From: Jessica Meadow [mailto:jessica.meadow@gmail.com]
Sent: Tuesday, November 10, 2015 4:31 PM
To: Rob Goldberg; Lee Heinmiller; Heather Lende; Brenda Josephson; Robert Venables; turnerconstruction@aptalaska.net; Rob Miller; George Campbell; Ron Jackson; Diana Lapham; Margaret Friedenauer; Tresham Gregg; Mike Case; Jan Hill; Julie Cozzi; David Sosa
Cc: Nicholas Szatkowski
Subject: Heliport Hearings, November 12, 2015

Greetings Planning Commissioners,

As you are aware, Borough code is very specific when it comes to the criteria for granting or denying Conditional Use Permits. There are **Eight Requirements**, all of which must be met in order to grant a permit. **The burden of proof is on the applicant to prove with a preponderance of the evidence that all Eight Requirements have been met. If there is insufficient proof, or sufficient proof to the contrary, for even one requirement, the CUP is not permissible under Borough law. The CUP process is strict specifically because it is intended to prevent disharmonious land uses.**

The siting of a heliport in the neighborhood along Chilkat Lake Road is not permissible by Borough law, and this is why:

Requirement 1) The use is so located on the site as to avoid undue noise and other nuisances and dangers; The two things the Noise study showed without a doubt is 1) that the neighborhood is typically extremely quiet, quieter than any category in the study. And 2), that helicopters are extremely loud, hundreds, or thousands of times the ambient background noise in a neighborhood such as ours. **The noise levels produced by the helicopter traffic would not be allowed in residential or mix-use areas of any municipality that has existing noise standards; not Anchorage, not Los Angeles.** Any attempts to dilute the quantified measurements of the helicopter noise do not change the fact that, especially on adjacent and nearby properties, this constitutes undue noise, and is therefore not allowable under Borough law.

A further note regarding noise: Please read the attached public comments to the draft Noise Study. Many of the comments intelligently unpack the complexities of the Noise Study in a very usable way, and meaningfully critique the methodologies and conclusions offered by Mead and Hunt. The Noise Study remote presentation at the Committee of the Whole meeting, September 23, 2015 was itself not very well-attended, but I would like to incorporate by reference the entire audio recording of the meeting, as some important things were said therein which did not make it into the print versions of the study. Although Mead and Hunt's contract specified that they would provide raw, unweighted data, they failed to include the raw data into either the draft or the final report. I would like to incorporate by reference the raw data provided by Mead and Hunt in the Haines Noise Study. That data sits in the borough office, largely unseen by either the public, or the public officials such as yourselves, who will decide the fate of the neighborhood in which those numbers were measured. A decision made in the absence of that information could reasonably be called an uninformed decision, knowing, as we do, how dramatically A-weighting skews the decibel numbers. (For further detail on this issue, please see the attachment entitled, "A-weighting revisited.")

Requirement 2) The development of the use is such that the value of the adjoining property will not be significantly impaired;

Among the citizen comments to the Noise Study is an excerpt from a US Chamber of Commerce-commissioned, FAA meta-analysis examining all known studies of aircraft-noise impacts on property values, (see document entitled, "Airport Noise Law"). The FAA found that, in every study, an increase in decibels due to aircraft noise resulted in a significant and quantifiable decrease in property values. Under HBC 18.50.040, permitting such an activity is simply not allowed.

Req. 4) The proposed development must be consistent and in harmony with surrounding land uses and with the Comprehensive Plan.

The heliport site is surrounded by private properties--supporting homes, vacation cabins, families, children-- some as close as a hundred feet from the landing pad. The applicant has attempted to portray the neighborhood as an industrial area. This is patently false, as any brief visit to the area would show. The overwhelming majority of properties in the area are used for relatively quiet residence and/or vacation, or await development for such.

There are over 100 private properties within a one-mile radius of the helipad. Were this heliport approved, even people at a one-mile radius would be expected to experience noise levels that would wake a sleeping person, (45 decibels and above). This does not qualify as harmonious, and does not meet this requirement.

The Comprehensive Plan says that any future heliports should "be sited away from residences." The Comprehensive Plan, on page 94, lays out a path that the Borough must follow if it wishes to develop additional heliports within its borders. No such process has been undertaken, let alone completed, and therefore this requirement has clearly not been met.

Req. 5) The granting of the conditional use will not be harmful to the public safety, health or welfare; The US EPA, the World Health Organization, and other governing bodies have recognized the particular health and safety effects of excessive noise, and of helicopter noise in particular. Stress-related diseases, cognitive and behavioral disorders, heart problems, and other health effects have been directly linked to aircraft noise. Other regulatory bodies have specified safe distances for helicopter flight paths which avoid residences and other sensitive sites. Inclement weather, human error, and potential mechanical failures make the heliport's close proximity to residences an unsafe proposition. Additionally, the EPA has said there "is no safe level of lead exposure." Lead is a common additive in Jet-A fuel used in helicopters. Public health is jeopardized by having unsecured, leaded fuel near residences and water supplies. This requirement cannot be met in this location.

Additionally, during last March's "test period" SEABA's helicopters flew--at extremely low elevations--over and adjacent to the Corona property. Juan Corona has expressed that he fears SEABA's helicopters present real physical dangers to his family and property, especially in consideration of SEABA's poor record for safety and legal violations.

Req. 6) The use will not significantly cause erosion, ground or surface water contamination or significant adverse alteration of fish habitat on any parcel adjacent to state-identified anadromous streams; The helipad is about three vertical feet and less than one hundred horizontal feet from a state identified anadromous stream. SEABA/BSV this year operated without fuel spill containment under their tank, which was sitting on a pallet on the snow, even though their temporary CUP and their Title 5 Commercial Tour Permit specify that they must have DEC-approved fuel containment before commencing operations. *They are already violating this requirement, and the Haines Borough is currently negligent in its enforcement of the conditions of the 2015 CUP and SEABA's Title 5 permit.*

Req. 8) Public Comments must be considered and given their due weight. Public Comments were painstakingly gathered by Sheinberg and Associates, back in 2003, (see attachment entitled "December 2003 Heliport Public Comment Report") in the early days of commercial heliskiing in the Chilkat Valley. Four years *before* the property currently in question was purchased by SEABA/BSV, it (the "**40 acre parcel across the Steel Bridge'') was rated among the LOWEST of all the sites** under consideration, due to preexisting residential

and wildlife values. Each and every time this issue has come before the Borough, the majority of public sentiment has remained strongly in favor of protecting this residential area from this high-impact, heavy industrial development. In 2011, a majority of the residents in the affected area petitioned the Haines Borough to rezone the neighborhood from General Use to Rural Residential.

Precedent: The Planning Commission twice has sided with the public, and with Borough law and twice has denied the CUP for a heliport at the site. The Assembly has twice followed suit, and upheld the PC's denial of the CUP. Once, at literally one minute to midnight, acting on information known to be erroneous, the Assembly reconsidered it's own denial and the PC's denial, and granted the CUP for a temporary duration, with the express purpose of gathering noise data. Lawfulness of this decision aside, the Noise Study went ahead, and is in your packet tonight.

If you have read through the 18 citizen comments which critique the fatal flaws in the methodology and conclusions of the Noise Study, you will be aware of the uselessness and inappropriateness of using DNL metrics to attempt to dilute an extremely loud helicopter noise with many hours of background quiet. This is a physical impossibility and does not accurately depict the sonic impact on the otherwise peaceful neighborhood.

An additional problem with the Noise Study is the unlawful flight behavior of the helicopter operator. According to both GPS data and multiple eyewitness accounts, **SEABA was flying unlawfully throughout the duration of the Noise Study,** hiding their true sound signature from the noise sensors, and cheating the test, thereby invalidating the results of the Noise Study. The Agreement to Flight Operations, and the Heliski Complaints and Borough Responses are attached for your reference.

As a reminder, **SEABA/BSV last year pled guilty to 54 counts of federal trespass**, for "repeatedly and intentionally" trespassing on BLM lands that were closed to commercial heliskiing. That's 2/3rds of the time they were operating. The judge in that case *increased* the severity of the sentence because SEABA/BSV lied about their illegal behavior. **The Haines Borough should be looking very carefully at the development plans of companies that repeatedly and willfully break local, state and federal laws, and their own word.**

Citizens of this nation have well-established **rights to Quiet Use and Enjoyment** of their private properties, rights which judicial and other governing bodes are charged to uphold.

Scott Sundberg, General Manager of SEABA and Big Salmon Ventures, submitted the same application for a CUP in August of this year. He withdrew the application at the meeting, saying, in effect, that he wanted to wait to reapply until the noise study had resulted in changes to borough regulations. The noise study is currently being reviewed by the borough administration, and no code changes have yet been made. **Prudent planning would wait for the relevant public process to be complete before making major development decisions related to heliports.**

A final note regarding code compliance: Borough code requires that the manager's recommendation be provided "together" with the packet for review by the Planning Commission and public. This was not done. The absence of a manager's recommendation is a violation of borough code, and a violation of the due process rights of the public. The Planning Commission does not have sufficient information to fully consider the issue, and the public does not have sufficient information to the issue. The decision should be postponed until a future meeting, so that borough code can be followed, and so that the public can meaningfully contribute to the decision.

In conclusion, the Haines Borough Planning Commission is the governmental body charged with making land use decisions. Guided by Borough Code and the Comprehensive Plan, informed by your own experience and by public testimony, you are empowered to make decisions which will ensure future harmony among different interests in the Haines Borough. SEABA/BSV's heliport will never be harmonious with surrounding land uses at this location, and it will never meet the criteria for a Conditional Use Permit under Borough law, and it will never stop being contentious until it is decisively denied and forever put to rest.

Thank you for listening to our comments, and thank you for your public service.

Sincerely,

Nicholas Szatkowski Jessica Plachta



HAINES BOROUGH, ALASKA P.O. BOX 1209 • HAINES, ALASKA 99827 Administration 907.766.2231 • (fax) 907.766.2716 Tourism 907.766.2234 • (fax) 907.766.3155 Police Dept. 907.766.2121 • (fax) 907.766.2128

Fire Dept. 907.766.2155 • (fax) 907.766.3373

March 10, 2015

Jessica Plachta HC 60 Box 2621 Haines, AK 99827

Subject: Helicopter Complaint - February 24, 2015

Dear Ms. Plachta:

I initiated an investigation into the complaint the Haines Borough received from you on February 25, 2015 pertaining to helicopter activity on February 24, 2015.

SEABA began commercial heliskiing activity on February 26, Alaska Heliskiing's first day was February 28, and Alaska Mountain Guides has not yet begun operation. As such, the helicopter activity you observed was prior to the start of commercial heliskiing operations, and it is those operations that the voluntary *Agreement Regarding Flight Operations and Practices of Commercial Ski Tours* applies to. In other words, the agreements do not take effect until the first day of actual commercial skiing activity for each permittee.

The helicopter you observed on February 24 was arriving on site for SEABA to take contractual possession for the start of their commercial activities. I understand you were concerned about elevation and flight paths. Under federal law, the borough has no authority to regulate air activity occurring outside of the voluntary agreements.

Therefore, I have determined the agreements were not violated on February 24, 2015 and no enforcement is warranted.

Sincerely,

David Sosa Borough Manager

Helicopter Complaint

Jessica Plachta jessica.meadow@gmail.com HC 60 Box 2621 Haines,AK 99827 (907) 767-5768

Dear Haines Borough,

On February 24, 2015, at about 5pm, a helicopter was traveling at less than 500 feet elevation, heading southeast from the direction of SEABA/BSV's property, directly over the Little Salmon River. The helicopter maintained a low (under 500 feet) elevation for over a mile while traveling along the river. My son and I heard the helicopter from inside our home, went out on the porch, saw the helicopter above the treetops, and watched it fly over the Little Salmon Pond. My husband was out skiing along the Little Salmon River, and saw the helicopter fly directly over himself and the river maintaining a very low elevation. There was no wind, no fog, and a very high, light ceiling of clouds, offering very good visibility.

If that was a commercial heliskiing helicopter, the flight elevation was a violation of their Commercial Tour Permit, because it violates the MOA with the Borough. Helicopters are required to gain elevation as rapidly as possible after liftoff, and maintain a minimum elevation of 1500 feet over the valley floor at all times. The Little Salmon River is part of the Bald Eagle Preserve, and if flying along the Little Salmon is part of their flight path, it really shouldn't be. Looking at the Borough website, I don't actually see any flight path maps, or any updated information regarding the use of the temporary heliport off Chilkat Lake Road. Maybe you can point me to that information.

The Heliski Complaint Form would be more user-friendly if it were editable online, rather than having to print, fill out, and scan in the form to send to the Borough. I expect that if I provide the same information on this email, Borough staff will have the necessary information to act on my complaint. If this is somehow not possible, please let me know.

Thank you for your attention to this matter.

Sincerely,

Jessica Plachta

HAINES BOROUGH HELISKIING COMPLAINT FORM

P.O. Box 1209 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 Fax: 907-766-2716 www.hainesborough.us

Today's Date: 5/9/15	v	ww.namesborougn.	us		
Your Contact Information					
Name: (first, middle initial, last)					
Nicholas Szatkowski					
Mailing Address: (address, city, state,	zip code)	Physical Address	: (address, city, state, zip code)		
HC 60 #2621, Haines, AK 99827 Eagle Bluff Drive, 26-Mile					
Home Phone: (include area code)	Work Pho	ne: (include area code)	Email:		
contact via email	contact	via email	glacialllogic@gmail.com		
(Attach additional pages or use the b	color and ta ackside of this	form, if necessary.)	il, including who, what, when, where and why. cation, number of skiers, date, and time.		
(Attach additional pages or use the backside of this form, if necessary.) If you have photos, please email them to info@haines.ak.us or bring them to the Haines Borough Administration Building. During the period from March 7-March 17, helicopters utilizing the temporary heliport at SEABA/BSV's property at 26-mile were observed regularly and systematically violating flight rules for minimum flight elevation. This flight behavior was not related to takeoff/landing, but was instead typical of their entire flights to and from heliskiing areas. This was especially true, and particularly observable, when helicopters were transiting the area within 3 miles of the temporary heliport. The flight rules agreed to by the permitee require gaining/maintaining a minimum elevation of 1500 feet AGL as soon as is practicable, and 1/2 mile (i.e., 2650 feet) AGL over the valley floor. Despite the fact that helicopters were flying to destinations at least 4800 feet ASL, in every flight observed during this period, they chose to cruise in level flight just a few hundred feet AGL over the valley floor for miles to or from the temporary heliport. This is no way necessitated by safe flight requirements. Indeed it actually is somewhat less safe behavior than maintaining the legally required altitudes. It is also a violation of regulations of the Alaska Chilkat Bald Eagle Preserve, a portion of which the heliocopters regularly flew over. This systematically illegal behavior changed the sound signature of the helicopters, which was being observed and recorded during the same period, creating a false data for the Borough-funded noise study. Please ensure that ALL gps records are obtained for ALL helicopters operating from this site during the time period in question (more than one on some days).					
	Fo	r Porough Lles Only			
Date Received by Borough Manager:	11 May 2015	r Borough Use Only	Forwarded for Response or Investigation to:		
Copy given to: Date:	,		Date:		
Results of Investigation. This compl	aint onvore "	omo that ware a l.l.			
by the Borough and posted on the I consider this matter closed unles	Borough we	bsite. I do not see a	essed in three previous complaints investigate ny new information that has not bee addresse warrants a new investigation.		
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Matter addressed in other inves					
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HCF – 3/13]_			



HAINES BOROUGH Land Department P.O. Box 1209 Haines, AK 99827-1209 907-766-2231 Ext. 29 907-766-2716 (fax)

April 10, 2015

Ms. Lauren McPhun PO Box 1773 Haines, Alaska 99827

Dear Ms. McPhun,

I have reviewed your heliskiing complaint form of March 22nd in which you allege that on 14 March 2015 between noon and 3:00 PM there were violations of The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours (hereafter referred to as "The Agreement") and the Conditional Use Permit (CUP) issued to Big Salmon Ventures (BSV). Specifically, you allege the following violations of the CUP:

- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the Haines Airport Fly directly up the Takhin Valley to access area south of the Takhin and Tsirku River. Fly directly across the Chilkat River and up the slope between Haska Creek and Kicking Horse River to access areas south of Mt. Emmerich, including the Rainbow and Davidson Glacier areas. Avoid Haska Creek and Kicking Horse River. Avoid traversing slopes facing Chilkat Inlet to avoid residences.
 - Helicopters transiting between heliports should fly on the opposite side of the valleys from residents.
- 2. Violation of A (1) (b) "The Agreement": Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight.
- 3. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands.

In order to address your concerns, the Borough requested assistance from the local heliski companies in providing the GPS logs for the dates specified in your complaint. In conducting my review I consulted Borough Code, "The Agreement", The "Map", and reviewed the GPS flights logs. I was assisted in my review by the Borough Planning Technician Ms. "Tracy" Cui who processed GPS data using the Borough Geographic Information System (GIS) and produced graphics to support the review. Further, in the conduct of this investigation, the Borough will make a determination whether or not the allegations have merit using the preponderance of the evidence standard as a threshold for burden of proof. Individuals shall be considered innocent unless a "preponderance of the evidence" supports a finding of the misconduct. This "preponderance of the evidence supporting each finding is more convincing than the evidence offered in opposition to it.

The Borough contacted all organizations that hold Commercial Ski Tour Permits or Special Ski Competition Event Permits to determine if they were conducting operations on that date and time. For those entities operating under these permits the Borough collected statements and GPS data to review. The Borough can only collect information from organizations that it permits for Ski Tours or Ski Competitions and has no enforcement authority over, or the ability to collect information from, organizations with which it does not have an agreement. Additionally, only the Federal Aviation Administration is

authorized to direct flight-paths for aircraft and any questions related to organizations outside the scope of the Borough's remit will need to be addressed to the Federal Aviation Administration.

GPS Data Review: The GPS data was received as a csv. file enabling it to be processed into a graphic for review. The data also provided information relating to the following fields: aircraft, point number, date time group in universal and local time, latitude, longitude, altitude, speed, and bearing.

Given the GPS data available it was possible to determine if the flight paths were adhere to "The agreement" A (1) (a). The attached Graphic 1 displays all the GPS points collected in 2 minute intervals on March 14. The review of the GPS reveals actions consistence with adherence to "The agreement" A (1) (a).

