

3.10.5.5 PEREGRINE FALCON

The peregrine falcon is considered rare in the Juneau area during the spring and fall and absent during the summer and winter (van Vliet et al. 1997, Armstrong and Gordon 2002). Thus, it is unlikely to breed in the area. Regardless, all three subspecies of concern may occur in southeast Alaska on a transitory basis during migration. The American peregrine falcon (*Falco peregrinus anatum*) and the arctic peregrine falcon (*F. p. tundrius*) are listed as species of special concern by the ADF&G (ADF&G 2000). The Peale's peregrine falcon (*F. p. pealei*) is listed as a sensitive species by the Tongass National Forest's Regional Forester (Forest Service 2000). All three of these subspecies may occur in southeast Alaska during migration, but only the Peale's peregrine falcon is known to nest in the region (Armstrong 2002). Because peregrine falcons typically hunt over open areas (Campbell et al. 1990), most of the landscape area and portions of the project area provide potentially suitable habitat for this species.

3.10.5.6 OLIVE-SIDED FLYCATCHER

The olive-sided flycatcher is listed as a species of special concern by the ADF&G (ADF&G 2000). This species has declined throughout its breeding range in the lower 48 states and its nesting status in Alaska is uncertain. Loss of wintering habitat in South America is considered to be the main reason for population declines in the olive-sided flycatcher (Wright 2000). The olive-sided flycatcher is considered an occasional breeder in the Juneau area (van Vliet 1997), but its occurrence within the study and landscape areas is rare (Armstrong and Gordon 2002).

3.10.5.7 TOWNSEND'S WARBLER

The Townsend's warbler is listed as a species of special concern by the ADF&G (ADF&G 2000), and their population trend of in Alaska has yet to be determined (Pogson et al. 1999). This species, along with many other migratory species, spends its winter in the highlands of northern Mexico and in Central America as far south as Costa Rica. There has been a long-term decline in migratory species' abundance throughout these wintering locations (Pogson et al. 1999). Within the project area, Townsend's warbler is considered an uncommon visitor to shrub-scrub and forest habitats during spring and fall migration, and is not present during the summer and winter (Armstrong and Gordon 2002).

3.11 CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) of 1966 (as amended) and its implementing regulation, 36 CFR Part 800, mandate that the FAA consider potential impacts to historical properties resulting from any project with a federal nexus (i.e., funding, permitting, etc.). Section 106-protected properties are historic or cultural sites either listed on or eligible for listing on the National Register of Historic Places (NRHP). Pursuant to this mandate, cultural resource investigations were undertaken in association with the proposed projects at JNU.

3.11.1 AREA OF POTENTIAL EFFECT

The area of potential effects (APE) for cultural resources was defined as all previously undisturbed and unsubmerged locations that are being considered for development or alteration in relation to the proposed project, including those on and off Airport property. Figure 3-34 shows these locations. For the purpose of this EIS, the APE for cultural resource investigations was limited to those areas that could be physically disturbed as a result of project implementation. While cultural resource APEs may also include broader areas that could be subject to visual and auditory impacts, such broad designation was unnecessary for this EIS as none of the projects would cause appreciable changes in the visual nature of the Airport or in aircraft approach or departure patterns. The APE for cultural resources was approved of by the Alaska SHPO as part of granting the permit to conduct the cultural resources inventory for the EIS.

The on-Airport study area included the Northwest Development Area (around Duck Creek), two parcels of land in the Northeast Development Area near the existing TEMSCO facility, two parcels of land in the Jordan Creek Area, the proposed RSAs east and west of the existing runway and taxiway, and the area between the Airport float plane pond and the Dike Trail. The float plane pond, which may be dredged to provide fill material for Airport projects or to remove vegetation attracting waterfowl, was excluded from the cultural resource APE. The exclusion of the pond from the cultural resource inventory was decided as part of the pre-inventory consultation with the Alaska SHPO, due to the inundated nature of the area, the magnitude of historical dredging activities that would have likely removed or significantly altered cultural resources that may have been present, and the resulting low probability of this area to yield intact cultural resources of scientific, religious, or traditional significance.

Off-Airport cultural resource study areas included a small parcel and access route on Pedersen Hill, the existing CBJ gravel pit, the future CBJ gravel pit, and the Stabler Point Quarry. The gravel pits and quarry were evaluated because of the potential for riprap and fill materials to be imported from CBJ-owned borrow sites. Pedersen Hill was evaluated because it had been considered a candidate site for relocation of the RCO.

