

4.0 Alternate Heliport Sites

4.1 Recommended Sites

4.1.1 Dupont



Juneau, Alaska, NW 1/4, AK

Land Ownership: The One Nine Company Inc.

Physical: 12 to 20+ acre site available Slope from 20' to 80'

Terrain Features: Gradually sloping timbered area along the east side of Gastineau Channel.

Adjacent Terrain Features: Gastineau Channel to the South and 837' mountain to the Northwest.

Existing Infrastructure: Electricity On-Site water needed

Access: 7.5 miles Marine Park 13 minute drive from Marine Park New 1.5 mile access road to end of Thane Road needed

Road Description: Thane Road is a winding two-lane road without a paved shoulder. It runs southeast from downtown along Gastineau Channel for approximately 5.4 miles.

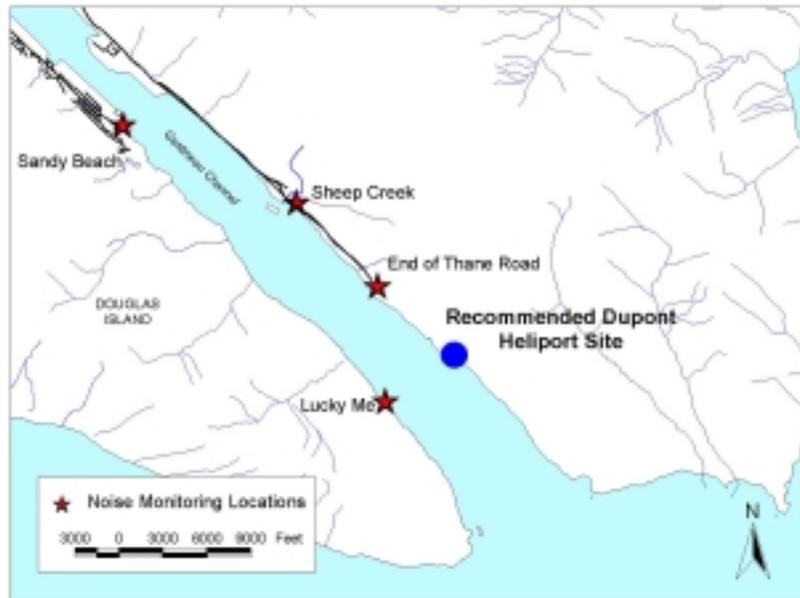
Type of Traffic route: Commercial traffic extends to the Sheep Creek Mine cut off. Residential traffic extends to end of road.

Nearest Fire Station: Downtown Juneau Fire Station, 8 miles

Noise

This is the recommended south site. Currently 3,777 residences are within the 6,000-foot noise (3,000 feet to either side of the flight line) footprint of the flight paths from the current ERA base. No residences are within the 6,000-foot noise footprint of flight paths from a Dupont base, however, seven cabins at Lucky Me are across Gastineau Channel, approximately 7,000 feet from the proposed site, and two are at Marmion across from the flight route. (see Figure 4.1.2 – Dupont flight routes)

Because sound travels across water better than across land, sound levels reaching these cabins would be higher than if the cabins were a similar distance across land. Noise levels at Lucky Me were monitored at 59 dBA during helicopter takeoff and landing and 50 dBA while the



helicopter approached the Dupont site on the flight path that would be used. As a point of reference, floatplanes flying their standard route down the channel registered between 64 and 71 dBA at Lucky Me. (see Noise Measurement Results Table 4-1-1)

The sound of the helicopter approaching Dupont registered at 45 dBA on the beach immediately below the end of Thane Road. As points of reference, last year's noise study found the ambient level of noise in Juneau neighborhoods, away from traffic, ranged from 37 to 48 dBA. The recommended level for desired sound levels for bedrooms at night is 25 to 45 dBA. The ambient sound level at this monitoring site ranged from 41 to 51 dBA. Floatplanes flying their standard route down the channel registered from the mid 60's to mid 70's dBA at the end of Thane.