The complaint alleges that "...we saw a dark blue helicopter with white tail numbers flying low over the tree tops south of our property line down river...I am completely positive this helicopter was flying much lower than 1500 ft...". Given the requirements for safe take off and landing profiles on either end of the trip and the requirement to gain elevation to get to the ski areas it is likely not possible to gain and maintain an altitude of 1,500 feet at all points of the flight as most of the trip involves take off and landing approaches. The attached Graphic 2 displays the GPS points with "altitude < 1,500 feet" on March 14. All of those GPS points were in the vicinity of the Haines Airport and the CUP Landing Zone (LZ).

An element of the complaint alleges that the flight paths were conducted over residence. I have conducted a review of the GPS logs reveals flight paths on 14 March, and produced the attached Graphic 3. The following are the findings:

- According to the flight GPS logs, no flight paths were conducted over McPhun's property;
- The nearest GPS point was collected within the CUP LZ. It was approximately 4,000 feet from McPhun's property;
- The helicopter was not in operation between noon and 3:00 PM.

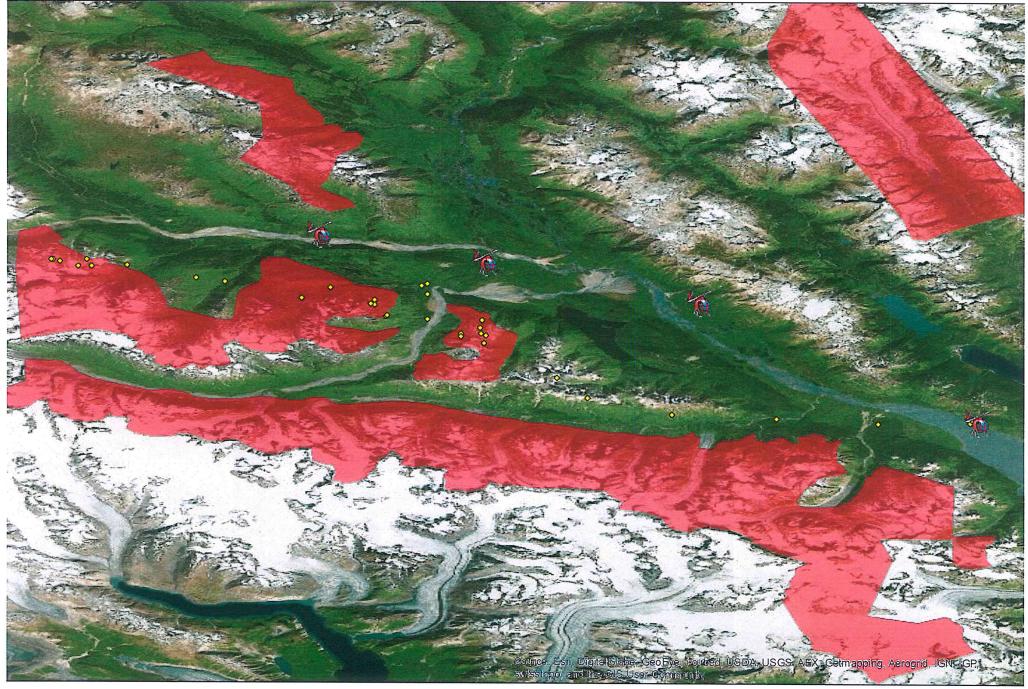
Additionally, the Borough verified the landings occurred on March 14. It was assumed that Air Speed of 0 and a Heading of 0 (0/0) was an indication that the aircraft was on the ground. The attached Graphic 4 displays the GPS points with "speed = 0" on March 14. Obviously, it indicates the landings were either at designated heliports or within the boundaries as approved on "The Map".

Findings: With respect to the violations alleged by the complainant the Borough finds after thorough review of the facts that:

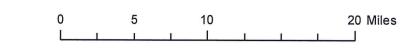
- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the Haines Airport Fly directly up the Takhin Valley to access area south of the Takhin and Tsirku River. Fly directly across the Chilkat River and up the slope between Haska Creek and Kicking Horse River to access areas south of Mt. Emmerich, including the Rainbow and Davidson Glacier areas. Avoid Haska Creek and Kicking Horse River. Avoid traversing slopes facing Chilkat Inlet to avoid residences: This allegation is not substantiated.
- 2. Violation of A (1) (b) "The Agreement"- Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.
- 3. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.

Respectfully,

David Sosa Borough Manager







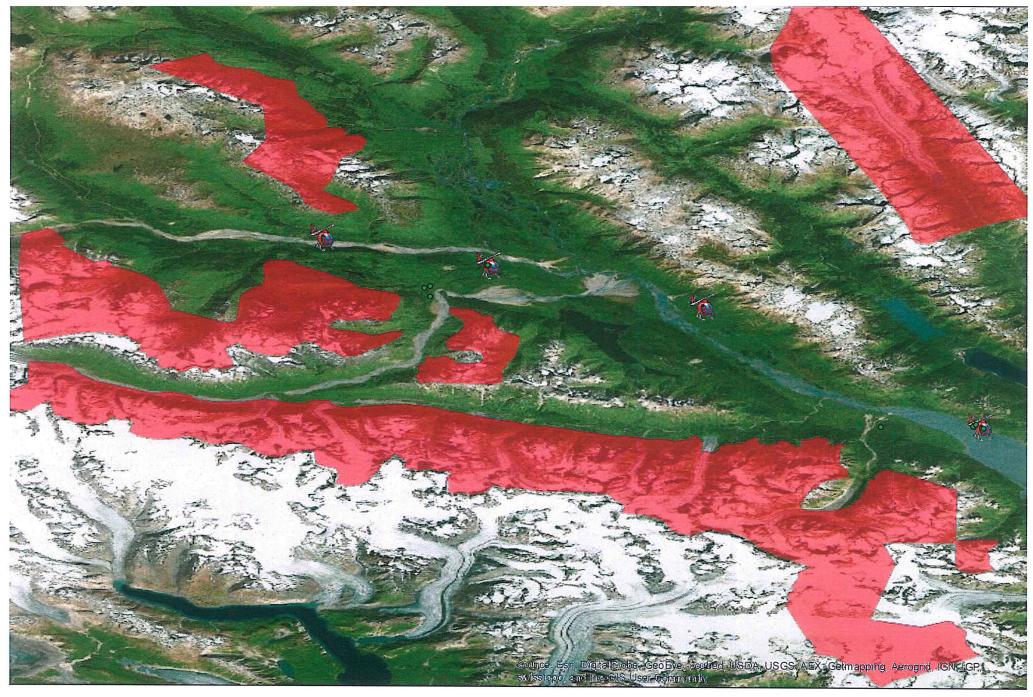
• March14CSV

Heliport

1

HeliskiApprovedArea_2014







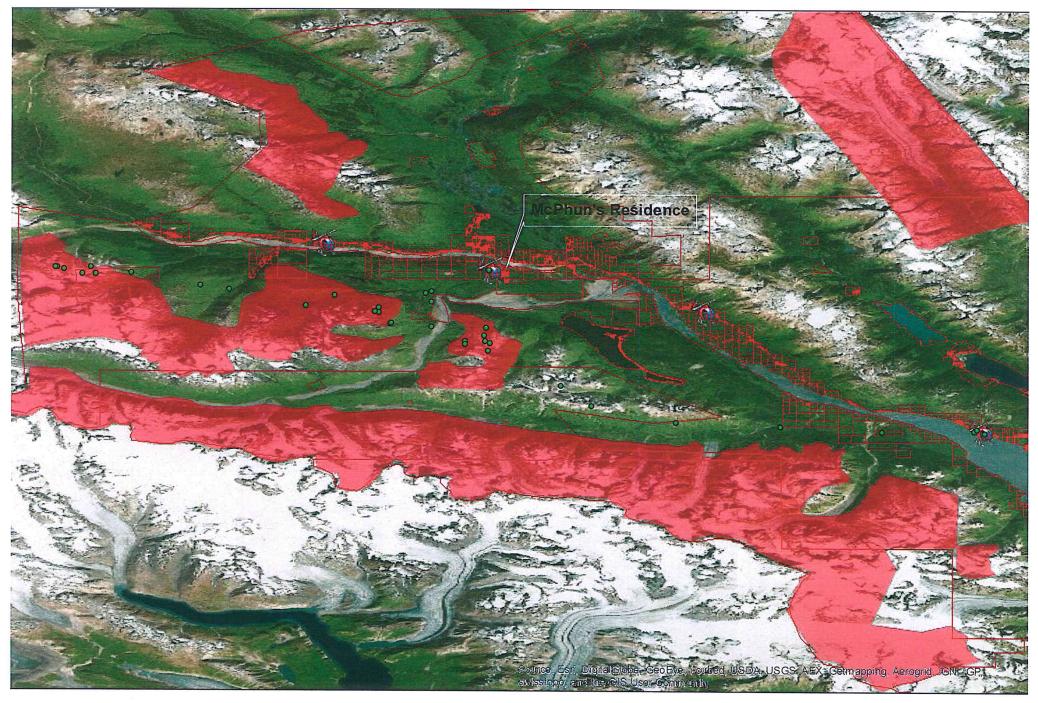
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• Altitude < 1500 Feet

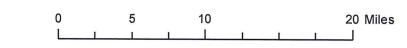


Graphic 2

HeliskiApprovedArea_2014



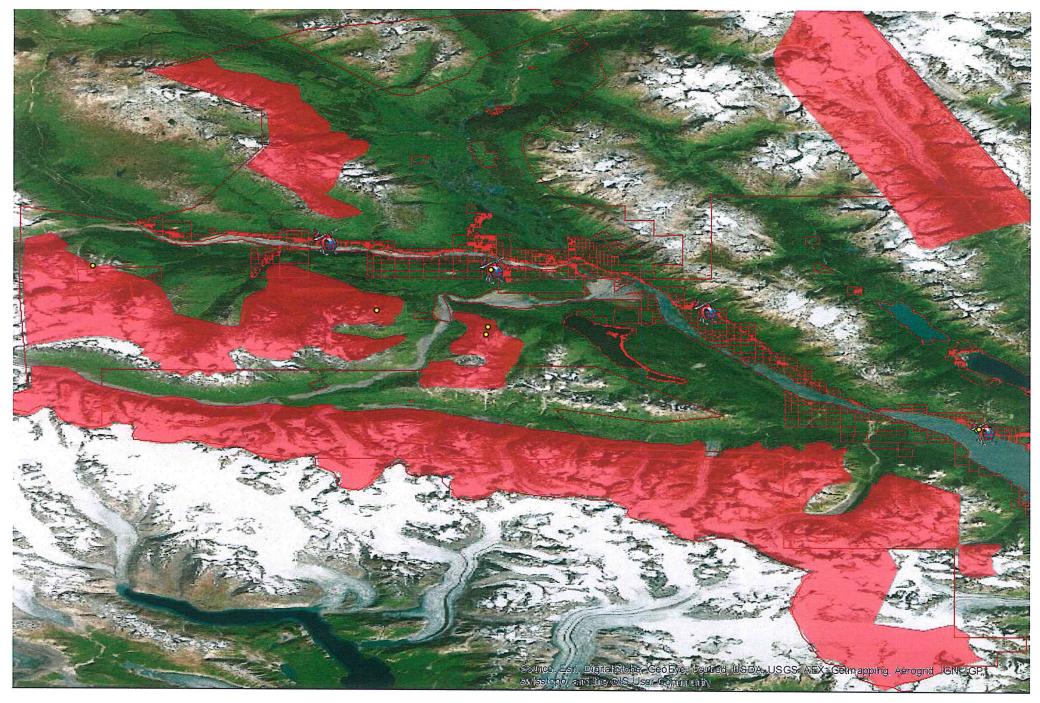




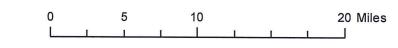
March14CSV



Graphic 3







• March14_Landings





HAINES BOROUGH HELISKIING COMPLAINT FORM

P.O. Box 1209 ◆ 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 ◆ Fax: 907-766-2716 www.hainesborough.us

Today's Date:			
Your Contact Information			
Name: (first, middle initial, last)			
Mailing Address: (address, city, state	e, zip code)	Physical Address	address, city, state, zip code)
	1		
Home Phone: (include area code)	Work Ph	ONE: (include area code)	Email:
Helpful details include helicopter	r color and t abackside of th	ail numbers, exact loo is form, if necessary.) I	I, including who, what, when, where and why. cation, number of skiers, date, and time. If you have photos, please email them to uilding.
		For Borough Use Only	/
Date Received by Borough Manager:	:		Forwarded for Response or Investigation to:
Copy given to:			Date:
Date:			
Results of Investigation:			
Action Taken			
Complainant Contacted regarding	Results of Inv	estigation:	Form Received by:
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Contacted by	Da	ate	
 Action: (attach additional pages, as needed) 	(hahad		
			Date-stamped copy given to complainant
HCF - 3/13			J

From: David Sosa Sent: Tuesday, June 09, 2015 9:39 AM To: 'Weishahn' Subject: RE: Heli-ski complaint

Ms. Weishahn,

FWT's special ski competition event permit specifically required them to *submit to the borough clerk a report detailing the number of skiers and flights, flight times and locations, deviations from the flight guidelines and any accidents.* This is different than the bi-weekly skier day use reports we get from the heliskiing operators who have commercial ski tour permits with skier day allocations.

FWT complied with that report requirement including reporting a deviation that took place for safety reasons. The fact that SEABA was contracted by FWT to assist in some of the logistics of the event does not mean that SEABA was required to report the deviation on their own skier day use report particularly as the deviation on March 19 was not related to SEABA's regular heliskiing activities.

Regards,

David Sosa

From: Weishahn [mailto:weis@aptalaska.net] Sent: Monday, June 08, 2015 7:22 PM To: Julie Cozzi Cc: David Sosa Subject: Heli-ski complaint

Hi Julie,

I'm hoping that my follow-up communications re the March 20 heli-ski complaint will be posted on the borough website soon. Since the manager will be giving the season-end report to the assembly at their first July meeting, my goal is to finalize the fact that there was a flight path deviation on March 19 as I reported and which Scott Sundberg also reported in the FWT Post-event Activity Report.

Thank you for checking on the progress of the complaint.

Cary Weishahn

FROM : Panasonic FAX SYSTEM

PHONE NO. :

P.001

HAINES BOROUGH HELISKIING COMPLAINT FORM

P.O. Box 1209 • 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 • Fax: 907-766-2716 www.hainesborough.us

Today's Date: 5/18/15				
Your Contact Information				
Name: (first, middle Initial, last)				
Carolyn H. Weishahn				
Mailing Address: (address, city, state,	zip code)	Physical Address:	(address, city, state, zip code)	
HC 60 Box 3977, Haines, AK	(99827	Mile 40, Haines H	Highway	
Home Phone: (include area code)	Work Ph	one: (include area code)	Email:	
907-767-5552			weis@aptalaska.net	
907-767-5552 Weis@aptalaska.net Complaint: Please describe the alleged or suspected violation in detail, including who, what, when, where and why. Helpful details include helicopter color and tail numbers, exact location, number of skiers, date, and time. (Attach additional pages or use the backside of this form, if necessary.) If you have photos, please email them to info@haines.ak.us or bring them to the Haines Borough Administration Building. Thank you for putting heli-ski CPS date on e USGS map showing rivers, streams, land contours etc. In reviewing SEABA's Freeride World Tour (FWT) Post-event Activity Report, I see that they report non-compliance with the agreed-upon flight paths on March 19, 2015, and explain the reason for the deviations. Excerpt from FWT activity report. April 15, 2015. Scott Sundharp. SEABA: "3/19 second full false start. We get all broadcast personnel and the men's ski on the hill ready for the comp, with other ski and anowboard categories on deck. Weather does not break, and we have to call off the attemp for the next day. We found it difficult geting all unnecessary personnel off the mountain that day because of chuids. We were forced to deviated from protocol flight path because of this. This clearly meets the 'burden of proof that there were flight path deviations on March 19 as reported in my first complaint. In addition to the statement by stated store were flights in the Klehini River watershed, in front of the range facing residences along the Haines Highway which are not allowed under the voluntary agreement. In his April 10, 2015 letter, the manager states that the borough requested GPS data logs from the heli-ski companies. Thi				
residence, and the reason for them.		- 	Right path deviations did occur on March 19 across from my	
Date Received by Borough Manager: Copy given to: Date:	5/1	8/15	Forwarded for Response or Investigation to: Date:	
Results of Investigation:				
Action Taken				
• Complainant Contacted regarding R			Form Received by: K. Kielsmeie Date Stamp: FIVED Haines BOTOUGI	
Contacted by	D	ate		
 Action: (attach additional pages, as need 	ded)		MAY 18 2015	
			Clerk's Office Date-stamped copy given to complainant	

From: David Sosa
Sent: Monday, April 27, 2015 11:39 AM
To: Weishahn
Cc: Xi Cui; Julie Cozzi; Bill Mandeville; Leslie Ross; Sunny Sundberg; nick@seaba-heli.com; ryan@alaskaheliskiing.com
Subject: FW: carol weishahn

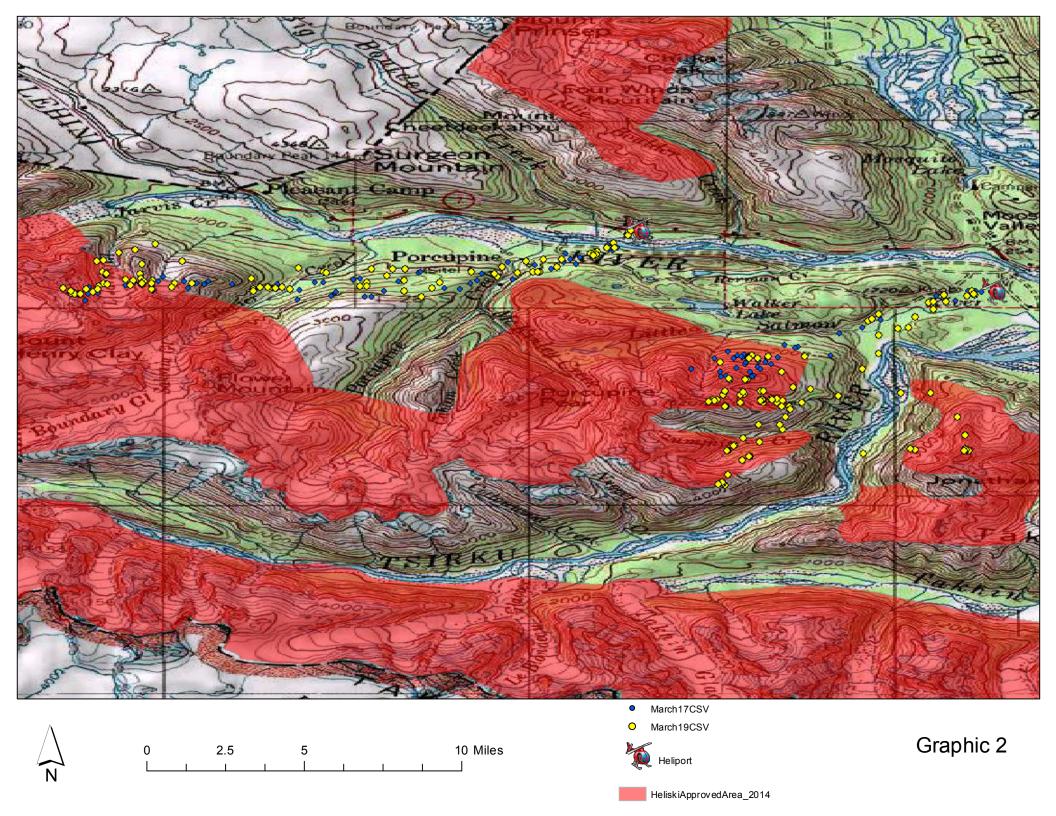
Ms. Weishahn,

The attached pdf file uses a USGS base map that contains geographical features. The user agreement states that aircraft should use Porcupine Creek, McKinley Creek, or Glacier Creek and avoid Jarvis Creek and Klehini River to keep noise away from residences. As the pdf depicts the aircraft on 17 and 19 left 33 mile and crossed over the Klehini River and avoided Jarvis Creek. They oriented on Glacier Creek and the tracks appear consistent with the agreement and with safe flight rules. As the focus of your question revolved around the details of the map and whether or not the flight pattern was consistent with the agreement I chose to look at this as an update to the original inquiry and not a new complaint. In sum I do not see anything here that would lead me to believe a violation occurred and the original determination of the inquiry stands. There is also nothing that leads me to believe any deviation from the agreement related to the Conditional Use Permit for 26 Mile occurred.

