



2023 Heliski Season-End Report

Prepared per HBC 5.24.040 (F) The borough manager shall compile a season-end report to be submitted to the borough assembly annually in July. The report shall include the number of helicopters used daily by each permitted company as compared to previous years, and it shall include any verified permit infractions along with correspondence and other information documenting reasons for the infractions.

by Borough Manager Annette Kreitzer

1. Permits Issued

Four operators were permitted for the 2023 season. One operator was permitted, but chose to not operate.

Operator	Start Day	End Day
Alaska Heli-skiing	February 6	April 22
Alaska Mountain Guides	Did not operate	Did not operate
SEABA	March 3	April 22
Stellar	March 6	April 21

2. Skier Day Use

The use of skier days was repealed and replaced with helicopter usage for the 2022 season. However, HBC 05.24.040 (E)1 requires reporting of skier days used during the reporting period. Skier days don't necessarily reflect income or sales tax paid by operators. For instance, a solo skier could pay a premium to have a guide and helicopter for several days and pay more than several people skiing over that same time period.

Operator	Skier Days 2023	Skier Days 2022	Skier Days 2021
Alaska Heli-skiing	502	445	471
Alaska Mountain Guides	0	4*	32
SEABA	279	363	314
Stellar	338	254	0
TOTAL	1119	1066	817

*AMG only reported number of helicopters after initial report of 4 skier days.

3. Helicopter Usage Including Additional Usage (HBC5.24.030(B))

Operator	2023 Helicopter allotted	2022 Helicopter allotted	Add'l Usage 2023
Alaska Heli-skiing	2	2	1
Alaska Mountain Guides	1*	1	0
SEABA	2	2	0
Stellar	2	1	0

*HBC 5.24.030 Helicopter Usage and Fees: "Each permit holder has the right to use at least one helicopter during the season." Helicopter was not used for Heliskiing in Haines Borough.

4. Season Extension: Per HBC 5.24.040(B), All activity *shall* be conducted between the hours of 8:00 a.m. and 6:00 p.m., except that the borough may authorize additional hours for no more than 30 days.

No operator came close to using 30 days of hours outside of 8 am and 6 pm.

I extended the hours of operation as follows:

Steller: March 7 (didn't use); March 26-April 21 Sunrise to one hour before sunset
During this time period, Steller had 12 take-offs before 8 am on seven separate days; and 10 landings after 6 pm on eight different days.

SEABA: March 26-27 approx. 6:30am to 6 pm

March 29 6:30 am

April 3-4 approx. 7:20 am to 6:30 pm

April 11 at 6:20 am – 7 pm

April 20-22 earliest at 5:35 am

AK Heli: Additional Usage for film crew on 4/11. Sunrise to one hour before sunset
March 28 through April 18 (using nine days early lift-off, and six days late landing)

AMG: No use

Reasons for these extended hours of operation were mostly weather and safety conditions. Requesters stated that as the sun hit the slopes in the afternoon, it created less stable conditions for skiing. Allowing earlier transport and skiing contributed to a safer environment.

5. Complaints

The one written complaint received was related to the flight paths of helicopters. As the Borough does not have the authority to regulate flight paths of aircraft, it recommends flight paths in the *Heliskiing Flight Rules, GPS Data Collection, Submission and Compliance* Administrative Policy.

a. Received a complaint of helicopter flight path from Mile 18. Although the complaint was fairly general in comment, I took the issue of helicopters flying out of Mile 18 not achieving 1500' quickly as one I could follow up on. In the Heliskiing policy adopted by the Borough: *"From the 18-Mile heliport - Take off and approach should be down river to avoid residences. Routes to skiing areas should go directly across the Chilkat River and into the mountains. Avoid flying parallel to the Chilkat or Klehini Rivers. When flying to and from the Ferebee Glacier area, avoid Chilkoot Lake and Lutak residents."* It is one of the spot checks done on March 24 for Mile 18. The attached map plotting helicopter with tail number N608OR's altitude with two-minute intervals. It is clear from this snapshot that this particular helicopter took a number of minutes to achieve 1500' and it appears did not achieve it as quickly as it likely could have.

6. Spot Checks

Administrative Policy requires a minimum of three spot checks. Based on post-season debriefings, I requested the following spot checks for the following reasons:

- a. March 20 – SEABA and Stellar in same drainage – No Data Retrievable
- b. March 24 – Stellar – verify flight path and height, re: complaint about helicopter flying low over neighborhoods
- c. March 27 – Alaska Heli – selected due to number of clients and areas skied.
- d. March 29– Stellar and SEABA – both at Dickinson Glacier
- e. April 1 – Would have been a 7 helicopter day; 4 operating
- f. April 7 – AK Heli #of clients and Stellar in same area (Tsirku)
- g. April 20 – Stellar and SEABA in same area – No Data Retrievable.

Operator	Date	Results
All Operators	March 20	No data retrievable*
Stellar	March 24	Achieve 1500' in elevation more quickly before traveling across to Mt. Jonathon Ward.
Alaska Heliskiing	March 27	This is the same issue as the 2022 season – landing exactly 500' outside boundary (2) Although the reason stated for landing outside the boundary was for safety, it is believed that it is also for convenience as this is a developed landing spot for helicopters servicing the Constantine Co. \$250 fine per occurrence – total \$500 fine
Alaska Heliskiing	March 27	500' outside boundary - Tsirku \$250 fine per occurrence – total \$500 fine
SEABA, Stellar/Dickinson Glacier	March 29	No anomaly found
SEABA, Stellar, AK Heli (4 helicopter day)	April 1	No anomaly found
Stellar & AK Heli in Tsirku	April 7	No anomaly found
Stellar, SEABA in same area	April 20	No data retrievable*

*Our GIS Contractor Gary Greenberg advised that the data could have been recorded over – we are not sure why the data from these two dates was unavailable. However, we do have the reports from each operator for these two dates.

