### Determinations of Eligibility The Good and the Could Be Better

- Sarah Meitl
- Review and Compliance Coordinator
- Office of History and Archaeology



## Introduction

O National Register of Historic Places Program • Determinations of Eligibility (DOE) Process ODE Components O Historic Context Significance - Criteria Integrity Ocase Studies

### National Register of Historic Places

Several program and database managed by the National Park Service

• Four Criteria and seven Criteria Considerations

- Five categories of property types
- AHRS vs. eligible vs. listed



## **Targeted Historic Context**

# All properties must be evaluated within a Historic Context

Establish the theme, boundary, and period(s) of significance

 Determine the area of significance (architecture, community planning and development, agriculture etc.)

 Establish the property types important to illustrate the context

## Evaluation of Integrity

Integrity is the ability of a property to convey its significance.

• Evaluation of integrity can be subjective but must always be grounded in an understanding of a property's physical features and how they relate to its significance.

Operation of the essential physical features that must be present for a property to represent its significance

## Case Study: Galena CB Building

## **Questions:**

• Was the appropriate process followed?

Object the Historic Context pertain to the property?

• Do we have enough information?



## Case Study: Galena CB Building

### SHPO Analysis:

 Historic Context stopped short
Building inappropriately tied to CAA-era historic district (1940-1958). The building was built in 1963 and should be evaluated based on a context post-1958 and the FAA.

Integrity discussion unnecessary

 Recommended expanding the historic context and evaluating the building in consideration of a post-1958 aviation historic district.

## Case Study: The Best Site

## **Questions:**

• Was the appropriate process followed?

Object the Historic Context pertain to the property?

• Do we have enough information?



## Case Study: The Best Site

## SHPO Analysis:

Connection between what was found at the site and how those remains can yield data potential

• Good discussion of site's integrity

O Likely concur eligible under Criterion D

## What if...

## ...the property has been completely destroyed?

Document and Report
Description of what it was and when destroyed
Photos before and after

Output the AHRS card

No need for a DOE

## What if...

## ...the property has been partially destroyed or altered?

Document and Report
Description of what it was and when alterations happened
Photos before and after

• Follow DOE process

- Develop Historic Context
- Establish if significant
- Evaluate integrity after

## Discussion



## Thank You!

### **Architectural Description:**

The Galena (GAL) Communications Building (CB) is located about 3.75 miles to the east of the end of Runway 25 at the Edward G. Pitka Airport in Galena, Alaska. The GAL CB consists of a single building with an antenna array situated on a slight rise built up by gravel, roughly three feet higher than the surrounding low-lying wetlands. Terrain in the area is generally flat with minimal topographic relief. The building is accessed from Campion Road via a one-lane gravel/dirt road. The access road approaches from the south then encircles the building, located on a circular dirt and gravel covered site plot, roughly 100 ft. in diameter. In 2018, the clearing was wet and swampy with tall grass and is surrounded by short paper birch trees and shrubs typical of the area.

The GAL CB is housed in a one-story square building, measuring 36 ft. x 36 ft. (1,296 sq. ft.). Constructed in the floodplain of the Yukon River, the metal I-beam foundation rests on 16 creosote-treated wood pilings, each about 12 in. in diameter, about two to three feet above the ground surface. The building features an approximately 50 ft. diameter flat, round roof covered with a rubber membrane with eaves overhanging the façades of the building. The underside of the roof (soffit) is covered in vinyl siding. The disc-like roof is approximately 10 in. thick and supported by exposed rafters extending off the center point of each wall. These 4 in. x 6 in. rafters are boxed with 1 in. boards. The edge of the roof is covered with metal flashing.

Rising from the center of the roof is an approximately 16 ft. high white metal 'cone' housing the VOR antenna. Attached around the perimeter of the roof are 16 monitor antennas (also called 'mailbox' antennas for their appearance) spaced at even intervals. Each three foot tall monitor antenna consists of a roughly 2 in. diameter pole with a 12 in. x 4 in. x 4 in. arched box on top of the pole. The roof also serves as a counterpoise deck for grounding the radio and antenna equipment.