Figure 4.1.2 Dupont Flight Routes and Noise Corridors



	3000' Noise Corridors	6000' Noise Corridors
Affected Land Parcels	12	13
Affected Housing Units	0	0

The sound of the helicopter landing and taking off at Dupont was not audible (N-A) from the end of Thane monitoring site and no helicopter noise connected to the Dupont site or flight path was audible at the Sandy Beach parking lot, immediately above the launch ramp.

The Point Bishop trail is already heavily impacted by flightseeing noise. If the heliport were moved to Dupont, the portion of the trail between the end of Thane and Dupont would see some decrease in aircraft noise. This is the portion of the trail that currently receives the heaviest use, but is also the portion that would probably disappear if a road were built to Dupont. Noise impacts to the portion of the trail from Dupont to its end would likely increase by 25 to 50 per cent. The current flightseeing noise impacts to the

Sheep Creek trail and valley would no longer exist.

Table 4-1-1

Noise Measurement Results (Maximum dBA)
Dupont Heliport Site N-A is Not Audible

Time	Procedure	Sandy Beach	Sheep Creek	End of Thane	Lucky Me
		S101	S102	S103	S104
13:04	Approaching Dupont along flight path	N-A	N-A	45	50
13:05	Landing at Dupont	N-A	N-A	N-A	59
13:06	Takeoff from Dupont	N-A	N-A	N-A	59

Air Safety

In evaluating this section, it is helpful to have read the Gastineau Channel and Southern sites subsections of the Air Safety Section of this report. Since it is located along the Gastineau Channel, the Dupont site’s airspace is relatively clear along the channel side (northwest and southeast), as well as for approximately one mile across the channel to the southwest, except for maritime traffic. The normal large ship route down the middle of the channel is approximately 2,500 feet from the east bank at that location; the 8:1 approach surface would clear about 300+ feet over the ship route, which would clear the channel for cruise and cargo ships. The FAR 77 heliport approach surfaces could also be placed in south-southeasterly and west-northwesterly directions, angling into the channel to avoid ship traffic.

Being at a relatively low elevation, the site would remain below most of the low scattered or broken ceilings that tend to make up the inclement weather in the area. With the ridgeline behind the site, the stronger northeast winds would be a relatively small factor for the site.

It is approximately 14 miles from the Juneau Airport along the final approach course to Runway 26 (or departure course from Runway 8). At 2.0 miles from the entrance to Gastineau Channel, approaching airline jet aircraft would be at approximately 5,000 feet MSL; departing flights would be higher. Therefore, there would be no airspace conflicts with Juneau airspace or IFR approach/departure procedures.

Figure 4.1.3 shows the helicopter flight route flown during noise monitoring.



The Dupont site would be able to meet the requirements in FAA AC 150/5390-2A Heliport Design given that:

1. the site has sufficient area for the functional elements of an alternative heliport;
2. the site has a relatively gradual grade for site preparation; and
3. there are sufficient areas for approach, departure and protection zones.

Physical Description

The Dupont site is located approximately 7.5 miles southeast of downtown Juneau, and 1.5 miles past the end of Thane road, on the northeast side of the Gastineau Channel at the mouth of Dupont Creek. The site is gradually sloping and linear along the edge of the channel at an elevation of 20-80 feet MSL, with 2:1 slopes to the northeast toward a ridgeline at 2,000 to 3,000 feet MSL. The site has about 59 acres where the slope is moderate enough for heliport use and is open to water toward the southeast.