I do appreciate your bringing this to our attention and in future will see that we use a USGS map so that the flight track can be better evaluated against terrain.

Regards,

David B. Sosa Borough Manager Haines Borough, Alaska <u>www.hainesalaska.gov</u> <u>dsosa@haines.ak.us</u> 907-766-2231 ext. 29





HAINES BOROUGH Land Department P.O. Box 1209 Haines, AK 99827-1209 907-766-2231 Ext. 29 907-766-2716 (fax)

April 10, 2015

Ms. Carolyn Weishahn HC 60 Box 3977 Haines, Alaska 99827

Dear Ms. Weishahn,

I have reviewed your heliskiing complaint form of March 20th in which you allege that on 17 and 19 March 2015 there were violations of The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours (hereafter referred to as "The Agreement"). Specifically, you allege the following violations of the Agreement:

- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the 33 Mile helicopter Use Porcupine Creek, McKinley Creek or Glacier Creek to access Porcupine Peak and Flower Mountain areas. Avoid Jarvis Creek, and the Klehini River to keep noise away from residences. Access the Mt. Jonathan Ward area from the porcupine Peak area. Use a route directly behind 33 Mile to access Four Winds area.
 - Helicopters transiting between heliports should fly on the opposite side of the valleys from residents.

2. Violation of A (1) (b) "The Agreement": Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight.

In order to address your concerns, the Borough requested assistance from the local heliski companies in providing the GPS logs for the dates specified in your complaint. In conducting my review I consulted Borough Code, "The Agreement", The "Map", and reviewed the GPS flights logs. I was assisted in my review by the Borough Planning Technician Ms. "Tracy" Cui who processed GPS data using the Borough Geographic Information System (GIS) and produced graphics to support the review. Further, in the conduct of this investigation, the Borough will make a determination whether or not the allegations have merit using the preponderance of the evidence standard as a threshold for burden of proof. Individuals shall be considered innocent unless a "preponderance of the evidence" supports a finding of the misconduct. This "preponderance of the evidence supporting each finding is more convincing than the evidence offered in opposition to it.

The Borough contacted all organizations that hold Commercial Ski Tour Permits or Special Ski Competition Event Permits to determine if they were conducting operations on that date and time. For those entities operating under these permits the Borough collected statements and GPS data to review. The Borough can only collect information from organizations that it permits for Ski Tours or Ski Competitions and has no enforcement authority over, or the ability to collect information from, organizations with which it does not have an agreement. Additionally, only the Federal Aviation Administration is authorized to direct flight-paths for aircraft and any questions related to organizations outside the scope of the Borough's remit will need to be addressed to the Federal Aviation Administration.

GPS Data Review: The GPS data was received as a csv. file enabling it to be processed into a graphic for review. The data also provided information relating to the following fields: aircraft, point number, date time group in universal and local time, latitude, longitude, altitude, speed, and bearing.

Given the GPS data available it was possible to determine if the flight paths were adhere to "The agreement" A (1) (a). The attached Graphic 1 displays all the GPS points collected in 2 minute intervals on March 17 and 19. The review of the GPS reveals actions consistence with adherence to "The agreement" A (1) (a).

The complaint also alleges that "March 19: 8:30 AM, 9:43 AM, 10:55 AM – From my home at 40 Mile, Haines Highway near the border station, I saw a black helicopter flying <u>at fairly low elevation toward 33 Mile heliport</u> in front of the range across the Klehini River". Given the requirements for safe take off and landing profiles on either end of the trip and the requirement to gain elevation to get to the ski areas it is likely not possible to gain and maintain an altitude of 1,500 feet at all points of the flight as most of the trip involves take off and landing approaches. On March 19 the helicopter made multiple trips from the 33 Mile to ski areas between 6:52 AM and 3:45 PM. The attached Graphic 2 displays the GPS points with "altitude < 1,500 feet" on March 19. All of those GPS points were in the vicinity of the 33 Mile heliport.

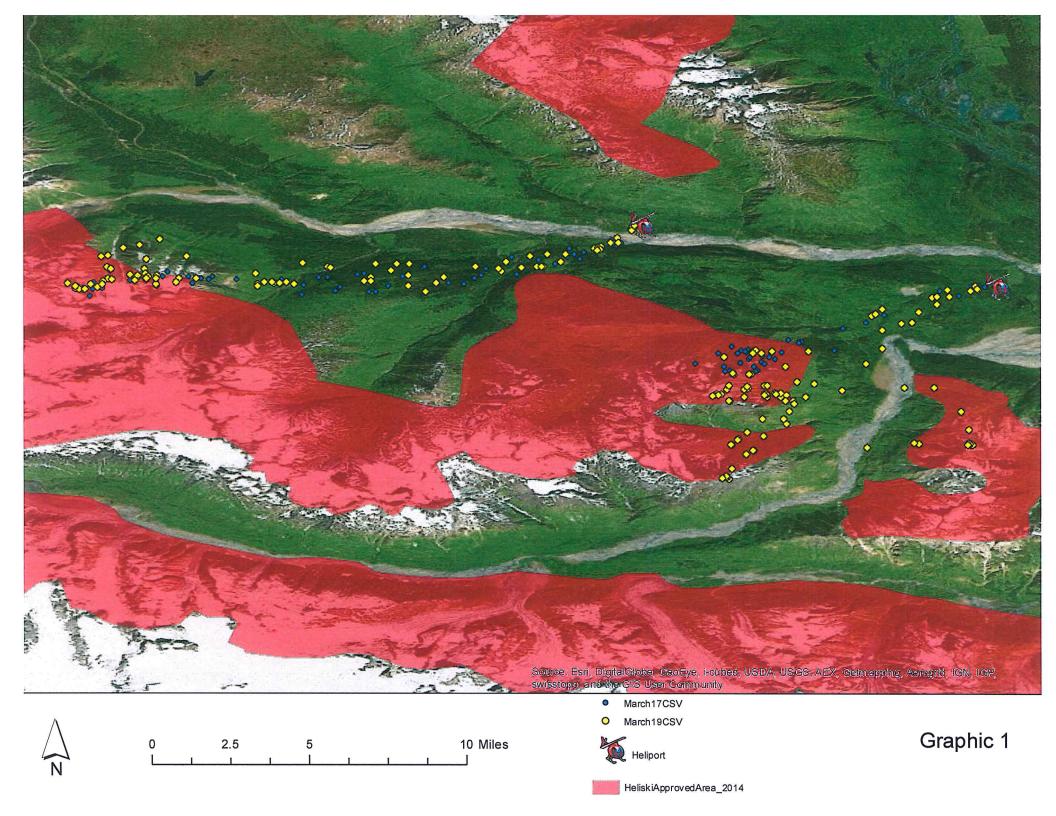
Additionally, you requested for the Borough to verify if the landings occurred on March 17 and 19 were within the approved heliski areas. It was assumed that Air Speed of 0 and a Heading of 0 (0/0) was an indication that the aircraft was on the ground. The attached Graphic 3 displays the GPS points with "speed = 0" on March 17 and 19. Obviously, it indicates the landings were either at designated heliports or within the boundaries as approved on "The Map".

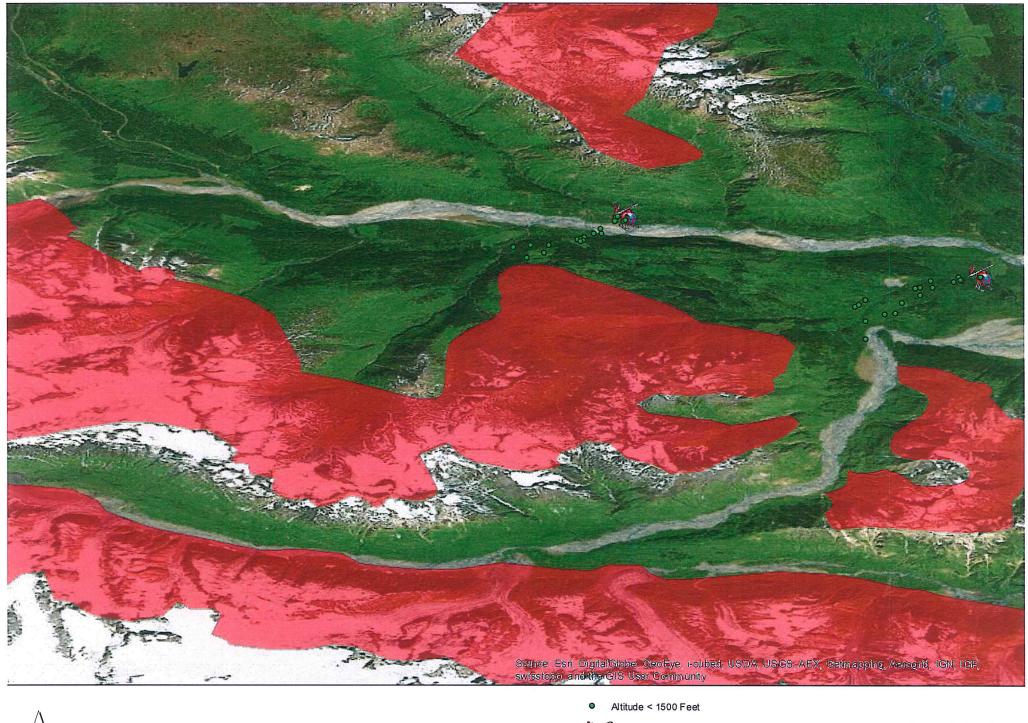
Findings: With respect to the violations alleged by the complainant the Borough finds after thorough review of the facts that:

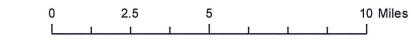
- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the 33 Mile helicopter Use Porcupine Creek, McKinley Creek or Glacier Creek to access Porcupine Peak and Flower Mountain areas. Avoid Jarvis Creek, and the Klehini River to keep noise away from residences. Access the Mt. Jonathan Ward area from the porcupine Peak area. Use a route directly behind 33 Mile to access Four Winds area: This allegation is not substantiated.
- 2. Violation of A (1) (b) "The Agreement"- Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.

Respectfully,

David Sosa Borough Manager



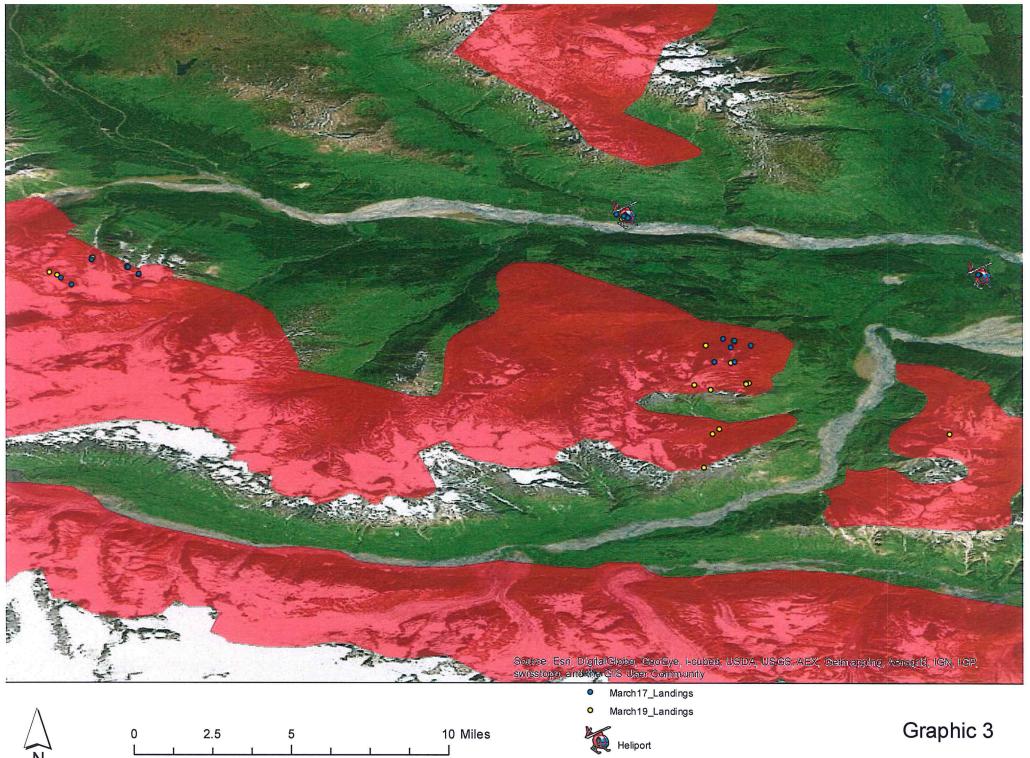




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Graphic 2



0	2.5	5				10 Miles
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FROM : Panasonic FAX SYSTEM

P.001

HAINES BOROUGH HELISKIING COMPLAINT FORM

P.O. Box 1209 • 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 • Fax: 907-766-2716 www.hainesborough.us

Today's Date: 3/20/15			Address of the second se
Your Contact Information			
Name: (first, middle initial, last)			
Carolyn H. Weishahn			ç.
Mailing Address: (address, city, state, :		•	address, city, state, zip code)
HC 60 Box 3977, Haines, Ak	99827 Mil	e 40, Haines Hi	
Home Phone: (include area code)	Work Phone:	(include area codo)	Email:
767-5552			weis@aptalaska.net
Helpful details include helicopter (Attach additional pages or use the be info@haines.ak.us or bring them to the March 19: 8:30 a.mFront I saw a black helicopter flyin range across the Klehini Riv March 19: 9:43 a.mFront L saw a black helicopter flyin range across the Klehini Riv	color and tail marked by a color and tail marked by a color and tail marked by a color and tail of this for the Haines Borough of th	ambers, exact locat m, if necessary.) If y h Administration Buil at 40 Mile, Hain elevation towar at 40 Mile, Hain elevation towar	es Highway near the border station, d 33 Mile heliport in front of the es Highway near the border station, d 33 Mile heliport in front of the nes Highway near the border
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HAINES BOROUGH, ALASKA P.O. BOX 1209 • HAINES, ALASKA 99827 Administration 907.766.2231 • (fax) 907.766.2716 Tourism 907.766.2234 • (fax) 907.766.3155 Police Dept. 907.766.2121 • (fax) 907.766.2128 Fire Dept. 907.766.2155 • (fax) 907.766.3373

Ms. Jessica Plachta HC 60 box 2621 Haines, Alaska 99827

Dear Ms. Plachta,

I have reviewed your letter of March 9th in which you allege that on 6 & 7 March 2015 there were violations of The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours (hereafter referred to as "The Agreement") and violations of the Conditional Use Permit (CUP) issued to Big Salmon Ventures (BSV) on 14 March 2014. Specifically, you allege the following violations of the Agreement and of the CUP:

- 1. Violation of A (1) (b) "The Agreement": Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL)while in flight
- 2. Violation of A (1) (c) "The Agreement": Maintain a minimum distance of one-half mile from wildlife on public lands while in flight
- 3. Violation of A (1) (d) "The Agreement": Maintain a minimum distance of one half mile above the valley floors except when shuttling passengers from the bottom to the top of the run and during takeoff and landings.
- 4. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands;

In conducting my review I consulted Borough Code, "The Agreement", The "Map", reviewed the Conditional Use Permit of 03-14-2014, reviewed the GPS flights logs for the dates specified, interviewed SEABA Manager Mr. Sundberg, and consulted with the Borough Attorney. I was assisted in my review by the Borough Planning Technician Ms. "Tracy" Cui who processed GPS data using the Borough Geographic Information System (GIS) and produced graphics to support the review. Further, in the conduct of this investigation, the Borough will make a determination whether or not the allegations have merit using the preponderance of the evidence standard as a threshold for burden of proof. Individuals shall be considered innocent unless a "preponderance of the evidence" supports a finding of the misconduct. This "preponderance of the evidence" standard requires that the evidence supporting each finding is more convincing than the evidence offered in opposition to it.

GPS Data Review: The GPS data was received as a cvs. file enabling it to be processed into a graphic for review. This graphic is labeled Graphic 1 in the supplemental information provided with this response. The data also provided information relating to the following fields: aircraft, point number, date time group in universal and local time, latitude, longitude, altitude in Above Sea Level (ASL), speed, and bearing.

For the purposes of this review it was assumed that Air Speed of 0 and a Heading of 0 (0/0) was an indication that the aircraft was on the ground. Additionally, the GPS reports data on time intervals so multiple successive time intervals of 0/0 equated to a sustained period of time on the ground. This was confirmed in conversation with Mr. Sundberg. In general

flights from the CUP Landing Zone (LZ) to drop off locations were 6 minutes while flights from the pick-up locations to the CUP LZ were 2-4 minutes. Elevation gains in each instance were consistent with safe flight.

