trail does not retain original materials. Original materials for this trail, such as bridge materials, have been replaced.

Workmanship: The trail retains original workmanship.

Feeling: The trail retains original feeling.

Association: The trail does not retain the original association. Although used as a winter transportation route historically and currently, the historic use for the trail was transportation to mining areas whereas the current usage is largely military in nature with secondary recreational winter use by area residents.

Summary

While the Bonnifield Trail retains a high degree of integrity, it lacks the historical significance to be eligible for listing to the NRHP. The Bonnifield Mining Region was not a significant ore-producing region, and the coal deposits located in the region are more easily accessed from the Nenana-Healy area. The trail was largely used in winter only, mainly to haul supplies to area prospecting locations. Currently, the trail serves both military training functions and winter recreational users from the Fairbanks area.

Summary of Archaeological Surveys and Sites

Between 2002 and 2018, CEMML archaeologists conducted systematic archaeological survey on 29,356 acres of land in TFTA (Figure 70). 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 known from the training area and one historic trail. 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 150 have not been evaluated. One site has been found not eligible.

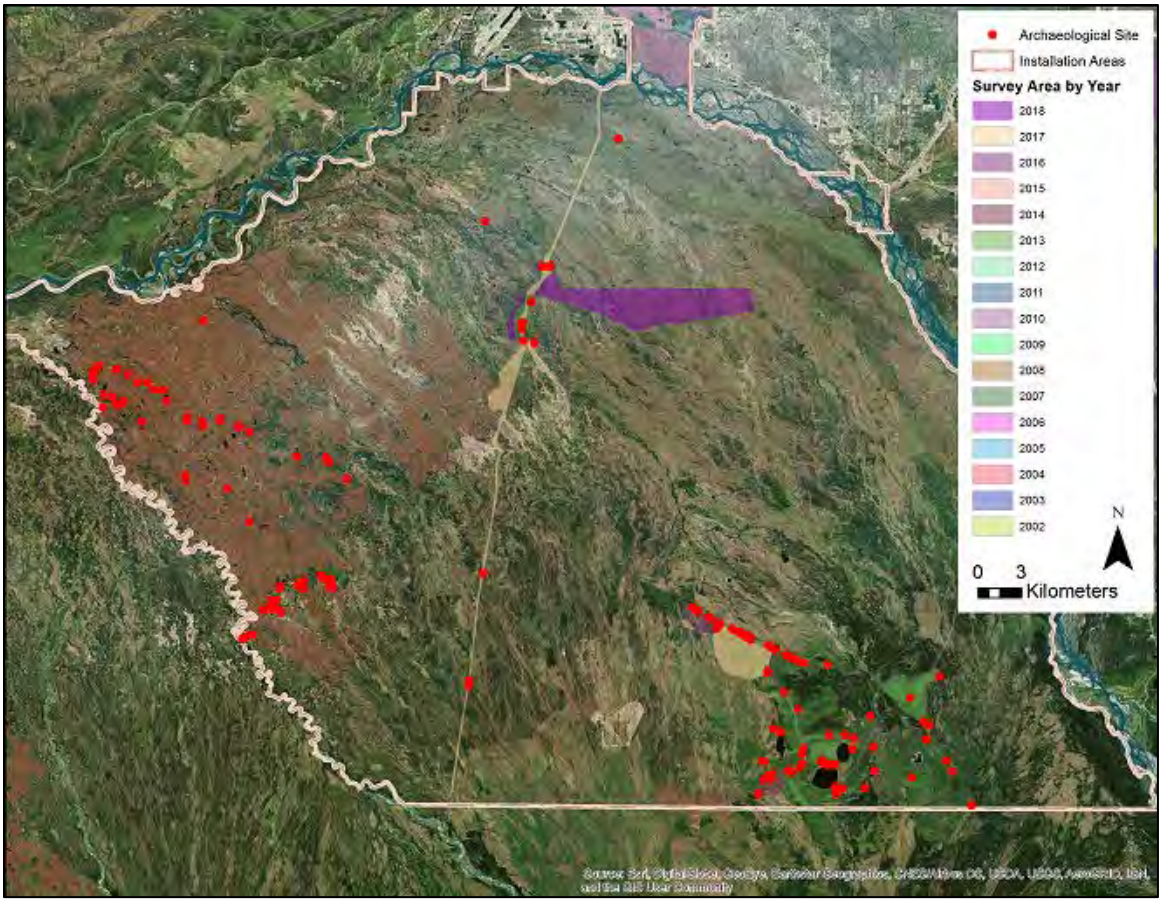


Figure 70. Archaeological sites and surveys in TFTA, all years.

2018 Yukon Training Area

NAGPRA and ARPA Activities

No activities related to NAGPRA or APRA took place in YTA in 2018.

Section 106 Activities

No undertakings requiring section 106 consultation took place in YTA in 2018.

Building and Structure Surveys

One hundred-seventeen buildings and structures were identified and surveyed in the YTA in 2018 (Table 7, Figure 71). Two of these are known to be nearing 50 years (FAI-02694 and FAI-02695).

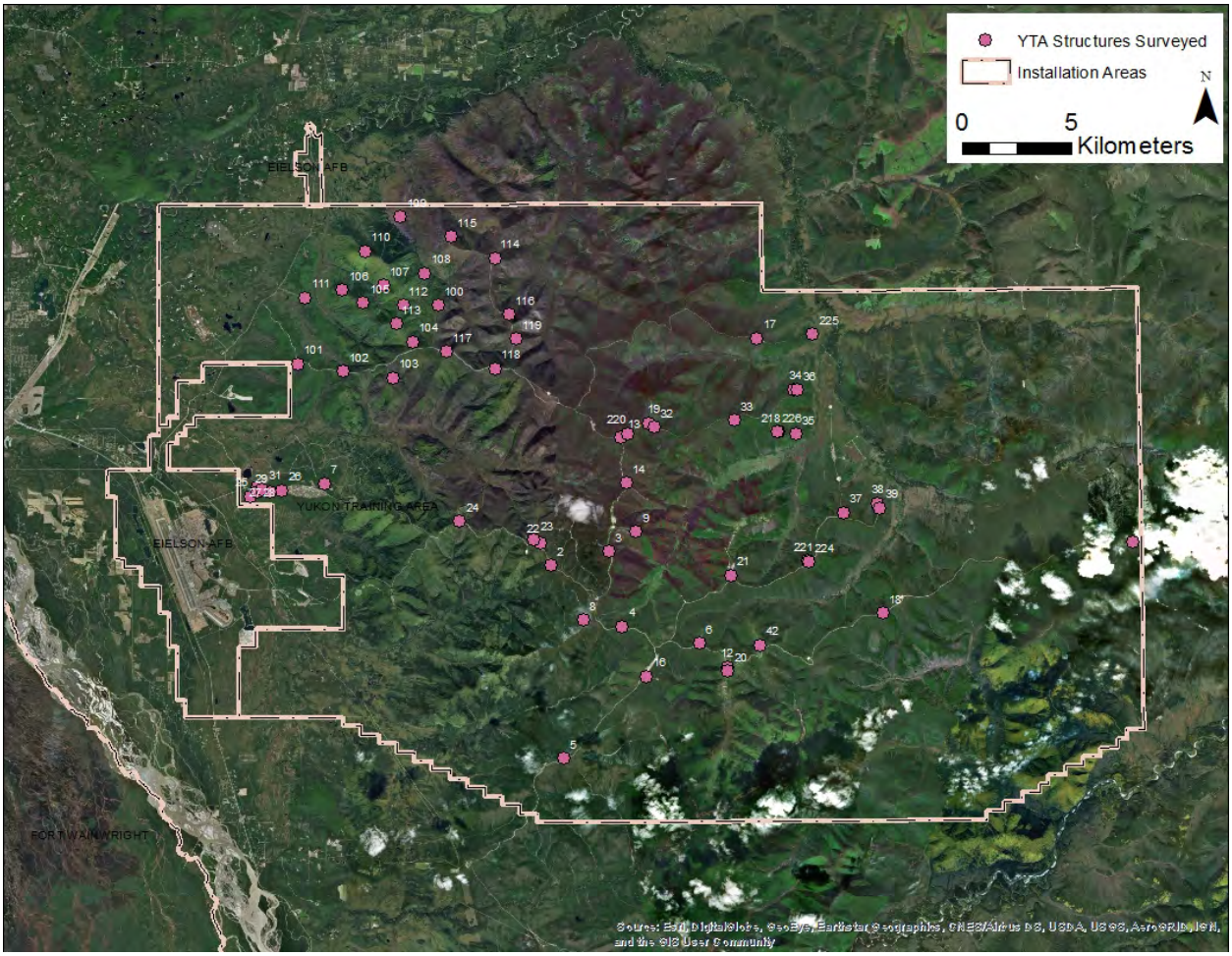


Figure 71. Buildings and structures surveyed in YTA in 2018.

Table 7. Buildings and structures surveyed in YTA in 2018.

ID	Training Area	Location	Latitude/ Longitude	Type	Name	Building #	Description	AHRS #
0	Stuart Creek IA		[redacted]	Building	CALFX Tower	N/A	Two story, square plan, conex shipping container structure.	No
0	309		[redacted]	Building	Conex with roof	N/A	One story, square plan, conex shipping container structure.	No
0	307	Moose Creek area, on Manchu Trail	[redacted]	Bridge	Moose Creek Bailey Creek	N/A	Rectangular plan, cast concrete foundation, cast concrete/metal framing, bailey metal trussed, wood board flooring.	No
0	313	Firebird Range, off Johnson Road	[redacted]	Building	Tan Shed	N/A	Half story, rectangular plan, horizontal wood board foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	White Quonset Tent	N/A	One and a half story, rectangular plan, unknown foundation, metal framed, canvas siding, rounded roof is also clad in canvas.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Small Metal Building	N/A	One story, rectangular plan, wood perimeter foundation, balloon framed, corrugated metal siding, flat roof clad in an unknown material.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Quonset Tent #1	N/A	Two and a half story, rectangular plan, unknown foundation, metal framed, canvas siding, rounded roof is also clad in canvas.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Quonset Tent #2	N/A	Two and a half story, rectangular plan, unknown foundation, metal framed, canvas siding, rounded roof is also clad in canvas.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Wooden Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, plywood siding, shed roof clad in asphalt shingles.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Abandoned Metal Building	N/A	Three story, square plan, metal pier/concrete slab foundation, metal framed, corrugated metal siding, flat roof clad in an unknown material.	XBD-00249

2	310	BRAVO Maintenance/ FP1, off Quarry Road	64.665444/ [redacted]	Building	Nike Structure #1	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/masonry siding, irregular roof clad in metal.	XBD-00249
2	310	BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Building	Nike Structure #2	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/masonry siding, irregular roof clad in metal.	XBD-00249
2	310	Bunkers near BRAVO maintenance site, off Quarry Road	[redacted]	Bunker	Bunker #1	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	XBD-00249
2	310	Bunkers near BRAVO Maintenance/ FP1, off Quarry Road	[redacted]	Bunker	Bunker #2	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	XBD-00249
3	309	Firing Point Hippie, off Skyline Road	[redacted]	Building	Storage Shed	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	No
4	305	FAARP USAF, Call Sign OSCAR, off Quarry Road	[redacted]	Building	Shed 1	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, vertical groove plywood siding, gable roof clad in standing seam metal.	No
4	315	FAARP USAF, Call Sign OSCAR, off Quarry Road	[redacted]	Building	Shed 2	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, vertical groove plywood siding, gable roof clad in standing seam metal.	No
5	312	Charlie Firing Point, Charlie Battery	[redacted]	Building	Red Storage Shed	N/A	Half story, rectangular plan, horizontal wood board foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
5	312	Charlie Nike Site	[redacted]	Building	Abandoned Concrete Building	N/A	Two story, rectangular plan, concrete slab foundation, reinforced CMU/cast concrete structure, flat roof clad in an unknown material.	XBD-00248

5	312	Charlie Nike Site	[redacted]	Building	Nike Structure #1	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/masonry siding, irregular roof clad in metal.	XBD-00248
5	312	Charlie Nike Site	[redacted]	Building	Nike Structure #2	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/masonry siding, irregular roof clad in metal.	XBD-00248
5	312	Charlie Nike Site	[redacted]	Building	Nike Structure #3	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/masonry siding, irregular roof clad in metal.	XBD-00248
5	312	Near Charlie Nike Site	[redacted]	Building	Metal Storage Structure	N/A	Half story, rectangular plan, unknown foundation, metal framed, sheet metal siding, flat roof clad in metal sheeting.	No
5	312	Charlie Battery	[redacted]	Bunker	Bunker #1	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	XBD-00248
5	312	Charlie Battery	[redacted]	Bunker	Bunker #2	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure partially covered in an earthen mound/partially open.	XBD-00248
5	312	Charlie Battery	[redacted]	Building	Maintenance Building	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof is clad in canvas.	No
5	312	Near Charlie Battery	[redacted]	Building	Abandoned Concrete Building #2	N/A	Two story, rectangular plan, concrete slab foundation, reinforced CMU/cast concrete structure, flat roof clad in an unknown material.	No
5	312	Charlie Battery	[redacted]	Building	Abandoned Concrete Building #3	N/A	Two story, rectangular plan, concrete slab foundation, reinforced CMU/cast concrete structure, flat roof clad in an unknown material.	No
5	312	Charlie Battery	[redacted]	Building	Corrugated Metal Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, corrugated	No

							metal siding, gable roof clad in corrugated metal.	
5	312	Charlie Battery	[redacted]	Building	Fiberglass/Metal Building	N/A	One story, rectangular plan, unknown foundation, metal framing, metal/fiberglass siding, flat roof clad in sheet metal.	No
5	312	Near Charlie Battery	[redacted]	Bunker	Bunker #1	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	No
5	312	Near Charlie Battery	[redacted]	Bunker	Bunker #2	N/A	One story, rectangular plan, concrete slab foundation, reinforced concrete structure covered in an earthen mound.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #1	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #2	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #3	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #4	N/A	Two story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #5	N/A	Two story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #6	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No

7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #7	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #8	N/A	Two story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #9	N/A	One story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
7	307	IPBC Plywood Village, off Quarry Road	[redacted]	Building	Plywood Building #10	N/A	Two story, square plan, unknown foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
8	311	Pole Hill, off of Quarry Road	[redacted]	Building	Metal Building #1	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof is clad in standing seam metal.	No
8	311	Pole Hill, off of Quarry Road	[redacted]	Building	Storage Structure	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
8	311	Pole Hill, off of Quarry Road	[redacted]	Building	Metal Building #2	N/A	One story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
8	311	Pole Hill, off of Quarry Road	[redacted]	Other	Metal Structure/Equipment	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
9	307	OP Shack, off Skyline Road	[redacted]	Equipment	Metal Storage Structure/Equipment #1	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
9	307	OP Shack, off Skyline Road	[redacted]	Equipment	Metal Storage Structure/Equipment #2	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed,	No

							sheet metal siding, flat roof clad in sheet metal.	
9	307	OP Shack, off Skyline Road	[redacted]	Equipment	Metal Storage Structure/Equipment #3	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
9	307	OP Shack, off Skyline Road	[redacted]	Equipment	Metal Storage Structure/Equipment #4	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
13	309	Bear Bait, Quebec, off Beaver Creek Road	[redacted]	Other	Metal Storage Structure	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
14	308	Off Skyline Road	[redacted]	Building	Skyline Hut/LZ Fox Hut	N/A	One story, rectangular plan, unknown foundation, balloon framed, corrugated metal siding, gable roof clad in wood/corrugated metal.	No
15	318	Hill 3265, Golfball, end of Brigadier Road	[redacted]	Building	"Crow's Nest II," Golfball	N/A	Three story, irregular plan, concrete slab foundation, metal framed, sheet metal/reinforced cast concrete siding, irregular (spherical) roof clad in sheet metal.	No
15	318	Hill 3265, Golfball, end of Brigadier Road	[redacted]	Building	Metal Building #1	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
15	318	Hill 3265, Golfball, end of Brigadier Road	[redacted]	Building	Metal Building #2	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
15	318	Hill 3265, Golfball, end of Brigadier Road	[redacted]	Building	Metal Building #3	N/A	One story, rectangular plan, horizontal concrete beam foundation, metal framed, metal siding, flat roof clad in an unknown material.	No

15	318	Hill 3265, Golfball, end of Brigadier Road	[redacted]	Equipment	Metal structure/equipment	N/A	Half story, rectangular plan, horizontal wood beam foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
16	313	East end of Firebird, off Johnson Road	[redacted]	Building	Maintenance Building	14000	One and a half story, rectangular plan, concrete slab foundation, corrugated metal siding, flat roof clad in corrugated metal siding.	No
16	313	East end of Firebird, off Johnson Road	[redacted]	Building	Storage Structure	N/A	Half story, rectangular plan, metal framed, sheet metal siding, flat roof with sheet metal siding.	No
17	306	FP 16, North Beaver Creek Road	[redacted]	Building	Metal Shed	N/A	One story, rectangular plan, horizontal wood board foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
17	306	FP 16, North Beaver Creek Road	[redacted]	Other	Metal Storage Structure	N/A	One story, rectangular plan, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
18	315	Sheet Hill, Call sign UNIFORM, off Brigadier Road	[redacted]	Building	Metal Storage Shed	N/A	One story, square plan, wood platform, balloon framed, corrugated metal siding, shed roof clad in corrugated metal.	No
18	315	Sheet Hill, Call sign UNIFORM, off Brigadier Road	[redacted]	Equipment	Metal structure/equipment #1	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in corrugated metal.	No
18	315	Sheet Hill, Call sign UNIFORM, off Brigadier Road	[redacted]	Equipment	Metal structure/equipment #2	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal, flat roof clad in sheet metal.	No
18	315	Sheet Hill, Call sign UNIFORM, off Brigadier Road	[redacted]	Equipment	Metal structure/equipment #3	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal, flat roof clad in sheet metal.	No
19	309	FP 8, off CAM II Road	[redacted]	Other	Storage/ Equipment Shed	N/A	One story, rectangular plan, metal bar foundation, metal framed, fiberglass/metal siding, flat roof clad in metal/fiberglass.	No
20	313	Grizzly Battle Course, off Brigadier Road	[redacted]	Building	Red Storage Shed	N/A	Half story, rectangular plan, concrete block foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No

21	315	MacMahon Range/Target Storage, end of CAM II Road	[redacted]	Building	Wood Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, plywood siding, gable roof clad in corrugated metal.	No
21	315	MacMahon Range/Target Storage, end of CAM II Road	[redacted]	Building	Conex Structure	N/A	One story, square plan, conex container structure, added wood framing, flat roof is clad in asphalt sheeting.	No
22	308	BRAVO Battery Bunker Site #1, off Quarry Road	[redacted]	Bunker	BRAVO Battery Bunker #1	N/A	Two story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, with no roof.	No
22	308	BRAVO Battery Bunker Site #1, off Quarry Road	[redacted]	Equipment	Metal Structure/equipment	N/A	Two story, rectangular plan, unknown foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
22	308	BRAVO Battery Bunker Site #2, off Quarry Road	[redacted]	Bunker	BRAVO Battery Bunker #2	N/A	Two story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, with no roof.	No
22	308	Near BRAVO Battery, off Quarry Road	[redacted]	Building	Abandoned Concrete Building	N/A	Two story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof clad in sheet metal.	XBD-00249
23	308	BRAVO FOB, off Quarry Road	[redacted]	Building	Storage Shed	N/A	Half story, rectangular plan, horizontal wood board foundation, balloon framed, plywood siding, shed roof clad in standing seam metal.	No
23	308	BRAVO FOB, off Quarry Road	[redacted]	Building	Outhouse	N/A	One and a half story, rectangular plan, reinforced CMU structure, gable roof clad in corrugated metal.	No
24	307	ISBC, off Quarry Road	[redacted]	Building	Metal Building	13000	One and a half story, rectangular plan, metal pier foundation, metal framing, corrugated metal siding, gable roof clad in standing seam metal.	No
24	307	ISBC, off Quarry Road	[redacted]	Building	Outhouse	13001	One story, square plan, metal pier foundation, metal framing, corrugated metal, gable roof clad in standing seam metal.	No

24	307	ISBC, off Quarry Road	[redacted]	Building	Metal Building 2	13002	One and a half story, rectangular plan, metal pier foundation, metal framing, corrugated metal siding, gable roof clad in standing seam metal.	No
24	307	ISBC, off Quarry Road	[redacted]	Building	Wood shed/former gatehouse	N/A	One story, square plan, unknown foundation, balloon framed, vertical groove plywood siding, shed roof clad in asphalt sheeting.	No
25	307	Lower Winter Camp, off Manchu Road	[redacted]	Building	Metal Building	10030	One and a half story, square plan, post & block foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
25	307	Lower Winter Camp, off Manchu Road	[redacted]	Building	Outhouse Bldg	10045	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, clad in split face CMU, gable roof is clad in corrugated metal.	No
26	307	DMPTR, off Manchu Road	[redacted]	Tower	Range Tower	10060	Four story, rectangular plan, concrete slab foundation, metal framed, plywood siding, shed roof clad in corrugated metal.	No
27	307	Ammo Supply Point, off Manchu Road	[redacted]	Building	Metal Building	10050	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
28	307	Manchu Range, end of CAM II Road	[redacted]	Building	Wooden Building	33	One story, irregular plan, post & block foundation, balloon framed, vertical groove plywood, shed roof is clad in corrugated metal.	FAI-02695
28	307	Manchu Range, end of CAM II Road	[redacted]	Building	Shed with megaphone	N/A	One story, square plan, horizontal concrete beam foundation, balloon framed, vertical groove plywood siding, gable roof clad in asphalt shingles.	No
28	307	Manchu Range, end of CAM II Road	[redacted]	Building	Bathroom Facilities	31	One story, rectangular plan, unknown foundation, balloon framed, corrugated metal siding, shed roof is clad in standing seam metal.	FAI-02694

28	307	Manchu Range, end of CAM II Road	[redacted]	Building	Storage Building	N/A	One and a half story, rectangular plan, unknown foundation, balloon framed, corrugated metal siding, shed roof is clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	Outhouse 1	10000	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, clad in split face CMU, gable roof is clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	AAR Building	10001	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	Maintenance Building	10002	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	ROC (Range Operations Center)	10003	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	Outhouse 2	10004	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, clad in split face CMU, gable roof is clad in corrugated metal.	No
29	307	Moose Creek Range Operations Center	[redacted]	Building	Warehouse/Storage Building	10006	One and half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
32	Stuart Creek IA	X-Ray, on CAM II Road	[redacted]	Building	Storage Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, plywood & corrugated metal siding, gabled roof clad in corrugated metal.	No
33	Stuart Creek IA	NCR1, end of CAM II Road	[redacted]	Building	Metal Shed	N/A	One story, rectangular plan, horizontal wood board foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No

34	Stuart Creek IA	Cam site II spur road	[redacted]	Building	Survival Cabin	N/A		No
35	Stuart Creek IA	Lantern Village, Call sign YANKEE 2, on CAM II Road	[redacted]	Building	Conex building/tower	N/A	Two story, rectangular plan, conex container structure.	No
36	Stuart Creek IA	End of CAM II Road	[redacted]	Other	PAPA	N/A	One story, rectangular plan, no foundation, metal framed, sheet metal siding, flat rood clad in sheet metal.	No
36	Stuart Creek IA	End of CAM II Road	[redacted]	Building	Plywood Building 1	N/A	One story, rectangular plan, no foundation, balloon framed, plywood siding, gable roof clad in plywood/corrugated metal.	No
36	Stuart Creek IA	End of CAM II Road	[redacted]	Building	Plywood Outhouse	N/A	One story, square plan, horizontal wood beam foundation, balloon framed, plywood siding, shed roof clad in asphalt sheeting.	No
36	Stuart Creek IA	End of CAM II Road	[redacted]	Building	Plywood Building 2	N/A	One story, rectangular plan, unknown foundation, balloon framed, plywood siding, gable roof clad in plywood.	No
37	Stuart Creek IA	CAM I Site, CAM I Road	[redacted]	Equipment	Metal Structure/Equipment #1	N/A	Half story, rectangular plan, horizontal metal bar foundation, metal framed, metal/fiberglass siding, flat roof clad in metal/fiberglass.	No
37	Stuart Creek IA	CAM I Site, CAM I Road	[redacted]	Equipment	Metal Structure/Equipment #2	N/A	Half story, rectangular plan, horizontal metal bar foundation, metal framed, metal/fiberglass siding, flat roof clad in metal/fiberglass.	No
38	Stuart Creek IA	Victor, CAM I Road	[redacted]	Other	Metal Storage Structure	N/A	One story, rectangular plan, no foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
38	Stuart Creek IA	Victor, CAM I Road	[redacted]	Building	Wood Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, plywood siding, gable roof clad in corrugated metal.	No
39	Stuart Creek IA	Lima, end of CAM I Road	[redacted]	Equipment	Wood Shed	N/A	One story, rectangular plan, horizontal wooden beam foundation, balloon framed, plywood siding, gable roof clad in asphalt shingles.	No

42	315	Call sign NOVEMEBER, end of CAM II Road	[redacted]	Equipment	Metal structure/equipment #1	N/A	Half story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
42	315	Call sign NOVEMBER, end of CAM II Road	[redacted]	Equipment	Metal structure/equipment #2	N/A	Half story, rectangular plan, horizontal wood board foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
112	303	Bunker Site, center of AFTAC controlled area, end of CAM II Road	[redacted]	Bunker	Bunker	517	One story, rectangular plan, unknown foundation, reinforced cast concrete structure/metal framing, covered in earth/corrugated metal.	No
113	303	SW corner of AFTAC, four miles east of Johnson Road	[redacted]	Building	Metal Building	512	One story, rectangular plan, horizontal wood board foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
218	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Metal Building 2	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
218	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Plywood Building on Tower	N/A	One story, rectangular plan, metal platform foundation, balloon framed, plywood siding, flat roof is clad in corrugated metal.	No
218	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Metal Building/ Garage	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
220	306	Bear Bait, Quebec, off Beaver Creek Road	[redacted]	Other	Metal Storage Structure	N/A	One story, rectangular plan, no foundation, metal framing, sheet metal siding, flat roof clad in sheet metal.	No
226	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Metal Building/ Garage	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No

226	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Metal Building 2	N/A	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
226	Stuart Creek IA	SA-2 B/F, Call sign Juliet, end of CAM II Road	[redacted]	Building	Plywood Building on Tower	N/A	One story, rectangular plan, metal platform foundation, balloon framed, plywood siding, flat roof is clad in plywood/asphalt sheeting.	No

FAI-02694 and FAI -02695
Resource ID: 28
Resource Type: Wooden Building #33 and Bathroom Facility Building #31
Latitude: [redacted]
Longitude [redacted]
UTM [redacted]
Construction Date: 1971
Determination of Eligibility: Not evaluated

This set of buildings is located off of Manchu Road in the western portion of YTA, 29.5 km southeast of Fort Wainwright and 9.3 km east of Eielson Air Force Base (Figure 71). The first building (#33, FAI-02695) is a rectangular plan, one-story, wood framed building, sitting on a post and block foundation and is oriented east/west (Figure 72). The building is clad in red vertical groove plywood and the shed roof is made of corrugated metal. A double door entrance to the left and single door entrance to the right are located on the primary façade which faces east. Each façade contains a single window with simple plywood shutters. A wooden deck with railings had been added to the primary east façade and wraps around to the north side of the building.

Figure 72. FAI-02695, Building #33 west façade.