SEASON SUMMARY:

I interviewed all four operators. I have compared the actual weekly use reports against email communication and the “Helicopter Days” calendar that I maintain during the season to ensure the information in this report is as accurate as possible. Weather, availability of pilots, helicopter maintenance, and illness all play a part in last minute changes to operational plans. The end-of season report is the opportunity to audit all of this information.

Heliskiing is a sport with some risk. Following the interviews of operators from the 2022 and 2023 seasons, I thought it prudent to provide some information regarding avalanche fatalities by state and in Alaska.

As with last year’s report, there were some concerns regarding safety of operations. As might be expected, each operator has its own sense of what it considers “safe” operations. There were differing views as to the relative avalanche hazards during the season. One suggestion by an operator was to discuss a subscription to InfoEx on behalf of all operators. This year, two of the three companies operating tours were using InfoEx. InfoEx depends on the SWAG (Snow, Weather, Avalanche observation Guidelines) (in the US) to provide common understanding and descriptions of weather and avalanche characteristics. The annual cost of an InfoEx subscription is estimated at between \$600-\$650 (per Stuart Smith, InfoEx Manager). Here is a 6-minute introduction to how operators use InfoEx, with permission of SEABA to use its data: [INFOEX Application](#)

As the attached April 1 and April 7 maps show, operators can get clustered in relatively small areas. It is this proximity which makes communication among operators extremely important. InfoEx is one tool to increase the communication of weather and potential avalanche conditions.

In support of the need for operators to more fully share weather and avalanche information, I've attached data regarding avalanche fatalities in Alaska, although there are fatalities that have occurred in the Haines Borough that are missing from the list. This is to provide an overview of how Alaska compares to other states when it comes to avalanche fatalities. It is meant to facilitate the discussion about the usefulness of InfoEx.

The Borough Commercial Ski Tour Map is scheduled to be reviewed in 2025. There continues to be a lot of discussion about cleaning up the lines on the map, where there appears to be no reason for a line to be just below a ridge where a helicopter could land. The map is likely the result of a number of compromises, but in practice it should reflect appropriate topographical boundaries. There may be technical problems with how the Borough-adopted heliski map is received digitally by other map programs. Following last season and in recognition of digital anomalies, I allowed for deviations of 500 feet from a boundary. However, all of the operators were aware of the boundaries after these conversations following last season.

According to HBC 5.24.040 C - *All activity shall be conducted only in areas identified on the map labeled "Haines Borough Approved Commercial Ski Tour Areas" as provided in HBC 5.24.050.* This includes training as it is an activity in support of a Heliski operation.

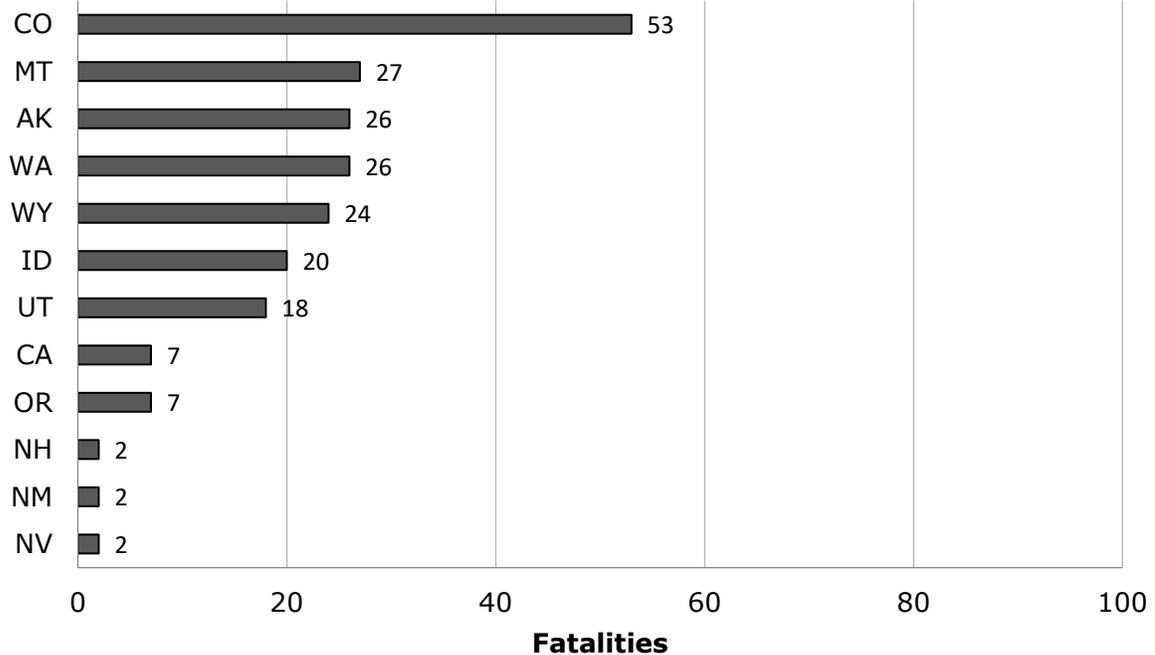
GIS contractor Gary Greenberg thoroughly reviewed the data with Alaska Heliski, and unfortunately I will have to assess fines for four out of bounds landings. There were numerous reasons Alaska Heliski believed it was operating within the bounds of the map, and therefore did not report these infractions on their Weekly Use Reports.

The Bureau of Land Management actively manages its lands for heliskiing, and its lands were removed from the map in March 2022 by the Assembly, the Alaska Mental Health Trust does not allow heliskiing on its property within the Haines Borough.