<u>6 March</u>: On 6 March 2015 the helicopter departed the CUP LZ at 10:55 AM and returned at 1:07 PM. On the initial flight out the aircraft gained more than 2,000 feet in four minutes consistent with safe flight and ultimately gained nearly 5,000 feet of elevation before dropping passengers off at 11:07. The aircraft shut engines and "parked" in the ski area on five occasions before returning to the CUP LZ at 1:07 PM. All end points for a given Flight Track and start points for the next Flight Track give indications of Airspeed and Heading of 0/0 with the exception of Point 10 of Track 83 and Point 1 of Track 84. Point 10 of Track 83 indicates an Airspeed of 69.99943 Knots and a Bearing of 348 degrees. The Airspeed listed is an increase of 52 Knots over the previous reading for Point 9. There then follows a gap in readings of 23 minutes until the GPS readings resume during which the aircraft shifts 5,000 feet based on the Latitude and Longitude readings. This irregularity is depicted on Graphic 4.

<u>7 March</u>: On 7 March the helicopter made multiple trips from the CUP LZ to ski areas between 10:04 AM and 1:24 PM. Review of the flight data reveals that actions were consistent with Code, provisions of the CUP, and provisions of "The Agreement". On 7 March there were a total of 28 Takeoff/Landing occasions all either at CUP LZ or within the boundaries as approved on "The Map". There were a total of 7 Takeoff/Landing occasions at the CUP LZ including the initial takeoff and final landing.

Occurrence	Time	Elevation Gain	Comments
1	10:04-10:10	CUP LZ to 4800 ASL in 6 Minutes	Elevation gain consistent with safe flight
2	10:34-10:42	CUP LZ to 4443 ASL in 6 minutes	Elevation gain consistent with safe flight
3	10:54-10:56	CUP LZ to 4443 ASL in 6 minutes	Elevation gain consistent with safe flight
4	12:00-12:08	CUP LZ to 2884 ASL in 6 minutes	Elevation gain consistent with safe flight
5	12:54-12:56	CUP LZ to 3226 ASL in 18 minutes	Gained 2,600 feet in 4 minutes and then continued to drop-off location
6	1:14-1:16	CUP LZ to 2530 ASL in 4 minutes	Elevation gain consistent with safe flight
7	1:24	End of flying	

An element of the complaint alleges that there were violations of the provision to remain 1500 AGL. Graphics 2 & 3 display imagery of a takeoff and a landing at the CUP LZ on 7 March 2015. The graphics denote location and elevation in ASL and also depict a 100 foot contour interval. The table below converts the information on the graphic to estimated AGL:

Graphic 2: CUP LZ to Ski Area (appx. 8.25 mi)					
Point	ASL	Contour	Estimated AGL		
3	237	100	0		
4	539	150	389		
5	2456	750	1706		
6	4800	1400	3400		
7	4768	1400	0		
Graphic	: 3: Ski Area to CUP LZ (ap	px. 8 mi.)			
23	4443	1300	0		
24	1897	400	1497		
25	450	150	300		
26	286	100	0		

Given the data available it was only possible to approximate the AGL by subtracting the estimated contour data from the ASL from the GPS. As reading from the GPS are in 2 minute intervals only the data for those points in time are available.

An additional note on AGL requirements is in order. The CUP LZ is closer to the ski areas than the other approved take-off and landing sites and this is made clear when reviewing the short flights to and from the LZ and ski areas. Given the requirements for safe take off and landing profiles on either end of the trip and the requirement to gain elevation to get to the ski areas it is likely not possible to gain and maintain an AGL of 1500 feet at all points of the flight as most of the trip involves take off and landing approaches falling within the exception noted in item 3 listed above. The 6 minute flight from the CUP LZ to the ski area consists of a minute on either end for take-off and landing and the four minutes in the middle focused on gaining elevation to get to the ski area. The 2-4 minute return from the ski area provides even less opportunity to meet the 1500 foot requirement.

The complaint alleges impact to wildlife and a violation of A (1) (c) of the Agreement. In alleging this violation Ms. Plachta does not provide any corroborating evidence in the form of other witness statements nor did she provide imagery or video to support the allegation. Additionally, there is no evidence to support a clear link between the helicopter operations and the allegation.

Finally, the complaint also alleges Violation of point 7 of the CUP stating that that the aircraft flew over University of Alaska lands which the complaint alleges are private lands. This issue was discussed with the Borough Attorney and the Borough position is that University of Alaska lands are public lands and not private lands. Additionally, a review of the GPS logs reveals flight pats on both 6 and 7 March that are consistent with the requirements of point 7 of the CUP.

Findings: With respect to the violations alleged by the complainant the Borough finds after thorough review of the facts that:

- 1. Violation of A (1) (b) "The Agreement"- Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.
- 2. Violation of A (1) (c) "The Agreement"- Maintain a minimum distance of one-half mile from wildlife on public lands while in flight: Ms. Plachta did not provide any corroborating evidence to demonstrate that the aircraft flew within on-half mile of wildlife on public lands while in flight nor did Ms. Plachta provide any evidence (still or video imagery) showing that there was impact to wildlife or that there was a link between the aircraft flight and any perceived disruption to wildlife. This allegation is not substantiated.
- 3. Violation of A (1) (d) "The Agreement": Maintain a minimum distance of one half mile above the valley floors except when shuttling passengers from the bottom to the top of the run and during takeoff and landings: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.
- 4. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.

One concern noted from a conversation with Mr. Sundberg relates to the knowledge the aircraft operators have of requirements listed in the Agreement and in the Conditional Use Permit. Mr. Sundberg stated that the pilot was briefed about the flight requirements but not provided with a copy of the Agreement or of the CUP. Providing the pilot with copies of these documents will provide clarity and represent best practice for ensuring that the requirements are adhered to.

Notwithstanding the irregularity noted above, the Borough finds after a full inquiry into the circumstances and facts surrounding this complaint that the flight profiles were consistent with the CUP, The Agreement, and with safe flight and that there was no violation of Borough Code, Policy, or Agreement. Additionally, the Borough maintains the process that granted the CUP was conducted in accordance with Borough Code and that therefore the flight was not unlawful.

In closing this investigation the Borough again makes note of the irregularity noted on 6 March. That still remains unexplained and the Borough will continue to investigate this aspect of the investigation while closing out the investigation of the elements noted above. Should further investigation determine that a violation occurred the Borough reserves the right to impose penalties as appropriate based on code, agreement, and policy. Finally, the Borough recommends that tour operators provide copies of the Agreement and any applicable CUP's to aircraft operators to ensure there is a clear understanding of restrictions and requirements.

Respectfully,

David B. Sosa

Borough Manager Haines, Alaska

HAINES BOROUGH HELISKIING COMPLAINT FORM

P.O. Box 1209 ♦ 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 ♦ Fax: 907-766-2716 www.hainesborough.us

Today's Date:					
Your Contact Information					
Name: (first, middle initial, last)					
Jessica Plachta					
Mailing Address: (address, city, state,	zip code)	Physical Address	(address, city, state, zip code)		
HC 60 box 2621					
Home Phone: (include area code)	Work Ph	Work Phone: (include area code) Email:			
9077675768	I		jessica.meadow@gmail.com		
Helpful details include helicopter	color and ta	ail numbers, exact loo is form, if necessary.) I	I, including who, what, when, where and why. cation, number of skiers, date, and time. f you have photos, please email them to uilding.		
On Friday, March 6th and Sa	aturday, N	larch 7th, I heard	the noise from approaching and		
departing helicopters; sound					
SEABA/BSV's temporary he	liport nea	r Chilkat Lake Roa	ad. I walked along Chilkat Lake		
Road, up the available hills,	and to the	e Roffler/Williams	property, which neighbors		
SEABA/BSV's property. At a	only one p	point was the helic	copter visible. The helicopter was		
lifting off from the heliport, an	nd was vi	sible through a cle	ared line in the trees. The helicopter		
lifted off, and then skimmed	the treeto	ps so closely as to	o be completely invisible from either a		
distance, or from a near loca					
departures over the course of	of a coupl	e of hours on Satu	urday, and only on that one occasion		
was the helicopter visible, ar	nd then or	nly at a very low e	levation. The rest of the time, the		
helicopters were so low as to) remain i	nvisible an estim	nated couple hundred feet above the		
valley floor.					
			ces of Commercial Ski Tours		
	-		helicopter should "b. attain as quickly		
			vation of 1,500 feet above ground		
			e of one half-mile from wildlife on		
0			of 1/2 mile above the valley floors		
excent when (1) shuttling na			o the top of a run (?) during landing		
Data Dessived by Persuch Manager		For Borough Use Only	r Forwarded for Response or Investigation to:		
Date Received by Borough Manager:	9 March	2014	Date:		
Copy given to: Date:					
Results of Investigation:					
Action Taken					
 Complainant Contacted regarding Regarding 	egulte of Inv	estigation:	Form Received by		
		congution.	Date Stamp:		
Contacted by	- Da	ate			
			LAR 09 2015		
 Action: (attach additional pages, as nee 	aed)		Clerk's Office		
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			Date-stamped copy given to complainant		

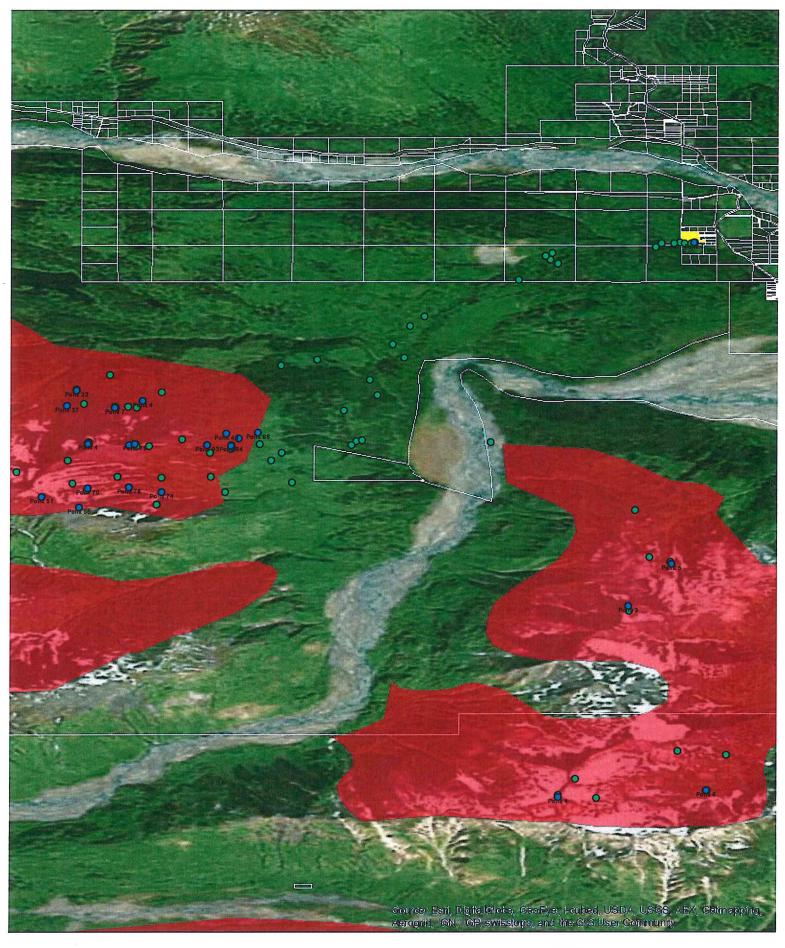
On Friday, March 6th and Saturday, March 7th, I heard the noise from approaching and departing helicopters; sound which seemed to be emanating from the direction of SEABA/BSV's temporary heliport near Chilkat Lake Road. I walked along Chilkat Lake Road, up the available hills, and to the Roffler/Williams property, which neighbors SEABA/BSV's property. At only one point was the helicopter visible. The helicopter was lifting off from the heliport, and was visible through a cleared line in the trees. The helicopter lifted off, and then skimmed the treetops so closely as to be completely invisible from either a distance, or from a near location. I watched for, and listened to, many arrivals and departures over the course of a couple of hours on Saturday, and only on that one occasion was the helicopter visible, and then only at a very low elevation. The rest of the time, the helicopters were so low as to remain invisible--- an estimated couple hundred feet above the valley floor.

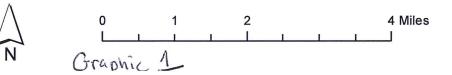
The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours specifies under the heading "Flight Rules" that the tour helicopter should "b. attain as quickly as practicable after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight." Also, "c. maintain a distance of one half-mile from wildlife on public lands while in flight. And, "d. maintain a distance of 1/2 mile above the valley floors except when (1) shuttling passengers from the bottom to the top of a run, (2) during landing and takeoffs." The agreement was adopted March 24th, 2011, and contains no specific flight paths for the heliport in question. However, SEABA/BSV's application, which became their de facto permit, contains language specifying that they would fly west from their heliport, and remain over state lands, not flying over private properties. SEABA/BSV erroneously identifies University of Alaska lands as "not private property", when in fact they are private lands eventually intended for subdivision and sale to provide revenue for the University (and thereby increasing Borough property tax revenues as well). Impacting University lands is impacting private lands, and should be assessed as such by the Borough.

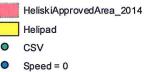
The effects of this unlawfully low flight elevation are many. One is that the sound signature of the helicopter is localized and amplified for the area immediately below the helicopter, making the noise seem lower for the distal area, while the area directly beneath the "cone of sound" is blasted by extreme noise levels. Indeed, when we left the house to investigate, we noticed an unusual number of eagles circling in the sky, appearing agitated, and - I can only guess - displaced from their usual roosting and/or nesting areas. Winter and spring are critical time periods for many species, including resident eagles, and being forced into unnecessary flights can stress their lean reserves and threaten their survival.

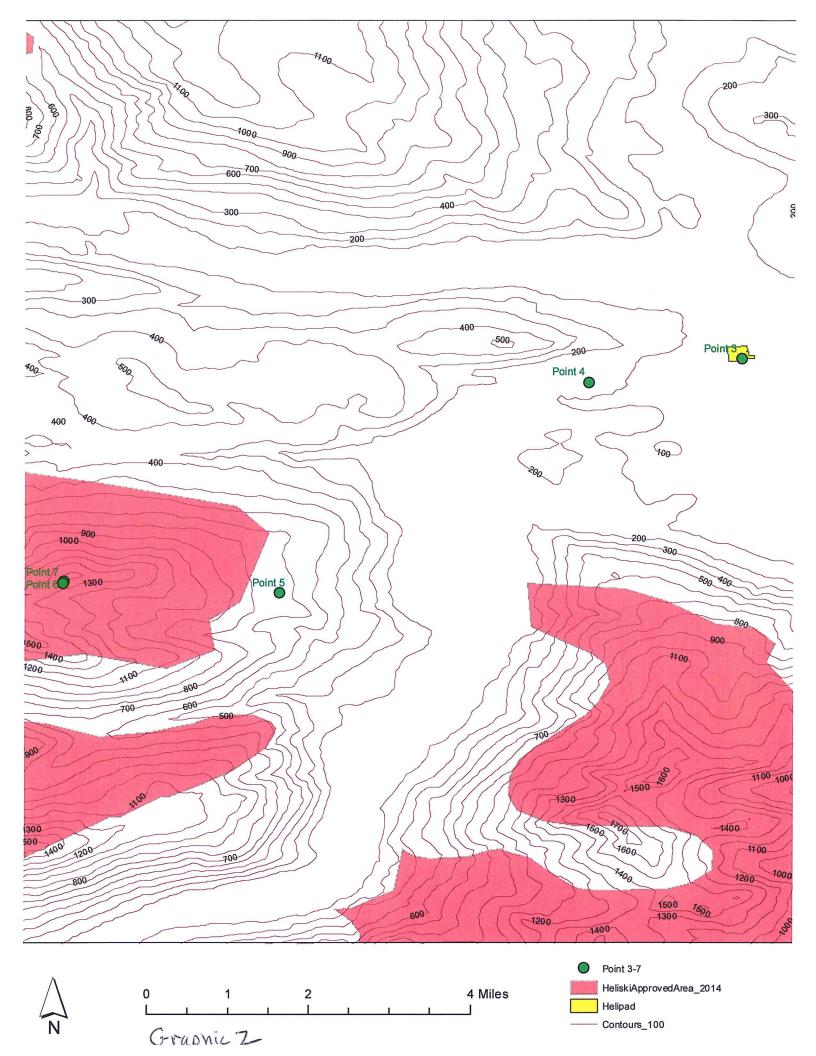
The other very significant effect of this unlawfully low flight elevation is that the noise test currently underway will be acquiring flawed, unusable data. The noise study is a considerable cost to the local taxpayers. Allowing SEABA/BSV to continue to violate the terms of their Commercial Tour Permit will invalidate the data collected during the noise study. Additionally, the actual noise impacts of helicopter

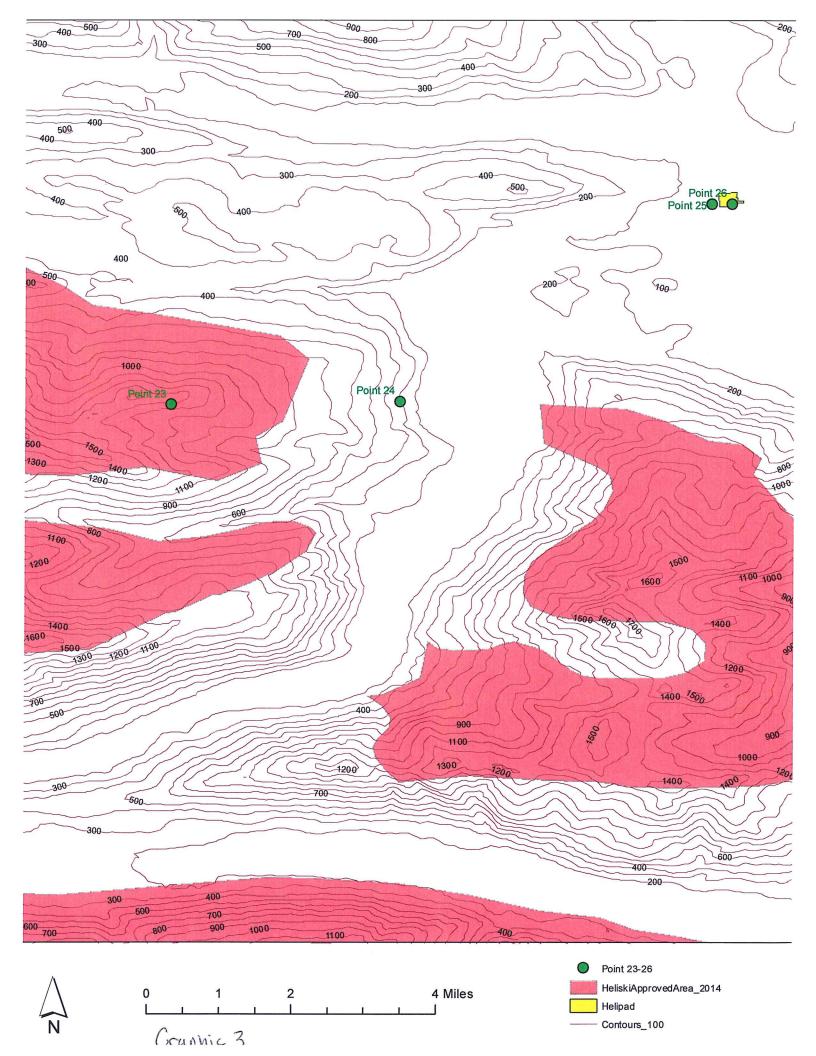
operations at the heliport site in question won't be accurately reflected in this noise "study" if SEABA's operations during the testing period aren't consistent with required operational guidelines that would presumably





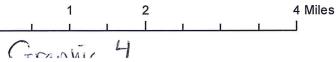














HeliskiApprovedArea_2014 Helipad



HAINES BOROUGH, ALASKA P.O. BOX 1209 • HAINES, ALASKA 99827 Administration 907.766.2231 • (fax) 907.766.2716

Tourism 907.766.2234 • (fax) 907.766.3155 Police Dept. 907.766.2121 • (fax) 907.766.2128 Fire Dept. 907.766.2155 • (fax) 907.766.3373

April 13, 2015

Marilyn T. Taylor PO Box 1512 Haines, Alaska 99827

Dear Ms. Taylor:

I have reviewed your complaint of April 2 in which you allege that on that same date there was a violation by SEABA of The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours (hereafter referred to as "The Agreement"). Specifically, you allege SEABA-operated helicopters were flying directly over your house located in Deishu Subdivision.

