Annual Report

Archaeological Survey and Evaluation: Fort Wainwright, 2006

June 2007

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The following people constituted the 2006 Fort Wainwright field crew and this document is the results of their efforts in 2006.

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1.0 INTRODUCTION

In 2006, the U.S. Army Garrison Alaska (USAG-AK) initiated several projects that triggered archaeological and cultural resources analyses and surveys of proposed project areas. This report details each undertaking for which archaeological field work was completed at Fort Wainwright (FWA), excluding the Donnelly Training Area (DTA; within the boundaries of the former Fort Greely). A separate annual report for work conducted in 2006 within the Donnelly Training Area is being prepared.

Survey and subsurface testing was conducted, following procedures defined in USAG-AK's archaeological field methodology (Raymond-Yakoubian and Robertson 2005) and Integrated Cultural Resources Management Plan (ICRMP) (CEMML 2001). Where archaeological sites were identified within a project's area of potential effect (APE), evaluative testing was conducted to determine eligibility for listing in the National Register of Historic Places (NRHP), based on National Register Criteria detailed in 36 CFR 60.4, and pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800).

Archaeological field crews, comprised of employees of the Center for Environmental Management of Military Lands (CEMML), Colorado State University, conducted surveys of areas potentially impacted (both directly and indirectly) by proposed undertakings. The field crew, ranging from three to four archaeologists and a crew chief, conducted work at Fort Wainwright in the cantonment and the Yukon Training Area (YTA) (Figure 1).

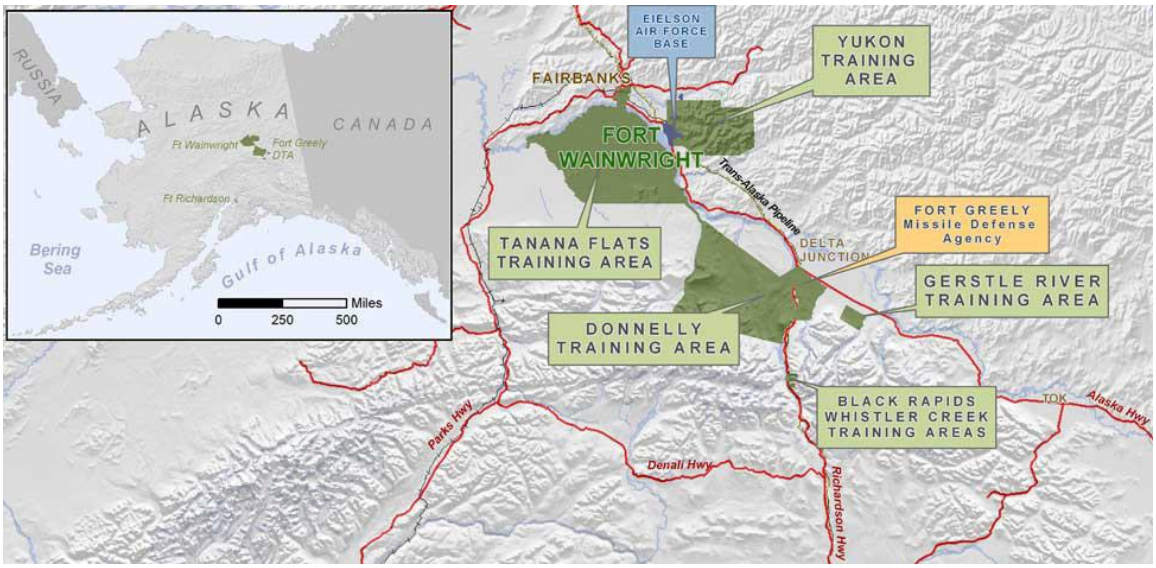

Figure 1. Location of Wainwright and associated training areas

2.0 FORT WAINWRIGHT

Introduction

The archaeological crew investigated the locations for proposed projects in the Yukon Training Area (YTA) and on the main post of For Wainwright. In addition, pursuant to Section 110 of the NHPA , which states "The heads of all Federal agencies shall assume responsibility for the preservation of historic properties which are owned or controlled by such agency", several archaeological sites previously located were revisited (or an attempt made to do so) to determine if their integrity was not being impacted by current military related activities.

Setting

Fort Wainwright is located in central Alaska, north of the Alaska Range in the Tanana River valley. 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. Average monthly temperatures in Fairbanks range from –11.5° F in January to 61.5° F in July, with an average annual temperature of 26.3°F. The record low temperature is -66° F and the record high is 98° F. Average annual precipitation is 10.4", most of which falls as rain during summer and early fall. Average annual snowfall is 67", with a record high of 168" during the winter of 1970-71 (Natural Resources Branch 2002).

Prehistoric Background

Traditional chronologies of Alaskan prehistory divide time into periods based on tool forms. Because of the almost continuous flux involved with the many subcategories of an Alaskan prehistory, the following discussion will entail the broadest classification scheme that divides Alaskan prehistory into three traditions: the American Paleoarctic Tradition, the Northern Archaic Tradition and the Athabaskan Tradition.

- ***The American Paleoarctic Tradition (12,400-7,000 years BP)***

  The American Paleoarctic Tradition was originally defined by Anderson (1970) as the earliest microblade-using tradition in the American arctic, with a proposed relationship to Northeast Asian late Pleistocene cultures based on similarities in these distinctive artifact types. The term is now generally used by archaeologists to refer to the earliest archaeological cultures known from Alaska. In interior Alaska, this tradition includes several proposed complexes or subdivisions including the Nenana Complex and the Denali Complex.

  The Nenana Complex was identified by Powers and Hoffecker (1989) from sites in the Nenana Valley. This complex is dated at approximately 11,000 years BP with an artifact assemblage that includes triangular or teardrop-shape bifacial projectile points ("Chindadn" points), large unifacial chopper-like tools, and flake tools. The Nenana Complex is defined as lacking microblades, microblade cores or burins, and was proposed as predating the Denali Complex, which has a major focus on these types of tools. In the Tanana Valley, Cook termed sites with distinctive triangular points as "Chindadn" sites and dated them at 11,000-10,000 years BP (Cook 1969, 1975; Holmes and Cook 1999).