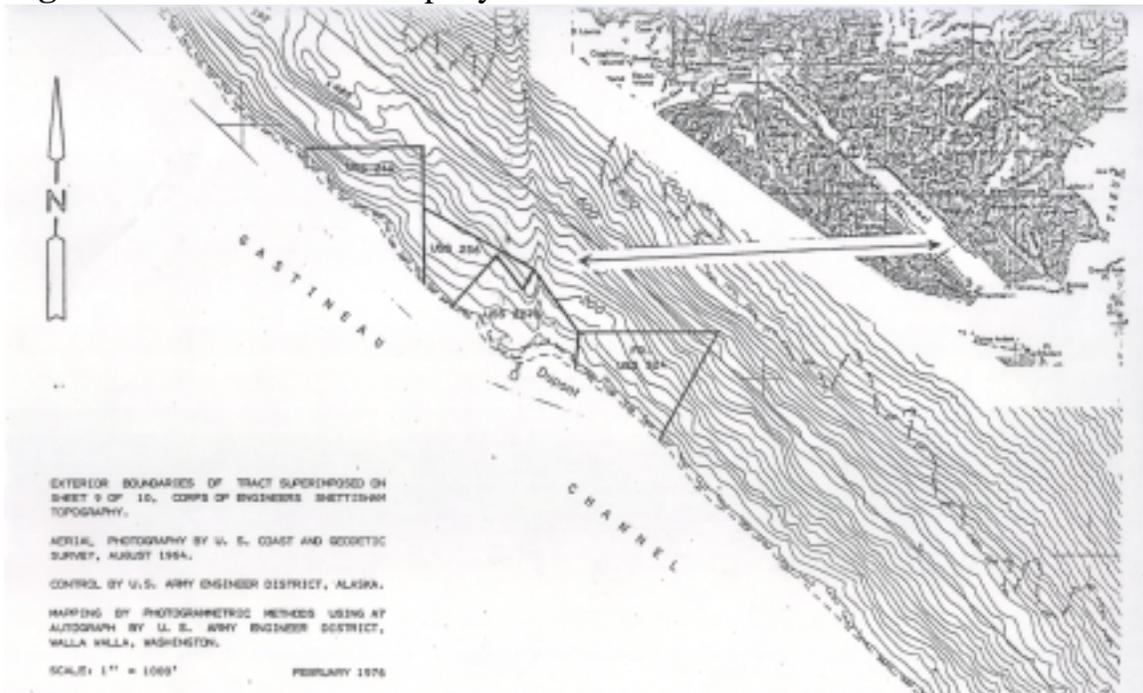
Dupont Creek runs through the area but the heliport could be located away from it. There are no environmental considerations with this site that would

seem to pose a bar to the use of this site for a heliport.

Ownership

The Dupont site is on approximately 100 acres of land owned by the One Nine Company, a group of Juneau citizens who have owned the land since 1975. Representatives of the company have indicated they would be willing to talk to the CBJ regarding sale of all or a portion of their land. (See Figure 4.1.4)

Figure 4.1.4 One Nine Company Land



Infrastructure

The main electric line to Juneau passes directly behind the Dupont site. A facility water and septic system would be needed.

Access

There are two alternatives to access for the Dupont site. The first is by land, the second by sea. Thane road is a two-lane winding road without a paved shoulder that leads down Gastineau Channel to end approximate 5.4 miles southeast of downtown. To reach the site by land would require approximately a mile and a half extension beyond the end of Thane Road.

The route of the extension would be along a moderate slope with one significant V-notch to bridge.