The exterior of the building was constructed of prefabricated panels on a metal frame and is clad in vinyl siding. The southwest (main) façade is pierced by two openings for single-leaf metal doors. A wood porch with central stair accessing the doors is nearly 5 ft. off the ground. (**Figure 1**). The doors are flanked on the east by a large metal vent hood and on the west by a single smaller metal vent hood. The electric meter and service disconnect cabinet are affixed at the southwest corner and a metal ground-mounted transformer box is located on the west side of the porch stairs. There are no windows in the building. The only penetrations on the east wall are a single metal vent hood and conduit for an electric service line from an old ground-mounted transformer in a metal cabinet. A 2000-gallon free standing diesel fuel tank protected by metal bollards is also adjacent to the east wall. The north (rear) wall is pierced by a single metal vent hood. Wood posts at the rear of the building previously supported an air handler. The east wall is pierced by an opening for a single window-unit style air conditioner; each penetration is roughly 6 ft. from the base of the structure.

The interior of the building is divided into two rooms, an equipment room housing the electronics equipment (radio receivers and transmitters) and an engine generator room, housing a back- up generator in the event that commercial power supply to the facility is interrupted.

#### **Previous Investigations:**

In 1999, the United States Army Corps of Engineers (USACE) documented and evaluated air navigation facilities built by the Civil Aeronautics Administration (CAA) in Alaska from 1940 to 1958 (Chattey 1999). The survey defined the period of significance in Alaska as 1940 to 1958 and grouped resources into nine (9) building types including offices, community service facilities, engine generator buildings, flight service stations, shops, aerial navigation buildings, utility buildings, storage buildings, and living quarters. The category of aerial navigation buildings includes several navigation types such as remote transmitter/receiver (RTR), non-directional beacon (NDB), direction finder (DF), glide slope (GS), locator lights, middle marker (MM), homing beacon, and remote communications outlet (RCO). In addition to housing the equipment itself, some of the more remotely located aerial navigation buildings also included transient quarters. Navigation facilities constructed by the Federal Aviation Administration (FAA) after 1958

(the end of the period of significance), including all VORs, were not documented and evaluated in the earlier survey; however, all FAA facilities, including the newer equipment, were minimally inventoried in Appendix 5 of that report (Chattey 1999).

Six (6) CAA/FAA facilities located on or associated with the Galena Airport were included in the Appendix 5 inventory (Chattey 1999; **Table 1**). Of these, only three were documented in the 1999 survey and assigned Alaska Heritage Resource Survey (AHRS) numbers: Buildings 201 (NUL-131), 202 (NUL-75), and 411 (NUL-132). The report indicated that not enough information was found to evaluate these buildings for National Register of Historic Places (NRHP) eligibility; however, in notes appended to the report from the Alaska SHPO reviewer, the buildings were noted as not individually eligible, but are considered contributing elements to a potential Galena CAA/FAA historic district (NUL-130), with a period of significance from 1940 to 1958. A fourth building, Building 111, identified as Quarters/Housing constructed in 1963, was considered neither individually eligible nor a contributing element to a potential historic district because it was built outside the period of significance. Though not fully documented in the 1999 report, an AHRS card was prepared and Number NUL-135 was later assigned to this resource.

The two remaining unevaluated CAA/FAA resources associated with the Galena Airport include Building 406, the GAL CB, constructed in 1963, and Building 413, the H Marker (old), constructed in 1983. The GAL CB was previously recorded in the AHRS in 2009 and assigned AHRS Number NUL-145 (Northern Land Use Research Alaska, LLC [NLURA] 2009; 2013). No NRHP eligibility determination was entered for this resource.

In 1998, the US Air Force (USAF) Galena Forward Operating Base (FOB) was determined eligible for listing on the NRHP for exemplifying the Cold War mission in Alaska. Twenty (20) USAF resources (i.e., buildings and structures) were included as contributing elements within the Galena FOB Historic District, assigned AHRS inventory number NUL-126. A follow up study conducted in 2015 by the NLURA also documented the airfield and runways at the Edward G. Pitka Airport, assigned NUL-148, and concluded that the airfield was not eligible for the NRHP and that the historic district had lost sufficient physical integrity making it no longer eligible for the NRHP. Two USAF buildings at the airport remain eligible for the NRHP (Higgs and Neely 2015). As an FAA resource, the survey of USAF resources did not document the GAL CB (NUL-145).