RECOMMENDATIONS FOR 2024 SEASON:

- 1) Require all operators to purchase an InfoEx subscription for the duration of the season February-May, 2024. (Requires Administrative Policy change)
- 2) Require all operators to share all of that information with the exception of ski run data (shareable, if operators choose to share with one another). (May require Administrative Policy change).
- 3) Ensure that all operators are using the same form with the helicopter tail number and number of skier days (still required to be reported). (Requires Borough review of form and ensuring all operators have current form before 2024 season)
- 4) Remove the requirement that names of helicopter pilots be provided. It is too difficult to follow when pilots have to be changed out. The name of the company, color(s) of the helicopters, and tail numbers are sufficient to follow up on complaints. The name of the pilot has not proven to be useful information for the Borough's needs. (Requires Code change)
- 5) Although one operator (AMG) renewed its permit in 2023 for two years, it chose to not operate heliski tours in 2023. The Code guarantees each permittee one helicopter. (Could be Code change to make clear that if a permittee does not operate in a season that the permit automatically is terminated.)
- 6) Require all operators to submit GPS data in .KML format. Allowing operators to use different formats requires extra expense and time for the GIS contractor. (Requires Administrative Policy change)

US Avalanche Fatalities by State 2012-13 to 2021-22



Provided by Colorado Avalanche Information Center – obtained from CAIC website 10/1/23. This is not a total count of fatalities in the Haines Borough. There are other fatal accidents not included in this data. The graph appears to have not counted two fatalities. It is for relative comparison only.

2021-2022 Season: 1 FATALITIES IN ALASKA

20220425: Southeast of Thompson Pass, 1 heliskier caught and killed

2020-2021 Season: 6 FATALITIES IN ALASKA

20210513: Ruth Glacier, Denali National Park, 2 climbers caught in serac fall, one killed

20210327: Matanuska Glacier, 1 heliskier caught and killed

20210202: Bear Mountain, Chugach State Park, 3 climbers caught and killed

2019-2020 Season: 3 FATALITIES IN ALASKA

20200309: Hatcher Pass, 1 backcountry skier caught and killed

20200225: Unalaska Island, 1 snowmobiler caught and killed

20200210: Boulder Creek Drainage, South of Cooper Landing, 1 snowmobiler caught and killed

2018-2019 Season: 2 FATALITIES IN ALASKA

20190309: Crescent Lake Kenai Peninsula, 1 snowboarder caught and killed

20190313: Takshanuk Mountain, north of Haines, 1 snowboarder caught and killed

2017-2018 season: 3 FATALITIES IN ALASKA

20180502 Kenai Mountains, 1 snowmachiner killed, Blackstone Glacier
20180225 Ketchikan, 1 snowboarder killed
20171122 Hatcher Pass, 1 skier killed

2016-2017 season: 2 FATALITIES IN ALASKA

20170401 North Pole, child killed in roof avalanche
20170128 Near Cooper Landing, Kenai Peninsula, 1 Snowmobiler killed
20161229 Turnagain Pass, Lipps. Skier near miss

2015-2016 season: 6 FATALITIES IN ALASKA

20160411 Summit Lake, near Gulkana Glacier, 1 snowmobiler caught, buried and killed
20160403 Summit Lake, Eastern Alaska Range, Courage Mountain, 1 Snowmobiler killed
20160227 Glennallen, Chugach Mountains, near Nelchina Glacier, 2 snowmobilers caught, 1 killed
20160116 Hatcher Pass
20160102 Willow side of Hatcher Pass snowmachine fatality
20151129 Summit Lake area full burial survivor
20151122 Hatcher Pass solo skier fatality
20151114 Summit Lake area full burial survivor
20151107 O'Malley Peak near-miss
20151106 Hatch Peak partial burial near-miss

2014-2015 season: 3 FATALITIES IN ALASKA

20150402 Wrangells skier killed in cornice fall
20150314 Cantwell snowmachine fatality
20150101 Thompson Pass near-miss. Full burial survivor
20141228 Sunburst, Turnagain Pass near-miss. Full burial survivor.
20141206 Rainbow Ridge area, Alaska Range 1 ski fatality, 1 dog fatality, 1 survivor