The Denali Complex, dated at 10,500 to 8,000 years BP, was originally defined by West (1967) and includes distinctive microblade cores, core tablets and their derivative microblades, large blades, biconvex bifacial knives, certain end-scraper forms and burins. West (1981) later defined the Denali Complex as a regional variant of the American Paleoarctic Tradition.

The relationship between the proposed Nenana and Denali complexes is currently unresolved. Contrary to previous interpretations, current research (e.g. Holmes 1998; 2007; 2008), suggests that microblades and burins were used by the earliest known cultures in Interior Alaska, around 12,000-12,600 years BP, with a later co-occurrence with Chindadn points, the defining artifact type of the Nenana complex.

- ***The Northern Archaic Tradition (6,000-2,000 BP)***

The hallmark of the Northern Archaic Tradition is the presence of side-notched projectile points (Anderson 1968; Workman 1978). Some researchers (e.g. Anderson 1968; Dixon 1985) correlate the advent of Northern Archaic technologies, represented by the widespread occurrence of side-notched points throughout interior Alaska and northwest Canada, with the establishment of the taiga forest. Generalized similarities between northern side-notched points and point styles associated with middle- to late- Holocene age complexes known from more southern areas of North America, has led to comparisons of Northern Archaic technologies to those of forest-oriented Archaic cultures of the lower 48 states (Anderson 1968). However, it is uncertain that any of the Northern Archaic traits, other than the side-notched points, originated outside of the western subarctic region (Clark 1992). It also is questionable whether the diffusion of a single trait constitutes an archaeological tradition (Cook and Gillespie 1986).

Utilization of microblade and burin-based industries appears to continue through the middle and late Holocene. An intermediary period known as the Late Denali Complex, during which microblades reappeared, was once suggested (e.g. Holmes 1978; Dixon 1985) as occurring after the Northern Archaic Tradition. However, with the co-occurrence of microblades, microblade cores, and burins in site assemblages with side-notched points, it appears that the Northern Archaic Tradition includes these distinctive artifact types and that the Northern Archaic and American Paleoarctic may be related (Esdale 2007; Potter 2004).

- ***The Athabaskan Tradition (2,000 BP-1880 AD)***

The Athabaskan Tradition includes late prehistoric and proto-historic cultures generally believed to be the ancestors of Athabaskan tribes who currently inhabit Interior Alaska. Excavated Athabaskan sites are rare; however the limited body of evidence allows for several generalizations. The Athabaskan Tradition includes a reorganization of raw materials, 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 diversification of the resource base to include small mammal and freshwater marine animals such as fish and mollusks (Mcfadyen Clark 1981;

1996; Ream 1986; Sheppard 2001; Shinkwin 1979). Athabaskan sites tend to occur in resource-rich areas near lakes, stream and rives, and are generally characterized by large house-pit and cache pit features. Proto-historic Athabaskan assemblages include Euroamerican trade goods such as glass beads, and iron implements. Sites of this time period reflect the increased reliance on outside trade and include log cabins co-occurring with traditional house pits, as well as a change in site location to maximize trading opportunities (Andrews 1975; 1977; 1987; McFadyen Clark 1981; VanStone and Goddard 1981).

Fort Wainwright's training lands are located 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; Mischler 1986). Traditional settlement patterns were focused on a widely mobile season round, with the fall caribou hunt playing a pivotal role in subsistence preparations for the winter, while summer activities were focused at fish camps, and on berry and root collecting and sheep hunting (McKennan 1981). These activities were frequently communal in focus, 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 lifeways of local Athabaskan 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. The arrival of the missionaries in the Alaskan interior had profound affect on the traditional social organization. The introduction of mission schools for Native children and the doctrine of new religious beliefs contributed to an erosion of traditional settlement patterns and practices (McKennan 1981).

In 1898, the discovery of gold in the Tanana uplands began a rush of Euro-American settlement into the Tanana River valley. As the economic importance of the Tanana Valley increased, the need for reliable transportation routes and communication systems rose in tandem. Existing trails, such as the Bonnefield, 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).

Development in the Alaskan Interior increased dramatically with the advent of World War II and subsequent military build-up in Alaska. Of particular significance was the

development of airfields near Delta Junction (Big Delta Army Airfield, later Fort Greely), Fairbanks (Ladd Field, later Fort Wainwright), and 26 miles southeast of Fairbanks (Originally 26 Mile Satellite Field, later Eielson Air Force Base). The two airfields served as cold weather testing centers and lend-lease aircraft transfer points. 26 mile Satellite Field originally began as an alternate landing strip but was expanded to become a strategic bomber base. Each of these facilities expanded with the increased need for military support during the Cold War (Price 2004).

Fort Wainwright Cultural Resources

Archaeological research on Fort Wainwright's training areas has resulted in numerous technical reports (Bacon 1978; Bacon and Holmes 1979; Dixon et al. 1980; Frizzera 1973; Higgs et al. 1999; Holmes 1979; Potter et al. 2000; Rabich and Reger 1978; Reynolds 1983, 1984, 1985; Robertson et al. 2004; Staley 1993; Steele 1982, 1983; Yarborough 1975), scientific papers (Holmes and Anderson 1986; West 1967, 1975), and the identification of over 250 archaeological sites. Work on Fort Wainwright has been largely stratified sampling in nature, resulting at times in as little as 1 percent of the survey area being inventoried. This work has largely focused on known sites and areas thought to be of the very highest potential for containing archaeological sites. Areas of less than ideal site potential have often been neglected and sites and districts that may be eligible for nomination to the NRHP have been incompletely documented or left un-evaluated. Thus, while a large number of important sites have been identified on Fort Wainwright, a number of important gaps exist in the cultural resource inventory.