The bathroom facilities (#31, FAI-02694) to the west are oriented east/west, one-story, rectangular planned and wood framed with an unidentifiable foundation type (Figure 73, Figure 74). The building has a metal standing seam shed roof and is clad in red painted plywood. The front of the building facing east has four hopper windows, each with a single shutter attached

at the bottom. The entrance door is located on the south side of the building and three openings at the bottom of the west side can be adjusted for ventilation via awning-like shutters.

Figure 73. Bathroom facilities (left) adjacent to Building 33.

Figure 74. West façade of bathroom facilities.

Section 110 Archaeological Surveys

A total of 10,151 acres of land in YTA were surveyed for archaeological sites during the 2018 field season by CEMML crews. These surveys were in support of Range Control potential development areas and forestry management. All 2018 surveyed areas marked in Figure 75 were covered by pedestrian transects, and shovel testing occurred in upland locations. The terrain in YTA is extremely rugged and is largely covered by steep uplands. Figure 75 shows the YTA highlighting wetlands (green) and slopes greater than 20% (mustard brown). Ridgelines are the most likely areas to recover cultural materials in the YTA.

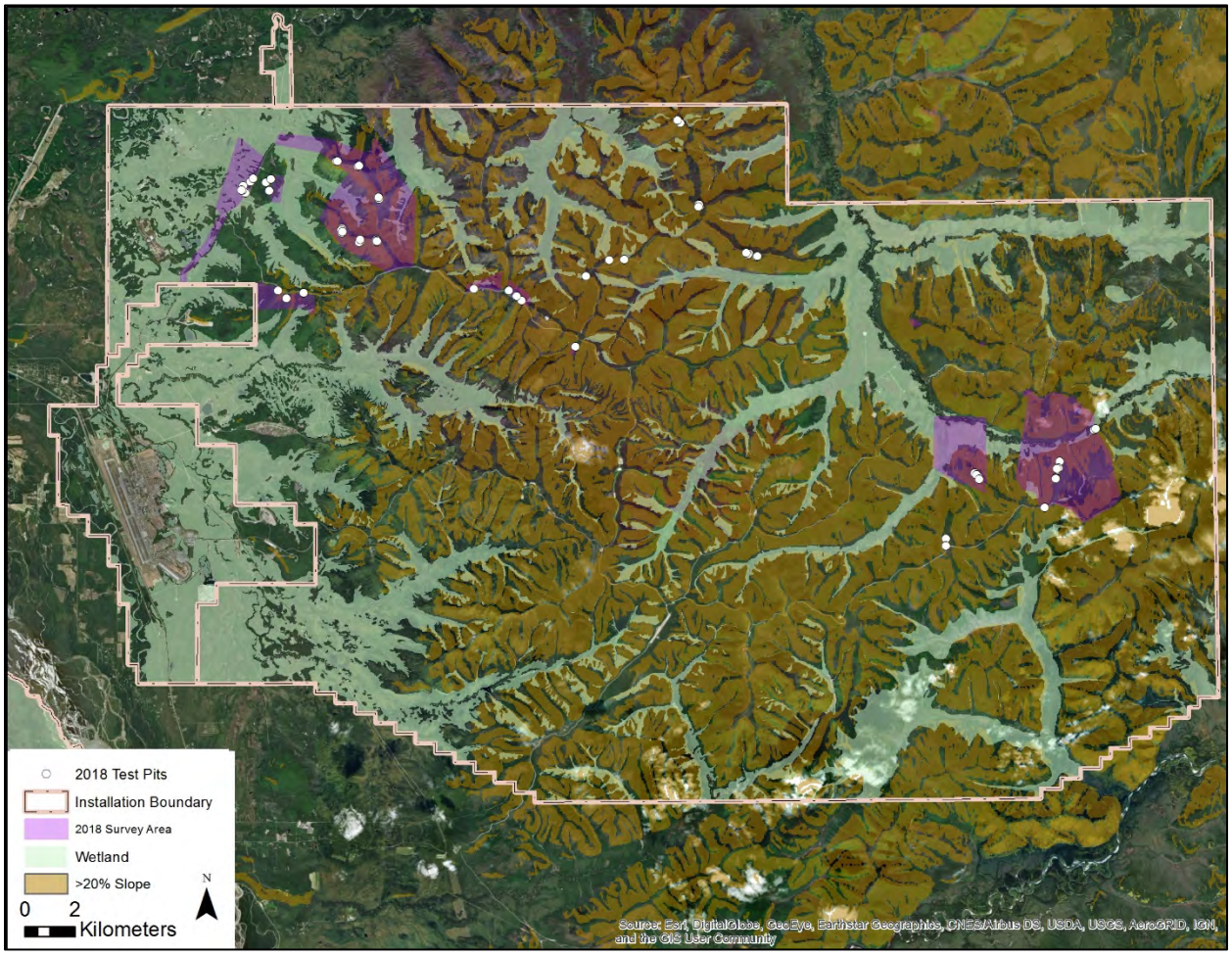


Figure 75. Archaeological surveys in YTA in 2018.

Surveys covered areas across the YTA including a large firing point location in the eastern portion of YTA (3518 acres), South Fork and Vole Creek Firebreaks (1305 acres), the Air Force Technical Applications Center area (3651 acres), Landing Zone Lynx (240 acres), Beaver Creek Firebreak (411 acres), Transmitter Road Firebreak and Road (873 acres), Tire Village Firing Point

(95 acres), NE YTA Firing Point (45 acres), and TA 305 Firing Point (13 acres). The eastern YTA Firing Point is located among the highest hills in the area. Short black spruce and willow are found along ridgelines (Figure 76). Test pits in this location were extremely shallow, measuring only a few centimeters before encountering bedrock (Figure 77). The Vole Creek area is covered with dense black spruce and a moss understory (Figure 78). Test pits reach approximately 20 cmbs. A thin (5 cm) organic layer overlies relatively unaltered silt deposits (Figure 79). Mature spruce forests cover the AFTAC survey area (Figure 80). Bedrock in this area is overlain by 25-30 cm of loess with 10 cm organic layers. A weak B horizon is evident in the profile (Figure 81).

Figure 76. Eastern YTA Firing Point survey area overview.

Figure 77. Eastern YTA Firing Point survey area test pit.

Figure 78. Vole Creek survey area overview.

Figure 79. Vole Creek survey area test pit.

Figure 80. AFTAC survey area overview.

Figure 81. AFTAC survey area test pit.

The LZ Lynx survey area had previously been cleared. Grasses and willows make up the majority of the vegetation (Figure 82). Test pits are shallow, up to 20 cm deep, with silt under a 5-10 cm organic layer (Figure 83). In the Beaver Creek survey area, mature white spruce forests cap approximately 25-30 cm of silt (Figure 84). A thin (5 cm) organic layer overlies a thin B horizon (Figure 85). The Transmitter Road survey location is covered by a mature spruce and poplar forest (Figure 86). Test pits reach approximately 20 cmbs. A thin organic horizon overlays silt with a 5-10 cm thick B horizon (Figure 87). The Tire Village survey area is forested with white

spruce and had deep sediments (up to 60 cmbs) (Figure 88). Test pits uncover a thin organic horizon overlying thick silts (Figure 89). Soil development is evident in the top 20-30 cm of silt. Finally, the NE Firing Point/TA 305 survey area, located at some of the highest elevation in YTA, has short spruce vegetation and grasses and test pits reaching a maximum of 40 cmbs (Figure 90, Figure 91).

Figure 82. LZ Lynx survey area overview.

Figure 83. LZ Lynx survey area test pit.

Figure 84. Beaver Creek survey area overview.

Figure 85. Beaver Creek survey area test pit.

Figure 86. Transmitter Road survey area overview.

Figure 87. Transmitter Road survey area test pit.

Figure 88. Tire Village survey area overview.

Figure 89. Tire Village survey area test pit.

Figure 90. NE Firing Point/TA305 survey area overview.

Figure 91. NE Firing Point/TA305 survey area test pit.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered in YTA during 2018.

Archaeological Site Monitoring and Site Protection Measures

Four sites were monitored in YTA in 2018 (Table 8, Figure 92). None of these site show erosion or other impacts from training or recreation. Current site photos are provided in Appendix 2.

Table 8. Sites monitored in YTA in 2018.

Training Area	AHRS #	Last Visit	2018 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction
301	FAI-01556	2014	6/19/2018	no	forested	no
306	XBD-00364	2012	6/19/2018	no	rocky outcrop with loose rock and low vegetation, modern tower near site	no
305	XBD-00368	2012	6/19/2018	no	rocky outcrop, forested, nearby push pile from road maintenance	no
305	XBD-00370	2012	6/19/2018	no	rocky outcrop, recently burned, new growth	no

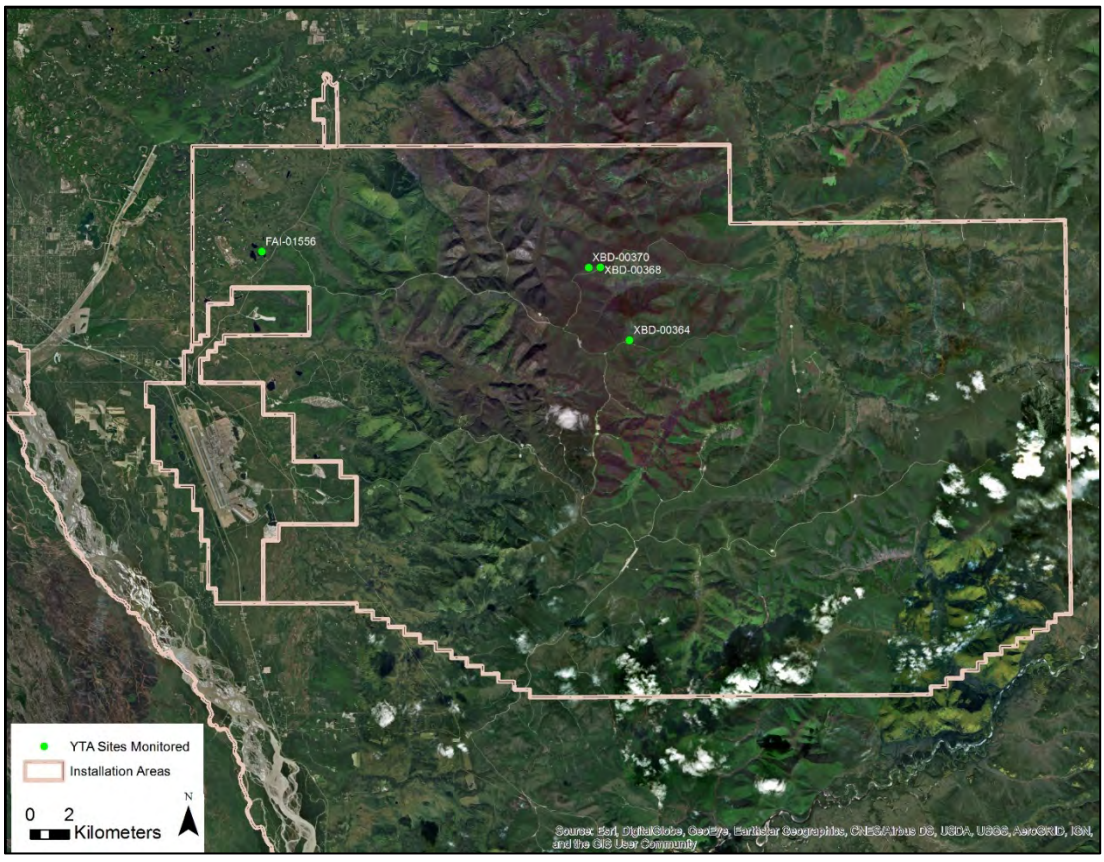


Figure 92. Sites monitored in YTA in 2018.

Determinations of Eligibility

No sites in YTA were evaluated in 2018.

Summary of Archaeological Surveys and Sites

Between 2002 and 2018, CEMML archaeologists have conducted systematic archaeological survey on 63,331 acres of land in YTA (Figure 93). This accounts for approximately 24.4% 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 21 archaeological sites have been found in the YTA. Fourteen of these have been found not eligible for the NRHP and seven sites have not yet been evaluated.

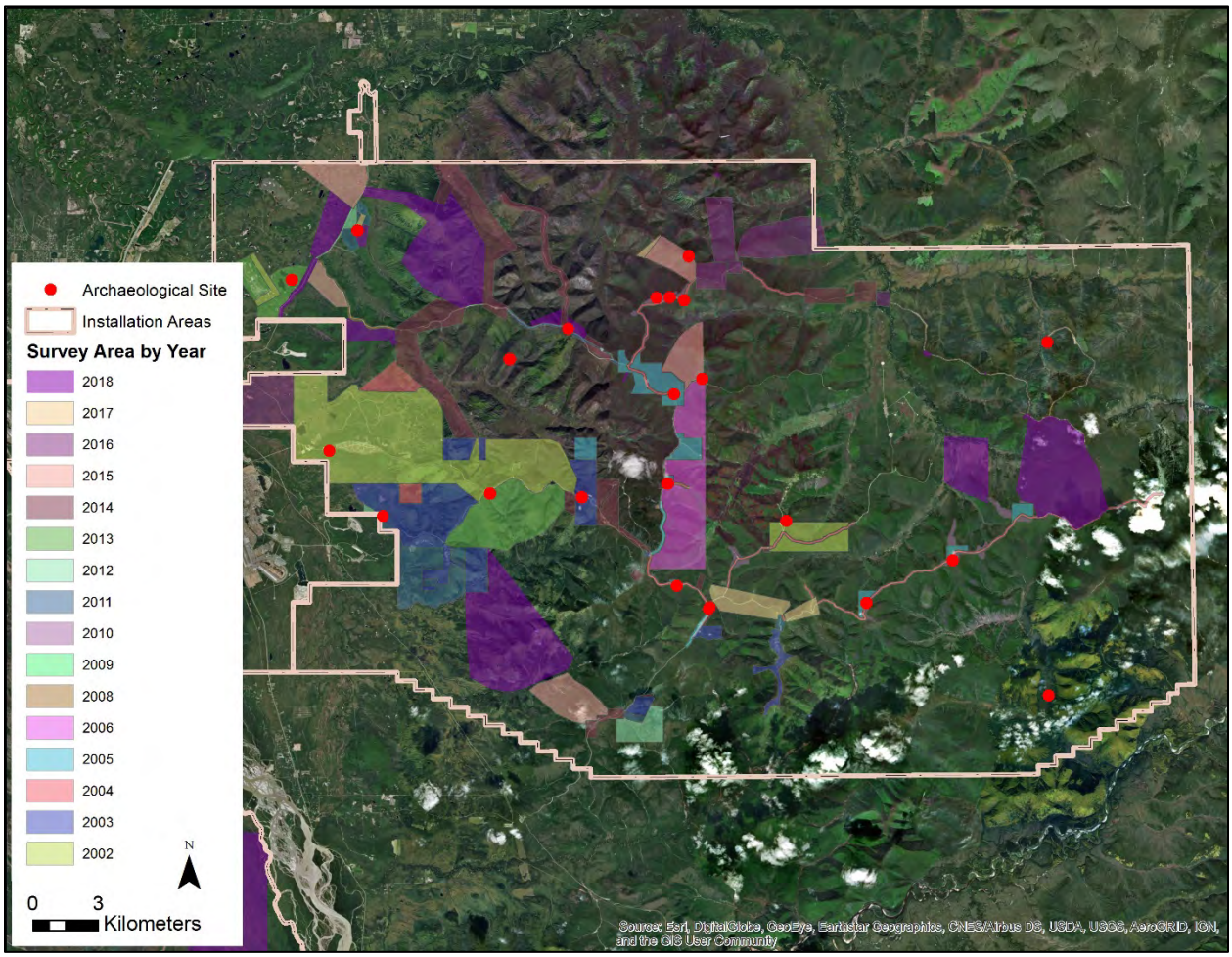


Figure 93. Archaeological sites and surveys in YTA, all years.

2018 Donnelly Training Area

NAGPRA and ARPA Activities

No activities related to NAGPRA or APRA took place in DTA in 2018.

Section 106 Activities

Section 106 consultation for two undertakings took place in 2018. The SHPO concurred with a finding of No Historic Resources Affected for the DTA West Trails Project on 23 April 2018. The SHPO and local stakeholders also reviewed the final report of excavations at the Delta River Overlook Site in DTA East. University of Alaska Fairbanks excavated this site in 2015 and 2017 to complete mitigation required under FW-MOA-1411. The report was the final requirement under the MOA which was closed on 28 November 2018.

Building and Structure Surveys

Surveys for undocumented buildings and structures also occurred in DTA in 2018. Two hundred forty eight buildings were visited (Figure 94, Table 9). Less than half (77) have building numbers for tracking by the Master Planning division. Of the buildings surveyed, twelve had previously been given AHRS numbers (XBD-00384, 00385, 00386, XMH-00391, 01274 (3 buildings), 01353, 01468, 01470, 01471, 01472). Seven additional structures appear to be nearing fifty years old and new AHRS numbers were acquired (XMH-01573 through XMH-01579).

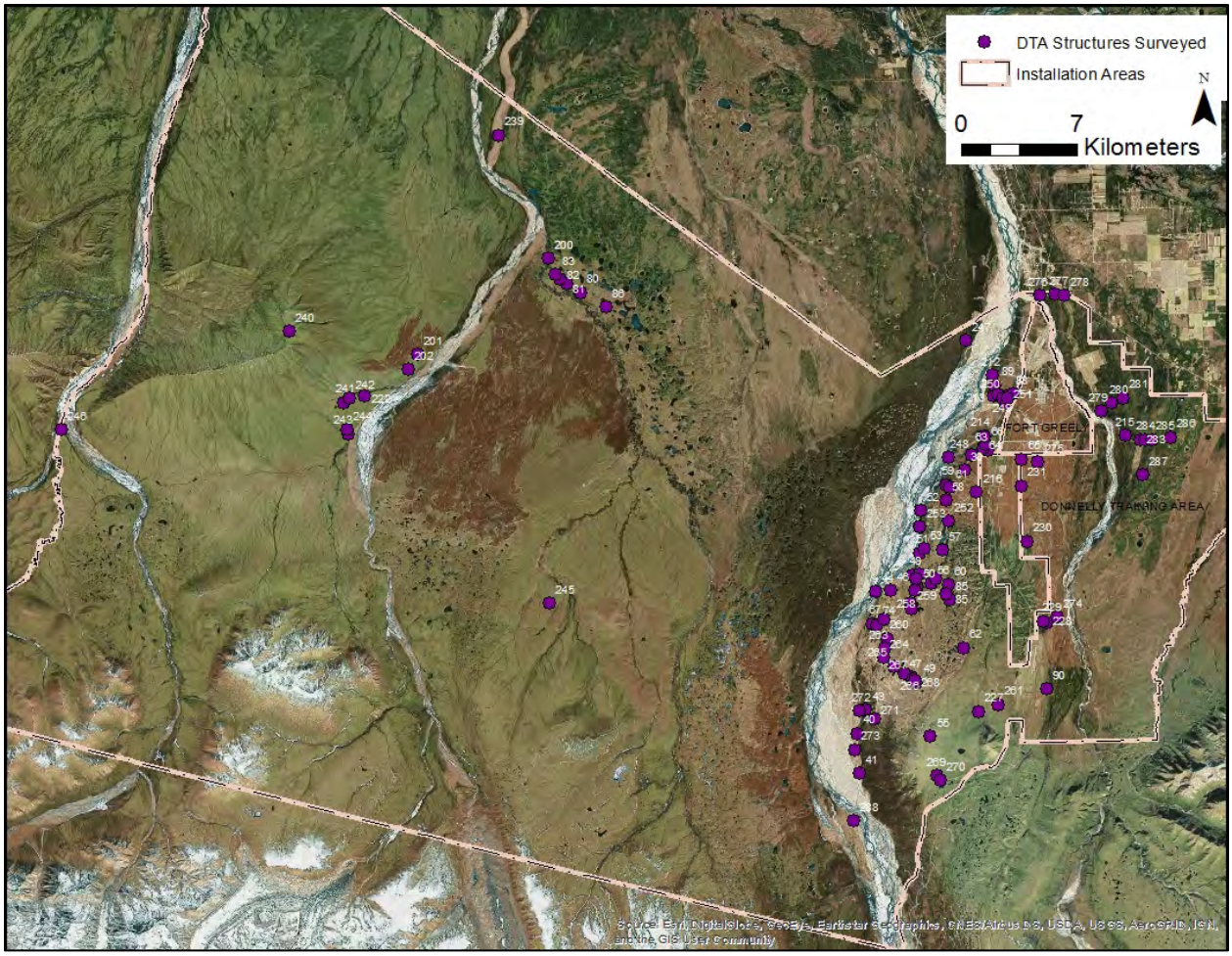


Figure 94. Buildings and structures surveyed on DTA in 2018.

Table 9. Buildings and structures surveyed in DTA in 2018

ID	Training Area	Location	Latitude/ Longitude	Name	Building #	Description	AHRS
0	529	On Texas Range	[redacted]	Metal Building	E5548	One story, rectangular plan, horizontal wood board foundation, metal framed, metal sheeting siding, flat roof clad in metal sheeting.	No
0	529	Near Texas Range maintenance facility	[redacted]	Wood Building	N/A	One story, rectangular plan, wood beam/plywood platform foundation, balloon framed, clapboard siding, side gable roof clad in asphalt sheeting.	No
0	529	Near Texas Range maintenance facility	[redacted]	Conex Building	N/A	One story, rectangular plan, conex structure.	No
0	529	On Texas Range	[redacted]	Conex Building	N/A	One story, rectangular plan, conex structure.	No
30	519	OP 4, Off OP Road	[redacted]	Metal & Concrete Building	S1355	One story, concrete slab foundation, reinforced CMU/metal framing, CMU/corrugated metal cladding, gable roof clad in corrugated metal.	No
40	550	OP 11, Washington Range along Delta River	[redacted]	Metal Building	N/A	One story, rectangular plan, concrete slab/metal beam foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
40	550	OP 11, Washington Range along Delta River	[redacted]	CMU Structure	N/A	Half story, irregular plan, concrete slab foundation, reinforced CMU, with flat concrete roof.	No
41	532	OP 12, south of Washington Range, near Delta River	[redacted]	Concrete Building	1700	One story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof with tar and gravel.	No
43	532	OP 10, south end of Texas Range Road	[redacted]	Outhouse	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, plywood siding, shed roof clad in asphalt shingles.	No
44	532	OP 9, off of CTR, off Meadows Road	[redacted]	Wood Building	OP 009	One story, rectangular plan, concrete slab foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No

46	523	OP 8A, end of CTR Road	[redacted]	Log Structure	N/A	One story, square plan, log structure with a log and earthen roof.	XMH-01573
47	529	Texas Condo Road		Wood Sheds	N/A	Two wood sheds.	No
48	522	OP 7A, off Meadows Road	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
48	522	OP 7A, off Meadows Road	[redacted]	Metal Building	S1431	One story, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
49	529	Off Texas Condo Road	[redacted]	Metal Building	N/A	One and a half story, square plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
50	526	Intersection of Meadows & Twin Lakes Roads	[redacted]	Range Operations Center metal building	D01990	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
50	526	Intersection of Meadows & Twin Lakes Roads	[redacted]	Wood Shed	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, plywood siding, gable roof clad in standing seam metal.	No
50	526	Intersection of Meadows & Twin Lakes Roads	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
50	526	Intersection of Meadows & Twin Lakes Roads	[redacted]	Concrete Outhouse	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, spit-face CMU cladding, gable roof clad in corrugated metal.	No
50	526	Intersection of Meadows & Twin Lakes Roads	[redacted]	Conex Tower	N/A	Conex boxes made into structures.	No
51	521	OP 7, off OP Road	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No

51	521	OP 7, off OP Road	[redacted]	Metal Building	S 1429	One story, rectangular plan, horizontal wood board foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
52	520	OP 6, off OP Road	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
52	520	OP 6, off OP Road	[redacted]	CMU/Metal Building	S 1357	One story, rectangular plan, concrete slab foundation, reinforced CMU/metal framing, gable roof clast in corrugated metal.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Wood Building #3	1400	One story, rectangular plan, horizontal wood beam foundation, balloon framed, shiplap siding, gable roof clad in asphalt sheeting.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Metal Building	1415	One story, rectangular plan, concrete slab foundation, reinforced CMU/metal framing, gable roof clast in corrugated metal.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Metal Building #2	1418	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Metal Building #2	1419	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Wood Building	030 - 5	One story, rectangular plan, horizontal metal beam foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Wood Building #1	16 -18	One story, rectangular plan, horizontal metal beam foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Wood Shed #2	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, shiplap/clapboard siding, gable roof clad in asphalt sheeting.	No

53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Wood Shed #1	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
53	521	Mississippi Range Complex, Off Meadows Road	[redacted]	Doyon Building	S 1421	One story, square plan, concrete slab foundation, vertical groove plywood siding, shed roof clad in standing seam metal.	No
55	532	Off Donnelly Dome Road	[redacted]	CMU Building	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in corrugated metal.	No
55	532	Off Donnelly Dome Road at top of hill	[redacted]	Small Metal Building	N/A	One story, rectangular plan, horizontal wood beams foundation, metal framed structure, metal sheeting siding, flat roof clad in metal sheeting.	No
55	532	Off Donnelly Dome Road at top of hill	[redacted]	Metal Building	N/A	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
55	532	Off Donnelly Dome Road at top of hill	[redacted]	Metal Structure/Equipment	N/A	One story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, flat roof clad in sheet metal.	No
55	532	Off Donnelly Dome Road at top of hill	[redacted]	Domed Building	N/A	Two and half story, irregular plan, concrete slab foundation, metal framed, sheet metal siding, gable roof clad in standing seam metal.	XMH-00391
56	526	UAS strip along Whalgren Highway	[redacted]	Metal Building #2	D 01970	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
56	526	UAS strip along Whalgren Highway	[redacted]	Metal Building #1	D 1965	Two story, rectangular plan, concrete slab, metal framed, sheet metal siding, gable roof clad in standing seam metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Main Building	1928	Two and half story, rectangular plan, concrete slab foundation, reinforced concrete structure, clad in stucco, flat roof with tar and gravel.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Metal Building	1929	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No

57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Metal Building	1930	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Metal Building	1931	One and half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Metal Building	1940	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Metal Building	1941	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	RPG Fitness Center	N/A	One story, rectangular plan, perimeter foundation, balloon framed, corrugated metal siding, flat roof clad in an unknown material.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Wood Building #1	N/A	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Doyon Building	N/A	One story, rectangular plan, unknown foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
57	525	CRTC Bolio Lake Test Facility, off Meadows Road	[redacted]	Wood Building #2	N/A	One story, rectangular plan, horizontal metal I-beam, foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
58	520	ASP Facility, ff Meadows Road	[redacted]	Bunke	1950	Two story, rectangular plan, concrete slab foundation, reinforced cast concrete structure with earthen siding and roof.	No
58	520	ASP Facility, ff Meadows Road	[redacted]	Metal Building	1951	Two story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
59	519	OP 5, off OP Road	[redacted]	CMU/Metal Building	S 1356	One story, rectangular plan, concrete slab foundation, reinforced CMU/metal framing, gable roof cast in corrugated metal.	No

60	526	Twin Lakes Campground	[redacted]	A-frame cabin	N/A	Two story, rectangular plan, horizontal wood beam foundation, balloon framed, corrugated metal/plywood siding, gable roof clad in corrugated metal.	XMH-01574
61	519	Off OP Road, near OP 5	[redacted]	Wood Building	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
62	528	Off Windy Ridge Road	[redacted]	Metal Shed #1	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
62	528	Off Windy Ridge Road	[redacted]	Metal Shed #2	N/A	One story, rectangular plan, unknown foundation, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #8	DRB 01	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #9	DRB 02	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #10	DRB 03	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #11	DRB 04	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #12	DRB 05	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #13	DRB 06	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #14	DRB 07	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No