I was assisted in the investigation by Borough Clerk Julie Cozzi who contacted all of the permitted heliski operators as well as the holder of a permit for a special ski production (filming). The contacts resulted in the following information:

Alaska Heliskiing – Operated on April 2 but were nowhere near town. SEABA – Did not operate on April 2. Alaska Mountain Guides – Did not operate on April 2. Matchstick Productions – Did not operate on April 2.

Findings: With respect to the alleged violation, the Borough finds three heliskiing-related permit holders were not operating on April 2, and one permit holder did operate but was not near the townsite. Therefore, neither SEABA nor the other companies were in violation of borough code or The Agreement.

Regarding other helicopters that may have been flying over your neighborhood, Federal FAA requirements prohibit the Haines Borough from managing or regulating aircraft travel that is not associated with permit conditions. We have no other wintertime helicopter-related permits.

In closing, I want to assure you the commercial ski permit conditions have not changed. The heliskiing operators have agreed as a condition of their permits to not fly over the townsite. We have no way of regulating other helicopters.

Respectfully,

David B. Sosa Borough Manager Haines, Alaska

RECEIVED APR 02 2015 APR 02 2015 Todates BOROUGH HAINES BOROUGH CITIZEN COMPLAINT FORM P.O. Box 1209 • 103 Third Avenue S. Haines, Alaska 99827 Ph: 907-766-2231 + Fax: 907-766-2716 www.hainesborough.us Your Contact Information - We may need to contact you to further discuss the issue, so you are strongly advised to tell us how to get a hold of you. NOTE: If you choose to submit your complaint anonymously, please be advised that we will not be able to contact you for more information or to let you know the issue has been resolved. Name: (first, middle initial, last) MARILYN Physical Address: (address, city, state, zip code) Mailing Address: (address, city, state, zip code) / + AINE DEISH 998 2.0. POX 1.5 2 N Home Phone: (include area code) Work Phone: (include area code) Email: ma 907 766-2215 Complaint/Concern: Please describe the complaint in detail, including who, what, when, where and why. Please ensure that your narrative is clear enough to give a reader, with no prior knowledge of the situation, a complete understanding of the problem. (Attach additional pages or use the backside of this form, if necessary.) BATO. Auni 20110 r How do you suggest the borough resolve this complaint? 602 na For Borough Use Only Complaint Number: Borough Date Received Clerk: 00 Forwarded for Response to/date: Copy to Manager/date Results of Investigation: Action Taken Form Received by: + Complainant Contacted regarding Results of Investigation: Date Stamp: RECEIVED Contacted by Date APR 02 2015 + Action: Date-stamped copy given to complain ant-



HAINES BOROUGH Land Department P.O. Box 1209 Haines, AK 99827-1209 907-766-2231 Ext. 29 907-766-2716 (fax)

April 10, 2015

Ms. Shanah Kinison HC 60 box 3842 Haines, Alaska 99827

Dear Ms. Kinison,

I have reviewed your heliskiing complaint form of March 18th in which you allege that on 14 March 2015 at 3:50 PM there were violations of The Agreement Regarding Flight Operations and Practices of Commercial Ski Tours (hereafter referred to as "The Agreement") and the Conditional Use Permit (CUP) issued to Big Salmon Ventures (BSV). Specifically, you allege the following violations of the CUP:

- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the Haines Airport Fly directly up the Takhin Valley to access area south of the Takhin and Tsirku River. Fly directly across the Chilkat River and up the slope between Haska Creek and Kicking Horse River to access areas south of Mt. Emmerich, including the Rainbow and Davidson Glacier areas. Avoid Haska Creek and Kicking Horse River. Avoid traversing slopes facing Chilkat Inlet to avoid residences.
 - Helicopters transiting between heliports should fly on the opposite side of the valleys from residents.
- 2. Violation of A (1) (b) "The Agreement": Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight.
- 3. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands.

In order to address your concerns, the Borough requested assistance from the local heliski companies in providing the GPS logs for the dates specified in your complaint. In conducting my review I consulted Borough Code, "The Agreement", The "Map", and reviewed the GPS flights logs. I was assisted in my review by the Borough Planning Technician Ms. "Tracy" Cui who processed GPS data using the Borough Geographic Information System (GIS) and produced graphics to support the review. Further, in the conduct of this investigation, the Borough will make a determination whether or not the allegations have merit using the preponderance of the evidence standard as a threshold for burden of proof. Individuals shall be considered innocent unless a "preponderance of the evidence" supports a finding of the misconduct. This "preponderance of the evidence supporting each finding is more convincing than the evidence offered in opposition to it.

The Borough contacted all organizations that hold Commercial Ski Tour Permits or Special Ski Competition Event Permits to determine if they were conducting operations on that date and time. For those entities operating under these permits the Borough collected statements and GPS data to review. The Borough can only collect information from organizations that it permits for Ski Tours or Ski Competitions and has no enforcement authority over, or the ability to collect information from, organizations with which it does not have an agreement. Additionally, only the Federal Aviation Administration is

authorized to direct flight-paths for aircraft and any questions related to organizations outside the scope of the Borough's remit will need to be addressed to the Federal Aviation Administration.

GPS Data Review: The GPS data was received as a csv. file enabling it to be processed into a graphic for review. The data also provided information relating to the following fields: aircraft, point number, date time group in universal and local time, latitude, longitude, altitude, speed, and bearing.

Given the GPS data available it was possible to determine if the flight paths were adhere to "The agreement" A (1) (a). The attached Graphic 1 displays all the GPS points collected in 2 minute intervals on March 14. The review of the GPS reveals actions consistence with adherence to "The agreement" A (1) (a).

The complaint alleges that "a dark black and grey helicopter flew directly over my property <u>very low</u>". Given the requirements for safe take off and landing profiles on either end of the trip and the requirement to gain elevation to get to the ski areas it is likely not possible to gain and maintain an altitude of 1,500 feet at all points of the flight as most of the trip involves take off and landing approaches. The attached Graphic 2 displays the GPS points with "altitude < 1,500 feet" on March 14. All of those GPS points were in the vicinity of the Haines Airport and the CUP Landing Zone (LZ).

An element of the complaint alleges that the flight paths were conducted over residence. I have conducted a review of the GPS logs reveals flight paths on 14 March, and produced the attached Graphic 3. The following are the findings:

- According to the flight GPS logs, no flight paths were conducted over Kinison's property;
- The nearest GPS point was collected within the CUP LZ. It was approximately 3,000 feet from Kinison's property;
- The helicopter made one trip from the CUP LZ to ski areas between 15:24 and 16:18 (labeled blue dots in Graphic 3). None of the blue dots were over Kinison's property.

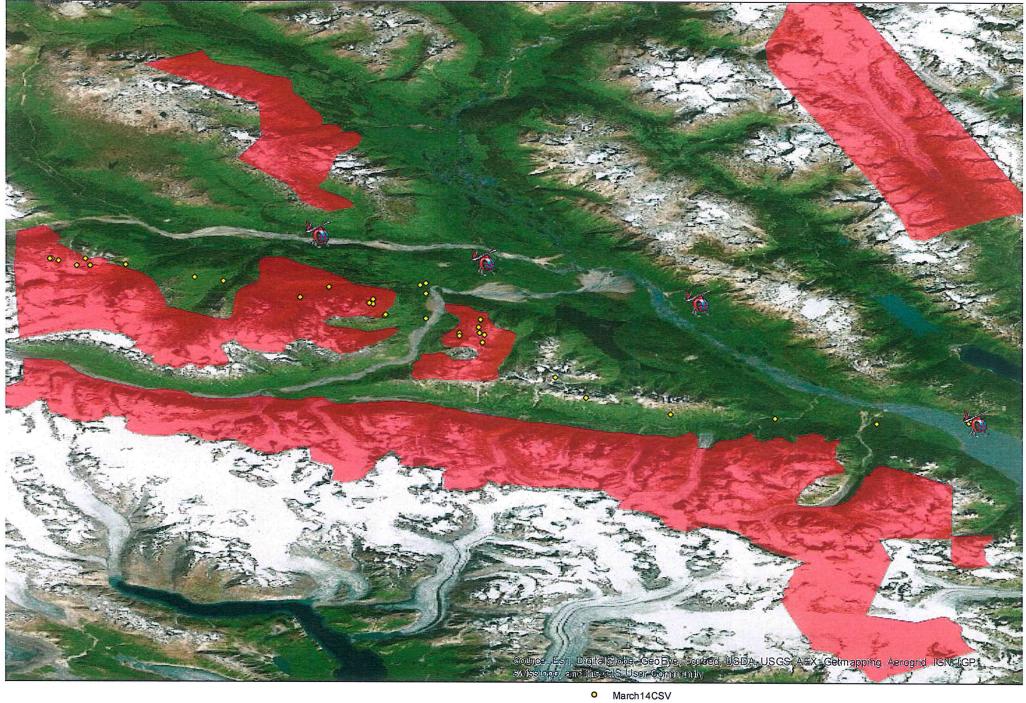
Additionally, the Borough verified the landings occurred on March 14. It was assumed that Air Speed of 0 and a Heading of 0 (0/0) was an indication that the aircraft was on the ground. The attached Graphic 4 displays the GPS points with "speed = 0" on March 14. Obviously, it indicates the landings were either at designated heliports or within the boundaries as approved on "The Map".

Findings: With respect to the violations alleged by the complainant the Borough finds after thorough review of the facts that:

- 1. Violation of A (1) (a) "The Agreement": follow the access route describe below:
 - From the Haines Airport Fly directly up the Takhin Valley to access area south of the Takhin and Tsirku River. Fly directly across the Chilkat River and up the slope between Haska Creek and Kicking Horse River to access areas south of Mt. Emmerich, including the Rainbow and Davidson Glacier areas. Avoid Haska Creek and Kicking Horse River. Avoid traversing slopes facing Chilkat Inlet to avoid residences: This allegation is not substantiated.
- 2. Violation of A (1) (b) "The Agreement"- Attain as quickly as practical after takeoff and maintain a minimum elevation of 1,500 feet above ground level (AGL) while in flight: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.
- 3. Violation of Point 7 within the CUP: Use a Specific and identified GPS flight path that will create the least amount of noise and impact to nearby residents. Flight paths will not be conducted over any residences and take place over state lands: The review of the GPS reveals actions consistent with adherence to the stipulations of the agreement. This allegation is not substantiated.

Respectfully,

David Sosa Borough Manager



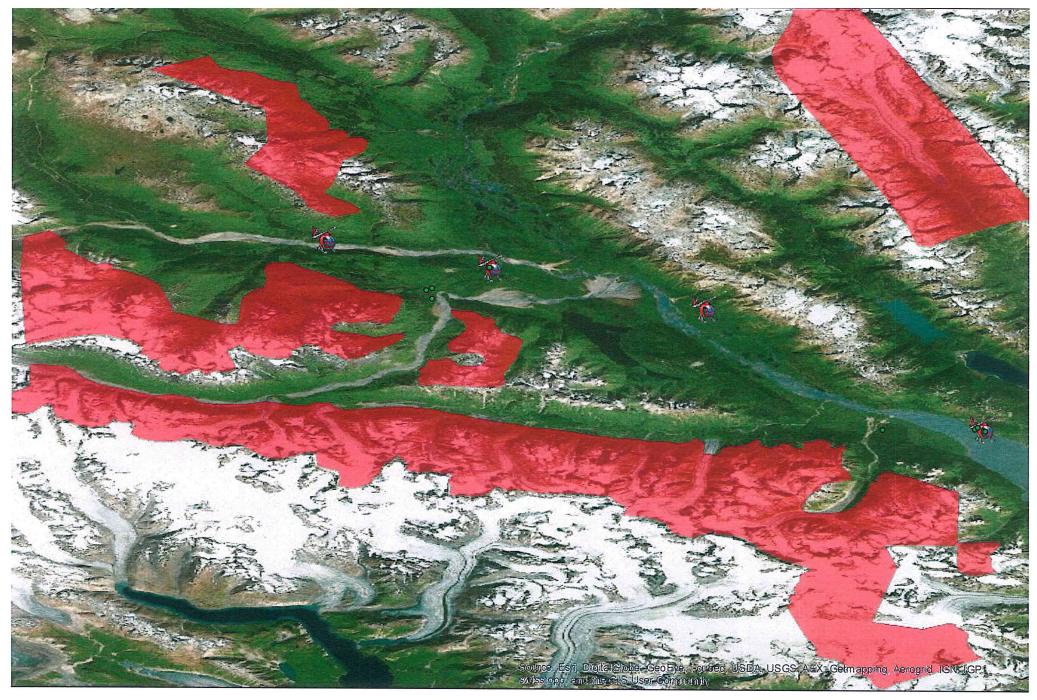


0	5	10			20 Miles
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0 5 10 20 Miles

• Altitude < 1500 Feet

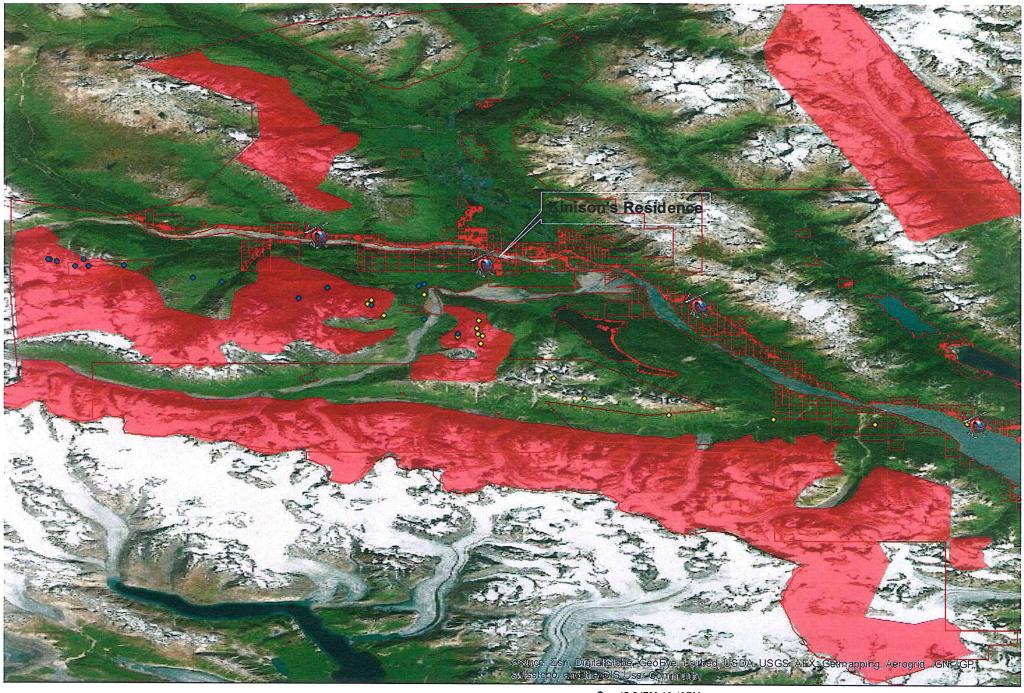
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Les .