Despite its incomplete nature, this rich archaeological record represents all of the known prehistoric cultures of the Alaskan Interior. Of importance is the role played by archaeological resources located on Army lands in the definition of the Denali Complex of the American Paleoarctic Tradition (Anderson 1970; West 1967, 1981). Though not located on Army lands, two of the oldest well-dated sites in North America, Swan Point and Broken Mammoth, dated to between 11,500 and 12,000 before present (BP), are located just to the north of DTA East in the vicinity of Shaw Creek (Holmes 1996, 1998; Holmes et al. 1996; Yesner et al. 1999). Sites reflecting the influence of what has been termed the Northern Archaic Tradition (e.g. Anderson 1968; Workman 1978), dating to perhaps 6,000 to 2,000 BP, are also present on Fort Wainwright training lands, as are late prehistoric Athabaskan (e.g. Andrews 1975, 1987; Cook 1989; Mishler 1986; Sheppard et al. 1991; Shinkwin 1979; Yarborough 1978) and Euro-American archaeological sites (Gamza 1995; Phillips 1984). The significance of these known sites on Army Withdrawal Lands is attested by the fact that despite that nearly 100 of these sites remain to be evaluated, over 75 individual sites and 3 archaeological districts have been deemed eligible for inclusion on the National Register of Historic Places, and a fourth archaeological district remains to be evaluated.

Historic research dealing with Fort Wainwright includes recent historic context studies that deal with homesteading (Price 2002), early mining (Neely 2001), and early transportation on Fort Wainwright (Neely 2003). Although mining was perhaps the most important economic endeavor of the late 19th century and early 20th century in the Fort Wainwright area, only three archaeological sites associated with mining have been recorded on Army managed lands in Alaska (Neely 2001). Several early transportation routes, roadhouses, and other structures associated with travel are known to exist in the vicinity of Fort Wainwright and the DTA, including the Donnelly-Washburn and Bonnifield trails, for example (Neely 2003). Military training and construction activities have also resulted in several potential site types, including downed aircraft, defensive fighting

positions, and training and target debris. The majority of these 'Base Ground Defense Sites' are difficult to assign to a specific context, and have often been consistently used for military training exercises; such sites have thus been determined ineligible for listing in the NRHP (see Shaw 2000).

2.1 Glass Park Family Housing, Cantonment

The proposed project consists of nineteen multiplex family housing buildings with access roads and a traffic turn-around. This construction will impact the current location of a bike trail and it will be moved. The project area is bounded by Gaffney Road, Tamarack Drive and Glass Drive (Figure 2). The project area is bounded on the south by Tamarack Drive and Gaffney Road. Glass Drive bounds the north side of the project area and the Chena River serves as a boundary for the east and west sides. This project is located on map quadrangle Fairbanks D2, T 1S, R. 1W. Sections 14 NE ¼, S 11 ½.

This project is located approximately one mile west of both the Ladd Air Force Base Historic District and the Ladd Field National Historic Landmark. The structures to the south of the project area are Capehart-Wherry military family housing currently used for temporary lodging. These structures have been previously mitigated through a Program Comment issued by the Advisory Council on Historic Preservation and no longer require Section 106 review. Consequently, the present undertaking will not affect historic properties within the project boundary. The total area of potential effect (APE) for this construction is approximately 63 acres. The 87 acre area surveyed includes the APE and extra area should the APE expand or shift.

Survey and Field Methods

In May and June 2005 and July 2006, an archaeological survey crew, comprised of three CEMML archaeologists conducted a pedestrian survey of the proposed project area. The survey area was larger than the planned footprint so flexibility existed in the exact citing of the structures and for possible expansion. The area surveyed consists of approximately 87 acres.

Parallel pedestrian transects spaced at 20 m were walked in all areas that were not deemed too wet or too steep (>40°) to contain cultural material. Systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes) during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 50cm x 50cm, and screened through ¼" hardware cloth. No cultural materials were identified or recovered during the field inventory.

Cultural Resources

This project is located approximately one mile west of both the Ladd Air Force Base Historic District and the Ladd Field National Historic Landmark. Numerous historic maps were consulted in the attempts to locate original homesteads. A homestead was located on these maps in the western portion of the APE, however extensive testing and survey could not relocate the remains of this structure. Most of the project area has been modified several times by the creation and grading of trails, disturbed by military and recreation activities, and impacted by modern construction and demolition. No remnants of early homesteads or camps could be located.

Two cultural resources surveys have been undertaken with 1 kilometer of the project (Figure 3), which have resulted in discovery of two historic sites:

FAI-01603
NRHP Determination: Not eligible

Site FAI-01603 is located north of Trainor Gate Road and the Alaska Railroad, and east of River Road, on a flat area several meters above the Chena River and within the main Fort Wainwright cantonment. This site is located approximately 350 m northwest of the Chena River. The partial remains of a small structure (approximately 5 ft x 5 ft) were found here. The remains had been previously impacted by heavy machinery and the remaining timbers are essentially pulverized. Some crushed mortar or cement was present on the outside of the structural remains. Testing within and outside of the structure did not produce any additional cultural material.

The remains have lost integrity, and due to their condition it is not possible to determine what the previous function of the structure may have been or its age. Additionally, the paucity of cultural material indicates that FAI-01603 does not contain additional information that is important to our understanding of the prehistory or history of the region. This property is not eligible for inclusion in the National Register of Historic Places.

FAI-01604
Determination: Not eligible

Site FAI-01604 is a small trash dump located north of Trainor Gate Road and the Alaska Railroad, and east of River Road, on a flat area several meters above the Chena River and within the main Fort Wainwright cantonment. This site is located approximately 250 m northwest of the Chena River. The trash dump is located on the edge of an area cleared by heavy machinery, at the top of a dry gulley. This area has been impacted by heavy machinery and it appears as though the materials were deposited in this area or pushed to their current location from nearby by previous disturbances. A metal detector and shovel tests were used to define the size of the site as 10 m x 3 m. Use of the metal detector in the gulley behind the site did not produce any evidence of the can dump extending down into the gulley.