63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #15	DRB 08	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #16	DRB 09	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #17	DRB 10	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #18	DRB 11	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #19	DRB 12	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #20	DRB 13	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #21	DRB 14	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #1	DRD 01	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #2	DRD 02	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #3	DRD 03	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #4	DRL 01	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No

63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #5	DRL 02	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #6	DRL 03	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Barrack Building #7	DRL 04	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
63	518	South of Barracks, off Beals Road South	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene framed, "rough tex" plywood siding, irregular roof clad in "rough tex" plywood.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Metal Building	N/A	One story, rectangular plan, unknown foundation, metal framed, vertical groove plywood siding, gable roof clad in asphalt shingles.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Wood Building	N/A	One story, rectangular plan, horizontal wood board foundation, balloon framed, vertical groove plywood siding, gable roof clad in asphalt shingles.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Wood/Metal Tower	N/A	Two story, square plan, metal/balloon framed, metal/plywood sheeting, shed roof clad in unknown material.	No
63	518	Battalion Bivouac, off Beals Road South	[redacted]	Doyon Water House	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	No
64	518	OP2, off Beals Road South	[redacted]	Quonset Hut	3004	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in corrugated metal.	XMH-01353
65	515	CRTC Test Track facility, off Richardson Highway	[redacted]	Metal Building	1840	One and a half story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
65	515	CRTC Test Track facility, off Richardson Highway	[redacted]	Metal Building	1844	One and a half story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No

65	515	CRTC Test Track facility, off Richardson Highway	[redacted]	Metal Building	1846	One story, rectangular plan, concrete slab, metal framed, corrugated metal, shed roof clad in corrugated metal.	No
65	515	CRTC Test Track facility, off Richardson Highway	[redacted]	Metal Building	1848	One and a half story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
65	515	CRTC Test Track facility, off Richardson Highway	[redacted]	Metal Building	N/A	One story, rectangular plan, perimeter foundation, balloon framed, corrugated metal siding, rounded roof clad in an unknown material.	No
66	518	OP 1, off road to Beals South entrance	[redacted]	Wood Building	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, shed roof clad with an unknown material.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #1	N/A	One story, rectangular plan, pier foundation, balloon framed, plywood siding, hip roof clad in plywood.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #2	N/A	One story, square plan, horizontal wood beam foundation, balloon framed, plywood siding, shed roof clad in an unknown material.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #4	N/A	One story, L-shaped plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #5	N/A	Two story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #6	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in plywood.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #7	N/A	One story, square plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in plywood.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #8	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in plywood.	No

67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #9	N/A	Two story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, gable roof clad in plywood.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #10	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in plywood.	No
67	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building #3	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framed, plywood siding, flat roof clad in an unknown material.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Tower #1 (South)	N/A	Two story, square plan, conex container foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Tower #2 (West)	N/A	Two story, square plan, conex container foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Tower #3 (East)	N/A	Two story, square plan, conex container foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Tower #4 (North)	N/A	Two story, square plan, conex container foundation, balloon framed, plywood siding, shed roof clad in corrugated metal.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Plywood Building	N/A	Two story, horizontal wood beam foundation, plywood siding, gable roof clad in corrugated metal.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Romtec Outhouse #1	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
74	523	Bondsteel Range, off Meadows Road	[redacted]	Romtec Outhouse #2	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
80	546	OP 27, DTA West	[redacted]	Airforce Structure	N/A	Two metal structures, generator, emitter.	No
81	546	OP 27.5, DTA West	[redacted]	Shed	N/A	Metal shed, tar and graveled in 100 Mile Fire.	No

82	546	OP 28, DTA West	[redacted]	Shed	N/A	Metal shed, emitter, truck targets, fuel tank, metal building, solar panel.	No
83	546	OP 29, DTA West		Shed	N/A	Metal shed, tar and graveled in 100 Mile Fire.	No
85	526	Twin Lakes Recreational Area	[redacted]	Twin Lakes Cabin	N/A	One story, rectangular plan, horizontal wood board foundation, log structure (combination of saddle and square notching system), gable roof clad in corrugated metal.	XMH-01575
88	Wills SAC	Small Arms Colorado Range	[redacted]	Metal Building	25050	One story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
89	Wills SAC	Small Arms California Range	[redacted]	Wood Building	N/A	One story, rectangular plan, balloon framed, shiplap siding, gable roof clad in asphalt sheeting.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Concrete Block Basket Structure	N/A	One and a half story, square plan, unknown foundation, structure made of metal wire, rocks and wood members, flat roof and sides clad in wire, rocks and fabric.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Concrete Structure #1	N/A	One story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof made of concrete.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Concrete Structure #2	N/A	One story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof made of concrete.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Concrete Structure #3	N/A	Half story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof made of concrete.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Small Wood Tower	N/A	Two story, rectangular plan, unknown foundation, wood framed, plywood siding, flat roof clad in plywood.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Wood Building	N/A	One story, rectangular plan, pier foundation, balloon framed, plywood siding, shed roof clad in plywood.	No
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Abandoned Metal Building	N/A	One and a half story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	XMH-01274

90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Radar Dome #1	N/A	One and a half story, circular plan, concrete slab foundation, reinforced cast concrete foundation, with an unknown roof type clad in metal.	XMH-01274
90	511	Donnelly Drop Zone, MIDAS and FOB sites	[redacted]	Radar Dome #2	N/A	One and a half story, circular plan, concrete slab foundation, reinforced cast concrete foundation, with a missing roof.	XMH-01274
200	546	OP 31, DTA West	[redacted]	Metal Building	N/A	Camera site metal buildings and equipment.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	Metal Building #3	1600	One story, rectangular plan, unknown foundation, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	Metal Building #1	1610	Two story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	Metal Building #2	1615	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	Cast Concrete Structure	N/A	Half story, rectangular plan, concrete slab foundation, reinforced cast concrete structure, flat roof clad in concrete.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	CMU Structure	N/A	Half story, irregular plan, concrete slab foundation, reinforced CMU structure, flat roof clad made of concrete.	No
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	CRTC Meteorology Building	N/A	Two story, rectangular plan, horizontal wood beams foundation, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
209	529	Texas Range Maintenance site,	[redacted]	Small CMU Building	1962	Two story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in tar and gravel.	XMH-01471

		end of Meadows Road					
209	529	Texas Range Maintenance site, end of Meadows Road	[redacted]	Quonset Building	1606	Two story, rectangular plan, unknown foundation, metal framed, corrugated metal siding, rounded roof clad in corrugated metal.	XMH-01472
210	Wills SAC	Georgia Range	[redacted]	Metal Building	D25001	One story, rectangular plan, concrete slab, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
210	Wills SAC	Georgia Range	[redacted]	Metal Building	D25005	One story, rectangular plan, concrete slab, metal framed, corrugated metal siding, shed roof clad in corrugated metal.	No
210	Wills SAC	Georgia Range	[redacted]	Conex Building	N/A	Three story, rectangular plan, concrete slab foundation, conex shipping container structure, flat/gable roof clad in conex structure/corrugated metal.	No
210	Wills SAC	Georgia Range	[redacted]	Outhouse	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, spit-face CMU cladding, gable roof clad in corrugated metal.	No
210	Wills SAC	Georgia Range	[redacted]	Wood Shed	N/A	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
211	519	OP 3, off OP Road	[redacted]	Concrete Basket Bunker	N/A	One story, square plan, unknown foundation, structure made of metal wire, rocks and wood members, flat roof and sides clad in wire, rocks and fabric.	No
212	Wills SAC	Arkansas Range Control	[redacted]	Wood Tower	N/A	Two story, rectangular plan, concrete slab foundation, plywood/clapboard siding, shed roof clad in unknown material.	No
212	Wills SAC	Arkansas Range Control	[redacted]	Wood Structure	N/A	One story, rectangular plan, wood framed, shed roof clad in corrugated metal.	No
212	Wills SAC	Arkansas Range Control	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, polyethylene framed, "rough tex" plywood siding, irregular roof clad in "rough tex" plywood.	No

212	Wills SAC	Located off road on the way to Arkansas Range Control	[redacted]	Wood Building #2	N/A	One story, rectangular plan, horizontal wood beams foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
212	Wills SAC	Arkansas Range Control	[redacted]	Doyon Wood Building	S-1309	One story, square plan, concrete slab foundation, balloon framed, vertical groove plywood siding, shed roof clad in sheet metal.	No
212	Wills SAC	Arkansas Range Control	[redacted]	Quonset Hut	1310	One story, rectangular plan, concrete slab, Quonset framed, corrugated metal siding, rounded roof clad in corrugated metal.	XBD-00384
212	Wills SAC	Arkansas Range Control	[redacted]	Garage	1311	One story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	XBD-00385
212	Wills SAC	Arkansas Range Control	[redacted]	Wood Building	1312	One story, rectangular plan, unknown, wood framed, clapboard (wood lap) siding, gable roof clad in asphalt sheeting.	XBD-00386
213	Wills SAC	Colorado KD Range	[redacted]	Wood Building	N/A	One story, rectangular plan, horizontal wood board foundation, balloon framed, clapboard siding, gable roof clad in asphalt sheeting.	No
213	Wills SAC	Colorado KD Range	[redacted]	Metal Building	N/A	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, earthen mound clad in corrugated metal.	No
213	Wills SAC	Colorado KD Range	[redacted]	Bunker	1320	One story, rectangular plan, concrete slab, reinforced concrete structure with earthen siding, earthen mound roof.	XMH-01468
214	Wills SAC	Beals Complex, maintenance facility	[redacted]	Doyon Building	1330	One story, rectangular plan, concrete slab, balloon framed, CMU siding, shed roof clad in sheet metal.	No
214	Wills SAC	Beals Complex, maintenance facility	[redacted]	Storage Shed	N/A	One story, rectangular plan, balloon framed, wood lap siding, bell cast gambrel roof clad in asphalt sheeting.	No
214	Wills SAC	Beals Complex, maintenance facility	[redacted]	Metal Building #1	N/A	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No

214	Wills SAC	Beals Complex, maintenance facility	[redacted]	Metal Building #2	N/A	Two story, rectangular plan, balloon framed, corrugated metal siding, gable roof clad in corrugated metal.	No
214	Wills SAC	Beals Complex, maintenance facility	[redacted]	Storage Shed	N/A	One story, rectangular plan, unknown foundation, balloon framed, clapboard siding, bell cast gambrel roof clad in rolled asphalt sheeting.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Metal Building	20981	One and a half story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in standing seam metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Vehicle Inspection Building	20983	One and a half story, rectangular plan, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Metal Building	21001	Two story, rectangular plan, metal framed, corrugated metal siding, shed roof clad in corrugated metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #1	21002	One story, rectangular plan, balloon framed, metal vertical groove siding, gable roof clad in standing seam metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #2	21002	One story, rectangular plan, balloon framed, metal vertical groove siding, gable roof clad in standing seam metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	AAR Building	21004	Two story, rectangular plan, concrete slab foundation, metal framed, metal vertical groove siding, gable roof clad in standing seam metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Metal Building	21005	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Ammo Building	D20998	One story, rectangular plan, concrete slab foundation, balloon framed, metal vertical groove siding, gable roof clad in standing seam metal.	No
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Metal Building	D21003	One and a half story, rectangular plan, concrete slab foundation, metal framed, metal vertical	No

						groove siding, gable roof clad in standing seam metal.	
215	502	Between BAX and CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #3	N/A	One story, rectangular plan, balloon framed, metal vertical groove siding, gable roof clad in standing seam metal.	No
216	524	Roads maintenance facility off Meadows Road	[redacted]	Quonset Tent	1881	Two and a half story, rectangular plan, metal framed, canvas siding, rounded roof clad in canvas.	No
216	524	Roads maintenance facility off Meadows Road	[redacted]	Quonset Tent #2	N/A	Two story, rectangular plan, concrete slab foundation, reinforced and cast concrete, rounded, clad in concrete and canvas with a rounding canvas roof.	No
216	524	Roads maintenance facility off Meadows Road	[redacted]	Metal Building	N/A	One story, rectangular plan, pier foundation, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
216	524	Roads maintenance facility off Meadows Road	[redacted]	Plywood Building	N/A	One story, rectangular plan, perimeter foundation, balloon framed, vertical siding, flat roof clad in an unknown material.	No
217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	CMU Garage	D-01320	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in corrugated metal.	No
217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	Wood Shed #1	N/A	One story, rectangular plan, concrete slab foundation, balloon framed, ship lap siding, shed roof clad in asphalt sheeting.	No
217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	Wood Shed #2	N/A	One story, square plan, unknown foundation, balloon framed, wood lap (clapboard) siding, gable roof clad in asphalt sheeting.	No
217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	Romtec Outhouse	N/A	Two story, irregular plan, concrete slab foundation, polyethylene pre-fab framed, "rough tex" plywood siding, irregular roof clad in polyethylene.	No
217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	Doyon Utilities Well House	S-1350	One story, square plan, concrete slab, balloon framed, vertical groove plywood siding, shed roof clad in standing seam metal.	No

217	Wills SAC	KD Complex, off Wills Range Road	[redacted]	Quonset Building	1352	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, curved roof clad in corrugated metal.	XMH-01470
222	539	Lower Hillbilly and RAWS	[redacted]	Equipment	N/A	USAF equipment.	No
227	530	North of Donnelly Dome, off Dome Road	[redacted]	Equipment	N/A	Satellite tracking reflector and wood platform.	No
240	543	Dinosaur Ridge, DTA West	[redacted]	Tower	N/A	Metal tower, metal box, two propane tanks.	No
241	539	Hillbilly Hill, DTA West	[redacted]	Wood Building	N/A	Wood building, fuel tank, threat site, and equipment.	No
242	539	Hillbilly Hill, DTA West	[redacted]	Wood Building	N/A	Metal building.	No
243	539	Simpsonville, DTA West	[redacted]	Wood Buildings	N/A	Several wooden buildings.	No
244	539	Simpsonville, DTA West	[redacted]	Tower	N/A	Metal tower with equipment.	No
246	542	Trade and Manufacturing Site, private property	[redacted]	Wood Buildings	N/A	Five wooden buildings and equipment.	No
249	Wills SAC	Colorado KD Range	[redacted]	Quonset Hut	1356	One story, rectangular plan, quonset framed, corrugated metal siding, rounded roof clad in corrugated metal.	XMH-01576
250	Wills SAC	Colorado South Range	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
251	Wills SAC	Near Georgia Range	[redacted]	Metal Building	N/A	One story, square plan, metal framed, sheet metal/corrugated metal siding, gable roof clad in sheet metal, corrugated metal.	No
252	524	Near north end of Bolio Lake	[redacted]	Boy Scout Cabin #1	N/A	One and a half story, rectangular plan, balloon framed, plywood siding, gable roof clad in corrugated metal.	XMH-01577

252	524	Near north end of Bolio Lake	[redacted]	Boy Scout Cabin #2	N/A	One and a half story, rectangular plan, balloon framed, plywood siding, gable roof clad in corrugated metal.	XMH-01578
252	DTA East 524	Near north end of Bolio Lake	[redacted]	Boy Scout Outhouse	N/A	One story, rectangular plan, balloon framed, plywood siding, shed roof clad in sheet metal/asphalt sheeting.	XMH-01579
253	520	Off OP Road	[redacted]	Concrete Block Basket Bunker	N/A	One story, rectangular plan, metal framed, metal wire, rocks, wood members siding, flat roof clad metal wire, rocks, wood members.	No
254	526	Twin Lakes Recreational Area	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
257	526	Off Meadows Road on road leading to OP 7A	[redacted]	Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #1	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #2	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #3	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #4	N/A	Two and a half story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #5	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #6	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #8	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #9	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #10	N/A	Two and a half story, rectangular plan, conex container structure.	No

258	523	AGI Conex Villages, off Meadows Road	[redacted]	Conex Building #11	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road		Conex Building #12	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road		Conex Building #13	N/A	One story, rectangular plan, conex container structure.	No
258	523	AGI Conex Villages, off Meadows Road		Conex Building #7	N/A	One story, square plan, conex container structure.	No
259	526	Located on road leading to Big Lake		Romtec Outhouse	N/A	One story, irregular plan, concrete slab foundation, polyethylene pre-fabricated, "rough tex" plywood clad, irregular roof clad in polyethylene.	No
260	523	AGI Village, on road to Bondsteel		Conex Bridge/ Overhead Pedestrian X-ing (Bldg. #3)	N/A	Three story, rectangular plan, conex container structure.	No
260	523	AGI Village, on road to Bondsteel		Conex Building with Dome (#4)	N/A	Two story, rectangular plan, conex container structure.	No
260	523	AGI Village, on road to Bondsteel		Conex Building (#2)	N/A	One story, rectangular plan, conex container structure.	No
261	531	Dome Road to Donnelly Dome		Metal Shack Seismic	N/A	Metal seismic shack.	No
269	532	AT&T Tower site, off Old Richardson Highway		Generator #1 (north)	N/A	Half story, rectangular plan, unknown foundation, metal framed, fiberglass siding, flat roof clad in fiberglass.	No
269	532	AT&T Tower site, off Old Richardson Highway		Generator #2 (south)	N/A	Half story, rectangular plan, unknown foundation, metal framed, fiberglass siding, flat roof clad in fiberglass.	No
271	532	End of Texas Road extension		Wood Shed	N/A	One story, rectangular plan, balloon framed, wood lap (clapboard), with some plywood siding, gable roof clad in asphalt sheeting.	No
273	532	Washington Range		Wood Shed	N/A	Wood shed.	No
274	513	Off 12 Mile Crossing Road		Equipment	N/A	RAWS Station.	No

275	515	CRTC Test Trak facility, off Richardson Highway	[redacted]	Metal Building	1820	One story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, shed roof clad in corrugated metal.	No
277	501	Off 33 Mile Loop Road	[redacted]	CMU/Plywood Building	277	One story, rectangular plan, concrete slab foundation, reinforced CMU framed, CMU/plywood siding, gable roof clad in standing seam metal.	No
278	501	Off 33 Mile Loop Road	[redacted]	Metal Structure	N/A	One story, rectangular plan, metal framed, metal siding, flat roof clad in metal.	No
279	502	CACTF, off 33 Mile Loop Road	[redacted]	Metal Building	D23001	Two and a half story, rectangular plan, concrete slab, metal framed, corrugated metal siding, gable roof clad in corrugated metal.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Mock Church Building #11	11	Three and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in CMU.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Mock Bank Building #13	13	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Mock Clinic Building #7	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Mock Convenience Store #6	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Mock Embassy" (#03)	N/A	Two story, square plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Fire Station" (#02)	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in CMU.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Hotel" (#09)	N/A	Three story, square plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No

280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Office" (#04)	N/A	Two story, square plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #1 (near "church")	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, spit-face CMU cladding, gable roof clad in corrugated metal.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #2 (near "police station")	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, spit-face CMU cladding, gable roof clad in corrugated metal.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Outhouse #3 (near "school")	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, spit-face CMU cladding, gable roof clad in corrugated metal.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	Pedestrian X-ing	N/A	Three story, rectangular plan, concrete slab foundation, metal framed, metal clad, flat roof clad in standing seam metal.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Police Station" (#10)	N/A	One story, irregular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Power" building (#08)	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Radio Station" (#12)	N/A	One story, L-shaped plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence A" (#15)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence D" (#16)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No

280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence C" (#17)	N/A	One and a half story, L- shaped plan, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence D" (#21)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence E" (#22)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence C" (#23)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence B" (#18)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence F" (#19)	N/A	One and a half story, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Residence" (#20)	N/A	One and a half story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"School" (#24)	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, flat roof clad in an unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Service Station" (#05)	N/A	One story, square plan, reinforced CMU structure, flat roof clad in unknown material.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Villa" (#14)	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No
280	502	CACTF, off 33 Mile Loop Road	[redacted]	"Villa" (#14A)	N/A	One story, rectangular plan, concrete slab foundation, reinforced CMU structure, gable roof clad in asphalt sheeting.	No

283	503	BAX, off 33 Mile Loop Road	[redacted]	Tower #21020	21020	One story, rectangular plan, concrete slab foundation, metal framed, sheet metal siding, shed roof clad in standing seam metal.	No

*CMU= Concrete Masonry Unit

XMH-01573
Resource ID: 46
Resource Type: Log Structure
Building Number: N/A
Latitude: [redacted]
Longitude [redacted]
UTM: [redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

This log building is located at the end of Center Road near OP8 in DTA East, 20 km southwest of Delta Junction (Figure 94). The structure is a square plan, one-story, log framed building, sitting on a log foundation. The structure is clad in log and its roof is composed of log and earth (Figure 95, Figure 96). The logs are notched in the corners and drywall was hung in the interior (Figure 97, Figure 98).

Figure 95. East façade of log building.

Figure 96. South façade of log structure.

Figure 97. Detail of notching system (west side near entrance).

Figure 98. Interior of structure.

XMH-01574
Resource ID: 60
Resource Type: A-Frame Building
Building Number: N/A
Latitude: [redacted]
Longitude -[redacted]
[redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

An A-frame cabin is located in the Twin Lakes camping area off of Twin Lakes Road, 1.8 km east of Meadows Road and 19 km south of Delta Junction (Figure 94). The A-frame cabin is a rectangular frame, two-story, balloon framed building on a horizontal wood beam foundation and is oriented north-south. The bottom third of the building is clad in corrugated metal and the upper two-thirds in plywood, while the steeply gabled roof is clad exclusively in corrugated metal. The primary façade on the north side of the building features a centrally located, single, flush plywood door with two small, square, fixed pane windows with a plywood shutter on each side of the entrance. The back façade's fenestration features a square fixed pane window just below the roofline and a fixed pane, vertical, rectangular window below, both with a single plywood shutter (Figure 99, Figure 100).

Figure 99. Front façade, XMH-01574.

Figure 100. Back façade, XMH-01574.

XMH-01575
Resource ID: 85
Resource Type: Log Structure
Building Number: N/A
Latitude: [redacted]

Longitude: [redacted]

[redacted]

Construction Date: unknown

Determination of Eligibility: Not evaluated

A small cabin is located at the southern end of Twin Lake south, 2.3 km east of Meadows Road and 19 km south of Delta Junction (Figure 94). The cabin is a rectangular plan, one-story, log square/saddle framed building, sitting on a horizontal wood board foundation and is oriented north-south. The cabin is composed of logs and its side gabled roof is clad in corrugated metal (Figure 101).

Figure 101. East façade of XMH-01575.

Figure 102. Bunks in the interior of XMH-01575.

Figure 103. Corrugated metal ceiling in XMH-01575.

XMH-01576
Resource ID: 249
Resource Type: Quonset Hut
Building Number: 1356
Latitude: [redacted]
Longitude - [redacted]
[redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

A Quonset Hut is located on the KD Range in DTA East, 800 m west of the Richardson Highway and 7 km south of Delta Junction (Figure 94). The building is a rectangle plan, one-story, metal framed building, sitting on an unknown foundation and is oriented east-west. The overall building, including its rounded roof, is clad in corrugated metal. The east and west façades both feature a centered single, flush wood door for access and the west façade also includes a horizontal, rectangular, fixed window to the immediate right of the door (Figure 104, Figure 105).

Figure 104. East façade of XMH-01576.

Figure 105. West façade of XMH-01576.

XMH-01577
Resource ID: 252-1
Resource Type: Cabin
Building Number: N/A
[redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

Three structures making up a Boy Scout Camp are located at the north end of Bolio Lake, 250 m east of Meadows Road, and 15 km south of Delta Junction (Figure 94). The first structure is a rectangular plan, one-story, balloon framed cabin that has a concrete slab foundation. The building is clad in plywood and the front gable roof is clad in corrugated metal and features exposed rafter tails. The entrance is a centrally located opening with three strap hinges located on the cladding to the right, indicating where the door once was. On the back of the building is a centrally located, rough cut, stone masonry chimney leading into a metal chimney pipe backed by metal flashing (Figure 106).

Figure 106. Boy Scout Cabin #1, XMH-01577, south façade.

XMH-01578
Resource ID: 252-2
Resource Type: Cabin
Building Number: N/A
[redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

The second cabin in the Boy Scout Camp is also located at the north end of Bolio Lake, 250 m east of Meadows Road, and 15 km south of Delta Junction (Figure 94). The cabin is a rectangular plan, one-story, balloon framed building and has a concrete slab foundation. The building is clad in plywood and the front gable roof is clad in corrugated metal and features exposed rafter tails. The entrance is a centrally located single plywood door and the back façade features a rough cut, stone masonry chimney leading into a metal chimney pipe backed by metal flashing (Figure 107).

Figure 107. Boy Scout Cabin #2, XMH-01578, southwest corner.

XMH-01579
Resource ID: 252-3
Resource Type: Cabin
Building Number: N/A
[redacted]
Construction Date: unknown
Determination of Eligibility: Not evaluated

The third structure in Boy Scout Camp located at the north end of Bolio Lake, 250 m east of Meadows Road, and 15 km south of Delta Junction is an outhouse (Figure 94). The outhouse is a rectangular plan, one-story, balloon framed building on a horizontal wooden beam foundation. The building is clad in plywood although areas are missing and its shed roof is clad in metal and asphalt sheeting. The interior of the building features four seats cover the back half of the building and span its length, while the plywood floor below is mostly deteriorated (Figure 108).

Figure 108. Boy Scout Outhouse, XMH-01579, north façade.

Section 110 Archaeological Surveys

In 2018, 19,429 acres of archaeological surveys were conducted in DTA in support of Range Control Potential Development Areas and future forestry management projects. These acres were divided between DTA West and DTA East with 12,229 and 7200 acres respectively. In DTA West, the 2018 survey efforts focused on fire breaks and potential timber development areas including the Hayes Lake timber sale (4538 acres), Koole Lake firebreak/timber sale (2248 acres), and assorted DTA West forestry plots (5443 acres) (Figure 109). Archaeological survey in DTA East was conducted in association with Arctic Anvil training exercise preparations, and Cold Research Testing Center Activities (1174 acres) (Figure 110). Cumulatively, these efforts contribute to the goal of complete survey coverage of DTA East, where over 90,000 of 96,000 acres (94%) have been surveyed.