2013-2014 season: 1 FATALITY IN ALASKA

20140315 Haines 1 heli ski fatality
20140111 Valdez snowmachine near-miss Brown's Creek

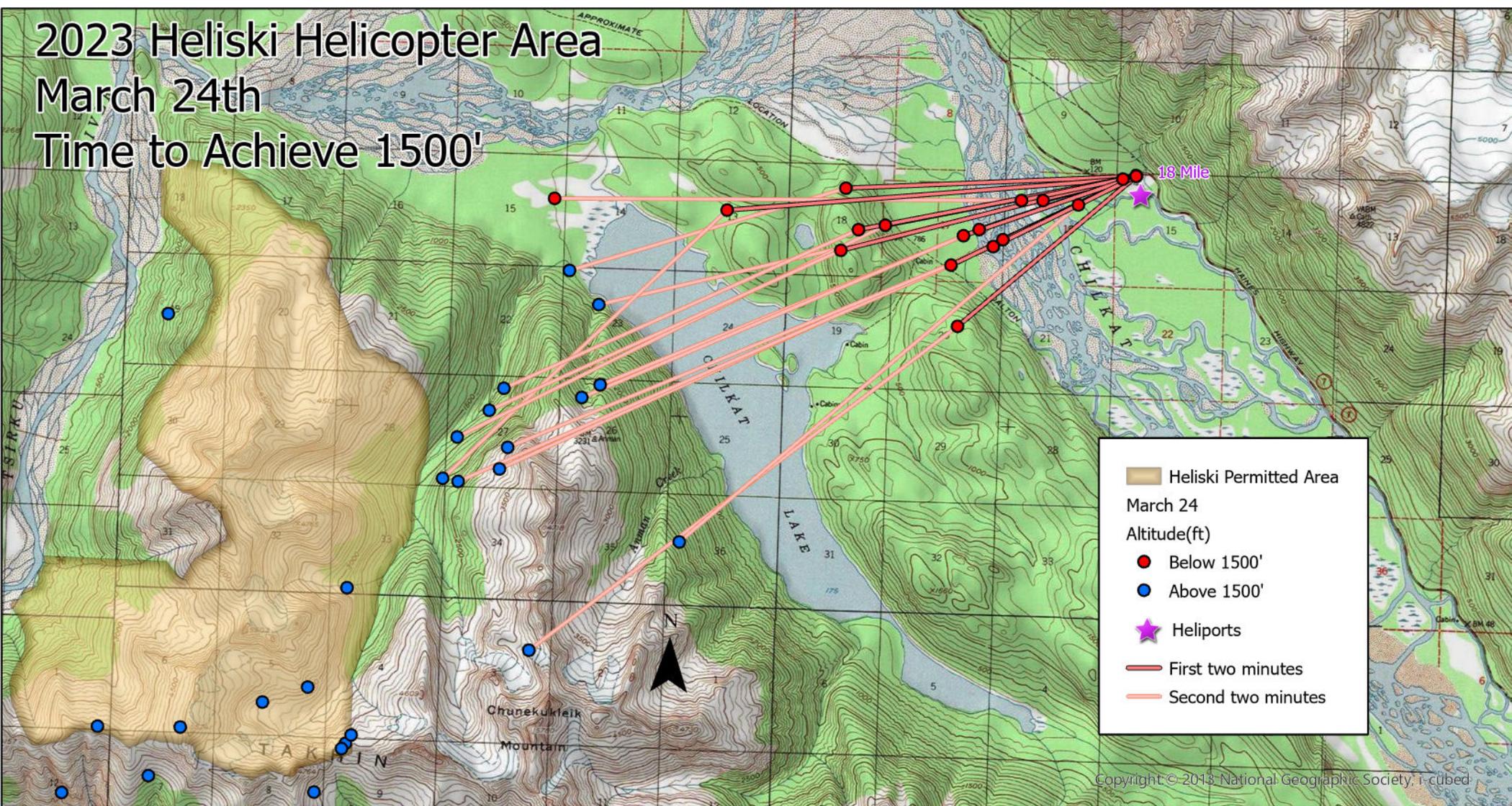
2012-2013 season: 1 FATALITY IN ALASKA

20130303 Haines 1 heli ski fatality

2023 Heliski Helicopter Area

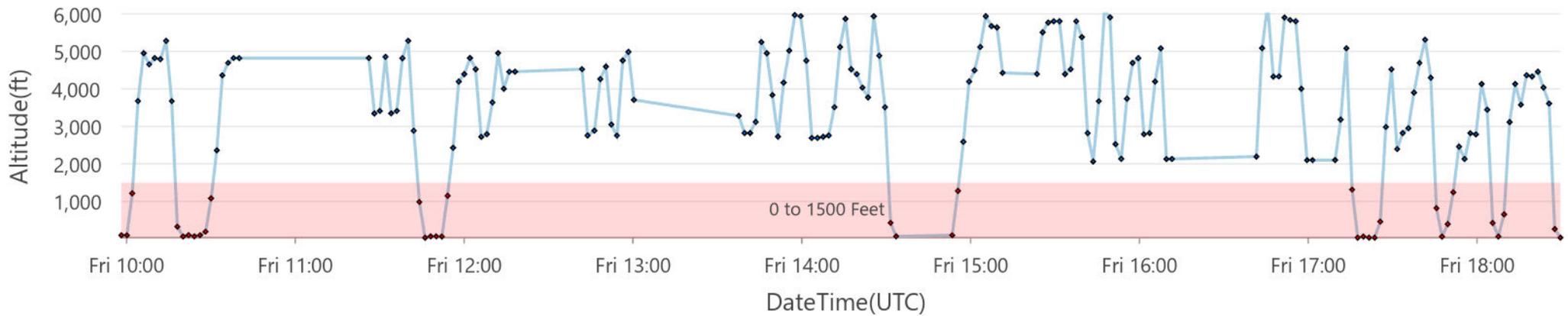
March 24th

Time to Achieve 1500'