3.11.2 STUDY APPROACH

First, a search of the site and project files at the Office of History and Archaeology in Anchorage was conducted by SWCA. Consultation with the Alaska State Historic Preservation Office (SHPO) was also initiated at that time. The purpose of the literature review was 1) to identify whether or not the Airport or portions of Airport property had been previously inventoried for cultural resources, 2) to identify any known and previously documented cultural resource sites within the study area, and 3) to provide some indication of the potential for encountering cultural resources during the field surveys.

No cultural inventories had previously been undertaken within the on-Airport or off-Airport study areas. One cultural resource site on Airport property, the LORAN monitoring facility just outside the Northwest Development Area (site JUN-718), has been documented previously. The site had been recently identified and described, and no site record was available at the Office of History

and Archaeology during the literature review. A specific technical report outlining the methods used for and the results of the cultural resources investigations described has been prepared and submitted to the SHPO for review and concurrence as part of the Section 106 review process under the NHPA (Ellis 2002).

In addition to the field investigations, local Native American/Native Alaskan groups and individuals were consulted as part of the Section 106 review process under the NHPA (Table 3-46). This consultation took place between July and September 2001, and the results are incorporated in this report as they relate to the specific cultural resource study areas. A text of the oral history gleaned from interviews conducted as part of the consultation is provided in Appendix G.

Table 3-46. List of Individuals and Organizations Contacted as Part of the Native American Consultation Process

Warren Heisler , Assistant Regional Director, Bureau of Indian Affairs
Marie Olson , Auke Tlingit Elder
Rosita Worl , Director, Sealaska Heritage Foundation
Bob Sam , Auke Tribal Member
Corrine Garza , Tlingit and Haida Indian Tribes of Alaska
Rosa Miller , Auke Tlingit Elder
Randy Wanamaker , President, Goldbelt, Inc.
Ed Kunz, Jr. , Auke Tlingit Elder
Dennis Demmert , Grand Secretary, Alaska Native Brotherhood
Andy Ebona , President, Alaska Native Brotherhood - Juneau Local Camp
Dorothy Owen , Douglas Indian Association
Janice Criswell , Juneau Area Haida/Tlingit Weaver
Albert Wallace , Auke Tlingit Elder
Gary Gillette , City and Borough of Juneau
Cecilia Kunz , Tlingit Elder
Delores Churchill , Southeast Alaska Native Weaver
Judy George , Tlingit and Haida Community Council

Alaska's first, and as yet only, formal Traditional Cultural Property (TCP) is located within the Auke Bay area. TCPs are sites or locations that have specific importance to a cultural/heritage group as a source of group identity. TCPs are defined based upon several factors, including their relationship to traditional subsistence practices, group myth and ideology (particularly origin myths), and specific religious or cultural practices. The Auke Cape TCP was defined in relation to ethnographic use of the area as a traditional village site and subsistence area for the Auke people.

In general, to be designated as a TCP, a property must be at least 50 years old and must be able to be geographically defined. However, in practice, boundaries are sometimes left only loosely defined, since group ideologies, group memory, and folk knowledge can be nebulous. Most of the Auke Bay TCP boundaries are roughly defined, but the eastern boundary towards JNU is not and should be considered fluid. However, other than the specific issues outlined below for individual study areas, no concerns related directly to potential impacts to the overall TCP were raised by



Figure 3-34. Areas of potential effect for cultural resources.

THIS PAGE INTENTIONALLY LEFT BLANK

consulting parties or identified by the EIS project team. Special consideration should be given to any development actions proposed by JNU or CBJ that would take place within the Auke Bay area, particularly the area west of the Mendenhall Peninsula and around Auke Cape. As detailed plans are developed for any such projects or actions, additional consultation with local native groups and individuals may be necessary to adequately assess potential impacts to the Auke Cape TCP.

3.11.3 CULTURAL RESOURCES SURVEY RESULTS: ON-AIRPORT STUDY AREAS

The cultural resources study area consists of several parcels of land located both on and off Airport property. This section addresses the results of the field investigations of the on-Airport parcels only.