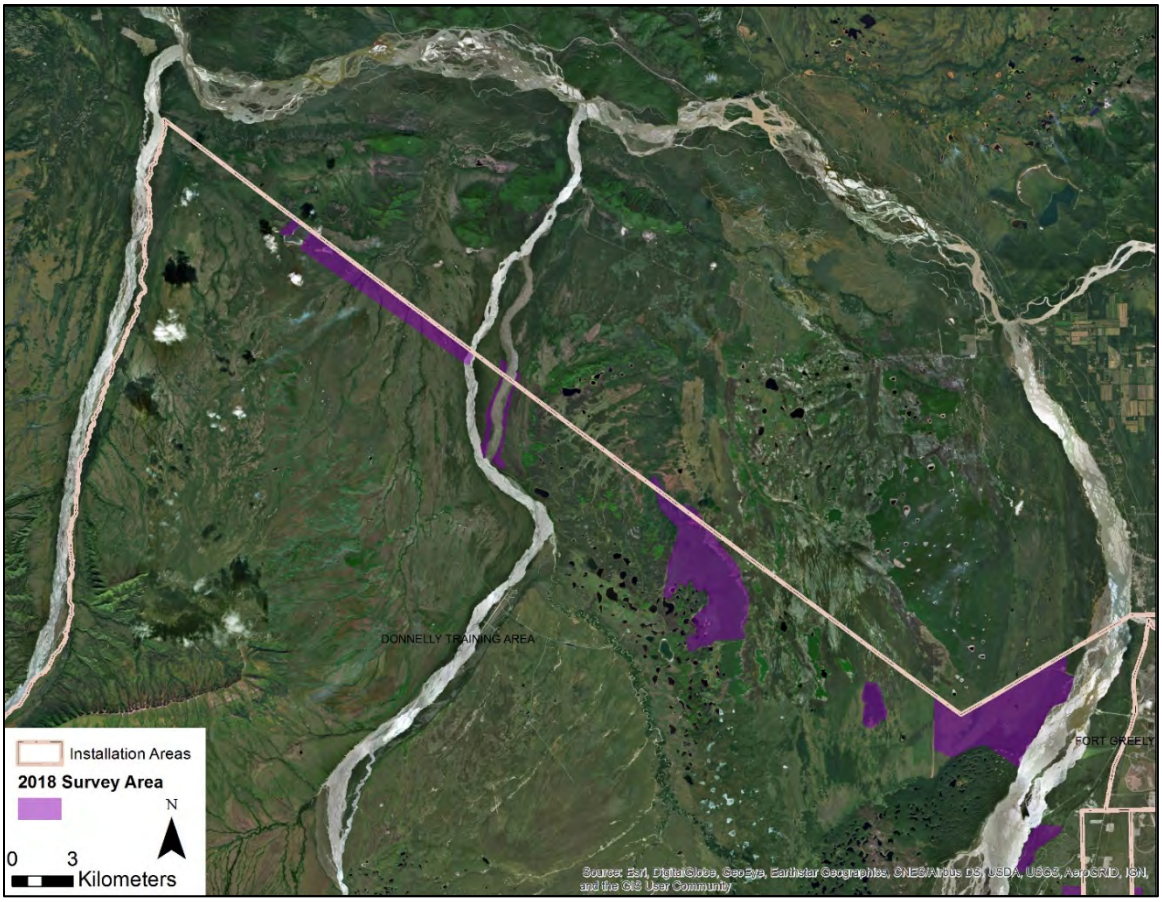


Figure 109. Archaeological surveys in DTA West in 2018.

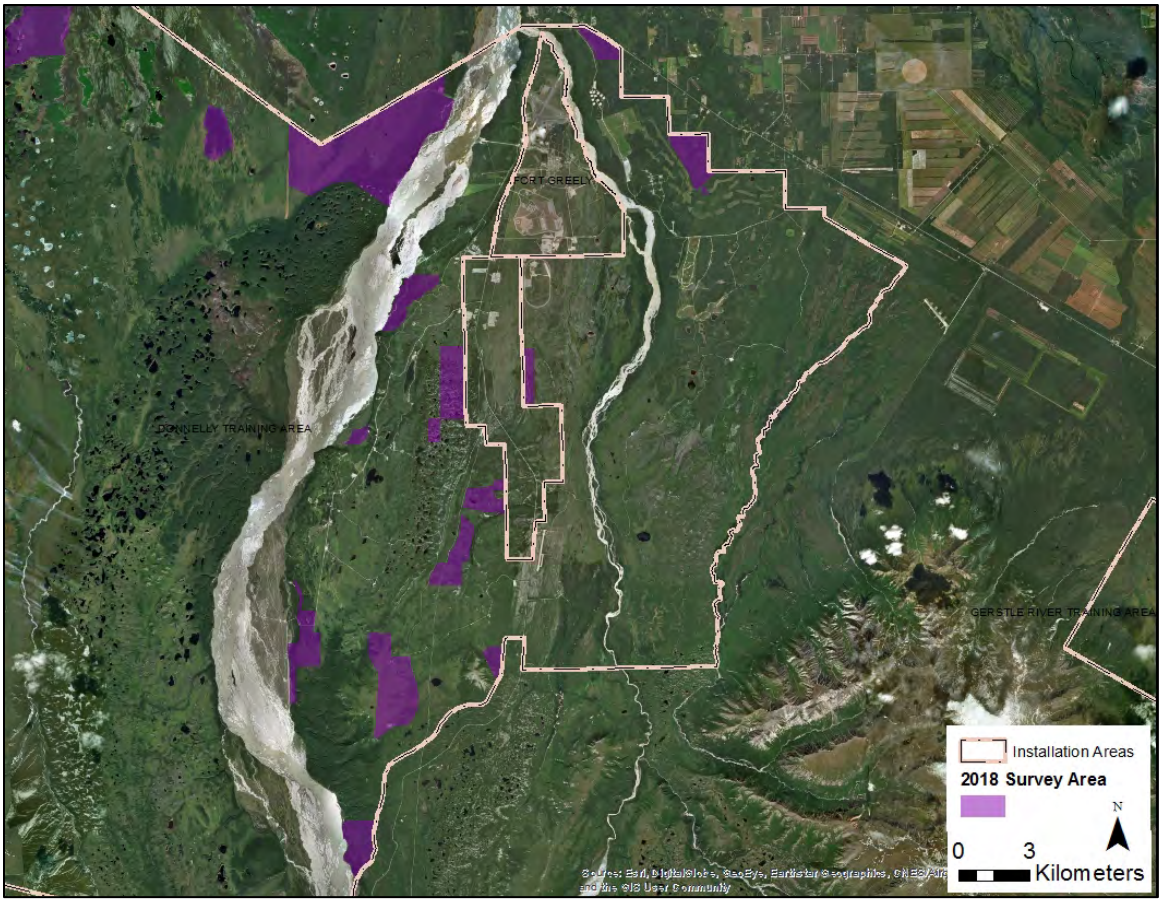


Figure 110. Archaeological surveys in DTA East in 2018.

Newly Discovered Archaeological Sites

Four new sites were located in DTA in 2018. Two sites (XBD-00450 and XBD-00451) and a trail (XBD-00449) are located in DTA West (Figure 111). One new archaeological site is located in DTA East (XMH-01567) (Figure 112).

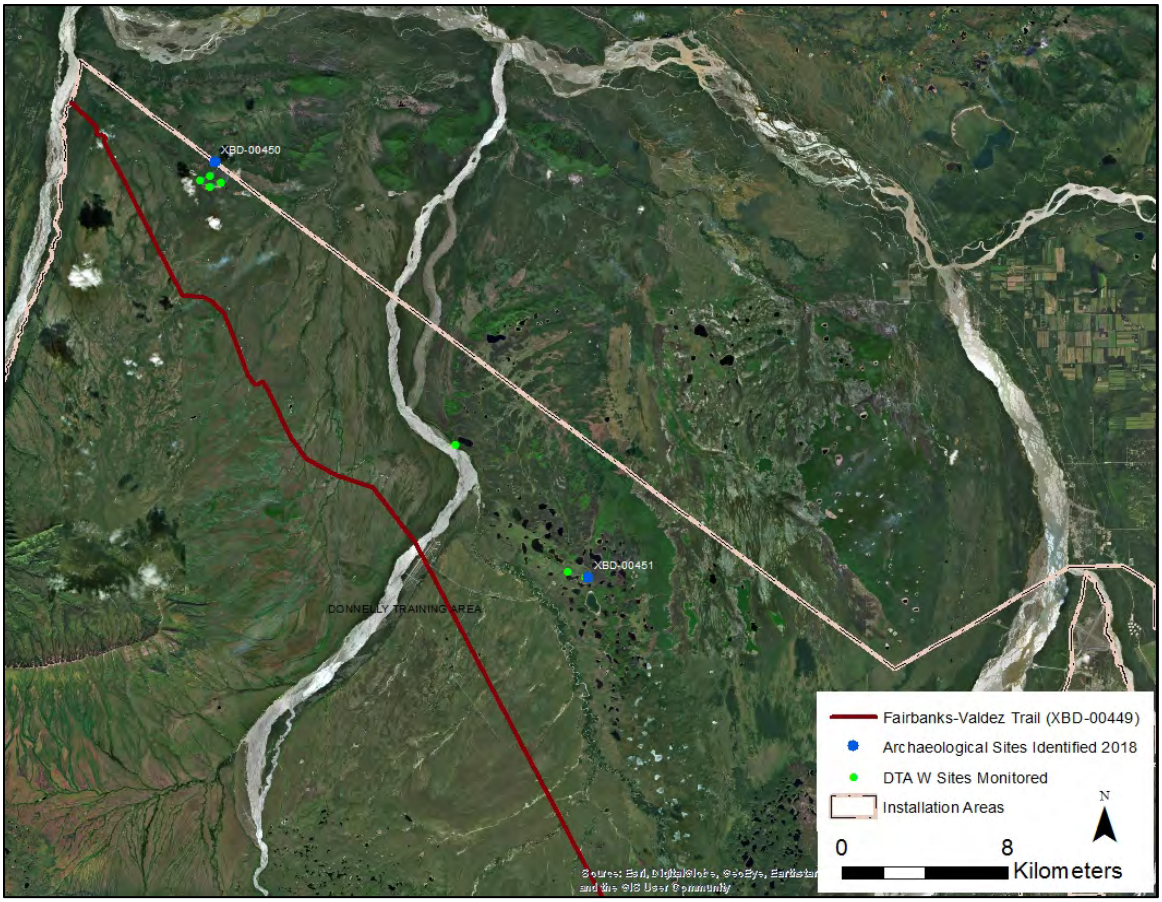


Figure 111. Archaeological sites found and monitored in DTA West in 2018.

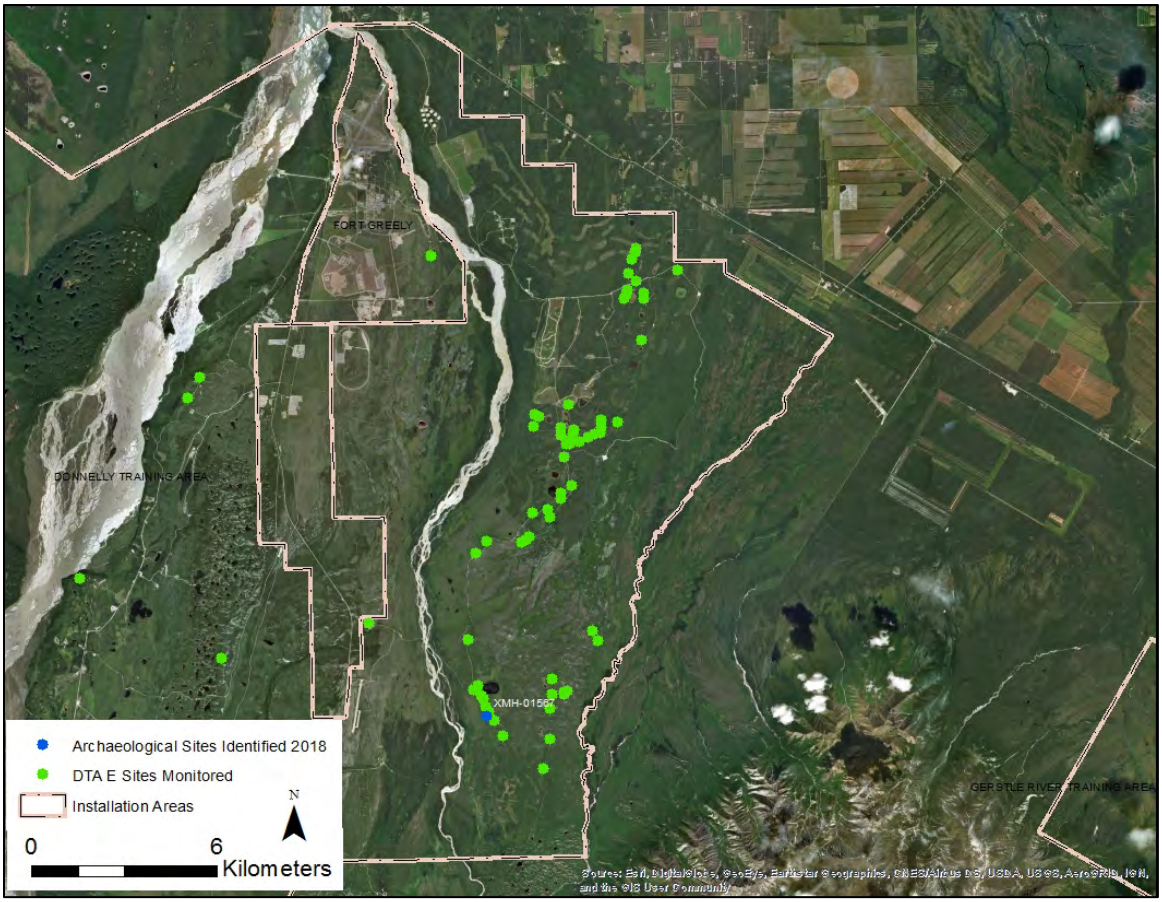


Figure 112. Archaeological sites found and monitored in DTA East in 2018.

XBD-00449/XMH-01568 (Fairbanks-Valdez Trail, Winter Cutoff)
Latitude/Longitude: [redacted]
UTM: [redacted]
Determination of Eligibility: See below.

This is a 115 km section of the historic Fairbanks-Valdez Trail located on USAG Alaska-managed lands in DTA. It includes the Winter Cutoff trail and a portion of the summer trail along the same route as the Old Richardson Highway. The portion of the trail that is still maintained extends from the Little Delta River, just 6 km south of its confluence with the Tanana River to Delta Creek (Figure 113, Figure 114, Figure 115). The original trail was only maintained in winter. The modern trail is cleared of brush and is a travel corridor for recreational and military use.

The Fairbanks-Valdez Trail provided the first overland access route to the gold fields of the Interior, especially the Tanana River Valley. It also provided the only winter route into the Interior from the coast until the opening of the Alaska Railroad. This section of trail, known as the Winter Cutoff, was utilized during the winter months as the frozen tundra allowed for the shaving of approximately 30 miles from the overall route. The Winter Cutoff, however, was not usable in the summer months due to the boggy terrain and the presence of the Delta River. The Fairbanks-Valdez Trail began in 1899 as a military pack trail from the port of Valdez, and developed into a major overland transportation route by 1904. Mail and supplies were brought into the Interior from the coast over the trail by means of packhorse, horse-drawn sleigh, dog sled, and, after 1913, automobile. The Winter Cutoff was abandoned in 1917 following on-going improvements to the overall trail and the construction and opening of the Alaska Railroad.

Figure 113. Fairbanks-Valdez Trail, west to east, from near the Little Delta River.

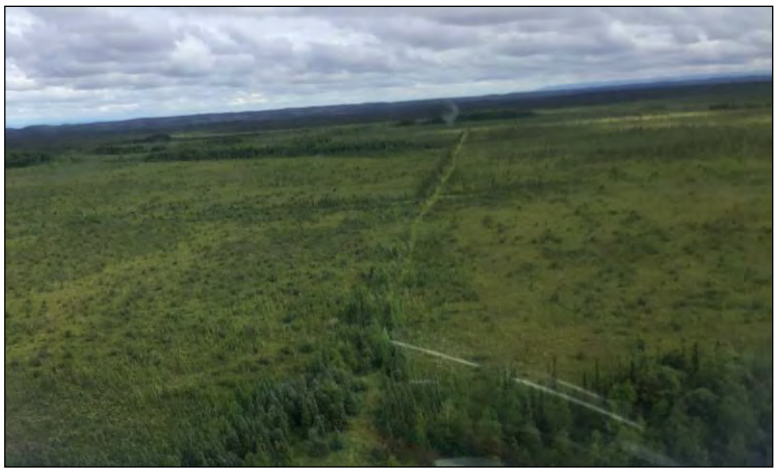


Figure 114. Fairbanks-Valdez Trail, west to east, from near Delta Creek.

Figure 115. Fairbanks-Valdez Trail, west to east, approaching Delta Creek.

XBD-00450

[redacted]

Determination of Eligibility: Not evaluated

This site is located near Koole Lake in DTA West, 46 km northwest of Delta Junction (Figure 111). The site is 250 m north of the lake on a ridge composed of Paleozoic age metamorphic rock covered in windblown silts (Wilson et al. 2015) (Figure 116). Vegetation in the area consists of dense black spruce and aspen, with an understory of Labrador tea, sphagnum moss, high bush cranberry and lichen. There is no surface visibility and no noted disturbances. Only one shovel test was excavated (Figure 117). A single chert flake was found buried in the test pit, 40-

50 cmbs (Table 10). A 10 cm organic layer overlies 40 cm of silt in this location (Figure 118, Figure 119). The upper 30 cm of silt are mottled from oxidation and other soil formation processes. The 10 cm of gray silt overlie schist and angular quartz pebble fractured bedrock.

Figure 116. XBD-00450 site overview.

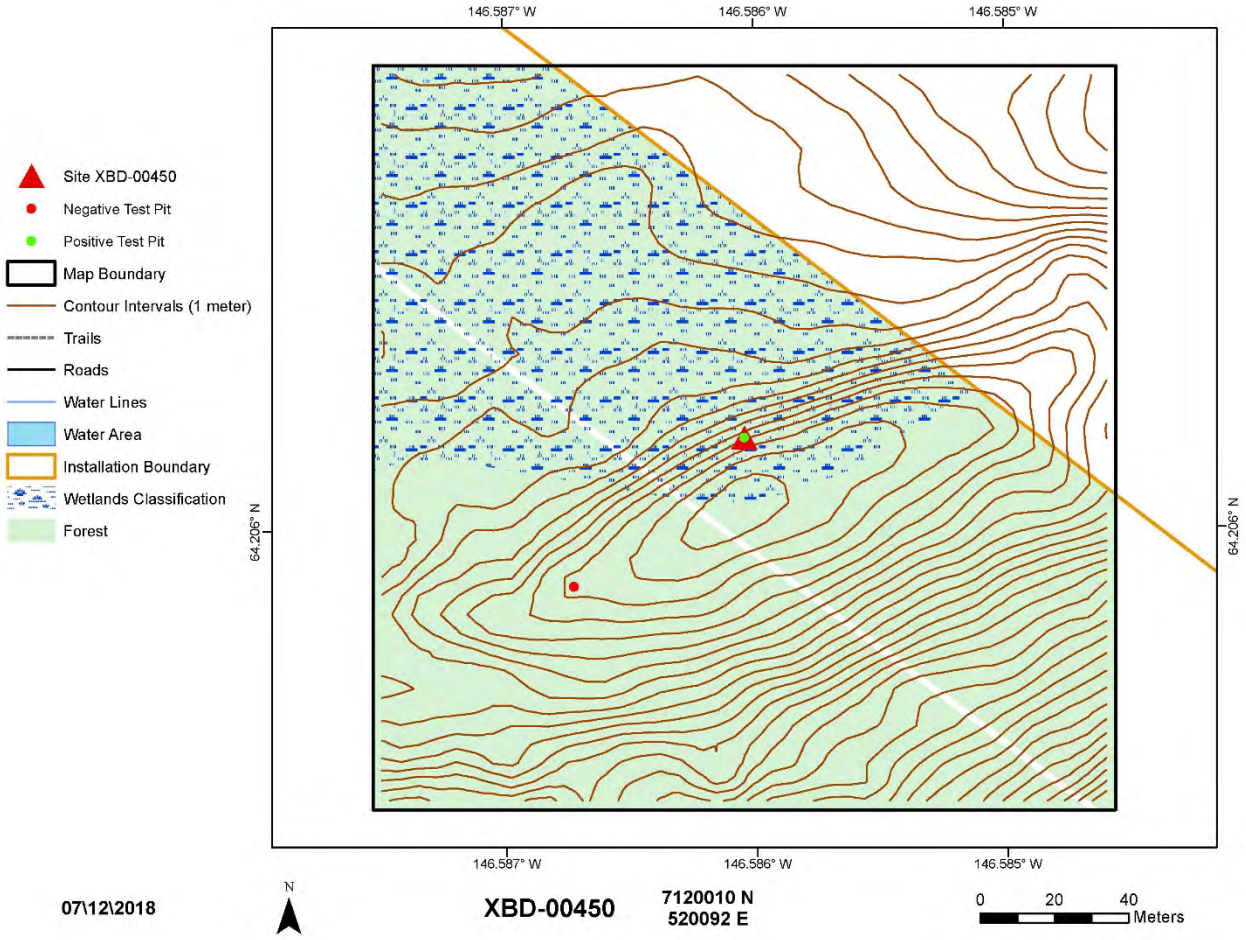


Figure 117. XBD-00450 site map.

Table 10. XBD-00450 accession log.

Accession #	Provenience	Quantity	Artifact Type	Raw Material
UA2018-086-1	JJSTP-2, 40-50 cmbs	1	Bifacial thinning flake	Grey chert

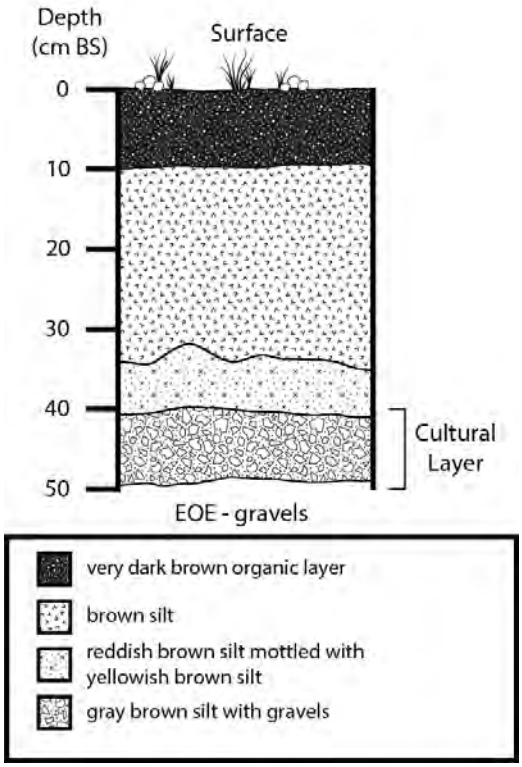


Figure 118. XBD-00450 site stratigraphy.

Figure 119. XBD-00450 test pit.

XBD-00451

[redacted]

Determination of Eligibility: Not evaluated

This site is located north of Boot Lake and 24 km west of Delta Junction in DTA West. (Figure 111). The site is 275 m north of the eastern end of the lake on the lower bench of a ridge composed of Paleozoic age metamorphic rock covered in windblown silts (Wilson et al. 2015) (Figure 120). Vegetation consists of Labrador tea, rose, high bush cranberry, raspberry, blueberry, horsetail, moss, grass, fireweed, alder, willow, poplar, and spruce. There is no surface visibility and no noted disturbances. Two shovel tests were excavated on the eastern side of the ridge, but only one on the lower bends (Figure 121). Eleven basalt and chert flakes and a chert scraper were found buried in the test pit, 0-40 cmbs (Table 11). A 10 cm organic layer overlies 40 cm of silt in this location (Figure 121, Figure 122). Shovel tests ended in sandy gravels at 50 cmbs.

Figure 120. XBD-00451 site overview.

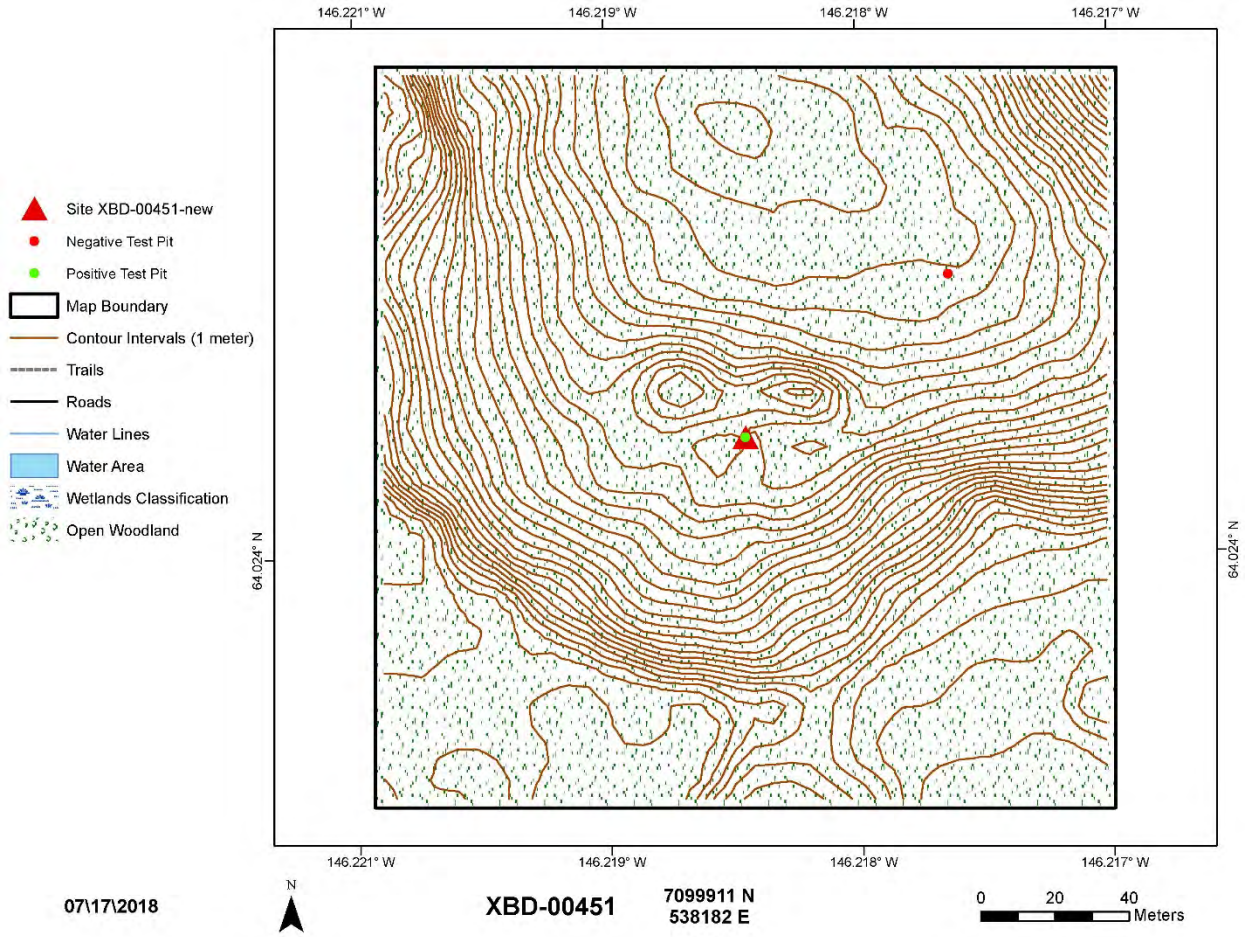


Figure 121. XBD-00451 site map.

Table 11. XBD-00451 accession log.

Accession #	Provenience	Quantity	Artifact Type	Raw Material
UA2018-081-1	538182 E, 709911 N 0-25 cmbd	8	Flakes and shatter	Rhyolite and basalt
UA2018-081-2	538182 E, 709911 N 25-40 cmbd	2	Flakes	Basalt
UA2018-081-3	538182 E, 709911 N 0-25 cmbd	1	Flake	Basalt
UA2018-081-4	538182 E, 709911 N 25-40 cmbd	1	Scraper	Grey chert

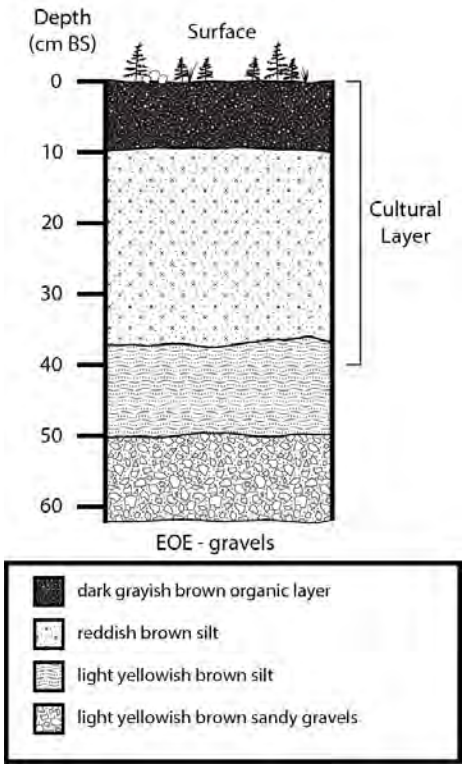


Figure 122. XBD-00451 site stratigraphy.