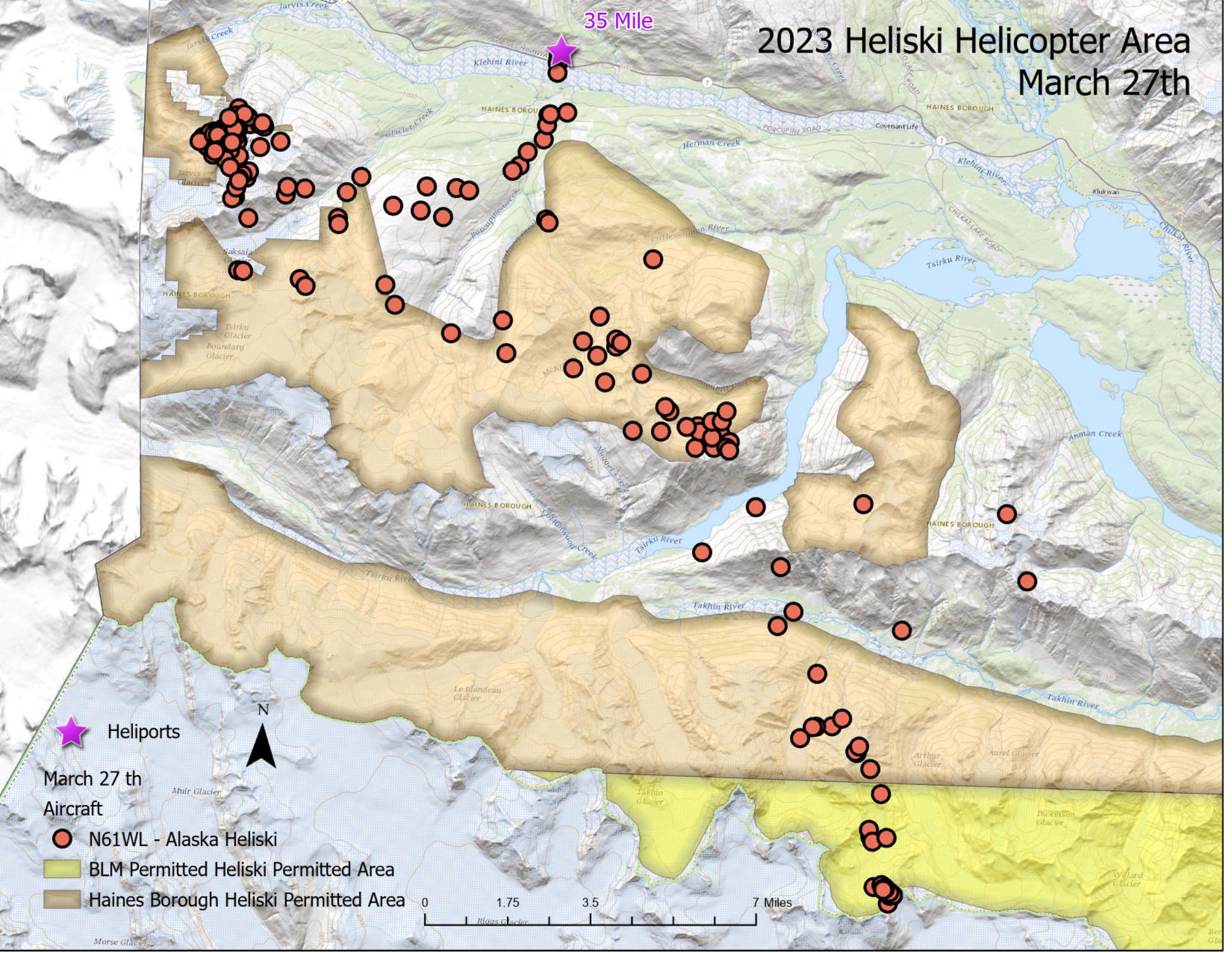
Average time is Approximately 4 minutes

Altitude(ft) over DateTime(UTC)