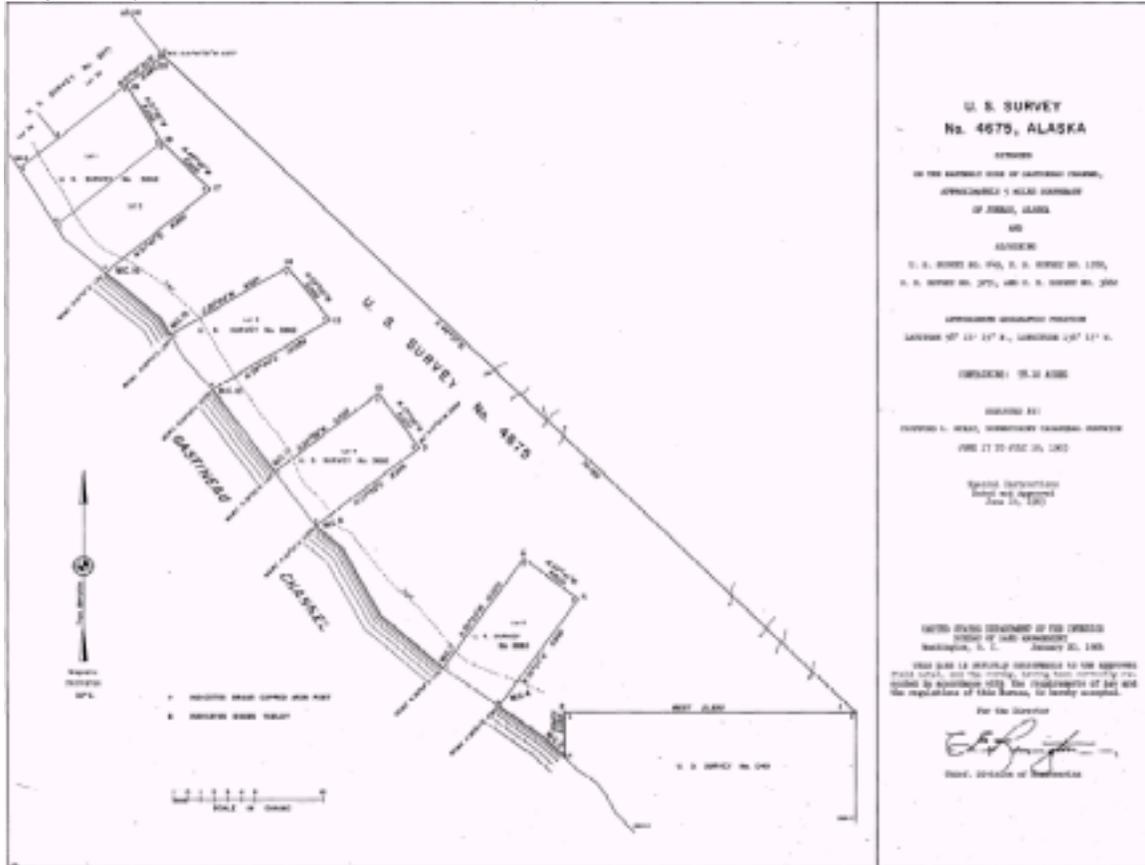
Figure 4.1.5 Dupont Road Extension



The land between the end of Thane Road and the One Nine Company's land is owned by the State of Alaska and is part of the Mental Health Land Trust (see Figure 1.4.6). Indications are that all parties would be open to negotiations regarding the construction of a road. R&M Engineering's rough rule of thumb for the cost of construction of a two-lane gravel road in Juneau is between \$1.3 and \$1.8 million per mile plus administrative overhead of 40%.

Currently, on their busiest days, traffic to the ERA site consists of approximately one bus per half hour plus 10 to 15 employee vehicle roundtrips a day, several trips per day by ERA vans for errands or to pick up passengers, and two trips per week by a fuel truck. Buses leaving the tour ship docks and heading south out of town would cause some diminishment in traffic in downtown, the bridge, and on North Douglas, with a corresponding increase on Thane Road.

Figure 1.4.6 State Mental Health Lands between the end of Thane Road and Dupont (USS No. 4675, 3862 Lot 1-5)



The second way to access the Dupont site is down Gastineau Channel by boat. Subchapter T vessels, which are licensed to carry up to 150 passengers, are manufactured by Allen Marine in Sitka and several other shipyards in the Northwest. Standard buses serving the heliports have capacities of approximately 50 passengers. Allen currently manufactures 50 passenger, 100 passenger, and 150 passenger fast vessels that might be suitable. (See Appendix A for additional information on boats). The operating costs of these craft can be very competitive if they run with close to full loads.

It is probable that Flightseeing operators would strongly prefer a road to the site for construction, fuel trucks, etc., but even with a road, passengers might best be transported by boat. It is probably a safe assumption that no one ever chose a flightseeing tour because of the bus ride, but it seems that a boat ride down the channel with a narrative about the sites (On your right is

the Treadwell Mine cave-in site, where in April of 1917 . . .) could be a selling point for a tour. Boats could also pick up passengers directly from the docks or cruise ships themselves, decreasing Juneau's traffic problems. Transportation time could be equivalent to buses. These vessels are relatively quiet and would not be expected to be a significant new source of noise. The effect of additional wakes in Gastineau Channel would need to be addressed.

An additional feature of the Dupont site is the possibility of also moving the base for floatplane flightseeing there. Such a co-location could offer economic benefits of scale, and could virtually eliminate both helicopter and floatplane flightseeing noise from Thane road, Douglas, West Juneau, and Downtown while improving air safety. This possibility is discussed in greater detail in Appendix C, Floatplane Relocation.