3.11.3.1 NORTHWEST DEVELOPMENT AREA

The Northwest Development Area encompasses the land within JNU boundaries in the vicinity of Duck Creek, including the Airport fuel farm. The historical record indicates that bunkers, or revetments, for military aircraft associated with a World War II era encampment were located in the general vicinity of Duck Creek, northwest of the passenger terminal. Unfortunately, the only historical maps illustrating the military facilities that could be found were of such gross scale that no precise pinpointing of former features was possible.

Consultation with native informants revealed additional information concerning possible past uses of the Northwest Development Area. According to one native elder, the Crolepy family smokehouse was located near the mouth of Duck Creek and was purchased and dismantled "a long time ago," possibly during World War II (see also Goldschmidt and Haas 1998:39, 113).

A field reconnaissance of the Northwest Development Area was conducted in July 2001. Vegetation, mostly spruce, devil's club, tall grasses, and riparian flora, was dense throughout the survey area, limiting ground visibility. During these field investigations, two pieces of a military-issue mess kit and a small, potentially historical site (Alaska Heritage Resources (AHRs) site number JUN-923) consisting of a steel propane tank, a possible generator, and a set of four concrete footings were documented. The mess kit, which included a tin cup with a belt hook and a tin bowl/pan, constitute an isolated find. As such, it is not eligible for consideration under the criteria of the NRHP.

The age of Site JUN-923 is questionable, but it is likely that it meets the minimum age requirement of 50 years to be considered historical. The site's features likely represent the earlier military activity in the area. In addition to the propane tank, which measures roughly 4 feet 4 inches (1.31 meters) long by 2 feet 6 inches (0.76 meters) in diameter and had no visible markings, the site includes four concrete and wood footings with rebar protruding from the centers. Three of the footings appear to be in the original locations, while one has been uprooted by vegetation. The footings measure approximately 1 foot 4 inches (40 centimeters (cm)) square, and, based upon the uprooted footing, are 6 inches (15.24 cm) in height. The footings are spaced approximately 2 feet 10 inches (86 cm) apart north-south and 6 feet 3 inches (1.9 meters) east-west. It is unclear what the footings may have held. Approximately 10 feet (3 meters) to the southeast of the propane tank

is a piece of machinery that appears to be a small generator. The item is box-shaped and measures 2 feet 1 inch (63 cm) in height by 1 foot 8 inches (51 cm) wide by 1 foot 8 inches (51 cm) in depth. The artifact is in poor condition and exhibits moderate rusting. There were no markings or noteworthy characteristics visible on the artifact. Owing to dismantling, erosion, and an alteration of the setting of the items, the site lacks integrity of setting, feeling, association, and workmanship. The site's integrity of materials, location, and design has also been severely compromised.

The FAA, in consultation with the Alaska SHPO, has determined this site to be ineligible for the NRHP as per 36 CFR 800.4. The Duck Creek area appears to have been fairly heavily used by both the local native population and by the U.S. military. Evidence of this previous activity may still be present within the area. However, extremely dense vegetation cover obscures the ground surface, making a thorough examination of the area for surficial cultural resources exceptionally difficult.

3.11.3.2 NORTHEAST DEVELOPMENT AREA

The Northeast Development Area consists of two parcels of land totaling roughly 40 acres located near the existing TEMSCO facility to the north of the runway/taxiway and east of the private hangars. One of the two parcels consists of the undeveloped land surrounding the current RTR and ASOS facilities. The second parcel is smaller and is located east of the TEMSCO property. Field survey in this area consisted of two archaeologists walking parallel transects spaced no more than 30 feet (10 meters) apart back and forth over the subject parcels until all portions of the parcels had been inspected. Though grass cover was thick, ground visibility was generally good. No cultural resources were noted within either of the two survey parcels.

3.11.3.3 JORDAN CREEK AREA

The Jordan Creek study area consists of two parcels of land located east of the terminal area, along both sides of Jordan Creek. The natural flow of Jordan Creek has been altered through previous rerouting and piping of the channel during development of the Airport. Just prior to the cultural resource field studies, trees lining either side of the creek and scattered throughout the rest of the study parcel had been clear-cut. The activity surrounding removal of the trees also eliminated most ground-level vegetation. As such, ground visibility within the study was good. The survey area was inventoried by two archaeologists walking parallel transects spaced no more than 30 feet (10 meters) apart across both study parcels. No cultural resources were observed in the area.

