Alaska Mountain and Wilderness Huts Association
Attachment to Alternatives Analysis January 2004

Access for Resupply

This document briefly describes issues related to resupply of backcountry huts, both in general and in various locations on the Kenai Peninsula. Possible modes of resupply include:

- Railroad
- Helicopter
- Fixed Wing Cargo Aircraft (skis)
- Fixed Wing (185 or 206, floats/skis)
- River boat
- Snowcat
- Snowmobile
- Dogteam
- Pack Animal
- Backpack

Critical resupply items include:

- Propane tanks
- Firewood
- Maintenance building materials (e.g. replacement pane of glass or sheet of roofing)
- Food supplies (if food is offered at huts)

Of these, propane tanks, firewood, food supplies, and many maintenance materials theoretically come in sizes small enough to transport by backpack or pack animal. As a practical matter, however, the quantity of propane to be used likely requires use of "100-pound" tanks as the minimum size, and larger sizes may well be better. Hundred-pound tanks weigh 170 pounds full. Six cords of firewood amounts to approximately 768 cubic feet and some 20,000 pounds—easily transported in small quantities but potentially requiring hundreds of trips. If food service is to be offered for some portion of the year, the quantity at 2.5-3.5 pounds per person per day will amount to 30+ pounds per hut per day, or 210 pounds per week, or about 900 pounds per month (assuming 10 mouths to feed). This again suggests the need to haul large loads. Large and unwieldy building maintenance materials also may not be practical without motorized assistance.

With large items, large quantities, or both, there is a cost efficiency that must be taken into account. As shown in the table below (see detail, attached), fixed-wing aircraft is most efficient from purely a cost point-of-view. Means of resupply that use a paid person but move less than 1000 pounds (snowmobile, dogteam/pack animal, backpacker) are quite inefficient and probably are not worth considering for major resupply.

Example Means of Resupply	Cost($)/ 100 lb	Example Means of Resupply	Cost($)/ 100 lb
Helicopter Bell 212	16.81	Fixed Wing 206 on floats	11.17
Helicopter A-Star 350B	19.71	Snowcat (Piston Bully 100)	9.41
Helicopter Raven 2 R-44	13.91	Snowmobile (Skandic 24" track)	30.40
Fixed Wing Otter (skis/floats)	8.44	Dogteam/pack animal	53.33
Fixed Wing 206 on skis	8.12	Backpacker	148.57

Notes: This table assumes a hypothetical hut site 8 trail miles from a trailhead.

For these reasons, the Huts Association's Paradise Valley Trail proposal suggests mechanized resupply principally by aircraft in winter. It is likely the proposal for resupply at another alternative location would be similar—one to three times per year in a concentrated push is expected to be preferable, with only minor amounts of resupply by other means such as backpack. The efficiencies of taking the load directly to the door favor snowmobile, snowcat, and helicopter (where management, terrain, and forest cover allow), unless a hut happens to be on a lake or broad open area that a floatplane or ski plane can land on. As shown in the table above.

Efficiency also favors using one means of resupply for all huts. Therefore, if one hut is easily accessible by snowmobile, one is on a lake accessible by fixed-wing aircraft, and one is in a location where there is no flat ground and management does not allow snowmobiles, so that only a helicopter sling-load operation is practical, then the helicopter may be the preferred mode for all the huts. Helicopter shuttle to an intermediate point, with shuttles from there by other means is not likely to be better because of the double-handling involved in loading and unloading. Similarly, huts near (but not on) the railroad or near (but not on) a lake or river may not have much advantage over to the isolated hut on steep terrain. If several 170-pound propane tanks are offloaded beside the railroad but the hut is a quarter mile up a switchback trail, it still may require the helicopter to get them to the hut. However, it may be practical to deliver smaller resupply items by other means between the primary resupply events if riverboats, snowmobiles, or pack animals have access.

The following paragraphs provide a general analysis of resupply options at various alternative locations for a hut-to-hut system. Further discussion with the Forest Service is necessary to confirm the areas in which motorized use would be allowed summer and winter, and where administrative use might be allowed in areas otherwise closed to the general public.

Resurrection Pass Trail

The Resurrection Pass Trail is open to snowmobiles part of each winter, in the earlier portion of the winter, so snowmobile resupply is possible.

Trout Lake, Juneau Lake, and Swan Lake near the south end of the trail provide opportunity for float plane and ski plane resupply. The nearest originating locations for staging aircraft resupply would be the Hope airport, Cooper Landing strip, and Kenai Lake. Commercial aircraft likely would come from Anchorage, although Girdwood, Kenai, or Seward are possibilities.

The length of the trail would make the central portion more than a day's journey for non-motorized resupply, but the Devils Pass Trail offers a shorter option for backpack or pack animal resupply to the central part of the trail.

Grandview Iditarod Trail

Much of the Grandview trail is near the Alaska Railroad, and railroad resupply would be attractive but would work best for huts located virtually right next to the tracks. As currently envisioned, only one hut might be close enough so that the railroad could make direct deliveries. Other huts farther from the tracks still would require another means—likely backpack for small

items. The method would not work for oversize items such as replacement panes of glass or propane tanks.

Center Creek is closed to snowmobiles and may be restricted for aircraft use as well. Trail Creek is open to motorized use in winter. Ski planes may be able to land in open areas at Grandview proper and in the upper Trail River valley. Floatplane access does not appear practical on this route. However, river boat access above Trail Lake and on Placer River is possible.

Resurrection River High Country Trail

The high country trail has the advantage of several potential overland resupply points between the two termini. There is road access to an intermediate trailhead at Cooper Lake. Huts in the Lost Lake high country could be accessed via snowmobile using the Primrose or Lost Lake Trails or the route from Cooper Lake. The grades to reach these higher elevations would likely keep loads light. The high country is open and likely would allow for fixed-wing aircraft landings on skis at locations near huts. Although the Huts Association is not inclined to propose a summer airstrip, wheeled landings may be possible in portions of this high country in the summer.

A hut off the Stetson Creek Trail may be accessible via 4-wheeler. A hut on the north end of Cooper Lake could be accessed by boat from the lake, and a truck may be useful on the dam access road. Fixed wing aircraft likely could land summer or winter on the lake.

A hut near the Russian Lakes Trail south of Cooper Lake could be accessed via snowmobile in winter and is close enough to a trailhead that backpack and pack animal means might be more practical than at more remote huts.

Twentymile Iditarod Trail

Riverboat access in summer and snowmobile access in winter would be practical in much of the Twentymile drainage. It is likely that fixed wing aircraft could land in open area or on lakes. The hut site near Winner Creek Pass would be difficult to access except by helicopter or backpack, although there is a small chance that fixed wing aircraft on skis could land there.

Paradise Valley Trail

Terrain and management restrict snowmobile access from the highway up Ptarmigan Creek and the North Fork of Snow River and restrict aircraft landings in summer, except on lakes. As indicated in the Huts Association proposal, access to a Ptarmigan Lake hut (site A) could be by fixed wing aircraft summer and winter. The lake is long enough to allow large cargo aircraft. The hut at the pass may be accessible by small fixed-wing aircraft on skis in winter, because the lake at the pass is surrounded at each end by open wetland that, when frozen, would extend the runway. Hut site B2 (north of the pass) and C1 (in Paradise Valley) probably are not directly accessible except by helicopter. A helicopter could land in winter or possibly sling-load without landing in summer. Hut site C2 likely would allow fixed wing aircraft landings in winter on the large open expanse immediately west of the hut site.