### **Historic Context:**

The Galena Airfield has a long history of being jointly-operated as a military airfield by the United States Air Force (USAF) and as a civilian airport for the town of Galena, originally constructed by the Civil Aeronautics Administration (CAA) in the early 1940s.

The earliest radio-based aviation navigation aids in Alaska, established in 1939 by the Alaska Aeronautics Communications Commission (AACC), were radio stations broadcasting 24-hour voice communication with information about weather and air traffic. When the CAA's Alaska Region was established in 1940, these stations became part of a federally-managed national system and the CAA began selecting additional sites to expand the civilian airport construction program in Alaska. The CAA also constructed an additional 36 radio stations at these newly established airfields. In 1941, the federal government set aside 5,282 acres for the CAA to establish an airfield and air navigation facility (radio field station) in Galena. Galena was selected because of its central location in interior, western Alaska. By this time, Galena was one of 193 aviation fields in Alaska (Chattey 1999: 5; Alaska Department of Environmental Conservation [DEC] 2019).

In preparation for the coming of World War II, Galena was one of 11 existing airfields selected for military improvements to provide defense capabilities. The CAA coordinated with the U.S. Army Corps of Engineers (USACE) working through several civilian contractors on the location, design, and construction deadlines. Supplies for the airfield at Galena, located on the Yukon River, were transported by river boat and barge. In 1942, an Army post was established in Galena and the CAA officially turned operation of the airfield over to the military on July 1, 1943. From August 1942 until September 1945, Galena supported the lend-lease

Facility Building Type Building Date of Area (st)	Description N	Notes	AHRS	NRHP
GalenaAir Navigation:4111955592fDirection Finder </td <td>frame</td> <td></td> <td>NUL-132</td> <td>NIE; CE</td>	frame		NUL-132	NIE; CE
Galena H Marker (old) 413 1983 48	N/A		N/A	Not evaluated
Galena Quarters 111 1963 1308	frame		NUL-135	NIE; NCE
Galena Storage 201 1942 2160	wood framed on wood columns;C g metal siding withC la metal gabled roof panels; 35 ft. x 66 ft.(I s	Contains garage, storage, avatory, equipment room and supply area (loft), porch on E side	NUL-131	NIE; CE
Galena Shop 202 1942 2160			NUL-75	NIE; CE
GalenaFederal AviationDistrict1940-1958 (period of significance)N/AIAdministration Station Facility DistrictDistrict1940-1958 (period of significance)N/AI	Includes 3 CEs: NUL-131, NUL-132, NUL-075		NUL-130	E
Galena CB 406 1963 1,296	Frame		NUL-145	Unevaluated

Table 1. FAA Facilities at or near the Edward G. Pitka Sr. Airport, Galena, Alaska (GAL)

Source: Chattey 1999; AHRS

E = Eligible CE = Contributing element to a potential CAA historic district NCE = Non-contributing element NIE = Not individually eligible

transfer of nearly 8,000 American aircraft to the Soviet Union. At the end of WWII, the Army declared the airfield surplus and CAA resumed control of the airfield and facilities.

With the number of airports in Alaska on the rise in the early 1940s, additional air navigation facilities were needed for safety along the flight paths. These included radiocommunications stations and radio-navigation facilities in a network spanning the entire Territory of Alaska. The communication stations allowed rapid transmission of weather information from remote locations for weather forecasting and reporting of weather conditions to aircraft in flight. These stations also allowed tracking of flights and coordinating rescue operations. The radio ranges were designed to broadcast radio beams along routes of the Federal Airways System. The radio beams were picked up by aircraft equipped with special receivers. Pilots could locate themselves along the length of the beams, using fan markers along the airway (called thus because they broadcast a vertical beam that intersected the range beams). Although a great improvement over visual navigation, radio ranges were susceptible to interference by weather or electrical phenomena (Chattey 1999: 7).