3.11.3.4 RUNWAY SAFETY AREAS (RSAs)

The RSA study area consists of two parcels of land, each located at one end, the west and east, of the existing runway/taxiway. Also, the study included a narrow strip of land along the south side of the eastern half of the runway. The western parcel, for the purpose of the cultural resources investigations, extends across the Mendenhall River to the west side of the waterway. The eastern parcel extends from the end of the runway/taxiway eastward into the tidal flats and along the south side of the runway as described above.

Vegetation cover was thick in the western survey parcel, was composed largely of tall grasses, and made observing the ground difficult. The study area was inventoried by two archaeologists walking parallel transects spaced no more than 30 feet (10 meters) apart back and forth across all portions of the survey parcel. Special attention was paid to the cutbanks of the Mendenhall River for evidence of fish weirs and cultural strata that may have been exposed in the soil profile. No cultural resources were found within this survey area.

Vegetation cover within the eastern study parcel and the parcel along the southern edge of the runway was generally sparse, allowing good visibility of the ground surface. The eastern area was inventoried for cultural resources at low tide using the same survey techniques as described above. Special attention was given to the numerous runoff channels and meandering drainages for fish weirs and other cultural materials. No such resources were identified as a result of the field survey. However, it should be noted that marine and alluvial sediment deposition in this Eastern RSA study may have been buried any cultural resources that were once present.

A single historical site (AHRS site number JUN-924) was located and documented during examination of the narrow strip of land along the south side of the eastern half of the existing runway. This site is a remnant portion of a World War II asphalt runway. At present, three segments of the historical runway are being used as an apron or safety area along both the north and south sides of the modern runway. The segment on the south side of the modern runway measures roughly 50 feet (15.2 meters) wide and 5,000 feet (1,524 meters) long. It begins at the western end of the modern runway and extends southeasterly, contiguous with the south side of the modern runway. The second and third segments of the historical runway both measure roughly 50 feet (15.2 meters) wide. The western segment is located contiguous with the north side of the modern runway, at its western end; the second historical segment begins near the western end of the modern runway and extends roughly 1,800 feet (549 meters) southeasterly along the north side of the modern runway. The third historical segment begins just east of the main north-south ramp/taxiway and extends along the north side of the modern runway for a distance of approximately 2,200 feet (671 meters). The modern runway was constructed down the center of the historical runway, with the underlying section of the historical runway removed prior to the new development. Thus, the extant segments of the historical feature represent only a fraction of the original feature's size. Although the historical runway was associated with the World War II use of the Airport, the feature has been so heavily altered by subsequent development that it no longer retains its historical integrity. The FAA, in consultation with the Alaska SHPO, has determined this site to be ineligible for the NRHP as per 36 CFR 800.4.

3.11.3.5 AIRPORT FLOAT PLANE POND STUDY AREA

The Airport Float Plane Pond study area included all accessible areas of land that are south of the Float Plane Pond, and north of the Airport emergency vehicle access road and Dike Trail, near the southern perimeter of the Airport. According to the historical record, the earthen dike along which the road is located contained a series of defensive (anti-aircraft) bunkers during World War II. However, careful inspection of the levee yielded no evidence of these former features.

Although vegetation, primarily in the form of tree cover, was fairly dense throughout the Airport Float Plane Pond study area, visibility was generally good. The area was inventoried for cultural resources in the manner described previously. As a result of this inventory, two cultural features (one site and one isolated find) were identified south of the Float Plane Pond. The site (AHRs site number JUN-922) is an asphalt pad located in proximity to a possible abandoned dirt road. The visible portion of the pad measures approximately 50 feet (15.2 meters) north-south by 30 feet (9 meters) east-west. Vegetation cover and a surficial humus layer prevented definition of the full extent of the feature. The foundation has two yellow painted areas, with a pattern resembling a ladder. These painted areas are approximately 10 feet (3 meters) apart. A narrow two-track road, now resembling a trail rather than a road, is located approximately 15 feet (4.6 meters) to the east of the foundation. The road runs roughly parallel to the foundation, has two deep ruts, and is approximately 8 feet (2.4 meters) wide. It is heavily overgrown, indicating it has not been used for some time, and appears to see infrequent use as a footpath or animal trail. The road extends southwest, to where it intersects the Dike Trail on a narrow levee. No other features or artifacts were found in the vicinity. Temporal placement of the feature is difficult due to the lack of diagnostic artifacts. However, examination of historical air photos show that it was likely constructed some time between 1948 and 1962. That is, evidence of the foundation and road are visible on a 1962 air photo of the Airport. The features are not visible on a 1948 air photo of the same property. This information suggests that the features were not associated with the World War II military activity at JNU.