Graphic 2

HeliskiApprovedArea_2014





0		5		10				20 Miles
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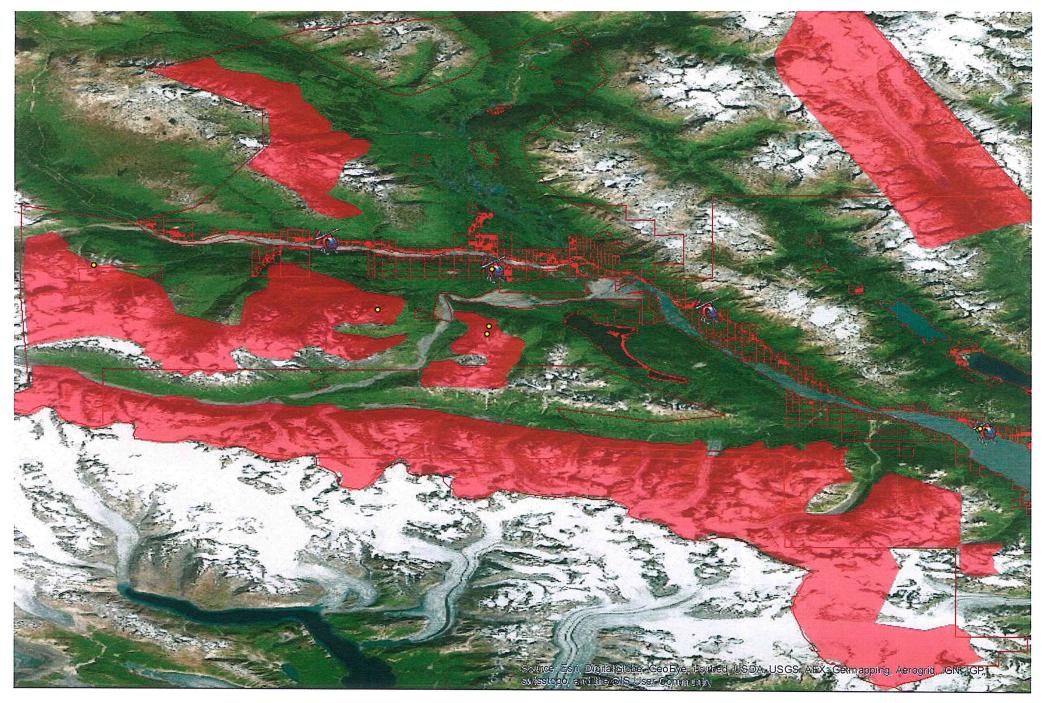
• 15:24PM-16:18PM

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March14CSV



Graphic 3





0	5	10			20 Miles
LI		 	 I	- Í	

• March14_Landings

Keliport

Graphic 4

HeliskiApprovedArea_2014

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HAINES BO HELISKIING COM P.O. Box 1209 + 103 Haines, Alask	IPLAINT FORM 3 Third Avenue S.
Ph: 907-766-2231 F www.hainesbo	Fax: 907-766-2716
Today's Date: 3 - 18-15	3 BO.
Your Contact Information	NOT.
Name: (first, middle initial, last) Shanah E. Kinison	Chy
Mailing Address: (address, city, state, zip code) Physical A	Address: (address, city, state, zip code)
1460 Box 3842 Haines, AK 99627 Lot 5 Ea	she Broff Dr. Haines, AK 99827
Home Phone: (include area code) Work Phone: (include area	
(907)767-5687	freventide @ gmail
Complaint: Please describe the alleged or suspected violation Helpful details include helicopter color and tail numbers , (Attach additional pages or use the backside of this form, if nece <u>info@haines.ak.us</u> or bring them to the Haines Borough Adminis	exact location, number of skiers, date, and time. essary.) If you have photos, please email them to
On Saturday 3/14/2015 at 3:5	O PM a dark (Black and gray)
helicopter flew directly over m	14 property very low. 1 was
Standing outside right next to n	ny porch with a Friend and
we heard a helicopter really loud	. Too loud to be normal. It
was flying so low that we	cald not see it untill it
popped right through a break	in the trees and lame
right over my garden. Flying	very low skimming the
trees flew across my entire	yard and over Eagle
Bluff drive. It was Flying so lo	on that it quickly dissappeared
from my view.	/
	lice Only
Date Received by Borough Manager:	Forwarded for Response or Investigation to:
Copy given to: Date:	Date:
Results of Investigation:	
Action Taken	Form Received by: K. Kielsmeier
Complainant Contacted regarding Results of Investigation:	Date StampEIVED Haines Borougi
Contacted by Date	- ,
 Action: (attach additional pages, as needed) 	MAR 18 2015
	Date-stamped copy given to complainant
HCF - 3/13	······



DATE: December 11, 2003

- TO: Haines Borough Planning Commission
- FROM: Barbara Sheinberg, AICP, Sheinberg Associates

SUBJECT: Possible Heliports in Haines Borough - Public Comment Report

1.0 Bulleted Summary Key Comments/Points

- Many residents were moderately to very dissatisfied with the Heliport Evaluation Survey format and some of the criteria.
- Residents seek recognition of the many hours of citizen work, as far back as the early 1990's, that has been spent on this issue, including work by the former Helicopter Service Area Board. This work should be reviewed and respected. Many comment that the role of elected and appointed officials is to represent residents who live out the highway and heed residents' votes, opinions and rights; the Assembly's job is to work to eliminate the negative impacts of the helicopter industry to residents and existing uses.
- Virtually all support the airport as a heliport. The most frequent comment is that the airport is supported as a heliport. Many find this the only appropriate site.
- A "screening level review" was conducted to quantify and compare the number of residents that would be affected by noise at each possible site. To do this the number of parcels and developed parcels (assumed to roughly equate to the number of dwellings) within a 3,000 ft of each possible heliport were counted by the Borough GIS. Note that many factors influence how sound travels including weather and topography; helicopter sounds will often be heard far beyond 3,000 ft.

Possible heliport sites with the fewest number of developed parcels within 3,000 ft of the site are: (5) Devil's Elbow, (8) Tsirku River drainage site, (14) Eldred Rock, and (1) Porcupine. Possible heliport sites with the most developed parcels within 3,000 ft of the site are: (4) 40 acre parcel at Steel Bridge, (15) Excursion Inlet, (10) 18-mile Stewart property, (9) 19-mile slide area, and (2) 33-mile roadhouse.

• If weather permits, possible heliport sites 9-15 could tend to favor State SUD designated flight path B, along the Takhin River rather than flight path A, along the highway and Chilkat River (thus less flying over dwellings).

- A general "screening level" review of the impact to anadromous streams, wetlands and bird habitat was prepared. In general, the sites that raise fewer concerns over impact to the natural environment are the sites that are already developed, including the (11) airport, (12) sawmill, (13) tankfarm, (2) 33-mile (and also (14) Eldred Rock). The already developed 18-mile site (10) is an exception to this generalization as it is near to Bald Eagle Council Grounds and is a designated moose winter concentration area. Sites with a higher level of concern over potential impact to the natural environment include the (4) Steel Bridge parcel, (6) sandy DOT&PF area, (7) Wells Bridge, and (8) Tsirku River drainage. Also, there is an active goshawk nest in the Porcupine area.
- Some favor remote sites (Devil's Elbow, Tsirku) where fewer residents are immediately affected by noise, the "trade-off" for some is concern over possible biological and environmental impact.
- Some suggest that only already developed sites should be considered, such as the airport, saw mill, tank farm, 33-mile, where industrial impacts are already expected and known.
- Some suggest that it makes no sense to consider sites close to the airport such as the sawmill or tankfarm, since they are so proximate to the airport where helicopters can already take off and land.
- (1) Porcupine, (5) Devil's Elbow, (11) the Airport, and (14) Eldred Rock had higher scores (more favorable) relative to other sites on the Heliport Evaluation Matrix.
- Many suggest that noise and safety factors be given highest consideration when heliport sites are considered as these impacts are of most concern to residents and are the impacts most difficult to minimize or mitigate.
- Questions and points for clarification that are raised repeatedly include:
 - o Are heli-ski operators and operations now covered by the Borough's Title 5 Tour Permits?
 - o Hard data on local economic benefits from the heli-ski industry should be prepared to facilitate informed decisions on how much public sector investment is appropriate for the industry.
 - o What exactly does "existing use" in the General Use zoning district mean vis-à-vis helicopters (§18.70.030 M) Is it linked to level of use? Will a Conditional Use permit ever be needed?

2.0 BACKGROUND, PURPOSE AND PROCESS

Helicopter landing and takeoff is allowed at the Haines Airport and heliports are a Use-by Right in the Heavy Industrial zoning district. In addition, Haines Municipal Code §18.70.030 establishes that heliports are a Conditional Use in the General Use zoning district, and it is commonly mentioned that helicopter take-offs and landings are considered an "existing use" at 33-mile and 18-mile. Other relevant information is that the State recently issued its Special Use Designation (SUD) regulations for heli-skiing in designated areas of Haines. The SUD designates two flight paths from the airport, one along the south side of the highway-Chilkat River where a minimum of 1,500 ft altitude is required, and the other along the Takhin River where a minimum of 5,000 ft altitude is required, to access designated areas of State land where heli-skiing is allowed, during prescribed months. The period within which an appeal to the SUD could be filed closed November 29, 2003. Also, helicopter landings are not allowed in the Chilkat Bald Eagle Preserve.

The Haines Borough Assembly asked that the Planning Commission recommend one (or more) sites for a heliport that could serve ad-hoc, recreational helicopter activities.

This has been requested due to noise and safety concerns that have been raised with periodic use of the 18-mile and 33-mile sites, as well as the fact that designating a heliport could give some stability and predictability to the recreational heli-industries, possibly encouraging investment.

A challenge for the Planning Commission was how to objectively evaluate the pros and cons of possible heliport sites, as this issue raises both a variety of concerns over impacts and emotions. To accomplish this, the Planning Commission:

- Discussed this matter with the public at two Planning Commission meetings: November 13, 2003 (at Mosquito Lake) and December 4, 2003.
- At the December 4 meeting the Commission listened to formal comment on this matter for over two hours.
- The Commission also worked among itself, with Sheinberg Associates community planning consultants, and with the public to 'brainstorm' a number of possible heliport sites and criteria against which possible heliport sites could be evaluated. Further, Borough staff used its computer GIS (geographic information system) to count the number of parcels near each possible heliport site and Haines area ADF&G staff supplied general "screening level" information about wetlands and habitat near each possible site. General criteria included Land Use, Noise, Site Acquisition and Development, Safety, Economics and the Natural Environment. The resultant Heliport Evaluation Matrix and 4-page color map series was mailed to over 70 residents and made available to the general public in late November. Residents had just over a week to return the surveys. Fifty-six (56) surveys or comments letters were submitted.

Despite the fact that many residents were moderately to very dissatisfied with the Heliport Evaluation Survey format and some of the criteria, the survey did generate valuable comment on the topic for the Planning Commission¹.

This report summarizes public comment.

¹ Residents felt the survey was confusing, that many of the criteria should more appropriately have been completed by experts rather than the general public, and that the timeframe for responding was too short. Comments made by residents also indicated that some were not familiar with designated flight paths established in the State's SUD.

3.0 GENERAL COMMENTS

A. Public versus Private Land Ownership and Economics

A survey question asked whether landowners of the various sites were willing to sell or lease the land to the borough. This generated many comments and concerns.

The "cons" of Borough ownership are competition with the private sector, and many comments expressing the sentiment that spending Borough funds to cater to one particular industry, or specifically to the heli-skiing industry which has mixed or negative support among residents, is not an appropriate use of Borough funds – "it is the Borough's job to zone, not own."

From a public policy perspective, the "pros" of Borough ownership of a heliport are that the site will be equally open to all (private landowners such as at 33 and 18 mile can limit or choose who uses the site); that the Borough will have more direct control over site design, development and management of the operation; and that a publicly owned facility will be eligible for funding and lower interest rates available only to the public sector.

Note that even if the public (Borough) did own a heliport there does not appear to be a mechanism to require operators to use that site if other allowed sites are functioning satisfactorily.

In response to economic evaluation criteria including whether the site would lead to increased or decreased flight time, the relative proximity of site to heli-destinations, and availability of road, phone and power, as well as proximity to developed accommodations and services, several comment that businesses need to pay for privately-used infrastructure. Others note that it is a "rule of thumb" that acceptable destinations in the heliskiers are 10-35 miles from fueling areas. Given weather factors and destination choices (see State SUD) there does not appear to be a significant difference in flight times to destinations between possible sites 1-10. Many note that proximity to developed accommodations and amenities is not relevant it is the private sector's job to respond to business opportunities.

Other frequently cited economic concerns are about decreased property value near heliport sites. Several people comment on the year-round economic contribution that residents make to the community through property taxes and daily spending, whereas heli-skiers provide only sporadic income. Some find that helicopters will make an important contribution to the development of year-round tourism. Another comment is that it is businesses' job, not the Boroughs, to locate and evaluate the appropriateness of sites and present an analysis of the data to justify their proposed heliport site.

B. Noise

Recognizing the value of peace and quiet to resident's lifestyle and quality of life, disruption of peace and quiet, and the presence of helicopters in residents' backyards are identified as major concerns. Helicopter noise, especially the duration and frequency of noise, are issues. Many

respondents note that a 3000' buffer between residences and take-off / landing areas is too small².

To quantify and compare the number of residents that would be affected by noise at each possible site, the number of parcels and developed parcels (assumed to roughly equate to the number of dwellings) within a 1,500 ft radius (3,000 ft total) of each possible heliport were counted by the borough GIS. Three thousand feet was chosen because the Juneau Heliport Assessment Study (Michael Baker Jr, September 2001) found the noise level at the edges of a 3,000 ft corridor around helicopter flight paths to be an estimated 65 dBA (the level which starts to interfere with normal conversation)³. Note that many factors influence how sound travels including weather and topography; helicopter sounds will often be heard far beyond 3,000 ft.

- Possible heliport sites with the least number of developed parcels within 3,000 ft of the site are: (5) Devil's Elbow, (8) Tsirku River drainage site, (14) Eldred Rock, and (1) Porcupine.
- **Possible heliport sites with the most developed parcels within 3,000 ft of the site are:** (4) 40 acre parcel at Steel Bridge, (15) Excursion Inlet, (10) 18-mile Stewart property, (9) 19-mile slide area, and (2) 33-mile roadhouse.
- Possible heliport sites 9-15 could tend to favor State SUD designated flight path B, along the Takhin River rather than flight path A, along the highway and Chilkat River (thus less flying over dwellings).

C. Impact on the Natural Environment

A general "screening level" review of the impact to anadromous streams, wetlands and bird habitat was expeditiously provided by Haines area ADF&G staff. The public was invited to build upon this by adding local knowledge about specific sites.

- In general, the sites that raise lesser concern over impact to the natural environment are the sites that are already developed, including the (11) airport, (12) sawmill, (13) tankfarm, (2) 33-mile, as well as (14) Eldred Rock.
- The already developed 18-mile site (10) is an exception to this generalization as it is quite close to Bald Eagle Council Grounds and is a designated moose winter concentration area.

 $^{^{2}}$ No assertion is made that 3,000 ft is an appropriate or minimum separation, but this was a common and understandable misinterpretation of the survey's counting the number of parcels within 3,000 ft of each possible heliport site.

³ Many suggest that a 3,000 ft or 6,000 ft flight path from heliport sites to destinations be drawn and the number of developed parcels within this corridor be counted for a more complete assessment and comparison by site of the impact of helicopter noise. This was the technique used by Michael Baker Jr in the Juneau Heliport Assessment study.

• Other sites with a higher level of concern over potential impact to the natural environment include the (4) Steel Bridge parcel, (6) sandy DOT&PF area, (7) Wells Bridge, and (8) Tsirku River drainage.

Environmental and biological concerns primarily focus on 1) concern about fuel leaks from helicopter use and associated fuel storage / transfer; 2) the fact that some sites and the area in general is so proximate to the Chilkat Bald Eagle Preserve, a special place that might be impacted by helicopter use and also the foundation for a good deal of tourist-economic activity; and 3) concern about the effect of helicopter noise on wildlife behavior and habitat, particularly for eagles and mountain goat.

D. Safety

General safety concerns include helicopter use adjacent to (or flying low near) roads, the highway, buildings, parking areas, or fuel tanks. Many suggest that residents do not have this expertise and that specific heliport setback requirements from a State highway be obtained from FAA or FHWA. It is noted that Juneau-based FAA staff have reviewed the 33-mile site in the past and not expressed any verbal concerns regarding helicopter use. Others raise liability concerns, both for the Borough if it designates or permits a site, and also for private landowners, if there is an accident.

4.0 SPECIFIC SITE COMMENTS

See Appendix A

APPENDIX A

SITE SPECIFIC COMMENTS REGARDING POSSIBLE HELIPORTS IN HAINES BOROUGH

Site specific comments on possible heliport sites in this appendix are from the Heliport Evaluation Matrix and summarized from letters sent to the Planning Commission, the Helicopter Service Area Board minutes, and testimony offered at November 13 and December 4, 2003, Planning Commission meetings.

How to Use and Not Use the Heliport Evaluation Matrix Results

The Heliport Evaluation Matrix was not designed to create a single average score per site on the suitability for heliports and the results can not be presented that way. Values reported for each criteria are the number of respondents, the average of all scores for that criteria, and the median for all scores for that criteria (median is the value in the middle of a set of numbers; that is, half the numbers have values that are greater than the median, and half have values that are less).

Site Specific Comments: (1) Porcupine

- Fewer number of developed parcels nearby compared to other sites
- Landowner(s) amenable to idea
- Active goshawk nest in area

COMMENTS (# of times comment mentioned in parenthesis)

(4) Regular helicopter use should not be based out of historic sites such as the Porcupine.

(1) Not only is the Porcupine valuable in the historic sense, but could also be used at a later date by a lower-impact type of tour group.

(1) Best site for upper Klehini Valley. Fewest people disturbed. Needs services.

(1) I own land in the Porcupine Mining Area, which is attractive for cross-country skiing, snow machining, and the already designated Heliskiing. There are no people living in this area and I am willing to trade a piece of this land to the Borough to accommodate such activity.

(1) We own a 20-acre tract near the Porcupine townsite. In later stages of development, we intend to build and maintain a fixed-wing airstrip. We hope future restrictions will not prevent us from loading helicopters there as well.

Heliport Evaluation Matrix Results						
	No.					
	responses	Average	Median			
Proximity to place to warm up & eat	30	1.8	2.0			
Nearby land available for commercial						
development	29	3.0	3.0			
Adjacent land use is compatible with						
light industrial use/ heliport	31	3.2	3.0			
Approx. no. properties, and developed						
properties within 1500' of site (2,0)	5	3.0	3.0			
Approx no. properties, and developed						
properties, within 3000' of site (6,1)	5	3.0	3.0			
Estimated frequency (relative) of						
helicopter flights from this site. 5=very						
few; 1= very many	17	2.8	3.0			
Landowner willing to consider sale,						
lease or trade to Haines Borough for						
use as heliport (leave blank if don't						
know)	1	1.0	1.0			
Clear approach and takeoff surfaces	28	2.9	3.0			
Has sufficient area for onsite firefighting						
and rescue	28	2.8	3.5			
Rate site compared to existing 33 mile						
and 18 mile site for relative increase or						
decrease in flight time	21	3.0	3.0			
Relative proximity to heli-destinations	28	3.8	5.0			
Road, phone and power availability	28	2.2	2.0			
Site contains or is adjacent to	Near Porcupine Creek, and					
anadromous stream	another unnamed cataloged					
	anadromous fish stream.					
Site may be wetlands There are likely wetlands in the second seco						
	area that will need to be avoided.					
Relative impact of helicopters to nearby						
eagle or important bird habitat	Likely not ar	issue.				

Economics:

(2) There would be a decrease in flight time to destinations relative to 33 and 18-mile locations.

Natural Resources:

(1) There is no threat to anadromous streams at this site.

(1) There is an active goshawk nest (very rare and sensitive species) in the vicinity of this site.

Site Specific Comments: (2) 33-mile Road house

- An existing helicopter use area though concerns raised over exactly what existing use means and many wish to use Conditional Use permit and review to mitigate impacts and make more compatible.
- One of sites with fewer environmental concerns.
- Higher number of developed parcels nearby compared to other sites.
- Safety concerns with proximity to road and buildings raised but verbal report from FAA Juneau does not indicate concern.