Military service at Galena Airfield resumed in 1945 when the newly created United States Air Force (USAF) established a base there. The 11th Air Force was designated the Alaskan Air Command (AAC) and in early 1951, the AAC negotiated an agreement with CAA for joint use of Galena Airport (Alaska DEC 2019). The USAF facility became a Forward Operating Base (FOB), or Forward Operating Location (FOL). From 1946 to 1989, it was the northernmost FOB in the US, serving as a base for fighter interceptors to meet the threat of Soviet bombers that developed during the Cold War (AHRS NUL-126). The Galena Airport was made the site of the regional long-range radar for aircraft control and warning, as part of the conversion to minimally attended radar in 1984. After the Base Realignment and Closure (BRAC) Commission voted to close the former Galena FOB, all permanent military personnel and aircraft withdrew by 1993. Many of the previous USAF facilities were transferred to federal, state, and local entities (Alaska DEC 2019).

In 1958, the CAA became the Federal Aviation Administration (FAA). Management of civilian air traffic navigation equipment at Galena was managed by the FAA. As of 1999, the FAA maintained some 400 navigation and communications aids throughout the state of Alaska for civilian aircraft. These included many technologically advanced aids that are several generations removed from the early CAA navigation aids documented in the 1999 survey. Miniaturization resulted in the automation of many stations and improved equipment increased the range of radio beacons, making dozens of older intermediate stations obsolete. New types of radio gear resulted in improved reception and more precise navigation information for pilots. Radio navigation was improved with systems like VOR (Very High Frequency [VHF] Omnidirectional Range), beginning in the late 1950s, LORAN (LOng RANge Navigation, now nearly obsolete), and Global Positioning System (GPS). These and other systems gave pilots a wider choice of more precise navigational aids (Chattey 1999).

The GAL CB building was commissioned on September 1, 1963. It was constructed based on standardized plans (modified from Drawing D-5167-1) for a VORTAC facility (Type 'B') developed by the CAA (1957). As-built drawings specific to the GAL VORTAC equipment building, site plot, and roof plan date to October 30, 1961, revised in 1985, and converted to AutoCAD with a building refurbishment in 1991 (Figures 1 and 2).

The GAL CB replaced the original low-frequency radio range (LFR), also called four-course, or Adcock radio range, established at Galena in the 1940s (Platt 2019). As VORs came online, they slowly replaced the older radio ranges although the two systems typically co-existed for years creating redundancy in navigational aids available to aircraft. Instrumentation in aircraft had to be upgraded to use VORs, otherwise, they would still rely on the older LFR. On a 1967 FAA navigation chart, the Galena CB was still referred to as a range. The last radio range was shut off in 1976.

A VOR is a type of ground-based electronic navigational aid or beacon for aircraft. It sends out signals that tell aircraft their bearing from the beacon. A VOR transmits two radio signals: a master signal and a secondary signal. The master signal is broadcast in every direction, while the secondary signal is rotated

(originally, the antenna was literally spun, now it's "turned" electronically). The phases of the two signals that is, the crests and troughs of the radio waves—are aligned once per rotation, at due north. The rest of the time the phase difference between the two varies through 360 degrees, and thus indicates a pilot's direction from the beacon (Vanhoenacker 2012).

Per construction drawings, the GAL CB was originally constructed as a VORTAC which included a VOR plus a Tactical Air Navigation (TACAN or TAC) station. VORTACs are ground-based electronic navigation aids transmitting very high frequency signals, 360 degrees in azimuth oriented from magnetic north with equipment used to measure, in nautical miles, the slant range distance of an aircraft from the navigation aid. A VORTAC provides VOR azimuth, TACAN azimuth, and TACAN distance measuring equipment at one site. In short, the VOR provides direction (or bearing) from the beacon; the TACAN provides distance. Distance Measuring Equipment (DME), which can also be co-located with a VOR, is another aid that provides the aircraft's distance from the beacon. These systems allow pilots to navigate without visual reference. They are useful to pilots around an airport as well as en route air traffic. The original TACAN station at Galena was later replaced with a DME antenna mounted on a separate pole on the facility site plot.