Figure 123. XBD-00451 test pit.

XMH-01567

[redacted]

Determination of Eligibility: Not evaluated

This site is located 756 m south of Butch Lake and 24 km south of Delta Junction in DTA East. (Figure 112). The site is located along a trail following a small glacial moraine overlooking the Jarvis Creek floodplain with a 15-20 m drop to a grassy muskeg area below. Vegetation consists mainly of dwarf birch and low bush cranberry with the occasional small spruce tree (Figure 124). Surface visibility is 10-15% and there are views in all directions. No surface disturbances were noted. Three shovel tests were excavated on the western side of the ridge (Figure 125). One red chert flake was found from 0-15 cmbs (UA2018-080-001). The flake was red and had a potlid from possible heat treating. A 10 cm organic layer overlies less than 10 cm of silt in this location (Figure 126, Figure 127). Shovel tests ended in sandy gravels at 30 cmbs.

Figure 124. XMH-01567 site overview.

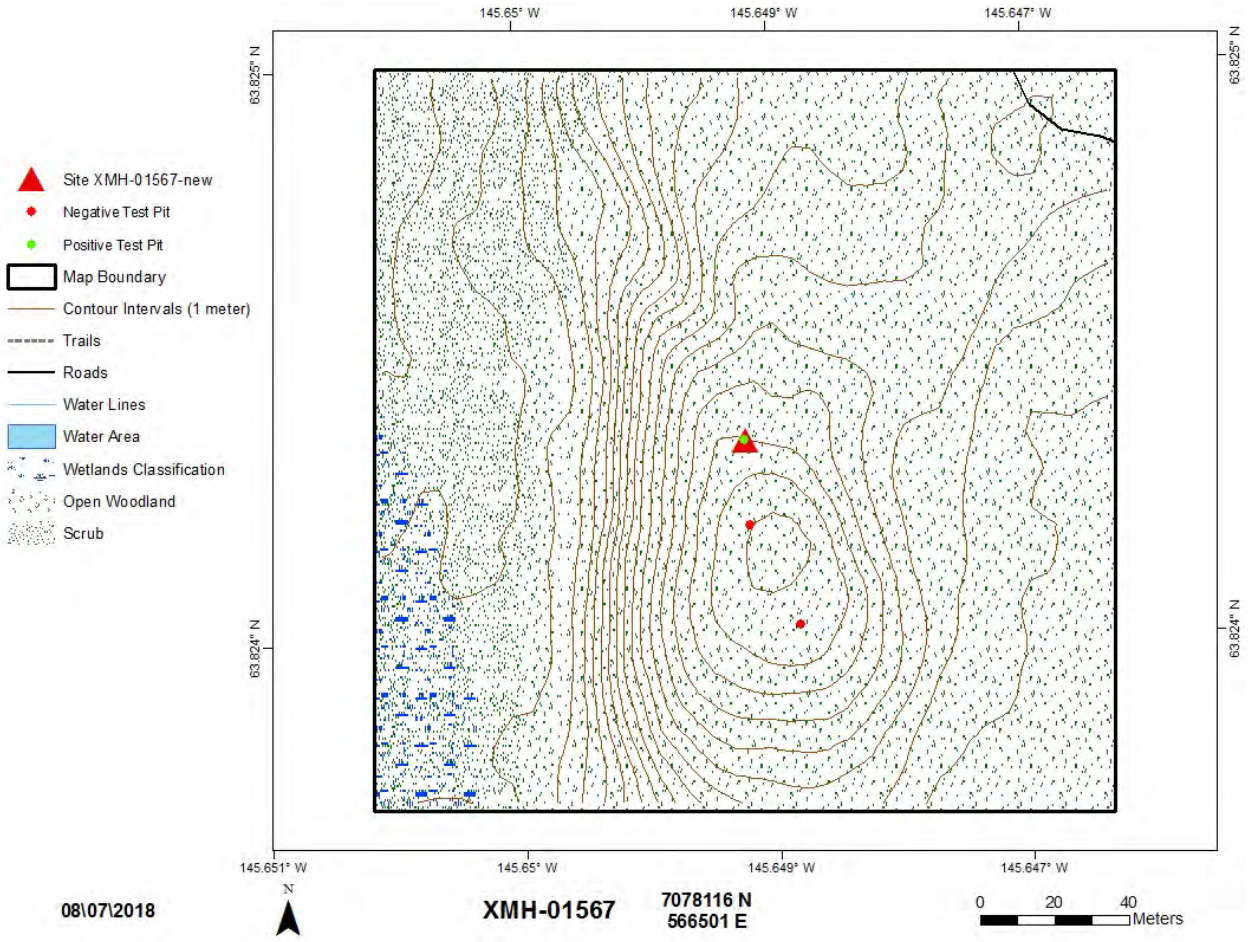


Figure 125. XMH-01567 site map.

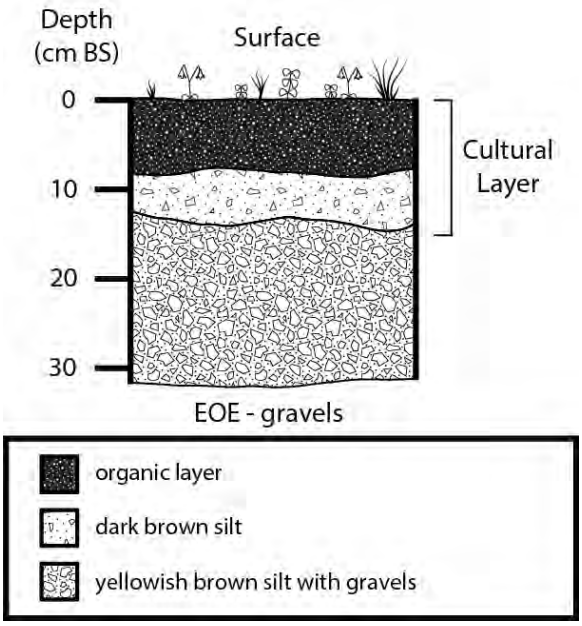


Figure 126. XMH-01567 site stratigraphy.

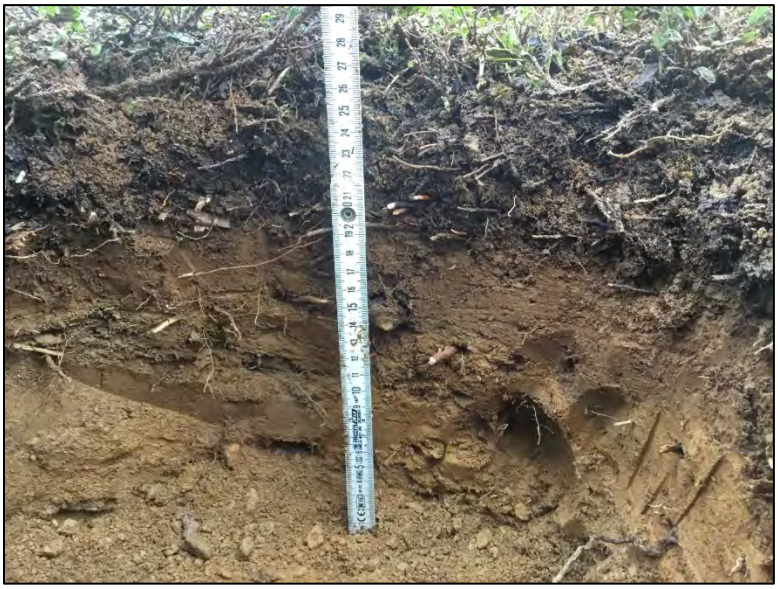


Figure 127. XMH-01567 test pit.

Archaeological Site Monitoring and Site Protection Measures

Seventy-six sites were monitored in DTA in 2018 (Table 12, Figure 128, Figure 129). Many of these sites (n=37) show erosion or other impacts from training or recreation. The most

common source of surface erosion of the sites is from trails which often bisect hilltops in the area (n=34). Several of the sites have evidence of recent recreational visits with fire rings (n=3) and one site landform is in use as a gravel pit. Current site photos are provided in Appendix 2. New site protection measures in 2018 include Seibert Stake signage at 59 sites to prevent the military community from driving over sites or digging within site boundaries and the installation of three sets of hedgehogs at the intersection of 33 Mile Loop road and major trails that lead to eligible archaeological sites (Figure 128, Figure 130, Figure 131).

Table 12. Sites monitored in DTA in 2018.

Training Area	AHRS #	Last Visit	2018 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction	Seibert Stake
546	XBD-00033	1970's	7/17/2018	no	not relocated	no	no
544	XBD-00106	1980	7/10/2018	no	forest, modern outhouse and fire pit on site	yes, recreational campsite	no
546	XBD-00109	2009	7/17/2018	no	forested, recent burn	no	no
546	XBD-00110	2017	7/16/2018 Excavation	no	forested with some clearing for site testing	yes, bluff erosion	no
544	XBD-00187	1980	7/10/2018	no	vegetated marshy area	no	no
544	XBD-00188	1980	7/10/2018	no	vegetated marshy area	no	no
544	XBD-00189	1980	7/10/2018	no	vegetated marshy area	no	no
510	XMH-00274	2017	7/24/2018	no	forested, trail through site	yes, vehicle use and trail maintenance	yes
507	XMH-00277	2017	8/8/2018	no	forested, trail through site	yes, vehicle use and trail maintenance	yes
506	XMH-00278	2017	7/24/2018	no	gravel moraine with patchy lichen, trail through site	yes, vehicle use and trail maintenance	yes
505	XMH-00279	2017	7/25/2018	no	low vegetation with patches of exposed gravel	no	yes
528	XMH-00281	2016	9/19/2018	no	gravel surface with some shrub vegetation	no	no

512	XMH-00282/01171	2016	7/26/2018	no	vegetated with fire rings and intersected by several trails	yes, vehicle use and trail maintenance	yes
504	XMH-00284	2016	7/24/2018	yes	low vegetation with patches of exposed gravel, bisected by a trail	yes, vehicle use and trail maintenance	yes
506	XMH-00292	2017	7/24/2018	no	vegetated, bisected by a trail	yes, vehicle use and trail maintenance	yes
505	XMH-00323	2017	7/24/2018	no	low vegetation, bisected by trails	yes, vehicle use and trail maintenance	yes
503	XMH-00878	2017	9/17/2018	no	vegetated but cleared, bisected by a trail	no	yes
504	XMH-00881	2016	7/24/2018	no	low shrub with exposed gravel, landform has been used for a gravel pit	yes, gravel extraction and vehicle use	yes
503	XMH-00887	2017	7/24/2018	no	forested but erosion in road bed	yes, vehicle use and trail maintenance	yes
503	XMH-00890	2017	9/11/2017	no	cleared with patchy lichen and low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	yes
503	XMH-00891	2017	9/11/2017	no	site is capped with landscape fabric, sand, and gravel, road follows the western edge of the site	yes, vehicle use and road maintenance, but capping is protecting the subsurface	no
502	XMH-00895	2016	7/23/2018	no	exposed gravel, surrounded by forest vegetation	no	yes
503	XMH-00896	2016	7/24/2018	no	vegetated, bisected by a trail	yes, vehicle use and trail maintenance	yes
503	XMH-00897	2016	7/24/2018	no	low vegetation	no	yes
503	XMH-00899	2017	7/25/2018	no	forested, trail adjacent to the site	yes, possible recreation	yes
503	XMH-00901	2016	7/25/2018	no	low vegetation, foot path following the ridge	no	yes
506	XMH-00906	2017	7/24/2018	no	exposed gravel and lichen, bisected by a trail	yes, vehicle use and trail maintenance	yes

503	XMH-00907	2017	9/17/2018	no	clearing with low shrubs, lichen, and exposed patches of soil	no	yes
506	XMH-00910	2017	9/17/2018	no	cleared area with groundcover, bisected by a trail	yes, vehicle use and trail maintenance	yes
506	XMH-00913	2017	9/17/2018	no	forested	no	yes
506	XMH-00914	2017	9/18/2018	no	low vegetation	no	yes
505	XMH-00915	2017	7/24/2018	no	exposed gravel with low vegetation, bisected by a trail, recent campfire	yes, vehicle use and trail maintenance	yes
505	XMH-00917	2017	7/25/2018	no	forested with some surface exposer	no	yes
506	XMH-00921	2017	7/24/2018	no	forested, trail leads to site, modern litter	yes, possible recreation	yes
506	XMH-00923	2017	9/17/2018	no	clearing with low vegetation, bisected by a trail	yes, vehicle use and trail maintenance	yes
506	XMH-00924	2017	7/24/2018	no	clearing with low vegetation, bisected by a trail	yes, vehicle use and trail maintenance	yes
506	XMH-00925	2017	7/24/2018	no	low vegetation	no	yes
506	XMH-00926	2017	9/17/2018	no	forested with some gravel exposure	no	yes
506	XMH-00927	2017	9/17/2018	no	forested	no	yes
503	XMH-00928	2017	9/18/2018	no	clearing with low vegetation and some exposed soil	no	yes
503	XMH-00945	2017	7/25/2018	no	low vegetation with patches of exposed gravel	no	yes
503	XMH-00980	2016	7/25/2018	no	low vegetation with patches of exposed gravel	no	yes
502	XMH-00992	2016	7/25/2018	no	low vegetation with patches of exposed gravel	no	yes
502	XMH-00993	2016	7/25/2018	no	forested	no	yes
502	XMH-00994	2016	7/25/2018	no	forested	no	yes

502	XMH-00997	2016	7/25/2018	no	forested	no	yes
502	XMH-00998	2016	7/25/2018	no	forested, bisected by a foot path	no	yes
506	XMH-01088	2017	7/24/2018	no	low vegetation	no	yes
507	XMH-01089	2017	6/28/2017	no	low vegetation, bisected by a trail	yes, vehicle use and trail maintenance	yes
507	XMH-01090	2016	7/25/2018	no	low vegetation with exposed gravel	no	yes
507	XMH-01091	2016	7/25/2018	no	forested	no	yes
503	XMH-01092	2017	9/18/2018	no	forested	no	yes
510	XMH-01126	2017	8/8/2018	no	cleared area with shrubs and patches of exposed soil	no	yes
507	XMH-01130	2017	8/8/2018	no	clearing with patches of exposed soil, trail bisects the site	yes, vehicle use and trail maintenance	yes
507	XMH-01163	2017	8/8/2018	no	clearing with low shrubs, bisected by a trial	yes, vehicle use and trail maintenance	yes
530	XMH-01291	2016	6/11/2018 DOE	no	forested, trail adjacent to the site	no	no
531	XMH-01292	2006	6/14/2018 DOE	no	forested, trail adjacent to the site	no	no
519	XMH-01298	2016	9/20/2018	no	recent burn with young growth	no	no
505	XMH-01303	2017	9/18/2018	yes	old clearing with young forest growth, trail bisects the site, recent digging and trash	yes, vehicle use and trail maintenance	no
508	XMH-01360	2017	7/24/2018	no	vegetated, bisected by a trail	yes, vehicle use and trail maintenance	yes
510	XMH-01361	2017	7/24/2018	no	vegetated, bisected by a trail	yes, vehicle use and trail maintenance	yes
510	XMH-01364	2017	8/8/2018	no	vegetated with areas of exposed soil	no	yes
510	XMH-01365/01366	2017	8/8/2018	no	clearing with low vegetation	no	yes

510	XMH-01368	2017	8/8/2018	yes	areas of exposed gravel, a trail bisects the site	yes, vehicle use and trail maintenance	no
508	XMH-01369	2016	7/24/2018	no	vegetated with low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	yes
508	XMH-01370	2016	7/24/2018	no	vegetated with low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	yes
508	XMH-01371	2016	7/24/2018	no	vegetated with low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	yes
508	XMH-01372	2016	7/24/2018	no	vegetated with low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	yes
508	XMH-01373	2008	8/6/2018	yes	vegetated with low shrubs, bisected by a trail, large erosional exposure	yes, vehicle use and trail maintenance	no
510	XMH-01375	2008	8/7/2018	no	vegetated with low shrubs, bisected by a trail	yes, vehicle use and trail maintenance	no
510	XMH-01377	2016	8/8/2018	yes	vegetated with low shrubs and patches of exposed gravel, bisected by a trail	yes, vehicle use and trail maintenance	yes
520	XMH-01457	2017	9/20/2019	no	vegetated with low shrubs and patches of exposed gravel	no	no
508	XMH-01495	2017	9/19/2019	no	vegetated with low shrubs	no	no
510	XMH-01511	2017	8/8/2018	no	vegetated, bisected by a trail	yes, vehicle use and trail maintenance	yes
505	XMH-01524	2017	7/24/2018	no	vegetated	no	yes
506	XMH-01555	2017	9/17/2018	yes	exposed gravel, surrounded by forest vegetation, trail leads to the site	yes, vehicle use and trail maintenance	yes

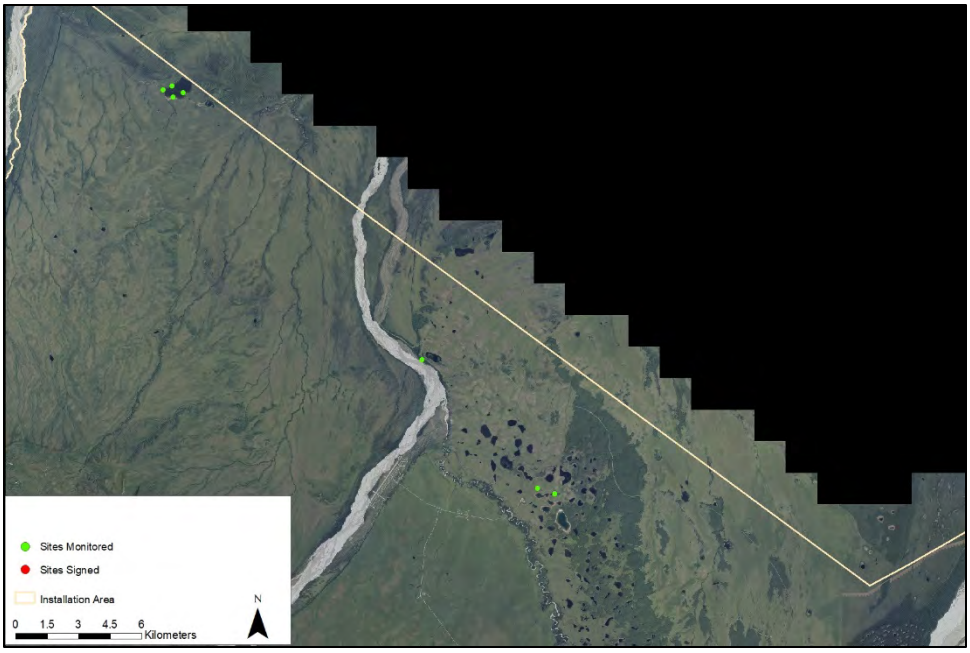


Figure 128. Sites monitored and signed in DTA West in 2018.

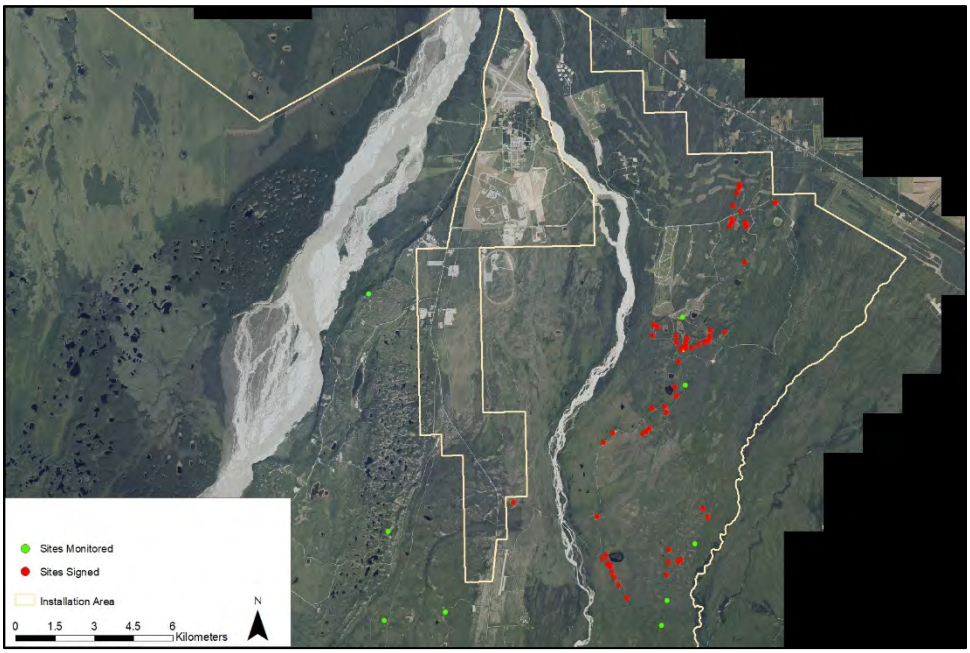


Figure 129. Sites monitored and signed in DTA East in 2018.

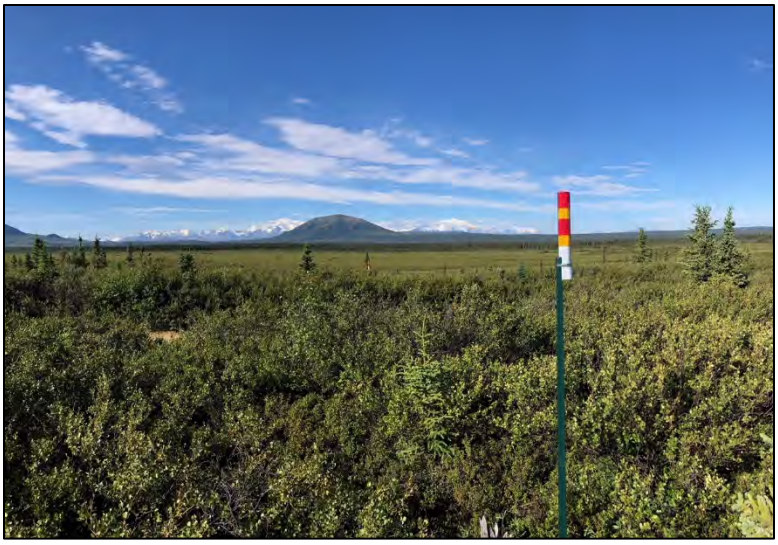


Figure 130. Example of a Seibert Stake marking the boundaries of an archaeological site.

Figure 131. Example of a row of hedge hogs preventing vehicles from travelling a trail through archaeological sites.

Determinations of Eligibility

One historic trail was evaluated for its eligibility for the NRHP in DTA in 2018.

XBD-00449/XMH-01568 (Fairbanks-Valdez Trail, Winter Cutoff)

[redacted]

Determination of Eligibility: Not eligible

The Winter Cutoff, also known as the Winter Trail and the Donnelly-Washburn Cutoff, was a section of the Fairbanks-Valdez Trail providing overland access to interior Alaska (Figure 132). While the main body of the Fairbanks-Valdez Trail was the only overland, all-American route into the Interior until the completion of the Alaska Railroad, the Winter Cutoff was only utilized in the winter. The route cut the mileage between Fairbanks and Valdez substantially in the winter, allowing for relatively easy travel across flat, frozen wetlands (Figure 113 through Figure 115). The Winter Cutoff was first utilized beginning in 1904-1905 when the first prospectors and adventurers began to filter into the Tanana River Valley following news of the gold strike at Fairbanks. In 1906, the ARC surveyed and cleared a new route, moving the trail terminus from the mouth of Delta Creek 12 miles west to the mouth of the Little Delta River. The cutoff trail supported the long-lived roadhouse Sullivan's Roadhouse, which operated seasonally until the Winter Cutoff was abandoned in 1921. While the trail retains integrity of location, design, setting, and feeling, the relatively short and seasonal use of the Winter Cutoff negates its significance in comparison with the larger overall Fairbanks-Valdez Trail, specifically through Isabel and Thompson passes.

Description

The Winter Cutoff trail is a 71-mile winter-only clear-cut trail maintained by the USAG Alaska for military and recreational purposes across DTA West. The trail is cleared to a width of 15 m and is only passable in the winter. During the summer months, the land crossed by the trail consists of low-lying wetlands dotted by lakes and creeks. The terrain is impassable during the warmer months, but when the ground freezes in the fall, the relatively flat terrain provides easy travel. This winter route reduces the travel distance between the take-off point south of Donnelly Dome and the rejoining point at what was once called the Washburn Trail by approximately 16 miles. This is a substantial distance saving for non-motorized vehicles. The Winter Cutoff trail starts south of Donnelly Dome, at approximately mile marker 239 of the Richardson Highway. South of this mile marker, the highway roughly parallels the Delta River, but at mile marker 239 the modern highway veers northeast and passes to the east of Donnelly Dome. The Winter Cutoff veers to the northwest, crossing the Delta River and continuing straight for approximately 1.5 miles. The trail then takes a shifting path while continuing to travel in a northwest direction, until it abuts the base of Buffalo Dome. The trail turns southeast at this point, skirting the base of the 2200 ft dome before turning northwest again. The trail then

travels more or less in a straight line for approximately 43 miles to the Litter Delta River. From this point, the trail follows the Little Delta to the north-northeast for approximately 4 miles before crossing the main Delta River and connecting to the modern Richardson Highway on the north side of the Delta River.

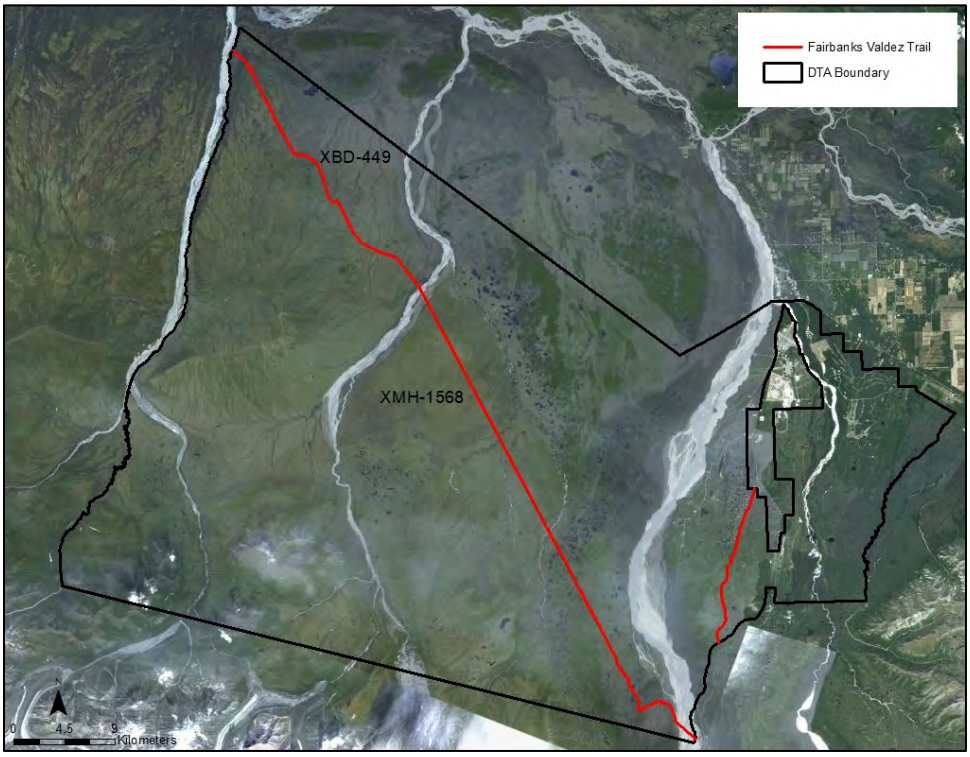


Figure 132. Fairbanks-Valdez Winter Cutoff.