COMMENTE (# of times comme	in mentioned in parentilesis)				
	Heliport Evaluation Matrix Results				
(3) Conditional use should be		No.			
maintained for 33-mile, so		responses	Average	Median	
landowners around the site	Proximity to place to warm up & eat	28	3.9	5.0	
have the right to know if	Nearby land available for commercial				
•	development	24	2.8	2.0	
flights or activities will be	Adjacent land use is compatible with				
increased.	light industrial use/ heliport	34	2.4	2.0	
	Approx. no. properties, and developed				
(9) 33-mile should not be	properties within 1500' of site (24,10)	5	1.6	1.0	
granted full heliport status.	Approx no. properties, and developed				
8FF	properties, within 3000' of site (34,17)	5	1.6	1.0	
(2) The current site at 33-mile	Estimated frequency (relative) of				
	helicopter flights from this site. 5=very				
is adequate.	few; 1= very many	16	2.3	2.0	
	Landowner willing to consider sale,				
(1) Essential. Has established	lease or trade to Haines Borough for				
heli-port, easy access, services	use as heliport (leave blank if don't				
available.	know)	2	3.0	3.0	
	Clear approach and takeoff surfaces	31	2.3	2.0	
Land Haa	Has sufficient area for onsite firefighting				
Land Use:	and rescue	29	2.9	3.0	
(1) Adjacent land use is	Rate site compared to existing 33 mile				
residential.	and 18 mile site for relative increase or	4.0			
(1) Nearby accommodations	decrease in flight time	12	3.0	3.0	
are good but small.	Relative proximity to heli-destinations	24	3.6	4.0	
	Road, phone and power availability	25	4.1	5.0	
Sefety	Site contains or is adjacent to	This develop			
Safety:	anadromous stream	little threat a	nearby ana	dromous	
(1) Approach and take-off		stream.			
surfaces are over the highway.	Site may be wetlands	Likely not an	issue.		
	Relative impact of helicopters to nearby				
Natural Resources:	eagle or important bird habitat	Likely not an	issue.		

COMMENTS (# of times comment mentioned in parenthesis)

(1) There is no threat to anadromous streams at this site.

(1) Fuel storage is a danger to the water table.

Site Specific Comments: (3) Highway Turn-out at 31-mile

• Higher number of developed parcels nearby compared to other sites.

COMMENTS (# of times comment mentioned in parenthesis)

(1) Heliport location at 31-mile is unacceptable.

(1) This is the only acceptable heliport site.

Heliport Evaluation Matrix ResultsNo.No.No.(1) Accomodations are located(1) Accomodations are locatedProximity to place to warm up & eat292.22.0(1) Adjacent land use isNearby land available for commercial101010(1) Adjacent land use isAdjacent land use is compatible with111010(1) Adjacent land could beAdjacent land use is compatible with341.71.0(1) Adjacent land could beApprox. no. properties, and developed101.0(1) Adjacent and take offproperties, within 3000' of site(20,12)41.0(1) Approach and take-off101.01.0Safety:5=very few; 1=very many173.33.0(1) Approach and take-off101.01.0surfaces are over the highway.10 Approach and take-off1.01.0(1) Approach and take-off1.01.01.0Clear approach and takeoff1.11.01.0Clear approach and takeoff1.11.01.0Clear approach and takeoff1.01.01.0Clear approach and takeoff1.11.01.0Clear approach and takeoff21.01.0Clear approach and takeoff21.01.0Clear approach and takeoff21.01.0Clear approach and takeoff22.01.0(1) There would be	(1) This site is best-suited for a						
Land Use: (1) Accomodations are located from 2 mi to 33 mi. (1) Adjacent land use is residential.responsesAverageMedian(1) Adjacent land use is residential.Nearby land available for commercial development281.92.0(1) Adjacent land could be leased from the state for 2 months.Adjacent land use is compatible with light industrial use/ heliport341.71.0(1) Approx no. properties, and developed properties, within 1500' of site (20,12)41.01.0Approx no. properties, and developed properties, within 3000' of site (42,12)41.01.0Safety: (1) Approach and take-off surfaces are over the highway. (1) Approach and take-off surfaces are removed.Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)21.01.0Clear approach and take-off surfaces are removed.Clear approach and takeoff surfaces311.81.0(1) Small, not level, emergency site only.Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations.Site contains or is adjacent to and rescueNear Klehnin River and 31 Mile Creek cataloged anaromous fish streams(1) The flight time and proximity to destinationsSite may be wetlandsThere are likely wetlands in the area that will need to be avoided(1) The flight time and proximity to destinationsRelative impact of helicopters to nearby eagle or important bird habitatLikely not an issue	spring heli-skiing site.	Heliport Evaluation		S			
Land Use: (1) Accomodations are located from 2 mi. to 33 mi. (1) Adjacent land use is residential. (1) Adjacent land could be leased from the state for 2 months.Proximity to place to warm up & eat variable for commercial development29 2.22.0(1) Adjacent land use is residential. (1) Adjacent land could be leased from the state for 2 months.Adjacent land use is compatible with light industrial use/ heliport281.92.0(1) Adjacent land use is residential. (1) Adjacent land could be leased from the state for 2 months.Adjacent land use is compatible with light industrial use/ heliport341.71.0Safety: (1) Approach and take-off surfaces are over the highway. (1) Approach and take-off surfaces are removed. (1) Small, not level, emergency site only.10100100Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations. (1) The flight time and proximity to destinations relative to 33-mile locations would be the same.10100The flight time and proximity to destinations relative to 33-mile locations would be the same.Ste contains or is adjacent to anadromous streamNear Klehnin River and 31 Mile Creek cataloged anadromous fish streamsSite may be wetlandsThere are likely wetlands in the area that will need to be avoided				Average	Median		
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Approx. no. properties, and developed properties within 1500' of site (20,12)41.01.0Approx. no. properties, and developed properties, and developed41.01.0Approx no. properties, and developed properties, and developed41.01.0Safety: (1) Approach and take-off surfaces are over the highway. (1) Approach and take-off surfaces could be safe if two trees are removed.5=very few; 1= very many take out the take off surfaces could be safe if two trees are removed.173.33.0(1) Small, not level, emergency site only.Clear approach and takeoff suffaces out does a slight increase in flight time to destinations relative to 33 and 18-mile locations.Clear approach and takeoff suffaces out does and rescue and rescue292.11.0Relative proximity to destinations relative to 33-mile locations would be the same.Site may be wetlandsNear Klehini River and 31 Mile and corports to nearby eagle or important bird habitatNear Klehini River and 31 Mile and eactor bird and take dom does and and the area that will need to be avoided			34	1.7	1.0		
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Safety: (1) Approach and take-off surfaces are over the highway. (1) Approach and take-off surfaces could be safe if two trees are removed. (1) Small, not level, emergency site only.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many173.33.0(1) Approach and take-off surfaces could be safe if two trees are removed. (1) Small, not level, emergency site only.Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)21.01.0Clear approach and takeoff surfaces311.81.0(1) Small, not level, emergency site only.Clear approach and takeoff surfaces311.81.0Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations. (1) The flight time and proximity to destinations relative to 33-mile location would be the same.Relative impact of helicopters to nearby eagle or important bird habitatNear Klehini River and 31 Mile Creek cataloged anadromous fish streams			4	1.0	1.0		
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(1) Small, not level, emergency site only.Has sufficient area for onsite firefighting and rescue292.11.0Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and proximity to destinationsRate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time212.62.0Relative proximity to heli-destinations282.93.0Road, phone and power availability292.83.0Site contains or is adjacent to anadromous streamNear Klehini River and 31 Mile 		- /		-			
and rescue292.11.0Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations. (1) The flight time and proximity to destinationsand rescue292.11.0Rate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time212.62.0Relative proximity to heli-destinations282.93.0Road, phone and power availability292.83.0Site contains or is adjacent to anadromous streamNear Klehini River and 31 Mile Creek cataloged anadromous fish streamsSite may be wetlandsThere are likely wetlands in the area that will need to be avoidedRelative impact of helicopters to nearby eagle or important bird habitatLikely not an issue			31	1.8	1.0		
Economics: (2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations. (1) The flight time and proximity to destinations relative to 33-mile location would be the same.Rate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time212.62.0Relative proximity to heli-destinations Relative proximity to heli-destinations (1) The flight time and proximity to destinations relative to 33-mile location would be the same.Rate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time212.62.0Relative proximity to heli-destinations Relative proximity to heli-destinations site contains or is adjacent to anadromous streamNear Klehini River and 31 Mile Creek cataloged anadromous fish streamsSite may be wetlandsThere are likely wetlands in the area that will need to be avoidedRelative impact of helicopters to nearby eagle or important bird habitatLikely not an issue		and rescue	29	2.1	1.0		
(2) There would be a slight increase in flight time to destinations relative to 33 and 18-mile locations.Relative proximity to heli-destinations212.02.0Relative proximity to heli-destinations282.93.0Noad, phone and power availability292.83.0Site contains or is adjacent to anadromous streamNear Klehini River and 31 Mile Creek cataloged anadromous fish streamsSite may be wetlandsThere are likely wetlands in the area that will need to be avoidedRelative impact of helicopters to nearby eagle or important bird habitatLikely not an issue		and 18 mile site for relative increase or					
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relative to 33-mile location would be the same.Relative impact of helicopters to nearby eagle or important bird habitatLikely not an issue	proximity to destinations	Sile may be wellands					
would be the same. Likely not an issue	1 2	Relative impact of beliconters to pearby					
			Likely not an	issue			
(1) UTITIES are available	(1) Utilities are available.						

Natural Resources:

(2) Relative impact to bird habitat is an issue.

(1) Anadromous streams and wetlands are not concerns for a heliport.

Site Specific Comments: (4) 40 acre parcel across Steel Bridge

- Higher number of developed parcels nearby compared to other sites.
- Higher level of concern regarding possible environmental impacts.

COMMENTS (# of times comment mentioned in parenthesis)

(4) I oppose heliport and/or flightseeing development in the 40-acre parcel near the Steel Bridge.

(2) The Little Salmon River area is biologically important for birds and other wetland animals, and should not have a heliport located Heliport Evaluation Matrix Results

there.	Heliport Evaluation Matrix Results				
		No.			
		responses	Average	Median	
(1) This area has been	Proximity to place to warm up & eat	29	2.0	2.0	
described as the "Fastest	Nearby land available for commercial				
growing part of the Haines	development	27	2.3	2.0	
Borough."	Adjacent land use is compatible with				
8	light industrial use/ heliport	32	2.0	1.0	
(1) Good site, easy access,	Approx. no. properties, and developed				
	properties within 1500' of site (35,10)	5	1.0	1.0	
large area.	Approx no. properties, and developed	_			
	properties, within 3000' of site (72,20)	5	1.0	1.0	
Land Use:	Estimated frequency (relative) of				
(1) Adjacent land is residential	helicopter flights from this site.	10			
	5=very few; 1= very many	19	2.8	3.0	
Safety:	Landowner willing to consider sale,				
(1) Approach and take-off	lease or trade to Haines Borough for				
surfaces are in residential	use as heliport (leave blank if don't	1	1.0	1.0	
	know)	1 29	1.0 2.6	1.0 2.0	
areas.	Clear approach and takeoff surfaces	29	2.0	2.0	
(1) Approach and take-off	Has sufficient area for onsite firefighting	20	2.0	2.0	
surfaces could be good with	and rescue Rate site compared to existing 33 mile	29	2.8	3.0	
improvement.	and 18 mile site for relative increase or				
L	decrease in flight time	21	2.4	2.0	
Economics:	Relative proximity to heli-destinations	28	3.1	3.0	
(2) There would be a slight	Road, phone and power availability	20	2.9	3.0	
· · · · ·	Site contains or is adjacent to	Near the Kle	-		
increase in flight time to	anadromous stream	migration co		•	
destinations relative to 33 and		salmon.			
18-mile locations if using	Site may be wetlands	There are lik	elv wetlands	in the	
upper valley, and a decrease if		area that wil			
using sunshine.	Relative impact of helicopters to nearby				
5	eagle or important bird habitat	There are eagle nests along the Klehini River in the vicinity.			
	augie et important bila habitat			·	

Natural Resources:

(1) This is a brown bear corridor.

(1) There is a large wetland that supports migratory swans, geese, and other birds.

(1) This parcel is in the middle of a residential area whose residents vehemently oppose disruptions of their peace and quiet.

Site Specific Comments: (5) Devil's Elbow

• No developed parcels within 3000 feet.

locations.

• Those that favor remote location to minimize noise impacts to residents mention this site as possible heliport, though some strongly opposed.

COMMENTS (# of times comment mentioned in parenthesis)

(2) Devil's Elbow should be	Heliport Evaluation Matrix Results					
considered as a location for a		No.				
future heliport		responses	Average	Median		
Tuture henpoit	Proximity to place to warm up & eat	31	1.5	1.0		
	Nearby land available for commercial					
Pros and cons specifically	development	29	2.3	2.0		
discussed during Dec 4	Adjacent land use is compatible with					
meeting.	light industrial use/ heliport	33	2.5	2.0		
	Approx. no. properties, and developed					
(3) Heliport location at Devil's	properties within 1500' of site (0,0)	4	4.0	4.0		
Elbow is unacceptable.	Approx no. properties, and developed					
Libow is unacceptable.	properties, within 3000' of site (0,0)	4	4.0	4.0		
	Estimated frequency (relative) of					
(1) Too remote to get in and	helicopter flights from this site.					
out – should be for emergency	5=very few; 1= very many	17	2.9	3.0		
use only.	Landowner willing to consider sale,					
-	lease or trade to Haines Borough for					
(1) Any heliport site at Devil's	use as heliport (leave blank if don't	•				
Elbow would mean that the	know)	2	1.0	1.0		
	Clear approach and takeoff surfaces	30	2.8	2.5		
logging roads would need to be	Has sufficient area for onsite firefighting					
plowed, eliminating use for all	and rescue	27	2.5	2.0		
other winter activities	Rate site compared to existing 33 mile					
(snowmobiling, skiing,	and 18 mile site for relative increase or	00	2.4	10		
dogsledding, etc.)	decrease in flight time	23	3.1	4.0		
	Relative proximity to heli-destinations	29	3.4	4.0		
Noise:	Road, phone and power availability	29	2.0	2.0		
	Site contains or is adjacent to	Near the hea				
(1) Consider the risk to water	anadromous stream	Salmon Rive				
quality and fish habitat.		sockeye, chum and coho salmon				
	Site may be wetlands	stream. There are lik	alywatlanda	in the		
Economics:	Sile may be wellands	area that will				
(2) There would be a decrease	Relative impact of helicopters to nearby					
in flight time to destinations	eagle or important bird habitat	Likely not an issue				
relative to 33 and 18-mile	cagic of important bird habitat	Likely not an	13306			

Natural Resources:

(2) The Little Salmon River area is biologically important for birds and other wetland animals, and should not have a heliport located there.

(1) There is no threat to anadromous streams at this site.

(1) There are brown bear in the area.

(2) Relative impact to bird habitat is an issue.

(1) This site is adjacent to the Eagle Preserve.

(1) This is the richest bird habitat in the valley. Much more research is needed before you can even CONSIDER this site

Site Specific Comments: (6) Sandy Open Area used at times by DOT&PF

• Higher level of concern regarding possible environmental impacts.

COMMENTS (# of times comment mentioned in parenthesis)

(3) Heliport location at the	Heliport Evaluation Matrix Results					
DOT&PF location is		No.				
unacceptable.		responses	Average	Median		
-	Proximity to place to warm up & eat	31	2.0	2.0		
(1) Good site. Large, open area	Nearby land available for commercial					
close to highway.	development	28	2.4	2.0		
close to ingliway.	Adjacent land use is compatible with					
(1) This site is best suited for a	light industrial use/ heliport	32	2.4	2.0		
(1) This site is best-suited for a	Approx. no. properties, and developed	_				
spring heli-skiing site.	properties within 1500' of site (12,3)	5	1.0	1.0		
	Approx no. properties, and developed	_	4.0	1.0		
Land Use:	properties, within 3000' of site (31,7)	5	1.0	1.0		
(1) Accommodations are	Estimated frequency (relative) of helicopter flights from this site.					
located from 9-mile to 33-mile.	5=very few; 1= very many	15	3.0	3.0		
(1) This area is used by locals	Landowner willing to consider sale,	15	5.0	5.0		
in the winter and spring for	lease or trade to Haines Borough for					
cross-country skiing and in the	use as heliport (leave blank if don't					
summer for swimming.	know)	1	1.0	1.0		
summer for swimming.	Clear approach and takeoff surfaces	28	2.9	3.5		
NI	Has sufficient area for onsite firefighting					
Noise:	and rescue	27	3.1	4.0		
(1) Too close to the river.	Rate site compared to existing 33 mile					
	and 18 mile site for relative increase or					
Safety:	decrease in flight time	24	2.5	2.0		
(1) There are clear approach	Relative proximity to heli-destinations	27	2.9	3.0		
and take-off zones.	Road, phone and power availability	27	2.6	2.0		
	Site contains or is adjacent to	Near the Kle				
Economics:	anadromous stream	spawning ch				
(2) There would be a slight		Eagle Prese				
	Site may be wetlands	salmon spav				
increase in flight time to		area that wil				
destinations relative to 33 and	Relative impact of helicopters to nearby					
18-mile locations.	eagle or important bird habitat	There are eagle nests along the Klehini River in the vicinity.				
(1) There would be		Designated moose winter				
approximately ¹ /2 mile		concentration area.				
difference in flight time and	<u> </u>	•				
proximity to destinations relative	to 33 and 18-mile locations.					
(1) Utilities are evoilable						

(1) Utilities are available.

Natural Resources:

- (1) There are brown bear in the area.
- (1) Lots of wildlife is spotted here in the spring and summer.

Site Specific Comments: (7) Borough Property Across Wells Bridge

• Higher level of concern regarding possible environmental impacts.