A major flooding event occurred in Galena when the Yukon River flooded in May 2013 due to ice jams. Most of the structures in and near the town were inundated by as much as seven feet of water and were subject to significant water damage. The GAL CB building and equipment were severely damaged by the flooding and have been out of service since. The FAA has proposed to demolish the structure in its current location and reconstruct a new VOR facility in another nearby location.

### Statement of Significance:

The GAL CB is not eligible for the NRHP under Criterion A for its association with the advent of a civilian aircraft navigation system in Alaska because it was constructed outside the period of significance established for the CAA in Alaska (1940-1958) and reflects a later technological advancement of the system. VOR technology replaced the earliest generation of low-frequency radio range air navigational aids constructed by the CAA for Federal Airways system routes in Alaska and nationwide as part of a nationwide network of civilian aircraft navigational aids. VOR technology is still employed worldwide with antennae and buildings similar to the GAL CB and is not exclusive to air navigation in the US or Alaska or linked to a military or Cold War mission. Further, because the GAL CB, built in 1963, was constructed outside of the period of significance (1940-1958) for the CAA Historic District at Galena Airport (NUL-130), this resource would not be considered a contributing element to the district.

The GAL CB is not eligible for the NRHP under Criterion B because the building is not known to be associated with persons important in history.

The GAL CB is not eligible for the NRHP under Criterion C because the GAL CB is a typical example of one of approximately 961 VOR remaining buildings across the country, constructed based on standardized plans, to house air traffic navigational aids (FAA 2019). The GAL CB is one of 39 VORs in the state of Alaska (FAA 2019) and one of 17 (44 percent) in the state with identical square footage (1,296 sq. ft.), presumably constructed of identical or similar layouts based on standardized drawings (**Table 2**). These were constructed during the earliest period of VOR construction nationwide, between 1959 and 1966. Of these 17 VORs, most (n=10) are frame or metal [frame] construction; four (4) are identified as concrete masonry unit (CMU), block, or concrete construction; and material type is not reported for three (3). The frame buildings were often constructed with prefabricated 4 ft. panels overlain by various types of exterior siding.

The common features of a typical VOR building constructed from the late 1950s through the 1960s include the flat, round or multi-sided polygon roof with centrally mounted antenna constructed on a square or rectangular building housing equipment and back-up power supply. Some VOR locations feature a building

Facility ID	Facility Location	Commission Date	Square footage <sup>2</sup>	Material
AKN	King Salmon	1/1/1961	1,296	frame
ANN	Annette (Island)	6/1/1964	1,369	block
BET	Bethel	4/1/1961	1,332	frame
BGQ	Big Lake	3/1/1964	1,369	frame
BIG	Big Delta	7/1/1963	unknown	unknown
BKA	Biorka Island	2/1/1960	unknown	unknown
BRW	Barrow	4/1/1975	806	frame
BTT	Bettles	6/1/1963	1,296	frame
CDB	Cold Bay	7/1/1961	1,296	block
DLG	Dillingham	8/1/1964	1,296	frame
ENA	Kenai	6/1/1960	1,296	frame
ENM	Emmonak	3/1/1989	346	unknown
ENN	Nenana	2/1/1966	1,296	CMU
FAI	Fairbanks	2/1/1965	1,296	unknown
FYU	Fort Yukon	5/1/1963	1,332	frame
GAL	Galena	9/1/1963	1,296	frame
GKN	Gulkana	3/1/1968	775	frame
HOM	Homer	7/1/1960	1,296	frame
HPB	Hooper Bay	2/1/1985	420	unknown
HSL	Huslia	7/1/1985	346	metal
JOH	Johnstone Point	5/1/1966	1,344	CMU
LVD	Level Island	11/1/1965	1,296	metal
MCG	McGrath	5/1/1963	1,296	frame
MDO	Middleton Island	6/1/1959	1,296	frame
MOS	Moses Point	6/1/1964	1,296	unknown
ODK	Woody Island	4/1/1986	775	CMU
OME	Nome	12/1/1963	unknown	unknown
ORT	Northway	6/1/1966	795	frame
OTZ	Kotzebue	1/1/1978	144	frame
SCC	Deadhorse	9/1/1974	794	frame
SQA	Sparrevohn	10/1/1983	192	unknown
SSR	Sisters Island	6/1/1965	1,296	concrete
TAL	Tanana	1/1/1964	1,296	frame
TED	Anchorage	2/9/2012	unknown	unknown
TKA	Talkeetna	4/1/1964	1,332	block
ULL	Savoonga	2/1/1985	336	unknown
UNK	Unalakleet	2/1/1964	1,296	unknown
WLK	Selawik	1/1/1985	346	metal
YAK	Yakutat	2/1/1959	1,296	CMU