Subsurface testing verified that the sediments in this area were disturbed, though intact deposits were present approximately 15 cm below the current, disturbed surface. Undisturbed sediments contained charcoal bits and other organic material; however, charcoal was also noted on the surface of the disturbed ground throughout the project area and is likely natural. One of three shovel tests produced additional materials; several pieces of bottle glass and can fragments were found between 1520 cm below the surface. Historic era cans, of the hole-in-top type, with crimped seams dating to the turn of the century or just after, were found in the disturbed sediments. A portion of a bottleneck with an intact collar was also found. This bottle fragment had no seams visible and was not screw top, likely dating it to a pre-1903 manufacture. Machine cut nails, modern wire rope, modern can fragments, un-diagnostic bottle glass, and a saw-cut piece of large mammal bone were also found in the disturbed sediments. It is estimated that 90 percent of the site has been disturbed.

Site FAI-01604 is the remains of a small, highly disturbed trash dump. Pedestrian survey and subsurface testing both revealed disturbed deposits, and the site does not retain any integrity. Additionally, the condition of the remains at FAI-01604 indicates that the site does not contain additional information that is important to our understanding of the prehistory or history of the region. This property is not eligible for inclusion in the National Register of Historic Places.

Results/Summary

Pedestrian survey and sub-surface testing of the proposed project areas failed to identify any cultural resources within the boundaries of the proposed housing project area. All previously recorded archaeological sites or historic properties fall outside the proposed project areas. Subsequently, the proposed projects will have no effect on historic properties. However, due to the potential for unidentified homestead features located on historic maps, the western portion of the construction area will be monitored during ground breaking.

Figure 2. Survey Area and Proposed Project Footprint for Glass Park Housing Project.

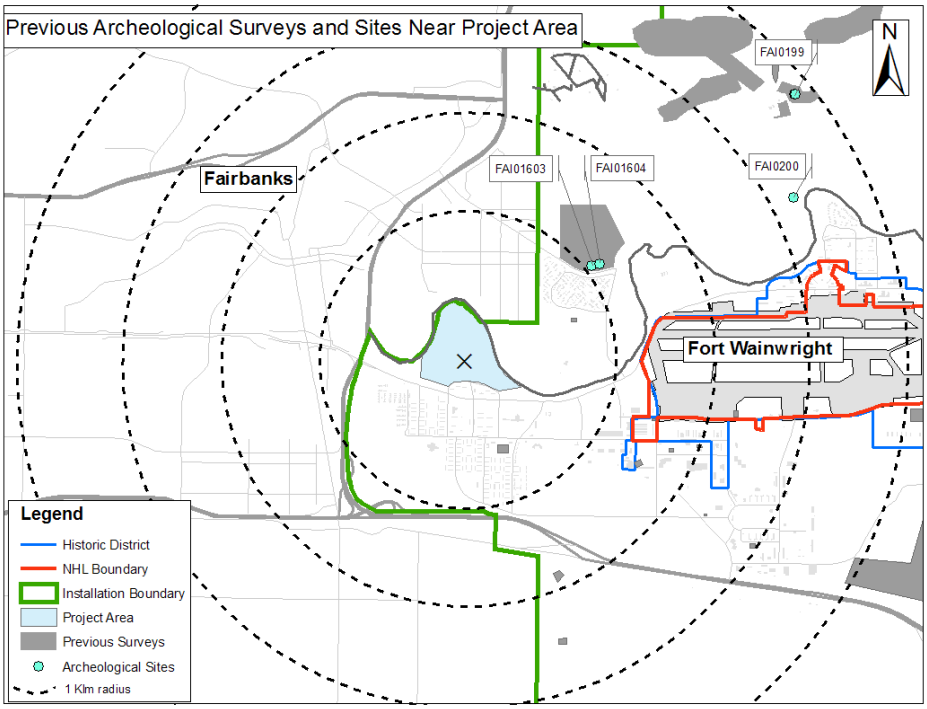

Figure 3. Location of Previous Surveys in the Project Area.

2.2 Approach Hill Survey, Cantonment

Pursuant to Section 110 of the National Historic Preservation Act, a CEMML archaeological crew surveyed an area within the FWA Cantonment, north of the airfield, known as Approach Hill. This project is located on map quadrangle FAI C1, T. 2 S., R. 4 E., Sections 30 and 31.

Survey and Field Methods

In the summer of 2006 the project area was investigated by a CEMML archaeological survey crew. A total of approximately 114 acres were surveyed for the project (Figure 4).

Parallel pedestrian transects spaced at 10-20 m were executed in all areas that were not deemed too wet or too steep (>40°) to contain cultural material. It was unknown if systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes). If so the shovel tests would have been approximately 40cm x 40cm, and the resulting material screened through ¼" hardware cloth.

Cultural Resources

Parcels to the north and the south of the project area were surveyed and tested in 2005, with no NRHP-eligible sites determined (Figure 5).

There are four known sites within approximately 1 km of the survey area, FAI 00040, FA1 00041, FAI-00042, and FAI 00043 (Figure 4). No sites were encountered during this survey. The area was greatly disturbed by military activities and foxholes litter the project location.

Known sites outside of survey area:

FAI-00040
NRHP Determination: The eligibility of this site has not been determined.

Site FAI-00040 was originally recorded in 1980. At that time the site was estimated as 10 m by 15 m. The site was tested using seven 30 cm by 30 cm excavation units. A total of 26 flakes were found, consisting of chert, obsidian, rhyolite and quartz. The site was considerably disturbed by military activities. Military-related structures were located 100m northeast of the site. The original investigators thought the site retained a possibility of yielding significant scientific data, when used in conjunction with data from nearby sites FAI-00041 and FAI-00042.