The Winter Cutoff was realigned once during its usage history; in 1906, the end of the route was shifted approximately 12 miles west from the mouth of Delta Creek to the mouth of the Little Delta River. The reroute was the result of survey work undertaken by the ARC in 1906 and cut approximately 10 miles from the winter route. The reroute also necessitated the moving of at least one roadhouse, Sullivan's, and bypassed the settlement of Richardson entirely.

Historical Context

The Fairbanks-Valdez Trail began as an All-American route from the Port of Valdez into the Interior and the Klondike gold fields in the Yukon. A dangerous route, few prospectors achieved their destination during the peak Klondike years. As the focus of prospecting activities shifted to the Fortymile district in Interior Alaska, the U.S. Army was charged with the establishment of a transportation route to facilitate law-enforcement activities. The survey for the trail was officially began in 1899 as a route from Valdez on the coast to Eagle in the Fortymile district and was known as the Valdez-Eagle Trail. Following the gold strike at what would become Fairbanks

in 1903, however, the route was shifted west and became known as the Valdez-Fairbanks Trail, the Valdez Trail, and the Military Trail. As Alaska grew in population and activities in the Interior became more permanent, the route was renamed the Richardson Road and then the Richardson Highway in honor of Wilds P. Richardson, who focused energy and money on the construction and maintenance of the route. Use of the road declined in the 1920s and 1930s, seeing resurgence in activity during the World War II era and again in the 1970s with the construction of the Alyeska Pipeline.

The Fairbanks-Valdez Trail began as a winter transportation link between the deep-water port of Valdez and the growing prospecting communities in the Interior. Following the gold strike in the Klondike in 1896, Valdez became touted as the jumping off point for the all-American overland route to the Klondike, which had the advantage of avoiding Canadian customs officials. Originally, the route from Valdez was intended to weave north to the gold rush city of Dawson; subsequent gold rushes eventually shifted the route to Eagle, Alaska, and then ultimately to Fairbanks.

The all-American route to the Klondike was short lived. Initially, the route was heavily advertised in newspapers despite a government report from 1884 on the impassible terrain in the area (Lethcoe 1996:7). In 1884, Lt. W. R. Abercrombie was dispatched by the U.S. Army to investigate previous Russian reports of hostile Alaska Natives in the vicinity of the Copper River. With the increase in prospecting and exploration of Alaska that began after the Alaska Purchase in 1867, the government recognized that American citizens would eventually explore and interact with the native people in this region. After a failed attempt at ascending the Copper River from its delta terminus, Abercrombie employed two Russian Creole guides who knew of a route into the Copper River Valley. The route utilized the Valdez and Klutina Glaciers to cross the Chugach Mountains (Bleakley 1997:5).

It was this route over the glaciers that was first utilized by prospectors heading to the Klondike in 1897. Glacier travel was particularly dangerous, as the softening of snow and ice during spring and summer months could weaken ice bridges over vast crevasses. Avalanches and storms were of particular danger on the exposed faces of the glaciers. Exposure, scurvy, and starvation claimed the lives of many prospectors attempting to travel this route. Of approximately 3,000 prospectors known to have attempted this route during the Klondike stampede, only two hundred are known to have made it to Dawson. Most returned to Valdez while others struggled north into the Copper River Valley, where they began prospecting (Sherwood 1965:157).

In response to the plight of the prospectors returning to Valdez in sick and starving conditions, the government sent Abercrombie to Valdez again in 1898 with the hopes of locating a safer

trail into the Interior. Reports vary as to the exact method by which Keystone Canyon was discovered, but the government reports indicate that Abercrombie located the canyon pass, giving easier access through the initial impassible stretch of mountains surrounding the port of Valdez. The pass had originally been used by area Natives as a method of travel between the port and the hunting grounds of the Copper River Valley. Plans were quickly made to blaze a trail through the canyon and over what became known as Thompson Pass (Bleakley 1997:6).

Between 1898 and 1900, the gold strike in the Klondike began to slow, and prospectors began to move down the Yukon River towards the previously investigated Fortymile region in the Interior and Nome on the west coast. In an attempt to bring law and order to the Interior along the Yukon, military forts were established at strategic points: Fort St. Michael near the mouth of the Yukon River, Fort Gibbons at the confluence of the Yukon and Tanana Rivers, and Fort Egbert near the gold rush settlement of Eagle City in the Fortymile district. Eagle City was of particular concern, as it was located just a few miles from the Alaska-Canada border and served as a port of entry. It also "provided services to more mining camps than any other along the Yukon" at the height of its prosperity (Naske and Slotnick 1994:139). Additional smaller military reservations were also established, most notably Fort Liscum at Valdez. However, as a consequence of the increased population and military presence, "inadequate transportation was becoming an ever-increasing problem" (Mudgett 1958:58). A method of transportation needed to be established to provide access to the Interior on a year-round basis. Summer transportation could be arranged by utilizing open water, sailing to the mouth of the Yukon and then taking steamers up the Yukon to Dawson. In the winter, however, the Interior was largely isolated by sea ice.

In the summer of 1899, Abercrombie returned to Alaska with the charge of creating the Trans-Alaska Military Road from Valdez to Fort Egbert on the Yukon. Congress appropriated funds totaling $49,975 for the construction effort, and by the close of the season in 1899 Abercrombie had succeeded in establishing a surveyed mail route to Fort Egbert and cleared 93 miles of packhorse trail from Valdez to the Tonsina River (Mudgett 1958:73). In addition to trail building efforts, Abercrombie also became aware of the serious condition of the prospectors who had wintered in Valdez. He was obliged to extend aid to approximately 500 ill-prepared miners and prospectors, housing and feeding them through the following winter (Mudgett 1958:72).

In 1900, a U.S. Senate subcommittee decided to establish "a system of transportation routes" in Alaska and that "the basis of such as system should be a well-built wagon road connecting the Pacific Ocean at Valdez with Eagle on the Yukon River, a distance of approximately 400 miles" (Naske 1983:22). Pressure had been placed on the government by the people residing in Alaska through Judge James Wickersham to improve road and trail conditions within Alaska, and

argued that doing so would be to the economic benefit of everyone. “The lack of good trails and wagon roads made mining very expensive. Miners and trading companies had built trails and bridges by subscription, each contributing as much as they could afford. But each fall the winter trails had to be reconstructed, and each spring the summer trails and bridges had to be rebuilt” (Naske 1983:18). The basis for the transportation route would follow the rudimentary trail already surveyed by Abercrombie from Valdez to Fort Egbert, dubbed locally as the Valdez-Eagle Trail. In doing so, the government also hoped to open up more of Alaska to development and promote a more permanent population, one based in Alaska for agriculture as well as mining activities. By 1901, the U.S. Army had completed a pack trail from Valdez to Eagle City (Bleakley 1997:6).

In 1902-1903, a small mining stampede took place in the area of the confluence of the Chena and Tanana Rivers, just upstream and south from the confluence of the Tanana and Yukon Rivers. Prospectors from Nome and Dawson flooded to the area in response to reports of gold found in the vicinity of Ester Dome in the fall of 1902. In September of that year, Fairbanks was officially established by the area miners. In December, a larger stampede to the Fairbanks area occurred from Dawson City, with approximately 800 miners and prospectors setting out for Fairbanks in temperatures close to fifty degrees below Fahrenheit (Naske 1983:137). One year later, by Christmas of 1903, there were approximately fifteen to eighteen hundred people working in the vicinity of Fairbanks (Naske 1983:138).

Owing to the population increase of Fairbanks from 1902 to 1903 and the subsequent drop in population in the Fortymile district, Fairbanks quickly became the focus for the military in terms of peace keeping. Judge James Wickersham, serving for the Third District Court of Alaska, moved his headquarters from Eagle City to Fairbanks in 1903 and proceeded in setting up a judicial court system from the burgeoning metropolis (Cole 2009). Prospectors traveling north from Valdez into the Interior took advantage of the Trans-Alaska Military Road, traveling the pack trail as far north as the Gakona River before turning northwest for Fairbanks. By 1904, this trail, dubbed the Valdez-Fairbanks Trail or alternately the Valdez Trail or simply the Trail, had become the dominant route of transportation into the Interior. In response, the U.S. Army was authorized to build a branch of the Trans-Alaska Military Road northwest from Gakona, providing reliable access from Valdez to Fairbanks.

An initial survey of the route was conducted in the summer of 1904, and estimates of $1.5 million were made to improve the existing route from pack trail to wagon road (Bleakley 1997:7). In order to fund the road construction work, legislation was suggested that 70% of the taxes on licensing fees within Alaska be set aside for road construction work, dubbed the Alaska Fund. Construction would be overseen by a Board of Road Commissioners, “composed of an engineer officer of the U.S. Army to be appointed by the Secretary of War and two other

officers drawn from troops stations in Alaska" (Naske 1983:24). The board was also given the ability to decide where roads were needed based on petitioned need. Roads were only to be built to permanent settlements, thereby not wasting funding and effort constructing roads to transitory, impermanent, or unproven mining settlements.

On January 27, 1905, legislation was signed into law creating the ARC with Major Wilds Preston Richardson was named as the president of the board. Richardson was familiar with Alaska, having been stationed at Fort St. Michael at the mouth of the Yukon River and overseeing military and judicial action along the Yukon River prior to the establishment of the Third Judicial District of Alaska. Richardson was also familiar with the previous road construction work of the U.S. Army.

Five years prior in 1900, Congress had appropriated $450,000 to build "a communications system which would tie Alaska and the United States together" (Mudgett 1958:81). The resulting telegraph line, dubbed the Washington Alaska Military Cable and Telegraph line, was intended to connect all of the military forts within Alaska, and from them to the contiguous United States and was specifically to be for military purposes. By 1901, landlines had been constructed connecting Dawson City, Yukon Territory, to Fort St. Michael. Soon after, cables were completed connecting Valdez to Fort Egbert along the Trans-Alaska Military Road. In view of this previous connection, Richardson enlisted the U.S. Army to aid in road construction efforts, as the military was already in charge of the telegraph line. A branch from Gakona to Fairbanks was of particular military importance, "Richardson then asked the Army to assign a company of engineer troops to Alaska. This company, to be stationed at Valdez, would work under the direction of the Board in improving the military trail and mail route between Valdez, Fairbanks, and the Yukon" as well as construct new telegraph cable along the new route (Naske 1983:31).

During the winter of 1905, construction efforts were concentrated on surveying and flagging the new military route. In 1906, the ARC and the U.S. Army Signal Corps began an official working relationship, with the telegraph cable line being officially changed to match the line of the new road. Having the road and telegraph lines parallel one another would provide addition funding for the road and allow for easy access to the cable line by established wagon road. Construction on the wagon road commenced, with funding coming from two different sources. Military funds were used primarily on the main Trans-Alaska Military Road, while the Alaska Fund was used for local road improvements and construction of smaller trails leading from the main road to smaller communities along the route (Naske 1983:40).

Prior to the creation of the Trans-Alaska Military Road and the ARC, travel from Valdez to the Interior was accomplished by foot or pack animal. The trail was often just barely wide enough

for a small wagon or sled. During winter months, sufficient snow coverage was required in order for supplies and mail to be brought over the route from Valdez (Fairbanks Daily Times 1906) as dogsled was the most efficient means of transportation in the winter months. In the later winter months of January and February, it was possible to ride the trail on a bicycle; the wisdom of this means of transportation was questioned, but adventurous travelers had succeeded by 1905 (Fairbanks Daily News 1905). In 1907, the best time made for travel over the route from Valdez to Fairbanks was accomplished by Ed Orr in a time of six days, ten hours, and ten minutes for the entire 400-mile-long route (Alaska Road Commission 1907).

There were two major routes once north of Isabel Pass, the Winter Trail and the Summer Trail. The Winter Route cut northwest across frozen wetlands impassible during the summer. The Summer Trail diverged from the Winter Trail at Donnelly Roadhouse just north of Isabel Pass, crossed overland around the west side of Donnelly Dome, up to Big Delta at the confluence of the Tanana and Delta Rivers, then followed the Tanana River northwest to Fairbanks. The Winter Trail rejoined the Summer Trail at the mouth of Delta Creek. During the shoulder seasons of spring and fall, however, both routes were largely impassable.

The goal of the ARC was to improve both the Summer and Winter routes into wagon roads, thereby improving on the total travel time and the difficulties associated with traveling extensive distances over pack trails. The trail was increased to a width of ten to sixteen feet depending on the section of road, with adequate grade and drainage to sustain traffic. In order to improve drainage, it was sometimes necessary to remove the vegetative ground cover, which resulted in the melting of the permafrost layer not far below the surface. To combat this, crews utilized corduroy construction, a technique that involved placing wood poles parallel to the roadbed and then covering it with a second layer at right angles with the first (Bleakley 1987:8). Corduroy construction is still employed on small rural access trails, as it provides a stable platform for travel over bogs and swampy ground. Additional drainage was provided by the construction of additional culverts as needed, usually of log taken from the surrounding vegetation. The construction of permanent-intending bridges also began, although bridge construction was often inadequate in the face of often-violent glacial rivers.

By 1908, over one-third of the route was officially suitable for wagon travel and “with the steady improvement of the overland trail to the coast, our spring and fall periods of isolation diminish with equal steadiness, and the time is now in sight when the freeze-up will have lost much of its significance” (Fairbanks Daily Times 1908). Nineteen construction crews were in working steadily on the trail during the construction season of 1909 (Bleakley 1997:8), and the first motorcycles were able to make the trip in two days in April of 1909. Motorcycles became increasingly used on the trail, outfitted to pull sleds (Fairbanks Daily News Miner 1909). The entire trail officially held the designation of a wagon road by 1910, although it was still not

meant for automobiles or heavy traffic during the summer months. Mail runs were being made three times per week by 1910 (Bundy 1910:14), and 3,500 people and 2,500 tons of freight were moved over the Trail during that winter season (Edman et al 1960:7).

The first serious discussion of upgrading the road for automobile use was suggested in 1912, and by 1913 had been improved to the extent that an automobile was able to make the trip from Fairbanks to Valdez. Bobby Sheldon, a Fairbanks freight hauler and automobile hobbyist, successfully made the trip in a 1913 Model T, averaging nine-miles-per-hour (Bleakley 1997:10). Following this success, more automobiles quickly followed suit, to the extent that the ARC was forced to declare that it made "no pretense of having built roads adapted for automobile travel" and widely discouraged their use on the trail (Bleakley 1997:10). By 1915, automobiles were in such extensive use that the mail runs were made exclusively by auto (Alaska Citizen 1915). The use of automobiles to haul freight and passengers quickly followed.

The entrance of the U.S. to World War I in 1917 saw the use of the road as a military transportation route, with trucks introduced for use along the entire length for hauling freight and inspecting and repairing the telegraph system. The use of motorized vehicles "was responsible for cutting the time necessary for an inspection of the line, a round trip of 740 miles, from six weeks to ten days" (Mudgett 1958:104). Richardson was relieved of ARC command in August of 1917 and transferred to the war effort, ending his official stewardship of road construction in Alaska. His commitment to the route had been so extreme that it had for some years been referred to as "Richardson's Hobby" and he continued to write editorials praising the road and the work of the people who maintained it (Fairbanks Daily News Miner 1917). In 1919, the ARC officially renamed the route from Valdez to Fairbanks the "Richardson Road" in honor the amount of work Richardson had put into the road, and in 1920 the road was rebranded the Richardson Highway (Fairbanks Daily News Miner 1920).

The use of the Valdez Trail began to decline during the second decade of the 20th century. Beginning in the late 1910s, the federal government began investing in the Alaska Railroad, a rail line to connect the major port of Seward, Alaska with the then-named Mt. McKinley National Park and ultimately with Fairbanks. The goal of the federal government was to open Interior Alaska for further settlement and development. The project was completed in 1923 at a total cost of $65 million. The rail line began operating in 1917, before the line was fully complete, with construction moving north from Seward and south from Fairbanks simultaneously. The Alaska Railroad had the advantage of providing comfortable, fast, and easy transportation of goods and people into the Interior year-round, although at a steeper price than the stagecoaches on the trail. Trains leaving Seward would run as far as the line had been completed, after which people took stagecoaches to reach the opposite end of the operating rail line.

In the end, the trail could not compete with this new means of transportation. There was a massive move to rebrand the route as a pleasant and scenic method of accessing the Interior and began to be marketed for tourism. A mass marketing strategy was enacted in 1920 to advertise the route outside of Alaska, complete with the distribution of post cards (Fairbanks Daily News Miner 1920). The completion of the Alaska Railroad as far as Broad Pass in 1921, leaving only a few miles of coach travel, meant that the decision was made to begin closing the Richardson Highway for winter travel. This decision was in direct contrast to the original use of the route, which had been focused almost entirely as a winter route into the isolated Interior. The highway had lost significance to the point that the only winter travel over the route was localized or for the purpose of maintaining the telegraph line, which for several years had been gradually being upgraded to telephone line (Fairbanks Daily News Miner 1921).

The advertisement of the Richardson Highway as a tour route was relatively successful, and by 1923 the road had been officially upgrade for use by automobiles (Smith 1974:19). Outside tour companies had picked up advertisements for the route and began working to provide tour trips, calling the highway the "Golden Belt Line" and "appealing to the more adventurous traveler" (Bleakley 1997:11). The name "Golden Belt Line" and the use of the term "highway" were considered misnomers to travelers unfamiliar with Alaska; "to Outsider and inexperienced travelers who are used to concrete highways and easy travel, the term highway (it being like no other highway they ever saw) enables them to criticize it harshly from a highway standpoint, whereas if it were called trail, and the found it anything better than a trail anywhere, they would be compelled to boost it" (Fairbanks Daily News Miner 1925).

Transportation of mail and passengers along the Richardson highway further declined with the introduction of aviation. The earliest flights in Alaska had taken place at air shows beginning in 1914, but the potential for the use as a viable means of transportation did not begin to catch on until the early 1920s. It was not viewed as a practical means of transportation until 1925 due to the extreme temperatures of Alaskan airspace in summer and winter and the lack of appropriate landing areas. In 1925, however, the Territorial legislature appropriated $5,000 for the construction of airfields, and the ARC was given the task of construction at major locations (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:57). By 1930, 61 government-funded airfields had been constructed, with countless more in private operation. "Increased use of airplanes led to decreased use of some trails and roads, and in some cases to their decreased maintenance or abandonment" (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:58).

During the 1930s, the Richardson Highway saw an increase in passenger and freight traffic linking the Interior to the coast and newly opened mining opportunities. While the rest of the U.S. was in the throes of the Great Depression, mining activity increased as a response to the

increase in the price of gold and other precious metals. Additionally, the federal government had raised the cost of transportation over the Alaska Railroad in an attempt to cover losses. This led to a thirty-five percent increase in traffic along the Richardson Highway. Attempts to raise taxes on licensing fees and the requirement of tolls to utilize bridges and ferries on the Richardson Highway in order to encourage use of the Alaska Railroad led to sometimes-violent conflict with Alaska residents. By 1942, the government had "effectively given up the struggle to force the Alaskan residents and businesses to use the railroad rather than the road system" (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:69).

The Richardson Highway became the object of military study during the buildup of international hostilities in the late 1930s. In 1939, "Congress passed a bill (later known as the Initial Defense Appropriation Act) that provided federal funding to states and territories for military readiness" (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:75). This included funds for the creation of military installations. Alaska had the distinction of being considered a strategic military location, and Army air and naval bases were constructed across the territory. In order to better connect the various bases on the Alaskan mainland (primarily in Anchorage and Fairbanks), funds were dedicated to the connection of roads from Anchorage to the Richardson Highway and the overall improvement of the Richardson Highway to handle the increase in heavy traffic. The First Deficiency Bill of 1941 provided for the construction of a highway from Palmer (Anchorage) to the Richardson Highway, later known as the Glenn, Highway, and in 1942, the First Deficiency Appropriate Act provided $2.2 million for bridge construction and widening and realignment of the Richardson Highway (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:76). Construction of the Alaska Highway, connecting Alaska to the contiguous U.S., began in 1943. Funds totally nearly $1 million were appropriated for the Richardson Highway to bring the road up to the same standards as were being employed on the Alaska Highway. Despite the increase in funds and road improvements, the ARC in 1944 continued to report the need for funds to continue and increase construction of the Richardson Highway (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:78).

The 1950s and 1960s saw an expansion of tourism, mining, oil, and fishing industries across the state. The military presence in Alaska remained high, owing to the ongoing conflicts of the Cold War and Alaska's proximity to Russia. "The defense industry in Alaska was the biggest employer and biggest spender in the state from the 1940s to the 1970s," and was only surpassed in the late 1970s by the sudden massive expansion of the oil industry (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:98).

In 1968, vast oil fields were discovered in Prudhoe Bay off Alaska's North Slope. The problem was transporting the oil from the North Slope of Alaska to the contiguous U.S. Construction quickly began in the 1970s on the Trans-Alaska Pipeline System, which runs from Prudhoe Bay

to Valdez, a distance of approximately 800 miles over unsettled country. In order to facilitate construction and maintenance of the pipeline, a gravel road was built from Fairbanks to Prudhoe Bay, which became known as the Dalton Highway, and was eventually built to state secondary road design requirements (Mead and Hunt and Cultural Resource Consultants, LLC. 2014:119). The Dalton Highway was constructed to connect to the Richardson Highway, and the pipeline beings to follow the Richardson south as soon as it passes Fairbanks. The existing road provided and continues to provide easy access to the pipeline.

Today, the Richardson Highway is used for access to the pipeline, for recreational purposes, and as a route for hauling freight from Valdez. The communities along the route continue to provide support for travelers. The Richardson is a favorite route among Alaskans, providing access to recreational and subsistence areas. Sections of the road have been designated as both scenic highway and historic highway.

Resource in Context

The Fairbanks-Valdez Winter Cutoff, also known as the Winter Trail, the Donnelly Cutoff, the Delta Cutoff, or the Donnelly-Washburn Cutoff, was established during the early part of the gold rush to Fairbanks, circa 1903-1904 (Figure 133). The trail was originally constructed by area prospectors, trappers, roadhouse men, and freight haulers. The winter route cut across frozen wetlands in a mostly straight fashion, cutting significant travel distance from the summer route. Additionally, the winter cutoff was better shielded from winter storms and the dangerous stretch of the Tanana north of Big Delta where the river cuts into the hills. Two roadhouses sprang up on the Winter Cutoff, Sullivan's Roadhouse and Gordon's Roadhouse. Gordon's Roadhouse was located 16 miles north of Donnelly Roadhouse, at the southern junction of the two trails, while Sullivan's Roadhouse was located on Delta Creek further to the north. The original as constructed by area locals cut from Donnelly Roadhouse at the junction of both the summer and winter trails and the Delta River south of Donnelly Dome northwest to the mouth of Delta Creek. The community of Richardson sprang up at this junction in response to prospecting activities in the Tenderfoot district as well as travel along the Trail. During the summer of 1906, as part of the first road-building activities undertaken by the ARC, the Winter Cutoff was rerouted, terminating at the mouth of the Little Delta River 12 miles west of Richardson (Figure 134). This new route avoided a particularly dangerous stretch of the trail west of Richardson, an area where the Tanana River cuts against the side of the hills and regularly washed out sections of the Trail. The new route angered the not-unsubstantial population of Richardson, and the ARC scrambled to fund the construction of a 10-mile long trail connecting the new Winter Trail to Richardson.

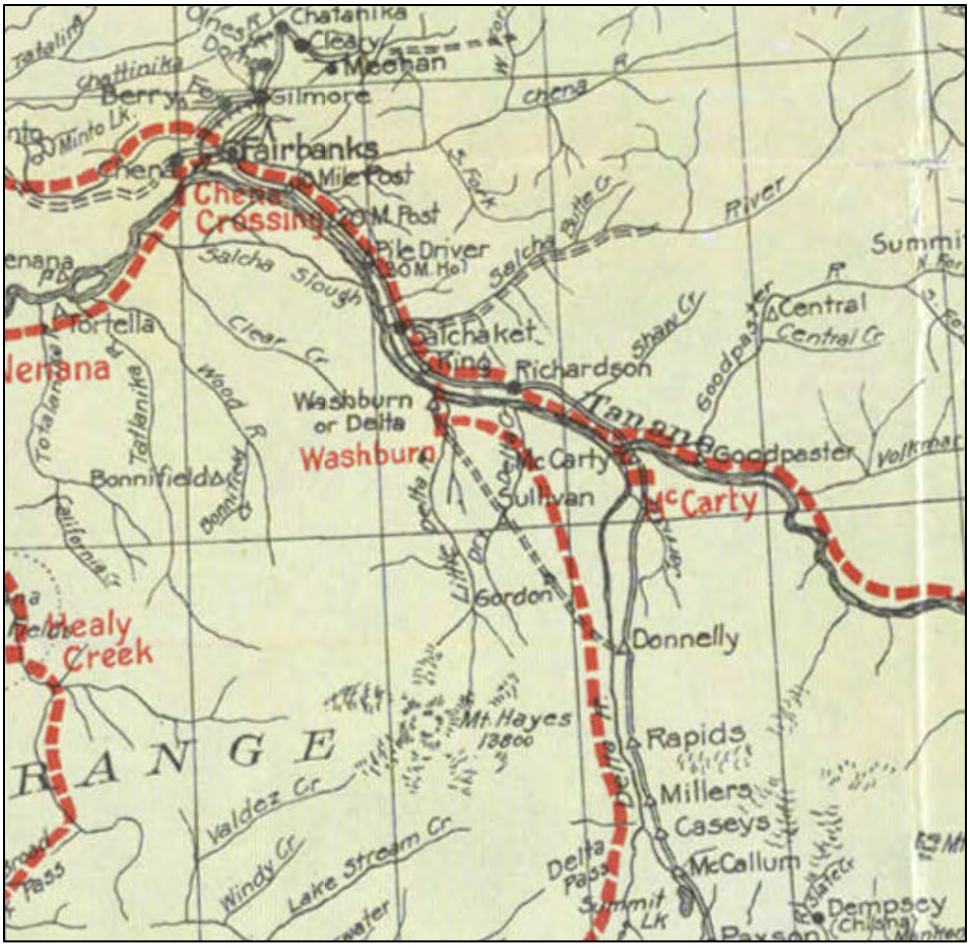


Figure 133. Detail of map showing both Winter and Summer Trails with Gordon's and Sullivan's Roadhouses marked (Kroll 1914).