Table 2. VORs in Alaska<sup>1</sup>

1 FAA Unstaffed Infrastructure Sustainment (UIS) Geospatial Decision Support Tool 2019 2 From Chattey 1999

with a slightly smaller rectangular footprint (36 ft. x 20 ft.) but a roof of the same approximate dimensions as the GAL CB, with the roof cantilevered over the building and supported by posts.

Building materials vary (frame or concrete), type and coloration of siding, and heights and shapes of the VOR antenna cone and monitor antennae also vary slightly. Because VOR buildings are ubiquitous across the country and were constructed of a simple, utilitarian design based on standard plans, they do not embody distinctive characteristics of a type, period, or method of construction, do not represent the work of a master and do not possess high artistic values. The GAL CB is not likely to be considered eligible for the NRHP under Criterion C.

The GAL CB is not eligible for the NRHP under Criterion D because the facility is commonly represented throughout Alaska and nationwide, it was constructed using standardized plans with minimal subsurface construction, and the facility type is not exceptional or significant. The GAL CB is not likely to yield historically valuable information.

### Integrity Discussion:

The footprint and interior configuration of the GAL CB building have remained unchanged since its construction. Alterations at the GAL CB building include new exterior vinyl siding, the addition of a piercing for a window-style air conditioning unit, and repairs and replacement of the roof and antenna equipment over time. The building was refurbished in 1991 per FAA drawings. The original antenna was a tube type VOR, replaced in 1998 with a second-generation FA-9996 typed system, conventional VOR. (FAA 2019). The GAL CB antenna cone was previously capped with a TACAN station which was later removed and replaced with a DME antenna. Damage from past flooding resulted in a deterioration of original building materials and the facility has been offline since the last major flood event in 2013. The DME, previously mounted on a separate pole on the site plot, has also been removed since the facility has been offline. The GAL CB retains integrity of location and setting; however, design, materials, workmanship, feeling and association have been severely compromised. The GAL CB no longer contains sufficient physical integrity to convey its original function.

The FAA has determined that the GAL CB is not eligible for the NRHP and it is not considered a contributing element to the Galena Federal Aviation Administration (FAA) Station Facility District as it was constructed and operational outside the period of significance for the district.

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Figure 1. Drawing ALD-GAL-202.003 VORTAC Equipment Building Elevations, Galena Alaska



Figure 2. Drawing ALD-GAL-201.001 VORTAC Equipment Building Floor and Reflected Ceiling Plan, Galena Alaska

### **Additional Photographs**



1. GAL VOR building, south (main) façade, showing the wood porch and steps, central VOR cone and monitor antennae.



2. GAL VOR building, east façade, showing vent hood, metal flashing around the roof, fuel tank with bollards and old transformer.



3. GAL VOR building, north (rear) façade, showing vent hood and remnant wood posts from the former air handler.



4. GAL VOR building, west façade, showing the window AC unit and vinyl siding.



5. Foundation of the GAL VOR building showing the steel I-beams and creosote treated posts that elevate the building above the Yukon River floodplain.