Sites FAI-00040, 00041and 00402 were examined in a 2006 relocation survey which is presented in greater detail later in this report. The relocation survey found the site to be 60 m by 15 m. It covers two bluff fingers overlooking a valley floor. Surface visibility is about 10 % where disturbed and less than 1% elsewhere. The view shed at the site is 180°

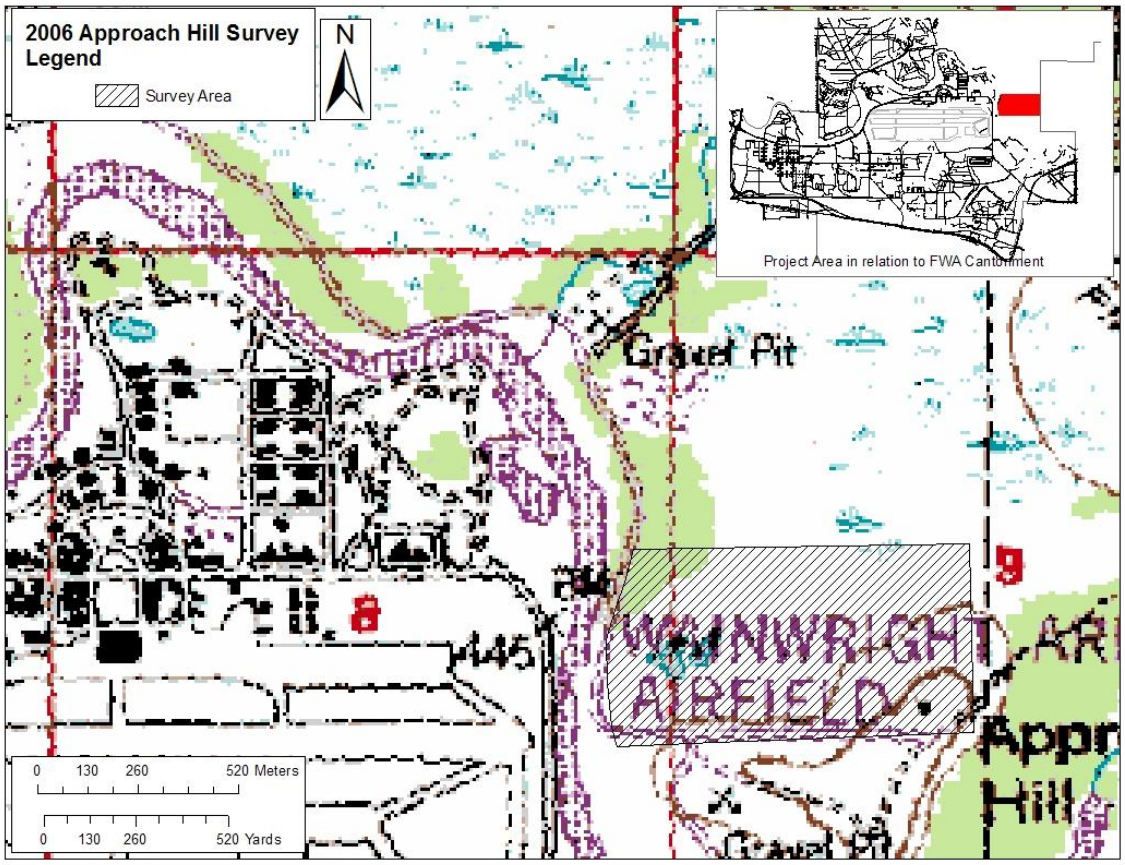

Figure 4. Approach Hill Project Location.

No subsurface testing was conducted. Artifacts found on the surface included 34 chert flakes, 1 quartz biface, one chert scrapper and a possible obsidian flake.

All tools and the possible obsidian flake were collected. Heavy military/construction and recreation activities have disturbed the site, along with potential down slope erosion.

FAI-00041
NRHP Determination: Undetermined

Site FAI-00041 was originally recorded in 1980. At that time the site was estimated 16 m x 14 m and was located on a high bluff. Ten excavation units, combined with surface examination found 27 artifacts, 1 bifacially retouched chert nodule (from surface) and 26 small chert pressure flakes. The site was heavily disturbed by military activity. The original investigators recommended Phase II testing for the site to gather additional information.

The 2006 site relocation survey provided the following updated information about the site. The site is located on a southwest pointing bluff finger. The view shed for the site

is about 180° and the surface visibility was about 10 %. A pedestrian survey found 2 chert flakes and 4 quartz flakes were found on the surface, some of them eroding down slope. They were all tertiary flakes, two of gray chert and four of white quartz. No artifacts were collected and no shovel tests were excavated. The area was disturbed by military activity.

FAI00042

NRHP Determination: Undetermined

This site was found in 1980, locate don a high bluff overlooking the Chena River Flood Plain. It was estimated to be 20m x 15. The site was tested and found to contain one chert and on quartz flake. The original investigators recommended Phase II testing for the site to gather additional information.

The 2006 site relocation survey was unable to locate the site using the known site coordinates and extensively surveying throughout that vicinity.

FAI-00043
NRHP Determination: Not eligible

Site FAI-00043 was originally recorded in 1980. The site was recorded as on a high bluff, at the foot of an observation tower. The area is very disturbed by construction activity. No dimensions for the site were recorded. Surface artifacts include 11 flakes, a bone fragment and a burin. The original investigators recommended Phase II testing for the site to gather additional information.

The 2006 site relocation survey provided the following data to update the site. FAI 00043 has a surface visibility of 100% within an ATV trail going through the site and in a stripped area, but less than 2% elsewhere. The view shed for the site is 180°. A pedestrian survey located 12 tertiary flakes, one of unknown material, two of black chert, four of black and white banded chert, and five of gray chert. Due to the high risk of military and recreational disturbances, all artifacts were collected. No shovel tests were excavated.

Results
Pedestrian survey and sub-surface testing of the proposed project area did not identify any cultural resources.

2.3 Skyline Road Survey, YTA

In order to assist USAG-AK in meeting its National Historic Preservation Act (NHPA) Section 110 responsibilities (Section 2aB), an archaeological crew completed an archeological survey within the Yukon Training Area of Fort Wainwright. This project is located on map quadrangle Big Delta C-6, T. 2 S., R. 5E, Sections 25, 26, 35 36 and T. 3S, R 5E, Sections 1, 2, 11,12,13,14, 23 and 24.

Survey and Field Methods

In the summer of 2006 the project area was investigated by an archaeological survey crew, employed by CEMML. A total of 3695 acres were surveyed for the project (Figure 6).