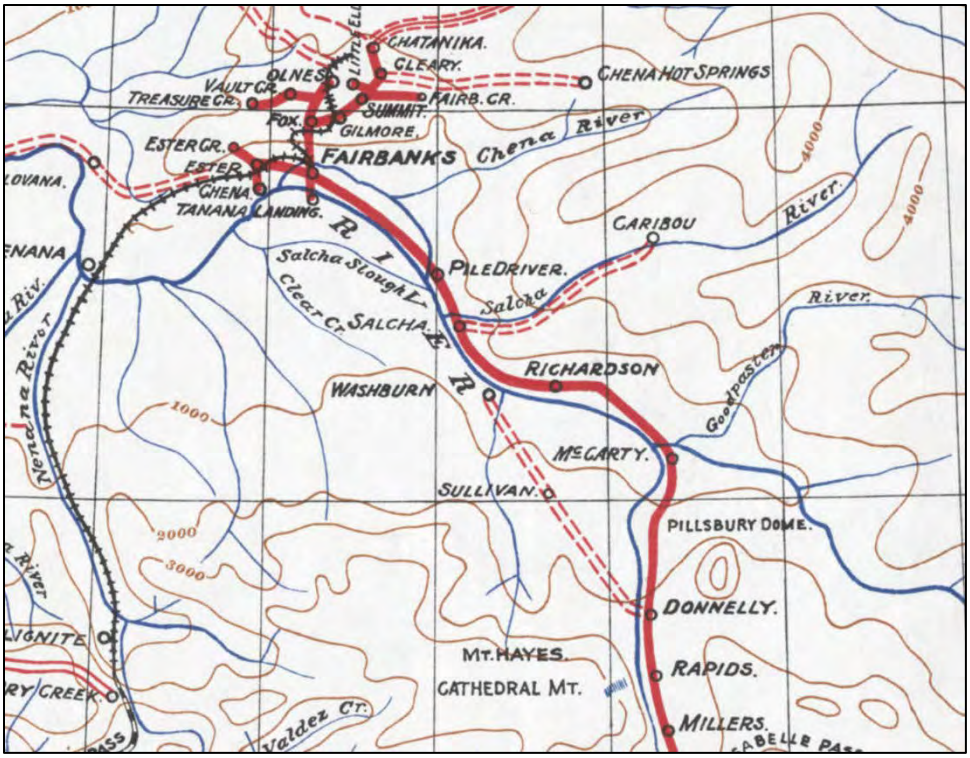


Figure 134. Detail of Alaska Road Commission map of the Richardson Road, with Winter Cutoff and Sullivan's detailed. Gordon's had vanished from maps by this point. Rare Maps Collection, Alaska and Polar Regions Collections, University of Alaska Fairbanks.

The Winter Trail was only utilized during the frozen months, generally between late September and early May, during which time the roadhouses operated at full capacity. The proprietors at Sullivan's, Florence and Jack Sullivan, began their operations in 1905 on the original Winter Trail, and were forced to move their roadhouse four miles west in 1906 in response to the rerouting of the trail. The Sullivans remained at the roadhouse during the summer months, providing area prospectors and trappers with fresh produce grown in a large garden and home-cooked meals. Mr. Sullivan contracted with the ARC to rebuild bridges on the Winter Trail during the summer months. The Sullivans operated their roadhouse until 1922, when they took possession of Byler's Roadhouse closer to Fairbanks on a year-round section of the route. Sometime after the establishment of the Donnelly Training Area by the U.S. Army in 1944, Sullivan's Roadhouse was found to be within a bombing range. Listed to the National Register of Historic Places in 1979, funds were secured in 1990s to move the roadhouse into the town of Delta Junction where it operates as a museum today.

Gordon's Roadhouse was established in 1909 by Harry Gordon, who was joined in 1911 by his wife Eva. Similar to the Sullivans, the Gordons remained at their roadhouse year-round, engaging in homesteading subsistence activities during the summer months. Gordon's

continued to operate after the Sullivans had moved closer to town, run by Henry “Butch” Stock from 1914 well into the 1920s. The exact location of Gordon’s is currently unknown; an aerial photograph from the 1970s shows the collapsed outlines of the cabin but does not record location.

Alterations:

Year	**Description**
1906	Terminus moved from Delta Creek to the Little Delta River

Statement of Significance

The Fairbanks-Valdez Winter Cutoff, while heavily used during the early years of the Interior development, was only utilized seasonally. Usage of the Winter Cutoff began to decline in 1917 at a quicker rate than sections of the year-round trail; travel to the Interior by the railroad, although more costly, was easier. After the ARC abandoned maintenance activities of the Winter Cutoff in 1921, the trail was used mostly for recreational and subsistence purposes by area residents (). The Winter Cutoff, therefor, lacks the significance required for listing to the NRHP.

Figure 135. 1923 map of Richardson Highway, showing only one route north of Donnelly. The 1923 Alaska Tour, Alaska Road Commission. Shield's Library, UC Davis, California.

NHRP Criteria

_NO_ A. Property is associated with events that have made a significant contribution to the broad patterns of our history.

_NO_ B. Property is associated with the lives of persons significant in our past.

_NO_ C. Property embodies the distinct characteristics of a type, period, or method of construction.

_NO_ D. Property has yielded, or is likely to yield, information important in pre-contact or contact period history.

NHL Criteria

_NO_ 1. Property is associated with event that has made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of the United States history.

_NO_ 2. Property is associated with the life of an important person nationally significant to the history of the United States.

_NO_ 3. Property represents some great idea or ideal of the American people.

_NO_ 4. Property embodies the distinguishing characteristics of an architectural type specimen exceptionally valuable for a period, style, or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction.

_NO_ 5. Property is composed of integral part of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture.

_NO_ 6. Property has yielded or may likely yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Property has yielded or may likely yield data affecting theories, concepts and ideas to a major degree.

Areas of Significance

Period of Significance: 1905 onwards

Cultural Affiliation: Euro-American

Level of Significance: None

Criteria Considerations: None

Research Potential: Limited

Integrity

Location: The trail retains its original location and routing

Design: The trail retains original design

Setting: The trail retains original setting

Materials: The trail does not retain original materials. Original materials for this trail, such as bridge materials, have been replaced.

Workmanship: The trail no longer retains the original workmanship, having been adapted for military and recreational use.

Feeling: The trail retains original feeling.

Association: The trail does not retain the original association. Although used as a winter transportation route historically and currently, the current usage is largely military in nature with seasonal recreational use by area residents.

Summary

The Winter Cutoff section of the Fairbanks-Valdez Trail provided overland access to interior Alaska from 1904-1921. The route was used entirely in the winter and was altered once in 1906. The trail is maintained by USAG Alaska but while it retains integrity of location, design, setting, and feeling, the relatively short and seasonal use of the Winter Cutoff negates its significance in comparison with the larger overall Fairbanks-Valdez Trail. USAG FWA finds this section of the trail not eligible for the NRHP.

Summary of Archaeological Surveys and Sites

A total of 124,911 acres of land have been surveyed in DTA between 2002 and 2018 (Figure 136). This accounts for 19.7% of the total land area. The majority of survey has been in DTA East and only portions of TAs 505, 531, and 532 are incomplete. Army trainings and development activities continue to expand in DTA East. A total of 475 archaeological sites have been found in the DTA. Four sites are historic and 471 are prehistoric. Of the total sites, 54 have been found eligible for the NRHP, 67 are not eligible, and the remaining 354 have not yet been evaluated.

Figure 136. Archaeological sites and surveys in DTA, all years.

2018 Gerstle River Training Area

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place in GRTA in 2018.

Section 106 Activities

No undertakings requiring section 106 consultation took place in GRTA in 2018.

Building and Structure Surveys

No building and structure surveys were conducted in GRTA in 2018.

Section 110 Archaeological Surveys

No archaeological surveys were conducted in GRTA in 2018.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered in GRTA in 2018.

Archaeological Site Monitoring and Site Protection Measures

No archaeological sites were monitored in GRTA in 2018.

Determinations of Eligibility

No historic buildings or archaeological sites were evaluated in GRTA in 2018.

Summary of Archaeological Surveys and Sites

To date, 279 acres of land have been surveyed in GRTA representing 1.3% of the total land area (Figure 137). Army training is not common in this area, and surveys are tied to small trail projects and timber sales. There are three prehistoric sites located in GRTA. One has been found ineligible for the NRHP and two have not yet been evaluated.

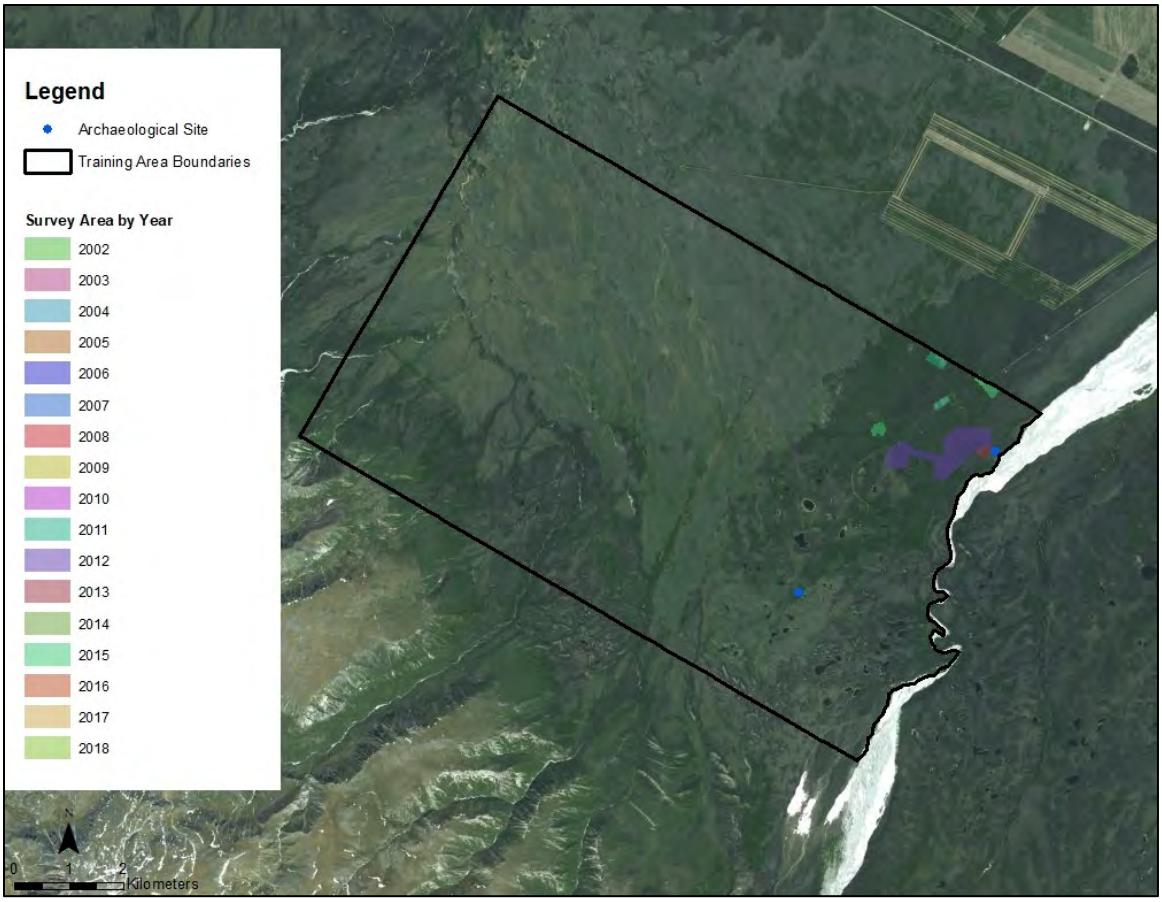


Figure 137. Archaeological sites and surveys in GRTA, all years.

2018 Black Rapids and Whistler Creek Training Areas

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place in BRTA or WCTA in 2018.

Section 106 Activities

No undertakings requiring section 106 consultation took place in BRTA or WCTA in 2018.

Building and Structure Surveys

Surveys for undocumented buildings and structures occurred in BRTA in 2018. Nineteen buildings were visited (**Error! Reference source not found.**, Table 13). Eleven of these have building numbers for tracking by the Master Planning department. Of the buildings surveyed, four were given AHRS numbers in 2018 (XMH-01580 through 01583).

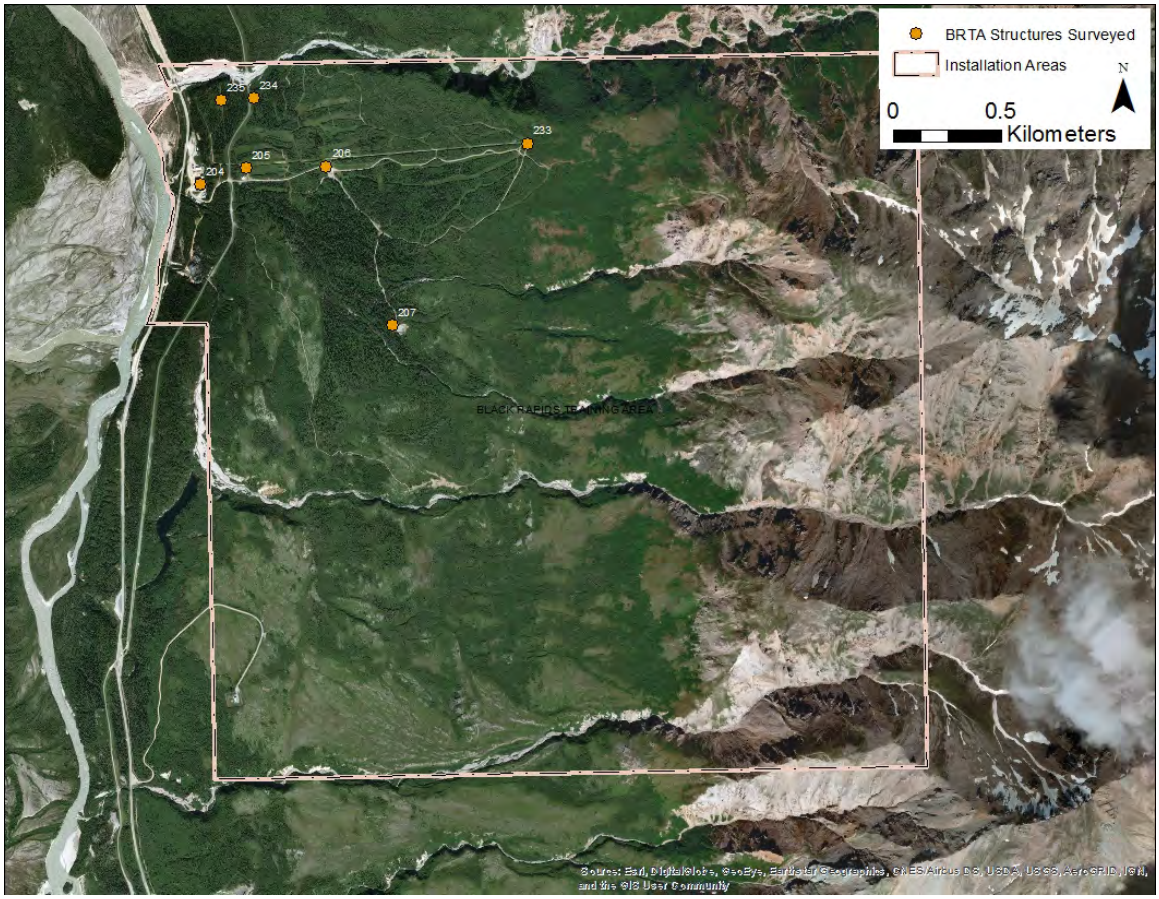


Figure 138. Buildings and structures surveyed in BRTA in 2018.

Table 13. Buildings and structures surveyed in BRTA in 2018.

ID	Training Area	Location	Latitude/ Longitude	Name	Building #	Description	AHRS
204	BRTA		[redacted]	Main building	2019	Two story, rectangular plan, concrete foundation, reinforced cast concrete with stucco, flat roof with BUR.	No
204	BRTA	South of main complex	[redacted]	Carpentry/ Construction Building	2026	One story, rectangular plan, concrete foundation, metal framed with corrugated metal siding, gabled roof clad in corrugated metal.	No
204	BRTA	South end of site	[redacted]	Metal Building	2027	One story, rectangular plan, concrete foundation, metal framed with corrugated metal sliding, gabled roof clad in corrugated metal.	No
204	BRTA	North end of site near entrance to training area	[redacted]	Concrete building	2035	One story, rectangular plan, concrete foundation, reinforced cast concrete covered in stucco, flat roof with BUR.	No
204	BRTA	Near building 2019	[redacted]	Metal storage structure #1	N/A	Half story, rectangular plan, unknown foundation, metal framing, metal framed, metal cladding, flat roof clad in sheet metal.	No
204	BRTA	Near building 2019	[redacted]	Metal storage structure #2	N/A	Half story, rectangular plan, metal beam foundation, metal framing, metal framed, metal cladding, flat roof clad in sheet metal.	No
204	BRTA	Near building 2019	[redacted]	Metal storage structure # 3	N/A	Half story, rectangular plan, metal beam foundation, metal framing, metal framed, metal cladding, flat roof clad in sheet metal.	No
204	BRTA	Located north of building 2020	[redacted]	Wood building	N/A	Half story, rectangular plan, horizontal beam foundation, balloon framing, vertical groove plywood cladding, shed roof clad in corrugated metal.	No
204	BRTA	North of building 2019	[redacted]	Metal maintenance bldg.	2020	One and a half-story, rectangular plan, concrete slab foundation, metal framed, corrugated metal siding, front gable roof clad in corrugated metal.	No
205	BRTA	Bottom of ski lift	[redacted]	Plywood building	2037	One story, rectangular plan, horizontal wood beam foundation, balloon framed, corrugated metal siding, shed roof clad in corrugated metal.	XMH-01581

205	BRTA	Bottom of ski lift	[redacted]	Lift building (bottom)	2036	Two story, rectangular plan, concrete slab foundation, balloon framed, vertical groove plywood siding, shed roof clad in corrugated metal.	XMH-01580
205	BRTA	Spans bottom to top of ski hill	[redacted]	Ski lift	XTBAR	Two story, linear plan, concrete foundation, metal framed with horizontal pulley system	XMH-01583
206	BRTA	Part way up ski hill	[redacted]	Outhouse	2033	One story, rectangular plan, concrete slab foundation, balloon framed, vertical groove plywood siding, front gable roof clad in wood shingles.	No
206	BRTA	Part way up ski lift	[redacted]	Chalet	2032	One and a half-story, rectangular plan, concrete slab foundation, wood framed, vertical groove plywood siding, front gable roof clad in asphalt shingles.	No
207	BRTA	South of ski lift	[redacted]	Log building	N/A	One story, rectangular plan, log (saddle) structure, shed roof clad with corrugated metal.	No
233	BRTA	Top of ski lift	[redacted]	“Matteson Warm Up” building	2039	One story, rectangular plan, horizontal wood beam foundation, balloon framing, clapboard siding, shed roof clad in asphalt sheeting.	No
233	BRTA	Top of ski lift	[redacted]	Ski lift building (upper)	2038	One story, rectangular plan, concrete slab foundation, reinforced CMU, gambrel roof clad in asphalt sheeting.	XMH-01582
234	BRTA		[redacted]	Bivouac shelter (upper)	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framing, corrugated metal siding, shed roof clad in unknown material.	No
235	BRTA		[redacted]	Bivouac shelter (lower)	N/A	One story, rectangular plan, horizontal wood beam foundation, balloon framing, clapboard siding, shed roof clad in asphalt sheeting.	No

XMH-01580
Resource ID: 205
Resource Type: Building
Building Number: 2036
[redacted]
Construction Date: circa. 1950's
Determination of Eligibility: Not evaluated

Building 2036 is located east of main building complex in BRTA, 288 m east of the Richardson Highway and 58 km south of Delta Junction, Alaska (**Error! Reference source not found.**). The building is a rectangular plan, one-story, balloon framed building, sitting on a concrete slab foundation and is oriented east/west. The building is clad in vertical groove plywood and its shed roof is clad in corrugated metal. The east primary façade, features two, large, tall, flush, single plywood doors that are opened when the lift is running (Figure 139, Figure 140). Between the two doors is a single, plywood access door with a centrally located, rectangular, fixed window. The building features no other fenestration on any of its façades.

Figure 139. Building 2036, east façade.

Figure 140. Building 2036, south façade.

The BRTA is home to the Northern Warfare Training Center (NWTC). Established in 1948, originally the NWTC was located at Camp Hale, Colorado, but was moved to Alaska beginning in 1957. The headquarters of the school is located at Fort Wainwright and its aim is to provide cold regions and mountain training in a challenging environment. Building 2036 is part of the original NWTC complex.

XMH-01581
Resource ID: 205
Resource Type: Building
Building Number: 2037
[redacted]
Construction Date: circa. 1950's
Determination of Eligibility: Not evaluated

Building 2037 is located east of main building complex in BRTA, 288 m east of the Richardson Highway and 58 km south of Delta Junction, Alaska (**Error! Reference source not found.**). The building has a rectangular plan, one-story, balloon framed building, sitting on a horizontal wood beam foundation and is oriented north/south. It is clad in vertical groove plywood and its shed roof is clad in corrugated metal (Figure 141, Figure 142). The primary, south façade features a single, centrally located, twelve panel, wood door, with a centrally located upper panel removed and altered into a window. Flanking the door are two identical, square, fixed pane windows. The only other fenestration located on the building is a large, rectangular, fixed window located on the right half of the eastern façade. Building 2037 is part of the original NWTC complex.

Figure 141. Building 2037, east façade.

Figure 142. Building 2037, south façade.

XMH-01582
Resource ID: 233
Resource Type: Building
Building Number: 2038, Lift Building
[redacted]
Construction Date: circa. 1950's
Determination of Eligibility: Not evaluated

Building 2038 is located east of main building complex in BRTA, 1.6 km east of the Richardson Highway and 58 km south of Delta Junction, Alaska (**Error! Reference source not found.**). The building is a rectangular plan, one-story, reinforced CMU building, sitting on a concrete slab foundation and is oriented east/west. It is clad in CMU and corrugated metal and its gambrel roof is clad in asphalt sheeting (Figure 143, Figure 144). The primary west façade features a single, flush, wood door to the far right and a rectangular, fixed, vertical, window on the left. The metal structure supporting the lift reaches the building at the peak of the gambrel roof and continues down the front middle of the façade, securing to the a square concrete slab below. A small rectangular opening just below the peak of the roof provides access to the building for the lift cables. The other facades of the building feature no fenestration. Building 2038 is part of the original NWTC complex.

Figure 143. Building 2038, west façade.

Figure 144. Building 2038, south façade.

XMH-01583
Resource ID: 205
Resource Type: Building
Building Number: XTBAR
[redacted]

[redacted]

Construction Date: circa. 1980
Determination of Eligibility: Not evaluated

The ski lift is located east of main building complex in BRTA, 288 m east of the Richardson Highway and 58 km south of Delta Junction, Alaska (**Error! Reference source not found.**). The ski lift is a linear plan, one to two-story, metal framed structure, with a concrete foundation and is oriented east/west (Figure 145, Figure 146). The lift provides transportation between the upper and lower lift buildings on the site and consists of a large, horizontal, pulley system that is supported by large, metal "T" shaped, poles at regular intervals between the two buildings. The ski lift is part of the original NWTC complex. It was previously surveyed in 2012 and found to have been built in 1980.

Figure 145. BRTA ski lift, facing north.

Figure 146. BRTA ski lift, facing west.

Section 110 Archaeological Surveys

No archaeological surveys were conducted in BRTA or WCTA in 2018.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered in BRTA or WCTA in 2018.

Archaeological Site Monitoring and Site Protection Measures

No archaeological sites were monitored sites in BRTA or WCTA in 2018.

Determinations of Eligibility

No historic buildings or archaeological sites were evaluated in BRTA or WCTA 2018.

Summary of Archaeological Surveys and Sites

To date, 1589 acres of land have been surveyed in BRTA and WCTA representing 47.9% of the total land area (Figure 147). There are 11 prehistoric sites located in these training areas. Four sites have been found ineligible for the NRHP and seven have not yet been evaluated.

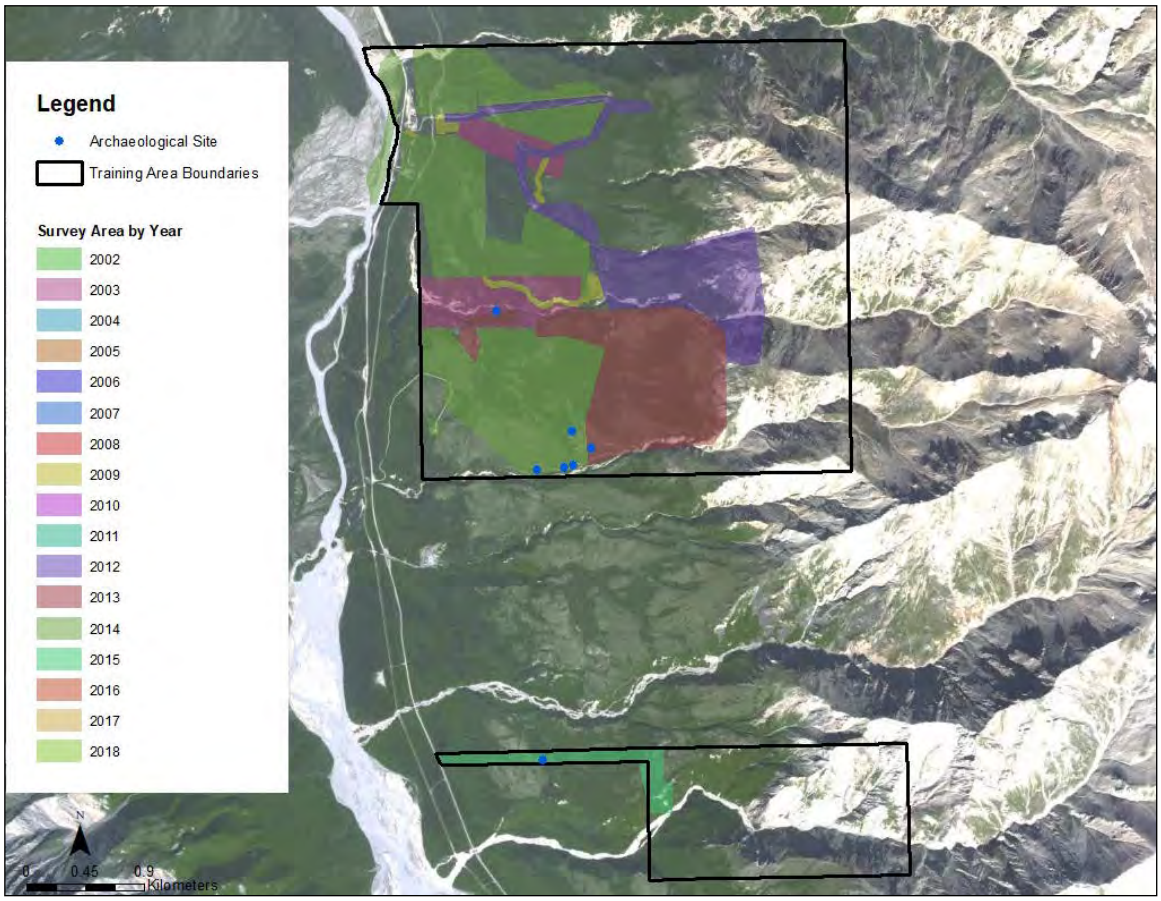


Figure 147. Archaeological sites and surveys in BRTA and WCTA, all years.

2018 Tok Fuel Terminal

NAGPRA and ARPA Activities

No activities related to NAGPRA or APRA took place at Tok Fuel Terminal in 2018.

Section 106 Activities

No undertakings requiring section 106 consultation took place at Tok Fuel Terminal in 2018.