### Excerpt from Imaginary Report 76

### **Historic Context**

The Best Fish Valley has never received an archaeological survey. Investigations in the region have documented the following cultural chronology:

Paleoarctic Tradition (12,000-9,000 years ago) Midarctic Tradition (9,000-6,000 years ago) Actual Middle Arctic Tradition (6,000-3000 years ago) Almost Recent Arctic Tradition (3,000-1,500 years ago) Recentarctic Tradition (1,500-500 years ago)

... Historic Context continues to describe what those traditions are.

The transition between the Midarctic Tradition, the Actual Middle Arctic Tradition, and the Almost Recent Arctic Tradition remains poorly understood. Recent theories have explored the influences of trade, population movement, and climate change on material culture but few sites have been found that can be definitively dated to these periods.

### **Site Description**

AHRS Number: TBD-00001 Site Name: The Best Site Latitude: 61.458559 Longitude: -146.578806 Determination: Eligible to the NRHP under Criterion D

Site TBD-00001 is located on a knob at the west end of an east-west trending terrace overlooking Best Fish Lake. The terrace is covered in mixed birch-spruce forest with an understory of berries and other shrubs. Ground visibility is zero over most of the site, but groundcover thins near the top of the knob. The viewshed from the knob is 370 degrees; the east is obscured by tree cover and foothills leading to the Biggerest Mountains.

Site TBD-00001 was discovered through pedestrian survey of the landform in 2050. A lithic scatter of green chert flakes were found on the top of the knob. While on site, the field crew conducted five shovel tests on the landform; three of which were positive. Subsurface testing yielded at least two stratigraphic

layers that contained cultural material, including diagnostic bifaces and microblades. Surface artifacts were left on site since they were non-diagnostic. The crew collected all artifacts produced from subsurface testing (n = 32).

Crews returned to the site in 2051 to gather additional information for a determination of eligibility for listing in the National Register of Historic Places. A four-man field crew placed shovel tests systematically throughout the site at intervals of 10 m, radiating from the site datum. Twenty-five new shovel tests were excavated. Tests were excavated down to glacial till and averaged 50 cm in diameter. Seven of the shovel tests yielded cultural material (417 lithic artifacts). Artifact materials include obsidian, chert, jade, and basalt. Shovel tests were consistent with the previous year's testing. Tests in 2051 documented two stratigraphically separated cultural occupations, roughly 20-30 cm below surface in a medium brown loess, and 50-70 cm below surface in a light brown sandy loess. No mixing or disturbance was noted while documenting the stratigraphy of the tests. The site extent is estimated to be 20m x 40 m, based on the results of survey and testing.

A 1m<sup>2</sup> test unit was placed adjacent to one of the most productive shovel tests. The unit confirmed shovel test results, but also encountered a hearth-like feature in both the lower and upper occupations. Radiocarbon dating on charcoal (willow) from the lower feature returned a date of 6,500 years before present (the Midarctic Tradition), while a charcoal sample from the upper hearth (willow) returned a date of 5,500 years before present (the Actual Middle Arctic Tradition). The unit excavation yielded approximately 66 lithic artifacts from the upper occupation, while 37 were recovered from the lower occupation. Excavators suspect that lithic artifacts may be clustered in use areas in both occupations.

### Significance

Site TBD-00001 is a relatively large site containing lithic artifacts and at least two hearth features. Subsurface testing has confirmed that there are two cultural occupations at the site, which span the transition between the Midarctic Tradition and the Actual Middle Arctic Tradition. Artifact material types include both local and exotic materials. The site has potential to answer questions relating to the transition between the Midarctic Tradition and the Actual Middle Arctic Tradition and the influence of trade on that transition.

The Best Site (TBD-00001) is significant under Criterion D for its potential to answer questions relating to the transition between the Midarctic Tradition and the Actual Middle Arctic Tradition

### Integrity

The site has not been impacted by modern development nor is it undergoing active erosional processes. Subsurface tests show no evidence of significant bioturbation or other site formation processes that would compromise the site's stratigraphic integrity.

The Best Site (TBD-00001) is eligible for listing in the National Register of Historic Places under Criterion D for its potential to answer questions relating to the transition between the Midarctic Tradition and the Actual Middle Arctic Tradition.