Parallel pedestrian transects spaced at 10-20 m were walked in all areas that were not deemed too wet or too steep (>40°) to contain cultural material. It was unknown if systematic sub-surface testing was undertaken in areas determined to be high probability (e.g., lake margins, ridges, benches adjacent to steeper slopes). If so the location of the units would have been determined during initial review of the proposed project area, and as determined by the supervising archaeologist and field crew leader based on survey findings. Shovel tests were approximately 40 cm x 40 cm, and were screened through ¼" hardware cloth.

Cultural Resources

Since 1979, several cultural resources surveys have taken place both within a reasonably close proximity of the project area and within it (Figure 7). As a result of these surveys, there are two sites within two kilometers of the survey area and one known site within the survey area.

Previously known sites within the survey area:

XBD-00093
Determination: Not eligible

This site was originally found in 1979 and consisted of one coarse-grained beige chert flake found on the ground surface on the east side of Skyline Drive (Holmes 1979). The flake may have been a bifacial thinning flake. It has previously found not eligible for the National Register on July 25, 1984. The status of the site will not be changed by future activities.

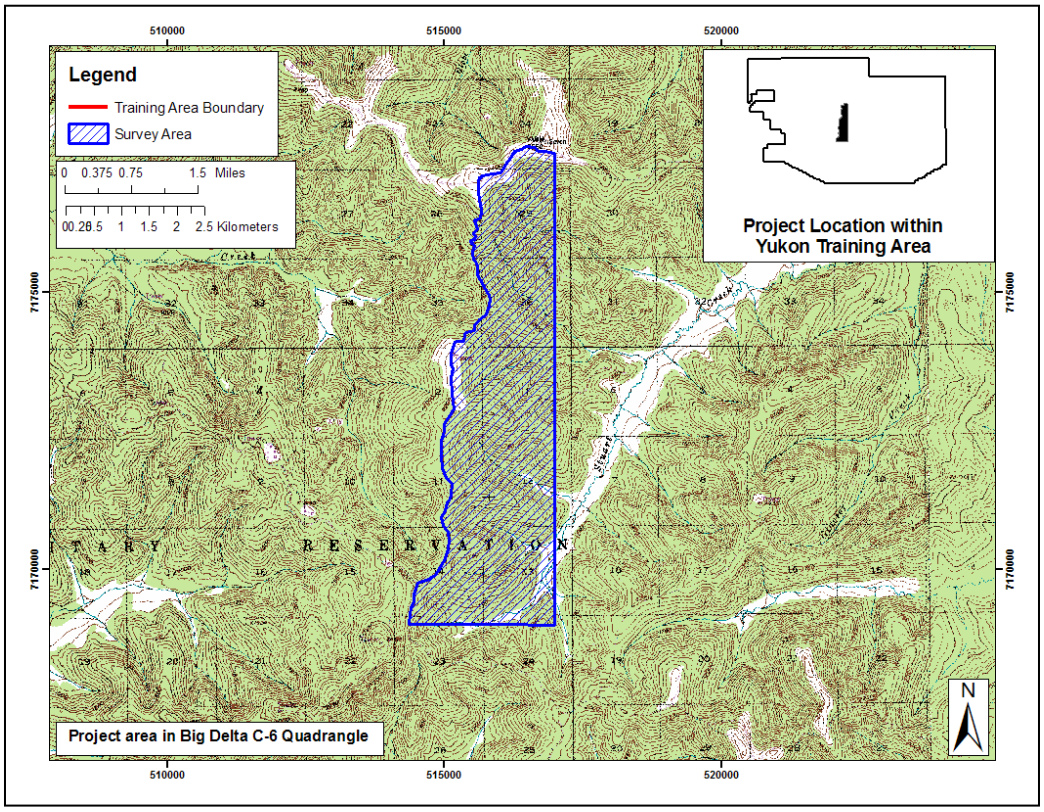

Figure 6. Skyline Road Project Area.

Known sites outside of survey area:

XBD-00103
Determination: Not eligible
This site, found in 1979, consisted of one coarse-grained translucent beige chert flake found on the surface of a disturbed area, on a small hill north of Quarry Road (Holmes 1979). The location of this site is off of a short spur-loop leading up to the top of a small hill and back down to Quarry Road.

XBD-00264
Determination: Not eligible

This site consists of an isolated find of a gray chert projectile point base found on the surface next to a Remote Threat Emitter on Beaver Creek Road. It is near the intersection of Skyline Road and Beaver Creek Road in the Yukon Training Area. The area was not shovel tested. The site was discovered in 2005. The sites status for inclusion into the NRHP was not determined in 2005.

The survey crew located one site during this survey, found during shovel testing of area with the highest potential for extant archeological remains. This site was called Fly-By-Ridge Site by the field crew (Figure 8). The site is being submitted to the Alaska SHPO for a site number once all of data is analyzed.

Fly-By-Ridge site located in the middle of a east-West trending ridge, with a steep north slope and a gradual south slope. Surface visibility is less than 1%. View shed is limited to 40º because of the heavy vegetation at the site. Vegetation consists of aspen, birch, ground pine, willow, alder and moss. This is was located using shovel test units. One positive shovel test unit found 2 quartz flakes and a small amount of charcoal.

Results
A combination of literature review, pedestrian survey and sub-surface testing of the proposed project area identified a single site which consisted of a subsurface deposit of quart flakes. Based on this survey, only projects with an extensive ground disturbance component would impact this site. The Fly-By-Ridge site was extensively investigated and it data potential has been exhausted. This site is ineligible to the NRHP.

2.4 Birch Hill Site Relocations, Cantonment

In order to assist USAG-AK in meeting its National Historic Preservation Act (NHPA) Section 110 responsibilities (Section 2 aB), CEMML completed some inventory activities in the Birch Hill area of the Fort Wainwright cantonment (Figure 8). This project is located on map quadrangle Fairbanks D2 SE, T. 1 S., R. 1 E, Section 4.

Survey and Field Methods

In the summer of 2006 three sites near Birch Hill on the FWA cantonment were relocated by a crew of four archeologists employed CEMML (Figure 9). An attempt to find three other sites in the vicinity was unsuccessful.