2023 Heliski Helicopter Area March 27th

35 Mile



★ Heliports

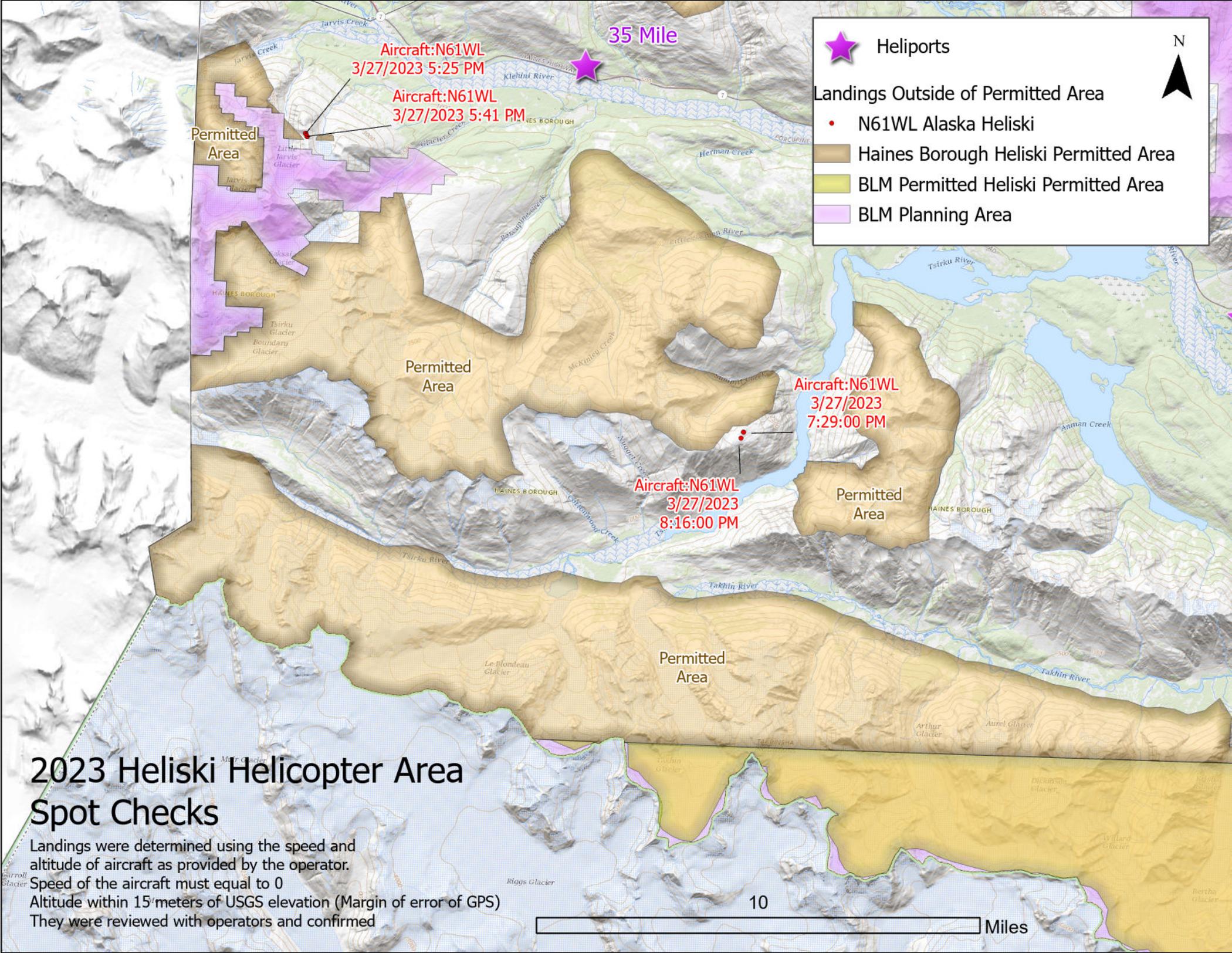
March 27 th
Aircraft

● N61WL - Alaska Heliski

■ BLM Permitted Heliski Permitted Area

■ Haines Borough Heliski Permitted Area





Aircraft:N61WL
3/27/2023 5:25 PM

Aircraft:N61WL
3/27/2023 5:41 PM

35 Mile

★ Heliports

Landings Outside of Permitted Area

- N61WL Alaska Heliski
- Haines Borough Heliski Permitted Area
- BLM Permitted Heliski Permitted Area
- BLM Planning Area



Aircraft:N61WL
3/27/2023
7:29:00 PM

Aircraft:N61WL
3/27/2023
8:16:00 PM

2023 Heliski Helicopter Area Spot Checks

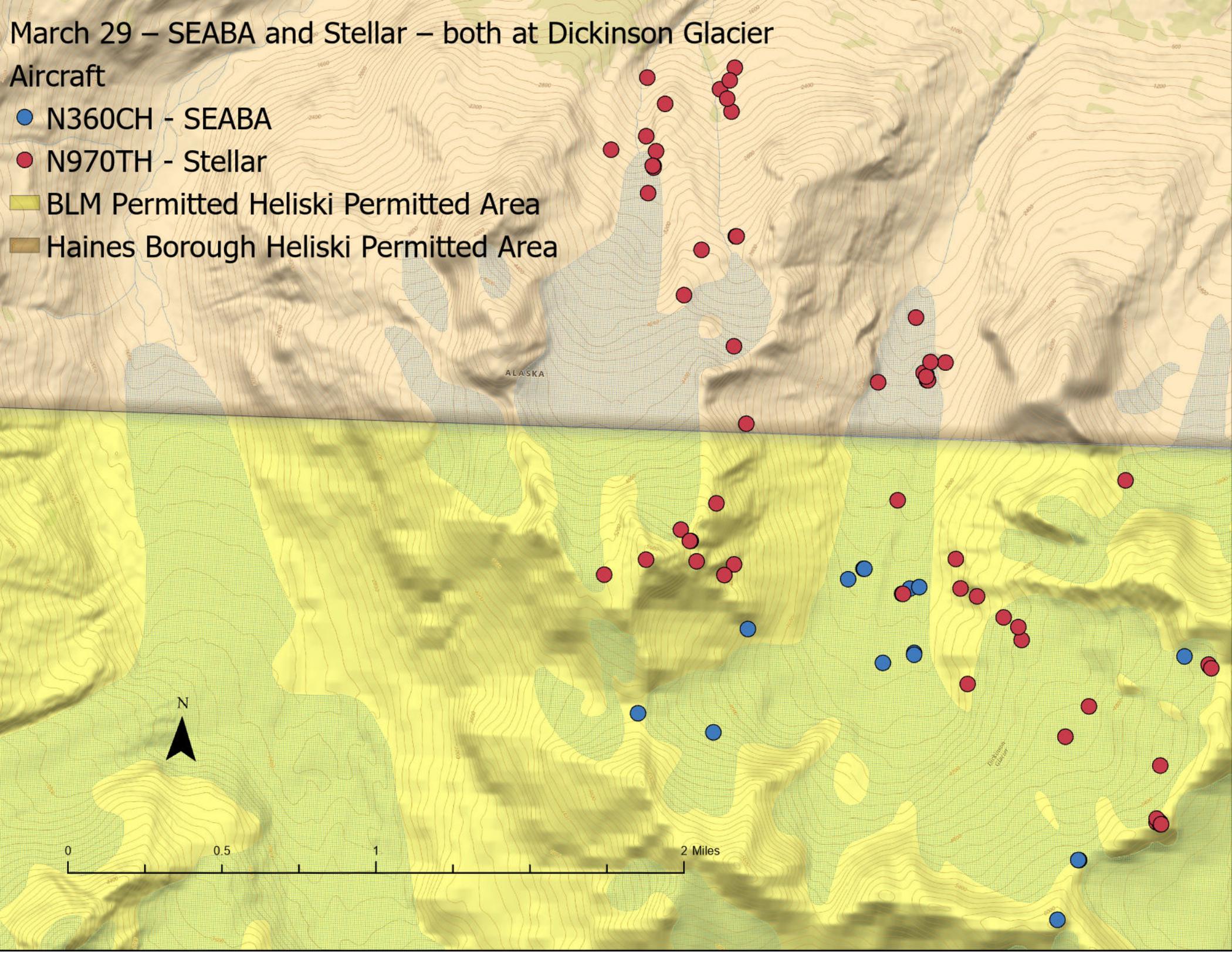
Landings were determined using the speed and altitude of aircraft as provided by the operator.
 Speed of the aircraft must equal to 0
 Altitude within 15 meters of USGS elevation (Margin of error of GPS)
 They were reviewed with operators and confirmed