The second feature observed in this area is a portion of an apparent wooden scaffold-style power pole. The feature is no longer upright, in its original position, but has fallen over owing to extreme erosion and deterioration of the wood. Overall, the feature measures roughly 30 feet (9 meters) long by 10 feet (3 meters) wide. It appears to be constructed of 4-inch by 10-inch or 4-inch by 12-inch pieces of milled lumber, attached together with 12 to 14-inch long bolts. Railroad ties were "sandwiched" between the lumber planks, adding mass to the structure. There were no clear indicators of the structure's age, nor were any additional artifacts or features associated with it. The structure is not visible on any of the available air photos of the Airport (1946, 1962, 1998), though its small size would make it difficult to discern on such a photo. Owing to its dubious age, its extreme level of deterioration, and its lack of association, the FAA, in consultation with the Alaska SHPO, has determined this site to be ineligible for the NRHP as per 36 CFR 800.4.

In addition to the archaeological resources described above, consultation with local native groups and individuals and public scoping for this EIS identified at least one area of cultural concern related to the area south of the Float Plane Pond. As part of the consultation and scoping process, the Sealaska Heritage Institute (formerly Foundation) submitted written comment expressing concern over any possible alteration of the spruce tree forest located south of the Float Plane Pond and north of the Dike Trail. Sealaska indicated that the JNU area was traditionally used by tribal basket weavers as a location for gathering spruce root. More recently, native practitioners of basket weaving have gathered, and continue to gather, spruce root from the area immediately south of the Float Plane Pond. These weavers have suggested that the area be named after one of their most acclaimed weavers, Salina Peratrovich. Additional related comments regarding the spruce grove south of the Float Plane Pond indicate that owing to the sandy nature of the soil,

some of the most desirable spruce roots in the CBJ area can be obtained from this area. Further, non-native basket weavers requested continued access to the spruce roots south of the Float Plane Pond.

Access to the spruce grove for the purpose of gathering spruce roots is by special permit only. According to Airport staff, as security increases, the number of permits issued for this purpose may decrease.

3.11.4 CULTURAL RESOURCES SURVEY RESULTS: OFF-AIRPORT STUDY AREAS

In addition to those areas located on JNU property, four off-site locations were also included in the cultural resource investigations. These areas included a small parcel and access road on Pedersen Hill, the existing CBJ gravel pit, the site of the proposed/future CBJ gravel pit, and the Stabler Point Quarry. Each of these areas is discussed in more detail below.

3.11.4.1 PEDERSEN HILL STUDY AREA

The Pedersen Hill Study Area consists of a 200-foot by 200-foot (61-meter by 61-meter) parcel of land centered on the existing FAA radio beacon facility, as well as a corridor, measuring roughly 3,000 feet (914 meters) long and 50 feet (15.2 meters) wide, for a proposed access road leading from Engineer's Cut-off Road to the tower facility. The possible path of an access road was centered on an existing trail leading to the tower on the summit. This area was surveyed because Pedersen Hill had been identified as a possible site for relocation of the RCO. Vegetation within this survey area, comprised primarily of a relatively young spruce/hemlock forest, was exceptionally dense and survey of the area by walking parallel transects was not feasible. Therefore, the study area was inspected for cultural resources by walking meandering transects. Special attention was paid to identifying any culturally modified trees that may have been present within the area. No cultural resources were identified during the field studies within this survey area.

3.11.4.2 EXISTING CBJ GRAVEL PIT

This study area includes the existing CBJ gravel pit east of Lemon Creek. The total acreage of this study parcel is approximately 29 acres. Some potential development projects at JNU, particularly construction of the RSAs, would require large volumes of fill material. The existing CBJ gravel pit has been identified as one of the possible publicly owned borrow locations for such material. As such, any disturbance at the pit that is directly related to or results from the activities evaluated in this EIS would be considered a connected action, and therefore subject to comparable environmental analysis.⁹

No specific cultural issues related to the Lemon Creek area have arisen as part of the general public scoping process. Local natives interviewed in 1946 as part of an early ethnographic study of Native Alaskans noted that the area "just north of Lemon Creek" had a stream used by the

9. Only publicly owned borrow sites were surveyed, since it would not have been possible to evaluate the potential for cultural resources on all privately held, possible quarries.