In order to relocate the sites, the crew used the site coordinates supplied on the Alaska Heritage Resources Survey form (AHRS). If the site was successfully found the field crew leader then recorded all of the pertinent site information, such as if the location was different, site composition, site integrity and site setting. If the site was not found using the AHRS coordinates, then an attempt was made to find in using a series of parallel pedestrian survey transects spaced at 20 meters or less within the site's known vicinity. In those areas deemed too wet or too steep (>40°) no survey was conducted.

Cultural Resources

Sites Relocated

FAI-00040
NRHP Determination: Undetermined

Site FAI-00040 was originally recorded in 1980. At that time the site was estimated as 10 m by 15 m. The site was tested using seven 30 cm by 30 cm excavation units. A total of 26 flakes were found, consisting of chert, obsidian, rhyolite and quartz. The site was considerably disturbed by military activities. Military-related were located 100 m northeast of the structure. The original investigators thought the site retained a possibility of yielding significant scientific data, when used in conjunction with data from nearby sites FAI-00041 and FAI-00042.

The 2006 relocation survey provided the following data to update the site. The site is now observed as 60 m by 15 m. It covers two bluff fingers overlooking a valley floor. The Chena River is the closest water source, circa 1500 m to the southwest. The view shed at the site is 180° showing the Tanana Uplands to the southeast, the Fort Wainwright airfield to the south west and a valley directly south. Surface visibility is about 10 % where disturbed and less than 1% elsewhere.

No subsurface testing was conducted. Artifacts found on the surface included 34 chert flakes, 1 quartz biface, one chert scrapper and a possible obsidian flake. All tools and the possible obsidian flake were collected. Heavy military/construction and recreation activities have disturbed the site, along with potential downslope erosion.

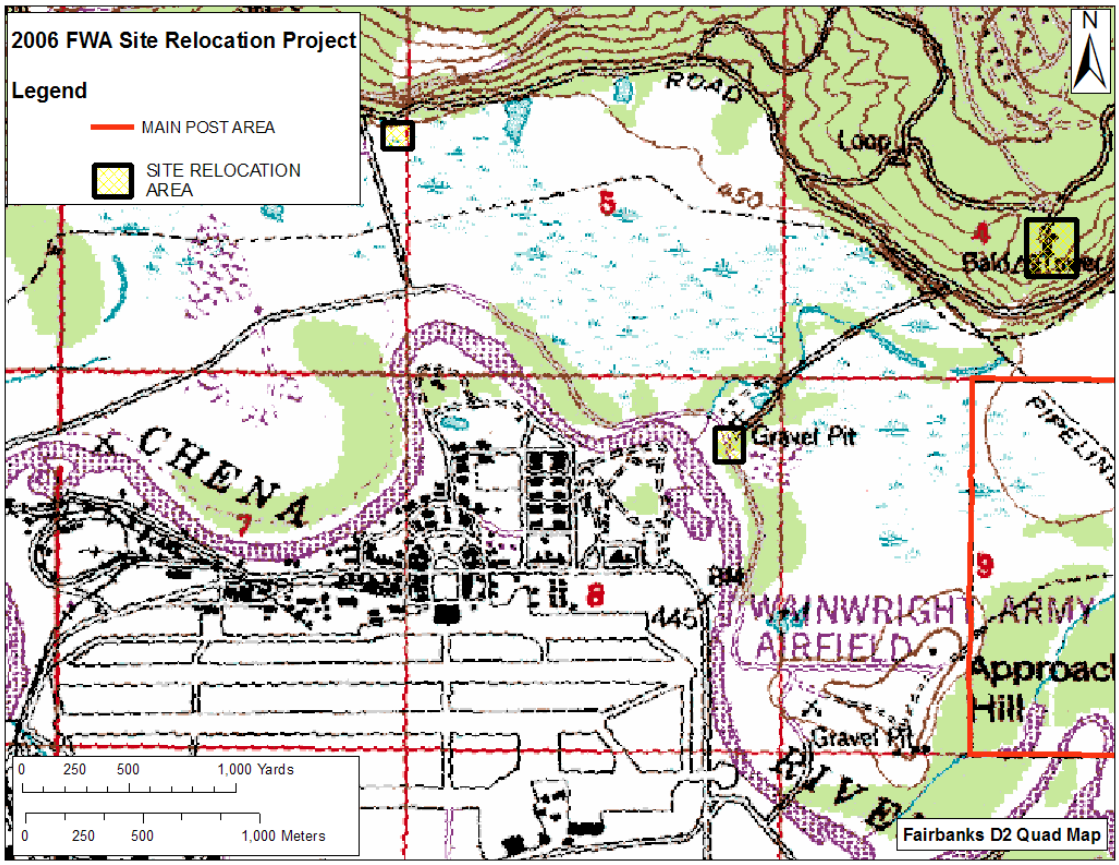

Figure 9. Overview of Birch Hill Site Relocation Project.

This site was found 178 m southwest of the location plotted during the 1980 survey.

Figure 11. Overview of Site FAI00040, facing south.

FAI-00041

NRHP Determination: Undetermined

Site FAI-00041 was originally recorded in 1980. At that time the site was estimated 16 m x 14 m and was located on a high bluff. Ten excavation units, combined with the surface examination found 27 artifacts, 1 bifacially retouched chert nodule (from surface) and 26 small chert pressure flakes. The site was heavily disturbed by military activity.

The 2006 site relocation survey provided the following data to update the site. The site is located on a southwest pointing bluff finger. Nearest water source is the Chena River, about 1350 m to the southwest. The view shed is 180° with Birch Hill visible to the west, Fort Wainwright airfield to the southwest, the valley floor to the south and the Tanana Uplands to the east. Surface visibility is about 10 %.

Artifacts found at the site include 2 chert flakes and 4 quartz flakes were found on the surface. The area was disturbed by military activity and the site contained a 4.5 m by 10 m depression.

This site was found 200 meters southwest of the original location recorded for the site.

Figure 12. Overview of Site FAI00041, facing south.