March 29 – SEABA and Stellar – both at Dickinson Glacier

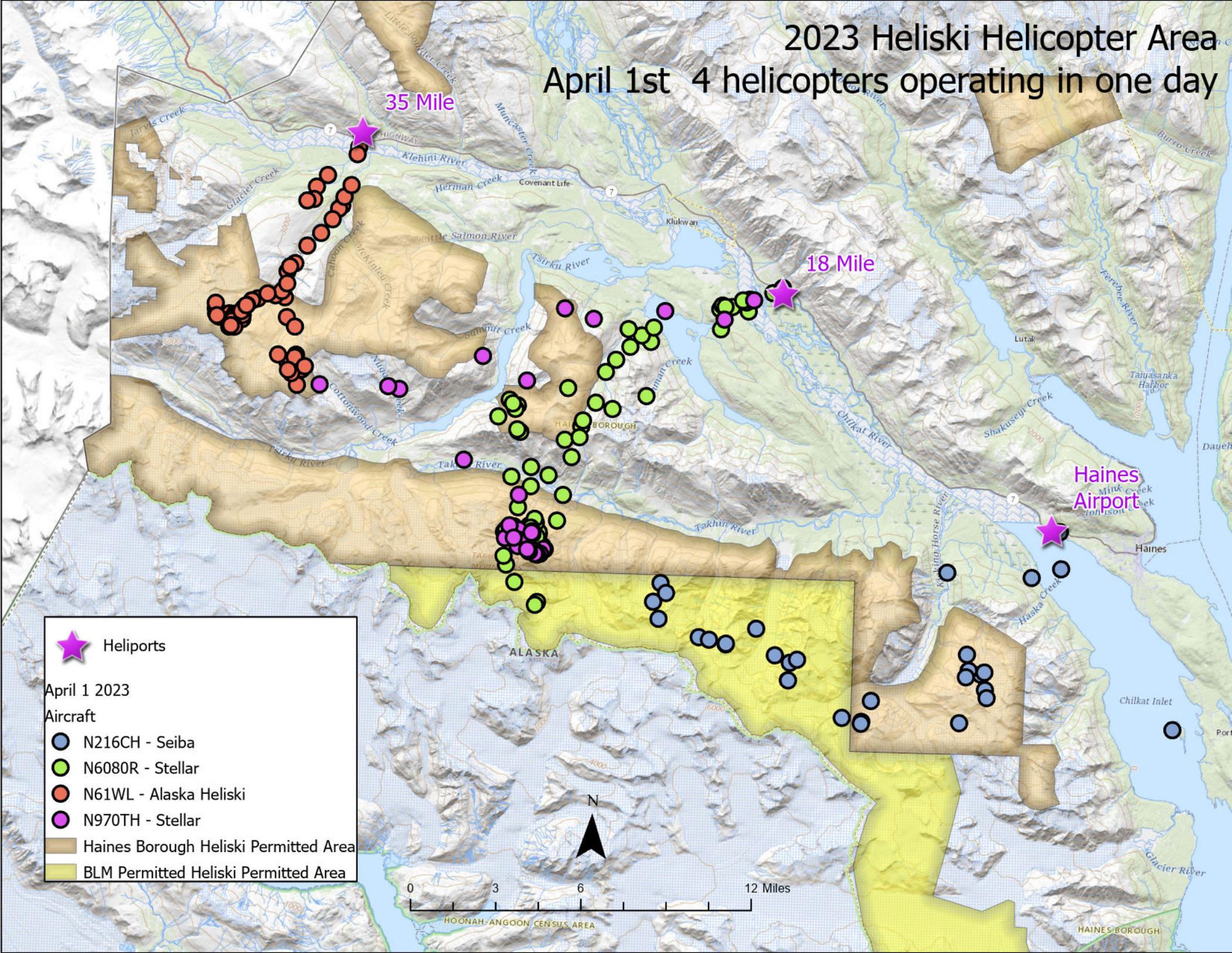
Aircraft

- N360CH - SEABA
- N970TH - Stellar
- BLM Permitted Heliski Permitted Area
- Haines Borough Heliski Permitted Area