Building and Structure Surveys

No building and structure surveys were conducted in Tok Fuel Terminal in 2018.

Section 110 Archaeological Surveys

Archaeological surveys conducted in association with site monitoring and evaluations at Tok Fuel Terminal in 2018 covered 16 acres (Figure 148). No archaeological sites were found during this survey.

Figure 148. Archaeological surveys at Tok Fuel Terminal in 2018.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered at Tok Fuel Terminal in 2018.

Archaeological Site Monitoring and Site Protection Measures

Seven sites were monitored at Tok Fuel Terminal in 2018 (Figure 149,Table 14). Several of these sites (n=5) show erosion or other impacts from recreation. The most common source of surface erosion of the sites is from dirt roads which lead from the base of the hill to the top. Current site photos are provided in Appendix 2. No current site protection measures are in place.

Figure 149. Sites monitored at Tok Fuel Terminal in 2018.

Table 14. Sites monitored at Tok Fuel Terminal in 2018.

AHRS #	Last Visit	2018 Visit	Artifacts Exposed	Surface Condition	Danger of Destruction
TNX-00007	2015	9/8/2018	yes	partly cleared area of exposed soil surrounded by aspen and spruce forest, road bisects the site	yes, heavy erosion from recreational ATV use and campsites

TNX-00008	2016	9/8/2018	no	spruce and aspen growth with thin undergrowth, road trail bisects the site	yes, heavy erosion from recreational ATV use and campsites
TNX-00010	2016	9/8/2018	no	cleared point of landform with road bisecting the site and exposed bedrock	yes, heavy erosion from recreational ATV use and campsites and campsites
TNX-00232	2015	9/8/2018	no	spruce forest with sphagnum moss undergrowth, ATV trails curve around the edges of the site	no
TNX-00235	2015	9/9/2018	no	spruce forest with interspersed birch and aspen and a thick sphagnum undergrowth	no
TNX-00236	2016	9/9/2018	no	open area on east side of landform with few large spruce trees and several dead tree falls, atv trail adjacent to the site	yes, heavy erosion from recreational ATV
TNX-00256	2016	9/9/2018	no	spruce forest with thick sphagnum undergrowth road bisects the site	yes, heavy erosion from recreational ATV

Determinations of Eligibility

No historic buildings or archaeological sites were evaluated in 2018.

Summary of Archaeological Surveys and Sites

To date, 58 out of 72 undisturbed acres of land (80.6%) have been surveyed at Tok Fuel Terminal (Figure 150). Another 140 acres of land are managed by USAG Alaska, but these areas have been heavily disturbed by past activities related to the fuel terminal. There are 10 prehistoric sites located in these training areas. One site has been found ineligible for the NRHP, two sites have been found eligible, and seven sites have not yet been evaluated.

Figure 150. Archaeological sites and surveys at Tok Fuel Terminal, all years.

2018 Haines Fuel Terminal

NAGPRA and ARPA Activities

No activities related to NAGPRA or ARPA took place at Haines Fuel Terminal in 2018.

Section 106 Activities

No undertakings requiring section 106 consultation took place at Haines Fuel Terminal in 2018.

Building and Structure Surveys

No building and structure surveys were conducted at Haines Fuel Terminal in 2018.

Section 110 Archaeological Surveys

No archaeological surveys were conducted at Haines Fuel Terminal in 2018.

Newly Discovered Archaeological Sites

No new archaeological sites were discovered at Haines Fuel Terminal in 2018.

Archaeological Site Monitoring and Site Protection Measures

No archaeological sites were monitored at Haines Fuel Terminal in 2018.

Determinations of Eligibility

No historic buildings or archaeological sites were evaluated at Haines Fuel Terminal in 2018.

Summary of Archaeological Surveys and Sites

Haines Fuel Terminal is a 208 acre property managed by USAG Alaska in Haines, Alaska. One prehistoric site, SKG-00043, was found not eligible for the NRHP on 12 January, 2001 (Figure 151). Ninety-four of the 208 acres (45.2%) were surveyed by Northern Land Use Research, Inc. (NLUR) in 1998.

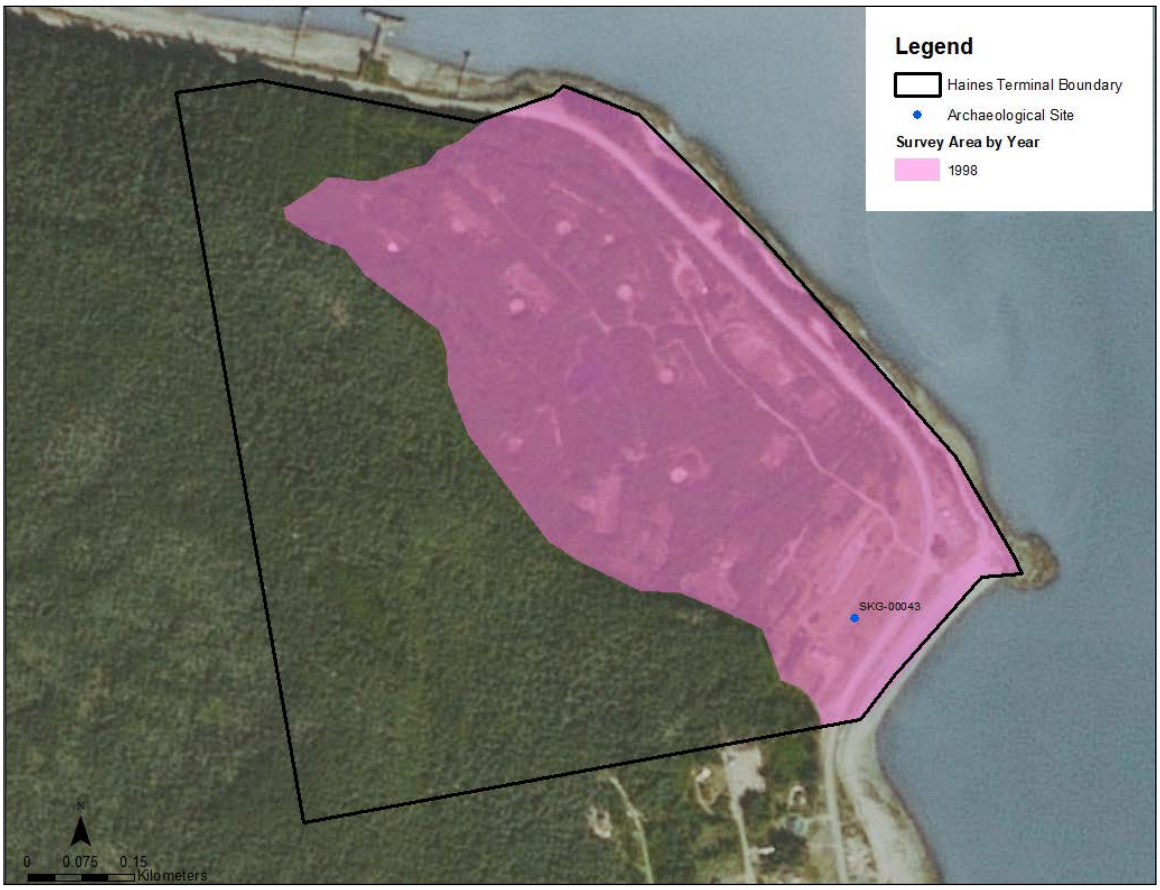


Figure 151. Archaeological sites and surveys in Haines Fuel Terminal, all years.

Summary

In summary, four Section 106 consultations for Army undertakings in addition to activities covered under the O&M PA took place in 2018, two on the cantonment (Bailey Bridge Repairs and Relocatable Arms Room Relocation) and two in DTA (DTA West Trails Project and Closure of FW-MOA-1411). In addition to these projects, consultation took place for the 2017 Fort Wainwright Annual Archaeological Report and the 2017 BAX Monitoring Report. All reports and letters were distributed to local tribes and consulting parties and reports were posted on Fort Wainwright's website (https://www.wainwright.army.mil/index.php/about/environmental/cultural-resources/section-106-consultation).

Four hundred eleven buildings and structures were located on Fort Wainwright training lands and surveyed in 2018 (Table 15). New AHRS numbers were given to 18 sites (FAI-02693 through FAI-02695, XBD-00449 through XBD-00451, XMH-01567, and XMH-01573 through XMH-01583).

Table 15. Building and structure surveys on USAG Alaska-managed lands.

Training Area	2018 Sites Surveyed
Cantonment	0
TFTA	27
YTA	117
DTA	248
GRTA	0
BRTA & WCTA	19
Tok Fuel Terminal	0
Haines Fuel Terminal	0
Total	**411**

Over 43,000 acres of land on USAG Alaska–managed lands were surveyed in 2018 (Table 16). Four new archaeological sites were found (XBD-00449 through XBD-00451, XMH-01567). A total of 14.5% of the installation has been surveyed for archaeological sites and historic structures. Seven hundred sites have been recorded (Table 17).

Table 16. Archaeological surveys on USAG Alaska-managed lands.

Training Area	2018 Acres Surveyed	Total Acres Surveyed	Percent Surveyed
Cantonment	0	12,500	100
TFTA	14,290	29,356	4.4
YTA	10,151	63,331	24.4
DTA	19,429	124,911	19.7
GRTA	0	279	1
BRTA & WCTA	0	1,589	47.9
Tok Fuel Terminal	16	58	80.6
Haines Fuel Terminal	0	94	45.2
Total	**43,886**	**232,232**	**14.5**

Table 17. Archaeological sites on USAG Alaska-managed lands.

Training Area	2018 Sites	Total Sites	Eligible	Not Eligible	Not Evaluated
Cantonment	0	11	1	10	0
TFTA	0	168	17	1	150
YTA	0	21	0	17	4
DTA	4	475	54	67	354
GRTA	0	3	0	1	2
BRTA & WCTA	0	11	0	4	7
Tok Fuel Terminal	0	10	2	1	7
Haines Fuel Terminal	0	1	0	1	0
Total	**4**	**700**	**74**	**102**	**524**

Over 100 archaeological sites were monitored on USAG Alaska-managed lands in 2018 (Table 18). The majority of these were located in DTA, but other sites were monitored when surveys or other activities were located in close proximity. Minor surface damage was noted on nearly half of the sites and from two major causes: use of vehicles on trails that bisect the sites and recreation (camping). These impacts are being addressed in two different ways. First, Seibert stakes are being placed on sites adjacent to trails to encourage traffic to stay on existing damaged pathways. Second, these sites will be monitored on a more frequent basis to determine if affects are increasing or staying stable. For sites where damage is likely, additional measures will be explored.

Table 18. Archaeological sites monitored on USAG Alaska-managed lands in 2018.

Training Area	2018 Sites Monitored	Sites with Surface Damage
Cantonment	1	1
TFTA	16	5
YTA	4	0

DTA	76	37
GRTA	0	0
BRTA & WCTA	0	0
Tok Fuel Terminal	7	5
Haines Fuel Terminal	0	0
Total	**104**	**48**

Four buildings, structures, or features were evaluated for the NRHP in 2018 (Table 19). These sites included a historic building (FAI-01786), a historic plane crash site (FAI-02368), and two historic trails (FAI-02497 and XBD-00449). No sites or features were found eligible for the NRHP.

Table 19. Buildings, structures, and feature DOEs on USAG Alaska-managed lands.

Site Number	Determination	Applicable Criteria
FAI-01786	Not eligible	
FAI-02368	Not eligible	
Bonnifield Trail	Not eligible	
Fairbanks-Valdez Trail	Not eligible	
Total	**4 not eligible**	

Archaeological fieldwork not presented in this report includes excavations at XMH-01303 and fieldwork for archaeological site DOEs. The fieldwork and analyses associated with the XMH-01303 excavations will be provided in a separate report. DOE fieldwork and eligibility recommendations will be provided in a Supplemental Volume to the Archaeological Districts on USAG Alaska-Managed Lands Report in 2020.

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Appendix 1: 2018 AHRS Cards

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: FAI-02693 **Site Name:** Alpha Impact Tower

Site Description

This site is a tower structure located near the Alpha Impact Area. The tower is a square plan, four plus-story, wood framed structure, with an unknown foundation. The structure is crossed braced and contains a metal railing surrounding the platform at the top. A centrally located metal ladder leads to the top of the platform on one of the facades. The tower is likely of military construction, but the date is unknown. The boards are experiencing weathering and the structure is deteriorated.

Location Description:

This site structure located in the northern portion of the Tanana Flats, 7.6 km south of Fort Wainwright and 0.7 km north of the Alpha Impact Area.

Latitude: [redacted] **Longitude:** **Geospatial Shape:** Point **Resource Nature:** Building

USGS quad:

Fairbanks C-2

MTRS:

F002S001E

Period:

Historic

Pertinent Dates:

Possibly WWII era

Significance Statement: (for DOE or NRHP)

This tower acted as an observation point for historic military activities, likely during the WWII era.

Present Condition:

Partially destroyed (B1)

Cultural Affiliation: Military **Property Owner:** US Army **Acres:**

BIA/BLM #:: **Other # (Specify):**

Repository: **Accession #:**

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Julie Esdale

Date Prepared: 03/06/19

form updated on 4/3/14

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: FAI-02694 **Site Name:** Building 31

Site Description

Two adjacent buildings were built in 1971. Building 31 is a bathroom facility oriented east/west. It is one-story, rectangular planned and wood framed with an unidentifiable foundation type. The building has a metal standing seam shed roof and is clad in red painted plywood. The front of the building facing east has four hopper windows, each with a single shutter attached at the bottom. The entrance door is located on the south side of the building and three openings at the bottom of the west side can be adjusted for ventilation via awning-like shutters. Building 33 is located adjacent to these facilities, to the east.

Location Description:

This set of building is located off of Manchu Road in the western portion of YTA, 29.5 km southeast of Fort Wainwright and 9.3 km east of Eielson Air Force Base.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

Fairbanks C-1

MTRS:

F002S004E

Period:

Modern

Pertinent Dates:

1971

Significance Statement: (for DOE or NRHP)

This is a Cold War Era military building located on an active training range.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify): USAGAK Master Planning Numbers 31 and 33

Repository:

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Julie Esdale

Date Prepared: 03/06/19

form updated on 4/2/14

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: FAI-02695 **Site Name:** Building 33

Site Description

Two adjacent buildings were built in 1971. Building 33 is a rectangular plan, one-story, wood framed building, sitting on a post and block foundation and is oriented east/west. The building is clad in red vertical groove plywood and the shed roof is made of corrugated metal. A double door entrance to the left and single door entrance to the right are located on the primary façade which faces east. Each façade contains a single window with simple plywood shutters. A wooden deck with railings had been added to the primary east façade and wraps around to the north side of the building. A bathroom facility (Bldg 31, separate AHRS number) is located adjacent to this building.

Location Description:

This building is located off of Manchu Road in the western portion of YTA, 29.5 km southeast of Fort Wainwright and 9.3 km east of Eielson Air Force Base.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

Fairbanks C-1

MTRS:

F002S004E

Period:

Modern

Pertinent Dates:

1971

Significance Statement: (for DOE or NRHP)

This is a Cold War Era military building located on an active training range.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify): USAGAK Master Planning Numbers 31 and 33

Repository:

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Julie Esdale

Date Prepared: 03/06/19

form updated on 4/3/14

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XBD-00450 **Site Name:** J18-1

Site Description

This site is located on a low bench overlooking Koole Lake to the south. A single chert flake was found buried in a test pit, 40-50cmbs. Vegetation consists of dense black spruce and aspen, with an understory of Labrador tea, sphagnum moss, high bush cranberry and lichen. There is no surface visibility and no noted disturbances. Only one shovel test was excavated.

Location Description:

250m north of Koole Lake, 46 km northwest of Delta Junction, just north of the border of Donnelly Training Area west

[redacted]

Geospatial Shape: Point

Resource Nature: Site

USGS quad:

Big Delta A-6

MTRS:

F008S006E20

Period:

Prehistoric

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: BLM/US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository: UAMN

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Heather Hardy/Julie Esdale

Date Prepared: 9/17/18

form updated on 4/3/14

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XBD-00451 **Site Name:** J18-2

Site Description

This site is located on a ridge over looking Boot Lake. Eleven basalt and chert flakes and a chert scraper were found in a shovel test on a flat portion of the ridge above the lake.iewshed is open to the south (check photos for landmarks). Vegetation consists of labrador, rose, high bush cranberry, raspberry, blueberry, horsetail, moss, grass, fireweed, alder, willow, poplar, and spruce. There is no surface visibility. Only one shovel test was excavated.

Location Description:

275m north of Boot Lake, 24 km west of Delta Junction, Donnelly Training Area west.

[redacted]

Geospatial Shape: Point

Resource Nature: Site

USGS quad:

Big Delta A-5

MTRS:

F010S008E29

Period:

Prehistoric

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: BLM/US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository: UAMN

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Heather Hardy/Julie Esdale

Date Prepared: 9/17/18

form updated on 4/3/14

Reset Form

ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01567 **Site Name:** W18-1

Site Description

W18-1 is located on a small glacial moraine overlooking the Jarvis Creek floodplain with an approx. 15-20m drop to a grassy muskeg area below. The ridge is a N-S trending finger off a larger ridge system trending NE-SW. Landmarks include Jarvis Creek to W and SW, Donnelly Dome to SW, Granite mountains to E, with Muskeg Hill to NE. Butch Lake is the closest water source 80m to the N.
Three shovel tests were excavated on the west side of the ridge line. One red chert flake was found from 0-15cmbs. No other cultural material was found.

Location Description:

W18-1 is on a finger ridge 80m south of Butch Lake, 24km SE of Delta Junction in Donnelly Training Area.

[redacted]

Geospatial Shape: Point

Resource Nature: Site

USGS quad:

Mt. Hayes D-4

MTRS:

F013S011E05

Period:

Prehistoric

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: BLM/US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository: UAMN

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Whitney Mclaren, Heather Hardy

Date Prepared: 9/13/2018

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01573 **Site Name:** Log Structure

Site Description

The structure is a square plan, one-story, log framed building, sitting on a log foundation and is oriented east/west/south. The building features a square notching system with the ends of the logs extending out farther than the corner joinery. The structure has been built into a hill on its south side and the logs used appear to be former utility poles. The structure is clad in log and its roof is composed of log and earth. Two large, metal, corrugated cylinders emerge from the east and west sides of the roof. Entrances to the building are accessed on the east, west, and south sides and consist of an opening without a door. Parts of the interior have remnants of drywall and two open, square, skylights connecting to the metal cylinders on the roof provide light to the main room.

Location Description:

Located at the end of Center Road near OP8 in DTA east, 20 km southwest of Delta Junction.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S009E

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Affiliation unknown but structure is likely associated with military training in the Cold War era.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army Garrison Alaska, BLM

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Julie Esdale

Date Prepared: April 23, 2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01574 **Site Name:** Twin Lakes A-frame Cabin

Site Description

The A-Frame cabin is a rectangular plan, two-story, balloon framed building on a horizontal wood beam foundation and is oriented north/south. The bottom third of building is clad in ribbed metal siding and the upper area in plywood, while the steeply gabled roof is clad in corrugated metal. The north, primary façade features a centrally located, single, flush plywood door flanked by two small, square, fixed pane windows with a plywood shutter. The back façade's fenestration features a square fixed pane window centered just below the roof line and a fixed pane, horizontal, rectangular window below, both with a single plywood shutter.

Location Description:

Building off Twin Lakes Rd, 1.8 km east of Meadows Road in DTA east, 19 km southwest of Delta Junction, Alaska.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S010E17

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

This cabin was built for recreational purposes on the training area.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01575 **Site Name:** Twin Lakes Log Cabin

Site Description

The cabin is a rectangular plan, one-story, square/saddle log framed building, sitting on a horizontal wood board foundation and is oriented north/south. The cabin is clad in log and its side gabled roof is clad in ribbed metal siding. The primary, south façade features a centered door made from vertical wood boards, attached to the structure on its left side with metal strap hinges. The right side of the south façade and left side of the east façade (SE corner) feature unhewn, round logs with the bark left attached that were most likely added later.

Location Description:

Building is located off a footpath located on Twin Lakes Rd, 2.2 km east of Meadows Rd in eastern DTA east, 19.5 km southwest of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S0010E20

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

This cabin was built for recreational purposes on the training area.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

None Reported

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01576 **Site Name:**

Site Description

The building is a rectangular plan, one-story, metal framed quonset building, sitting on an unknown foundation and is oriented east/west. The overall building, including its rounded roof, is clad in corrugated metal. The east and west facades both feature a centered, single, flush, wood door for access. The west façade also includes a horizontal, rectangular, fixed window to the immediate right of the door.

Location Description:

The building is located 900 m west of Wills Range Road in DTA east, 7.5 km southwest of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F011S010E10

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01577 **Site Name:** Boy Scout Cabin #1, north

Site Description

The cabin is a rectangular plan, one-story, balloon framed building, sitting on a concrete slab foundation and is oriented north/south. The building is clad in plywood and the front gable roof, featuring exposed rafter tails, is clad in corrugated metal. The primary, south facade features a centrally located opening with three strap hinges located on the cladding to the right, indicating where the door once was. On the back, north facade of the building is a centrally located, rough cut, stone masonry chimney leading into a metal chimney pipe backed by metal flashing.

Location Description:

Site is located near the north end of Bolio Lake, 330 m east of Meadows Rd in DTA east, 14.5 km southwest of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S010E05

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Buildings used as temporary housing by Boy Scouts of America.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: Boy Scouts of America

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01578 **Site Name:** Boy Scout Cabin #2, south

Site Description

The cabin is a rectangular plan, one-story, balloon framed building, sitting on a concrete slab foundation and is oriented north/south. The building is clad in plywood and the front gable roof, featuring exposed rafter tails, is clad in corrugated metal. The entrance is a centrally located single plywood door located on the primary, south facade. The back, north façade features a rough cut, stone masonry chimney leading into a metal chimney pipe backed by metal flashing.

Location Description:

Site is located near the north end of Bolio Lake, 330 m east of Meadows Rd in DTA east, 14.5 km southwest of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S010E05

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Buildings used as temporary housing by Boy Scouts of America.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: Boy Scouts of America

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01579 **Site Name:** Outhouse

Site Description

The outhouse is a rectangular plan, one-story, balloon framed building, sitting on a horizontal wooden beam foundation and is oriented east/west. The building is clad in plywood, although areas are missing and its shed roof is clad in metal and asphalt sheeting. The primary, east facade features the remnants of a plywood door on the far left and the plywood on the north elevation is completely gone, leaving the structure exposed. The interior of the building features four sitting areas over the back half of the building, spanning its length and the plywood floor below is mostly gone.

Location Description:

Site is located near the north end of Bolio Lake, 330 m east of Meadows Rd in DTA east, 14.5 km southwest of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH D4

MTRS:

F012S010E05

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Buildings used as temporary housing by Boy Scouts of America.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation:

Property Owner: Boy Scouts of America

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Weathering

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-8-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01580 **Site Name:** Building 2036, Lift Building (bottom)

Site Description

Building 2036 is a rectangular plan, one and a half-story, balloon framed building, sitting on a concrete slab foundation and is oriented east/west. The building is clad in vertical groove plywood and its shed roof is clad in corrugated metal. The primary, east façade features two equally spaced, tall, narrow, single doors for the lift cables to pass through and a regular sized, half lite, single door in between the two larger doors. The only other fenestration on the building is a single hung window located on the far right of the south façade.

Location Description:

East of main complex, in Black Rapids Training Area, 288 m east of the Richardson Hwy, 58 km south of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH C4

MTRS:

F016S010E20

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Black Rapids Training Area is home to the Northern Warfare Training Center. Established in 1948, originally the NWTC was located at Camp Hale, Colorado, but was moved to Alaska beginning in 1957. The headquarters of the school is located at Fort Wainwright and its aim is to provide cold regions and mountain training in challenging environment.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Unknown

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-15-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01581 **Site Name:** Building 2037

Site Description

Building 2037 is a rectangular plan, one-story, balloon framed building, sitting on a horizontal wood beam foundation and is oriented north/south. The building is clad in vertical groove plywood and its shed roof is clad in corrugated metal. The primary, south façade features a single, centrally located, twelve panel, wood door, with a centrally located upper panel removed and altered into a window. Flanking the door are two identical, square, fixed pane windows. The only other fenestration located on the building is a large, rectangular, fixed window located on the right half of the eastern façade.

Location Description:

East of main complex, in Black Rapids Training Area, 288 m east of the Richardson Hwy, 58 km south of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH C4

MTRS:

F016S010E20

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Black Rapids Training Area is home to the Northern Warfare Training Center. Established in 1948, originally the NWTC was located at Camp Hale, Colorado, but was moved to Alaska beginning in 1957. The headquarters of the school is located at Fort Wainwright and its aim is to provide cold regions and mountain training in challenging environment.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Unknown

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-15-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01582 **Site Name:** Building 2038, Lift Building (top)

Site Description

Building 2038 is a rectangular plan, one-story, reinforced CMU building, sitting on a concrete slab foundation and is oriented east/west. The building is clad in CMU and corrugated metal and its gambrel roof is clad in asphalt sheeting. The primary west façade features a single, flush, wood door to the far right and a rectangular, fixed, vertical, window on the left. The metal structure supporting the lift reaches the building at the peak of the gambrel roof and continues down the front middle of the façade, securing to the a square concrete slab below. A small rectangular opening just below the peak of the roof provides access to the building for the lift cables. The other facades of the building feature no fenestration.

Location Description:

East of main complex, in Black Rapids Training Area, 1.6 km east of the Richardson Hwy, 58 km south of Delta Junction, AK.

[redacted]

Geospatial Shape: Point

Resource Nature: Building

USGS quad:

XMH C4

MTRS:

F016S010E16

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Black Rapids Training Area is home to the Northern Warfare Training Center. Established in 1948, originally the NWTC was located at Camp Hale, Colorado, but was moved to Alaska beginning in 1957. The headquarters of the school is located at Fort Wainwright and its aim is to provide cold regions and mountain training in challenging environment.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Military

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Unknown

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-15-2019

form updated on 4/3/14

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ALASKA OFFICE OF HISTORY AND ARCHAEOLOGY

AHRS SITE CARD Page 1 of 1

AHRS #: XMH-01583 **Site Name:** BRTA Ski Lift

Site Description

The ski lift is a linear plan, one to two-story, metal framed structure, with a concrete foundation and is oriented east/west. The lift provides transportation between the upper and lower lift buildings on the site and consists of a large, horizontal, pulley system that is supported by large, metal "T" shaped, poles at regular intervals between the two buildings.

Location Description:

East of main complex, in Black Rapids Training Area, 288m east of the Richardson Hwy, 58 km south of Delta Junction, AK.

[redacted]

Geospatial Shape: Line

Resource Nature: Structure

USGS quad:

XMH C4

MTRS:

F016S010E16

Period:

Historic

Pertinent Dates:

Significance Statement: (for DOE or NRHP)

Black Rapids Training Area is home to the Northern Warfare Training Center. Established in 1948, originally the NWTC was located at Camp Hale, Colorado, but was moved to Alaska beginning in 1957. The headquarters of the school is located at Fort Wainwright and its aim is to provide cold regions and mountain training in challenging environment.

Present Condition:

Normal state of weathering, undisturbed by vandalism, construction or abnormal weathering such as flooding or earthquakes (A)

Cultural Affiliation: Miltary

Property Owner: US Army

Acres:

BIA/BLM #::

Other # (Specify):

Repository:

Accession #:

Danger of Destruction:

Unknown

Comments or Additional Information

Prepared By: Kirsten Freeman

Date Prepared: 8-15-2019

form updated on 4/3/14

Appendix 2: 2018 Site Monitoring Photos