FAI-00043
Determination: Not eligible

Site FAI-00043 was originally recorded in 1980. The site was recorded as on a high bluff, at the foot of an observation tower. The area is very disturbed by construction activity. No dimensions for the site were recorded. Surface artifacts include 11 flakes, a bone fragment and a burin.

The 2006 site relocation survey provided the following data to update the site. FAI 00043 overlooks the bluff with sites FAI 00040 and FAI 00041. The nearest water source is the Chena River, about 1600 m to the southwest. The view shed is 180°, blocked by vegetation to the north, but showing the Tanana Uplands, the valley floor, and the Fort Wainwright airfield.

Surface visibility is 100% in an ATV trail cutting through site and in a stripped area, but less than 2% elsewhere. There were 12 tertiary flakes located, one of unknown material, two of black chert, four of black and white banded chert, and five of gray chert. Due to the high risk of military and recreational disturbances, all artifacts were collected. No shovel tests were excavated.

Figure 13. Overview of Site FAI00043, facing north.

Sites not relocated

FAI00042
Determination: Not eligible

This site was found in 1980, locate don a high bluff overlooking the Chena River Flood Plain. It was estimated to be 20 m x 15 m. The site was tested and found to contain one chert and on quartz flake.

The 2006 archeological crew was unable to locate the site using the known site coordinates and extensively surveying in that location.

FAI00509

Determination: Not eligible

This site was originally discovered in 1996 and consisted of 3 flakes found eroding out of the side of a gravel pit. The size of the site is not known. The site was revisited in 2002 and found to be greatly disturbed and the pit flooded. It is now used for recreational purposes and any archeological resources have been obliterated.

The 2006 archeological crew was unable to locate the site using the known site coordinates and extensively surveying in that location. It has been possibly removed by disturbance activities.

FAI00199
Determination: Not eligible

This site was originally recorded in 1980. It was found on a low ridge 15m above the Chena River Flood Plain. It consisted of a side notched point and two flakes, all of chert. The site was reported by military personnel.

The 2006 archeological crew was unable to locate the site using the known site coordinates and extensively surveying in that location.

Potential New Site or Expansion of Existing Site

Determination: Unknown

This site is located on a bluff edge over looking a valley (Figure 12). The view shed is approximately 180º. The closest source of water is the Chena River 500 m to the north. Surface visibility is poor at <1%. Site vegetation consists of willow, spruce, aspen, sage, grasses, rosehips and cranberries. A single chert flake was found on a game trail.

This site is approximately 40 m NNE of FAI-00041 and 46 m SSW of FAI00040. This site is on the same ridge line as the two aforementioned sites. No subsurface testing was conducted.

Results

Three of the six sites targeted by the project were relocated. Each of the sites was not quite in the location recorded on the AHRS form. Three other sites that were targeted

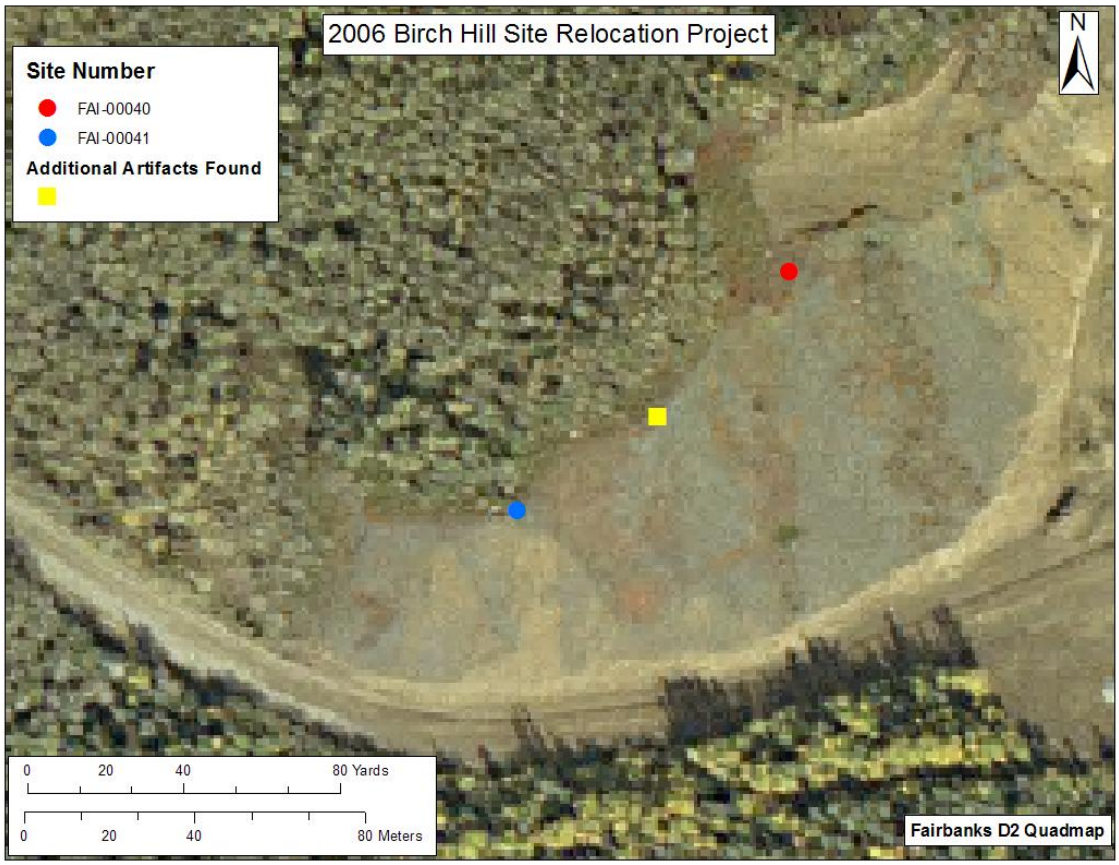

Figure 14. Overview of potential site expansion within project area.

for relocation were not found by this survey. This might indicate that the sites were removed due to erosion or military activities. A single flake found an a game trail might indicated that sites FAI-00040 or FAI-00041 might be larger than originally assumed. The heavy vegetation cover between the two sites might be covering evidence of a interrelationship.

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