2023 Heliski Helicopter Area

April 1st 4 helicopters operating in one day



35 Mile

18 Mile

Haines Airport

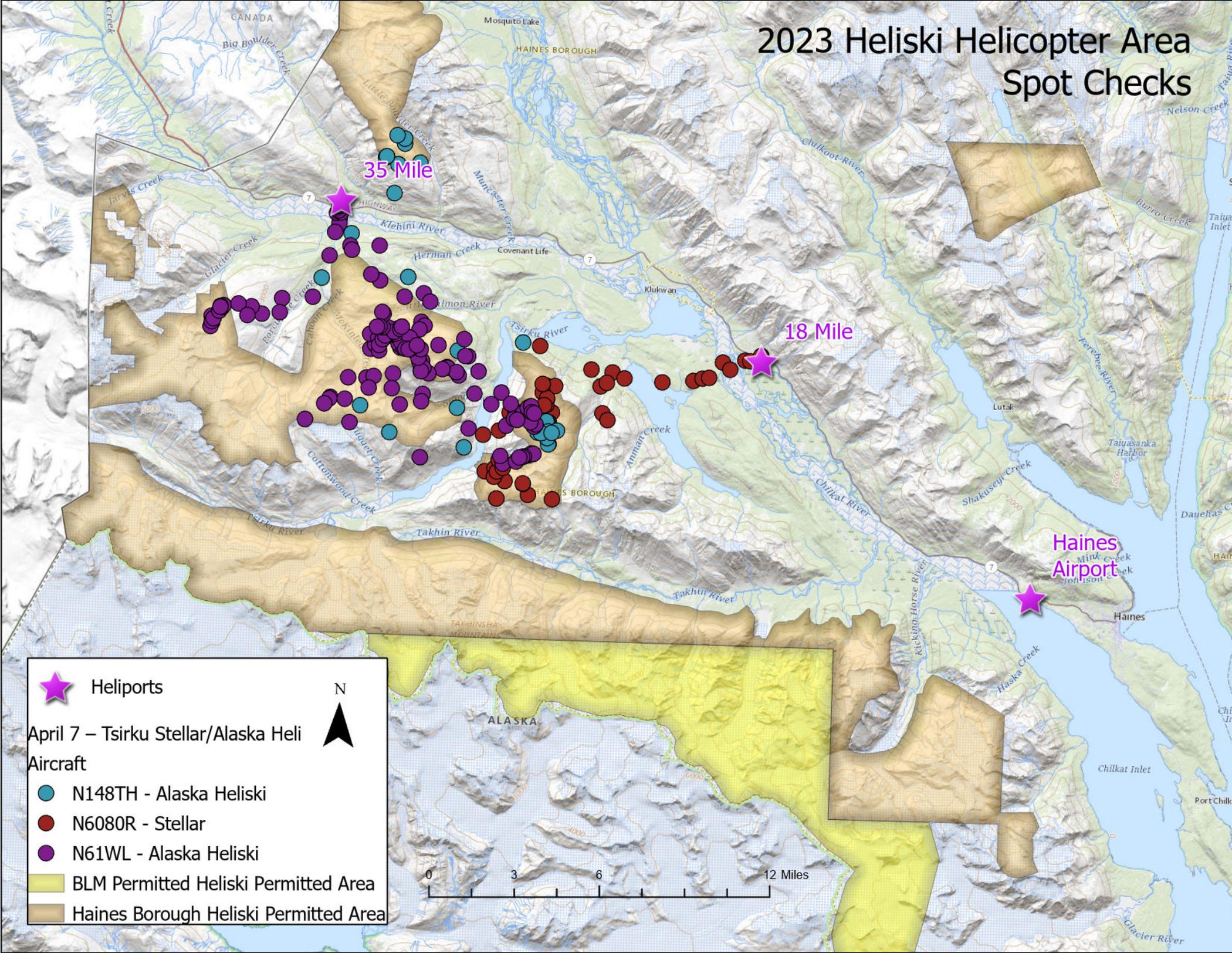
- ★ Heliports
- April 1 2023
- Aircraft
 - N216CH - Seiba
 - N6080R - Stellar
 - N61WL - Alaska Heliski
 - N970TH - Stellar
- Haines Borough Heliski Permitted Area
- BLM Permitted Heliski Permitted Area



HOONAH-ANGOON CENSUS AREA

HAINES BOROUGH

2023 Heliski Helicopter Area Spot Checks



- ★ Heliports

April 7 – Tsi'ku Stellar/Alaska Heli Aircraft

- N148TH - Alaska Heliski
- N6080R - Stellar
- N61WL - Alaska Heliski
- BLM Permitted Heliski Permitted Area
- Haines Borough Heliski Permitted Area



HAINES BOROUGH, ALASKA
P.O. BOX 1209, HAINES, ALASKA 99827
AK Annette Kreitzer, Borough Manager
907.766.6404 akreitzer@haines.ak.us

MEMO

TO: Heliski Operators: AMG, AK HELI, SEABA, STELLAR
DATE: October 9, 2023
RE: Helicopter allocations for 2024

ALL:

AMG has notified me that it does not intend to operate during the 2024 Heliski season. It also did not operate during the 2023 season. In accordance with HBC 5.24.020 B(4), I intend to allocate helicopters for the 2024 season which begins February 1, 2024 as follows:

AK Heli: two helicopters (\$8,000 payment received)

SEABA: two helicopters (\$8,000 payment received)

Stellar: two helicopters (\$8,000 payment received)

I encourage you to pay promptly to ensure this allocation, do not wait until January 15th. As always if you have questions, please email or call. (*payment from all operators was received following receipt of this allocation notice.*)

HBC 5.18.025 sets out the fees for helicopters allocated for the 2024 season:

C. Helicopter Fee. For 2022, 2023 and 2024 only, each commercial helicopter ski tour permit holder shall pay an annual nonrefundable fee of \$3,000 for the first regular usage helicopter prior to January 15th. To qualify for a second helicopter or additional helicopter usage during the season, a permit holder must pay a refundable fee of \$5,000. Any permit holder requesting a second helicopter must submit a written proposal to the borough manager demonstrating need on or prior to January 15th, or upon the manager's allocation of a second helicopter or additional usage or with the subcontracting, sharing or transferring of a second helicopter. The fee is not refundable once a second helicopter has been allocated, subcontracted, shared or transferred.

HBC 5.24.020 B(4) states:

4. *When more than three applicants apply for a commercial ski tour permit in any calendar year and/or the number of applicant requests exceeds six helicopters in any regular season, preference shall be given to existing permit holders in good standing in the grant of a permit. The manager may consider previous permit use, conditions, and compliance in the determination of good standing including willful noncompliance with any term, condition or provision of the permit; and any violations of any provisions of this code or other applicable local, state or federal law, policy or regulation.*

HBC 5.25.030 (A) Helicopter usage and fees states:

A. Regular season usage allows a maximum of six helicopters per day in the approved commercial ski tour areas map as described in HBC 5.24.050(D).

cc: Tina Olsen, Accounts Receivable, Department of Finance
Rebecca Hylton, Tourism Director