COMMENTS (# of times comment mentioned in parenthesis)

	Heliport Evaluation Matrix Results					
(3) Heliport location across the		No.				
Wells Bridge is unacceptable.		responses	Average	Median		
(1) This site is too close to	Proximity to place to warm up & eat	31	2.4	2.0		
Klukwan.	Nearby land available for commercial					
	development	29	2.6	2.0		
Economics:	Adjacent land use is compatible with					
	light industrial use/ heliport	33	2.4	2.0		
(2) There would be an increase	Approx. no. properties, and developed					
in flight time to destinations	properties within 1500' of site (17,7)	5	1.0	1.0		
relative to 33 and 18-mile	Approx no. properties, and developed					
locations.	properties, within 3000' of site (32,9)	6	1.5	1.0		
	Estimated frequency (relative) of					
Natural Resources:	helicopter flights from this site.					
	5=very few; 1= very many	15	2.7	3.0		
(1) There is a moose	Landowner willing to consider sale,					
concentration in this area.	lease or trade to Haines Borough for					
	use as heliport (leave blank if don't					
	know)	1	1.0	1.0		
	Clear approach and takeoff surfaces	29	2.5	2.0		
	Has sufficient area for onsite firefighting					
	and rescue	29	2.7	2.0		
	Rate site compared to existing 33 mile					
	and 18 mile site for relative increase or					
	decrease in flight time	24	2.6	2.5		
	Relative proximity to heli-destinations	29	2.9	3.0		
	Road, phone and power availability	28	2.8	3.0		
	Site contains or is adjacent to	Near Muskra		important		
	anadromous stream	coho salmor				
	Site may be wetlands	There are likely wetlands in the				
		area that wil				
	Relative impact of helicopters to nearby	There are eagle nests along the				
	eagle or important bird habitat	Chilkat Rive				
		Designated		r		
		concentration area.				

Site Specific Comments: (8) Tsirku River Drainage within Haines State Forest

- No developed parcels within 3000 feet.
- Higher level of concern regarding possible environmental impacts.

COMMENTS (# of times comment mentioned in parenthesis)

	Heliport Evaluation Matrix Results					
(5) Heliport should not be		No.				
located at Tsirku River.		responses	Average	Median		
	Proximity to place to warm up & eat	30	1.4	1.0		
(2) Tsirku River Drainage	Nearby land available for commercial					
should be considered as a	development	27	2.0	1.0		
	Adjacent land use is compatible with					
location for a future heliport.	light industrial use/ heliport	31	2.0	1.0		
	Approx. no. properties, and developed					
(1) Tsirku River Drainage may	properties within 1500' of site (0,0)	5	2.6	1.0		
be an acceptable site for the	Approx no. properties, and developed					
heliport.	properties, within 3000' of site (0,0)	5	2.6	1.0		
nonport.	Estimated frequency (relative) of					
(1) The end of the large strength 1	helicopter flights from this site.					
(1) Too remote to be practical.	5=very few; 1= very many	16	2.9	3.0		
Should be used for emergency	Landowner willing to consider sale,					
site only.	lease or trade to Haines Borough for					
	use as heliport (leave blank if don't	4	1.0	4.0		
(1) "The 26 mile community	know)	1	1.0	1.0		
should not be viewed as a	Clear approach and takeoff surfaces	29	2.7	3.0		
"sacrificial zone" for industrial	Has sufficient area for onsite firefighting	00		4.0		
	and rescue	28	2.2	1.0		
scale tourism."	Rate site compared to existing 33 mile					
	and 18 mile site for relative increase or	00	0.5	0.0		
Natural Resources:	decrease in flight time	23	2.5	2.0		
(1) There are brown bear in the	Relative proximity to heli-destinations	30	3.0	3.5		
area.	Road, phone and power availability	28	1.9	1.5		
(1) This area is extremely	Site contains or is adjacent to	Near the cor				
•	anadromous stream	Salmon and				
diverse biologically. Do not		important rui				
develop here.	salmon. Near importan			chum and		
(1) Adjacent land is too close		coho spawning areas. There are likely wetlands in the				
to the river.	Site may be wetlands					
	Polotivo impost of balicantors to nearby	area that will				
	Relative impact of helicopters to nearby	An eagle nest is nearby and swans				
	eagle or important bird habitat	are known to use this area.				

Site Specific Comments: (9) 19-mile Slide area

- Geophysical/erosion hazard.
- Higher number of developed parcels nearby compared to other sites.

COMMENTS (# of times comment mentioned in parenthesis)

(4) Heliport location at the 19-mile Slide Area is not acceptable.

(1) This site is too close to Klukwan.

	Heliport Evaluation Matrix Results			
(1) This site is best-suited for a		No.		
spring heli-skiing site.		responses	Average	Median
spring nen sning site.	Proximity to place to warm up & eat	31	2.0	2.0
Land Use:	Nearby land available for commercial			
	development	29	1.9	2.0
(1) Accomodations are located	Adjacent land use is compatible with			
from 14-mile to 33-mile, and	light industrial use/ heliport	34	2.2	2.0
from 19-mile to town.	Approx. no. properties, and developed			
	properties within 1500' of site (17,10)	5	1.2	1.0
Safety:	Approx no. properties, and developed			
(1) There are clear approach	properties, within 3000' of site (38,18)	5	1.2	1.0
and take-off surfaces.	Estimated frequency (relative) of			
and take-on surfaces.	helicopter flights from this site.			
. .	5=very few; 1= very many	16	2.9	3.0
Economics:	Landowner willing to consider sale,			
(1) The flight time and	lease or trade to Haines Borough for			
proximity to destinations	use as heliport (leave blank if don't	4	1.0	1.0
relative to 18-mile location	know)	1 32	1.0 3.0	1.0 3.0
would be the same.	Clear approach and takeoff surfaces	32	3.0	3.0
(1) Utilities are located in the	Has sufficient area for onsite firefighting and rescue	20	2.4	2.0
area.	Rate site compared to existing 33 mile	30	3.1	3.0
alca.	and 18 mile site for relative increase or			
	decrease in flight time	23	2.7	3.0
Natural Resources:	Relative proximity to heli-destinations	28	3.0	3.0
(1) Eagle nest and viewing	Road, phone and power availability	29	3.0	3.0
area.	Site contains or is adjacent to	-		
(1) Wetlands may be impacted	anadromous stream	Near the Chilkat River, chum salmon spawn near this site. Likely not an issue.		
because this is a slide area on	Site may be wetlands			
the Chilkoot.	Relative impact of helicopters to nearby	Adjacent or in Council Grounds, a		
	eagle or important bird habitat	high use area by eagles.		
(1) Chum salmon do not spawn				

near this site.

(1) There are no eagles in this area in the spring.

Site Specific Comments: (10) 18-mile Stewart Property

- An existing helicopter use area though concerns raised over exactly what existing use means and many wish to use Conditional Use permit and review to mitigate impacts and make more compatible.
- Higher number of developed parcels nearby compared to other sites.
- Higher level of concern regarding possible environmental impacts.

COMMENTS (# of times comment mentioned in parenthesis)

(3) Conditional use should be	l .			
maintained for 18-mile, so	Heliport Evaluation	rt Evaluation Matrix Results		
landowners around the site		No.	A	Madian
have the right to know if		responses	Average	Median
•	Proximity to place to warm up & eat	28	2.4	2.0
flights or activities will be	Nearby land available for commercial development	25	2.2	2.0
increased.	Adjacent land use is compatible with	25	2.2	2.0
(3) Current helicopter use at	light industrial use/ heliport	32	2.0	1.0
18-mile is unacceptable.	Approx. no. properties, and developed		2.0	1.0
(4) 18-mile should not be	properties within 1500' of site (16,10)	5	1.6	1.0
considered for future heliport.	Approx no. properties, and developed			
(1) Residents at 18-mile should	properties, within 3000' of site (35,19)	5	1.6	1.0
take precedence over those	Estimated frequency (relative) of			
with new skiing interests	helicopter flights from this site.			
because the residents have	5=very few; 1= very many	17	2.8	3.0
been there a long time.	Landowner willing to consider sale,			
(2) Current site 18-mile is	lease or trade to Haines Borough for			
	use as heliport (leave blank if don't	2	2.0	2.0
adequate.	know) Clear approach and takeoff surfaces	2 28	3.0 2.9	3.0 3.0
(1) This is private property – if	Has sufficient area for onsite firefighting	20	2.9	5.0
the landowner wants it, great!	and rescue	27	3.0	3.0
	Rate site compared to existing 33 mile	21	0.0	0.0
Land Use:	and 18 mile site for relative increase or			
(1) Adjacent land use is	decrease in flight time	16	2.7	3.0
residential.	Relative proximity to heli-destinations	25	3.1	3.0
(1) Nearby accommodations	Road, phone and power availability	25	3.6	4.0
are in a private home.	Site contains or is adjacent to	Near 18 Mile	,	
1	anadromous stream	unnamed an		
Safety:		These are in		
(1) Approach and take-off	Oite merche wetlen de	and pink salmon streams.		
surfaces are in residential	Site may be wetlands	There are likely wetlands in the		
	Relative impact of helicopters to nearby	area that will need to be avoided.		
areas.	eagle or important bird habitat	There are eagle nests along the Chilkat River in the vicinity. This		
		site also near the Council Grounds		
Natural Resources:		high use area by eagles.		
(1) There is no threat to		Designated moose winter		
anadromous streams at this		concentration area.		
site.				

Economics: (1) Relative proximity to destinations is good for lower value.

Site Specific Comments: (11) Haines Airport

- Existing heliport, zoned Industrial-Heavy so heliports are use-By-Right.
- Most actively favor this site for heliport.
- Residents already expect noise, industrial-type impacts.
- One of sites with fewer environmental concerns.

COMMENTS (# of times comment mentioned in parenthesis)

(22) The avia	cting cita at t	na Hainas Air	port is adequa	to for haliport	noods
(22) The exis	sung she al h	ie manies An	port is adequa	le for henport	necus.

	Heliport Evaluation	Matrix Result	S	
(9) The Haines airport is the		No.		
only acceptable potential		responses	Average	Median
heliport site.	Proximity to place to warm up & eat	35	4.5	5.0
nenport site.	Nearby land available for commercial			
(1) The Using simpler is not on	development	32	4.3	5.0
(1) The Haines airport is not an	Adjacent land use is compatible with			
acceptable site.	light industrial use/ heliport	40	4.6	5.0
	Approx. no. properties, and developed			
(1) "Don't sacrifice our entire	properties within 1500' of site (15,1)	5	4.0	4.0
neighborhood when the	Approx no. properties, and developed			
helicopters already have two	properties, within 3000' of site (27,3)	5	4.0	4.0
heliports, not to mention Al	Estimated frequency (relative) of			
Gilliam's private heliport up	helicopter flights from this site.	00	0.4	
the Tsirku drainage."	5=very few; 1= very many	23	2.4	2.0
ule I sliku urallage.	Landowner willing to consider sale, lease or trade to Haines Borough for			
	use as heliport (leave blank if don't			
(1) The airport meets the	know)	1	1.0	1.0
economic criteria of the	Clear approach and takeoff surfaces	36	4.8	5.0
proximity to services that the	Has sufficient area for onsite firefighting	00	-1.0	0.0
Haines town can best provide.	and rescue	35	4.8	5.0
Ĩ	Rate site compared to existing 33 mile			0.0
Noise:	and 18 mile site for relative increase or			
(1) Noise is not an issue here –	decrease in flight time	26	3.8	4.0
	Relative proximity to heli-destinations	31	3.7	4.0
it's already an airport.	Road, phone and power availability	32	4.8	5.0
	Site contains or is adjacent to	Several anadromous streams are		eams are
Safety:	anadromous stream	nearby, but this is likely not an		
(1) Approach and take-off		issue. Eulachon migrate to spav		
surfaces are already set up.		near this are	e noise	
• •		may pose impacts.		
Natural Resources:	Site may be wetlands	Likely not an	issue.	
(1) There is no threat to	Relative impact of helicopters to nearby			
anadromous streams at this	eagle or important bird habitat	Likely not an	issue.	
anauromous streams at tills				

site.

(1) Eulachon rely on the wetlands, so wetlands are an issue at this site.

Site Specific Comments: (12) Sawmill

- One of sites with fewer environmental concerns.
- zoned Industrial-Heavy or Waterfront Industrial so heliports are use-By-Right.
- Redundant site as close to airport.

COMMENTS (# of times comment mentioned in parenthesis)

	Heliport Evaluation	S		
(3) This site is unacceptable.		No.		
		responses	Average	Median
(2) There is no reason to have a	Proximity to place to warm up & eat	31	2.6	2.0
heli-port 3 air miles from the	Nearby land available for commercial development	29	2.8	2.0
airport. Remove this site from consideration.	Adjacent land use is compatible with light industrial use/ heliport	35	2.7	2.0
(1) This site has good access,	Approx. no. properties, and developed properties within 1500' of site (22,5)	5	1.6	1.0
but it is ugly. (1) This site may be	Approx no. properties, and developed properties, within 3000' of site (40,5)	5	1.4	1.0
acceptable.	Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many	17	3.1	3.0
Noise: (1) Lutak Inlet is an echo chamber.	Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)	1	1.0	1.0
	Clear approach and takeoff surfaces	30	3.2	3.5
Economics: (1) Flight time is fair because	Has sufficient area for onsite firefighting and rescue	30	3.2	4.0
this site is close to the Ferbee.	Rate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time	24	2.0	2.0
	Relative proximity to heli-destinations	28	2.3	2.0
	Road, phone and power availability	29	3.6	4.0
	Site contains or is adjacent to anadromous stream	No anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromou fish access to and from Chilkoot Lake. Likely not an issue.		nearby, ortant adromous Chilkoot
	Site may be wetlands	Likely not an issue.		
	Relative impact of helicopters to nearby eagle or important bird habitat	Likely not an	issue.	

1.

Site Specific Comments: (13) Tankfarm

- One of sites with fewer environmental concerns.
- zoned Industrial-Heavy or Waterfront Industrial so heliports are use-By-Right.
- Redundant site as close to airport.

COMMENTS (# of times comment mentioned in parenthesis)

(3) This site is unacceptable. No. Average Median (2) There is no reason to have a heli-port 3 air miles from the airport. Remove this site from consideration. Proximity to place to warm up & eat 31 2.7 2.0 (1) This site has good access, but it is ugly. Adjacent land use is compatible with is out it is ugly. 36 2.6 2.0 (1) This site may be acceptable. Approx. no. properties, and developed properties, within 3000' of site (71,13) 5 1.4 1.0 Land Use: Estimated frequency (relative) of helicopter flights from this site. 5 4.0 (1) Adjacent land is residential areas. Safety: 1 1.0 1.0 (1) Approach and take-off surfaces are in residential areas. 29 3.5 4.0 (1) Approach and take-off surfaces are in residential areas. 29 3.5 4.0 (1) Flight time is fair because this site is close to the Ferbee. Relative proximity to heli-destinations 28 2.3 2.0 Road, phone and power availability to heli-destinations 28 2.3 2.0 Road, phone and power availability to heli-destinations 28 3.5 4.0 Site contains or is adjacent to anadromous stream No anadromous stream near		Heliport Evaluation Matrix Results			
(2) There is no reason to have a heli-port 3 air miles from the airport. Remove this site from consideration.Proximity to place to warm up & eat at Nearby land available for commercial developmentAverage at at 29Median(1) This site has good access, but it is ugly.Adjacent land use is compatible with light industrial use/ heliport362.62.0(1) This site may be acceptable.Approx. no. properties, and developed properties, within 300° of site (30.3)51.61.0(1) This site may be acceptable.Approx no. properties, and developed properties, within 300° of site (71,13)51.41.0(1) Adjacent land is residential.Estimated frequency (relative) of helicopter flights from this site. severy few, 1= very many172.93.0Land Use: (1) Adjacent land is residential areas.Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)11.01.0Clear approach and take-off surfaces are in residential areas.Rate site compared to existing 33 mile and rescue293.54.0Relative proximity to heli-destinations this site is close to the Ferbee.Rate site for relative increase or decrease in flight time241.92.0Relative proximity to heli-destinations this site is close to the Ferbee.Site contains or is adjacent to andromous streanNo anadromous strean nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlands <td>(3) This site is unacceptable.</td> <td></td> <td>No.</td> <td></td> <td></td>	(3) This site is unacceptable.		No.		
(1) This site has good access, but it is ugly.Nearby land available for commercial development292.92.0(1) This site has good access, but it is ugly.Adjacent land use is compatible with 	., 1		responses	Average	Median
heli-port 3 air miles from the airport. Remove this site from consideration.Nearby land available for commercial development292.92.0Adjacent land use is compatible with light industrial use/ heliport362.62.0(1) This site has good access, but it is ugly.Approx. no. properties, and developed properties within 3000' of site30,351.61.0(1) This site may be acceptable.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many172.93.0Land Use: (1) Adjacent land is residential areas.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many172.93.0Clear approach and take-off surfaces are in residential areas.Clear approach and takeoff surfaces293.24.0Has sufficient area for onsite firefighting and rescue11.01.01.0Clear approach and takeoff surfaces are in residential areas.2.32.02.0Relative proximity to heli-destinations this site is close to the Ferbee.Site contains or is adjacent to anadromous streamNo anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlands Relative impact of helicopters to nearbyLikely not an issue	(2) There is no reason to have a	Proximity to place to warm up & eat	31	2.7	2.0
airport. Remove this site from consideration.Decompatible with light industrial use/ heliport2.02.02.02.0(1) This site has good access, but it is ugly.Adjacent land use is compatible with light industrial use/ heliport362.62.0(1) This site has good access, but it is ugly.Approx. no. properties, and developed properties, within 3000' of site helicopter flights from this site.1.0(1) This site may be acceptable.Estimated frequency (relative) of helicopter flights from this site.1.4(1) Adjacent land is residential.5=very few, 1= very many172.93.0(1) Adjacent land is residential areas.Clear approach and takeoff surfaces293.24.0(1) Approx ch and take-off surfaces are in residential areas.Clear approach and takeoff surfaces293.54.0(1) Flight time is fair because this site is close to the Ferbee.Relative proximity to heli-destinations282.32.0Road, phone and power availability283.54.0Site contains or is adjacent to andromous streamNo anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue					
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(1) This site has good access, but it is ugly.(1) This site has good access, but it is ugly.(1) This site has good access, properties, and developed properties, and developed properties, and developed properties, within 3000' of site (71,13) 51.61.0(1) This site may be acceptable.(1) This site may be acceptable.(1) This site may be acceptable.(1) This site may be properties, within 3000' of site (71,13) 5(1,4) 1.0(1) This site may be acceptable.(1) Adjacent land is residential.(1) Adjacent land is residential.(1) Adjacent land is residential.Safety: (1) Adjacent land is residential areas.(1) Approach and take-off surfaces are in residential areas.(1) Approach and take-off surfaces are in residential areas.(1) Approach and take-off surfaces are in residential areas.(1) Flight time is fair because this site is close to the Ferbee.(1) Flight time is fair because this site is close to the Ferbee.(1) Flight time is fair because this site is close to the Ferbee.(1) Flight time is adjacent to anadromous stream(1) No anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlandsLikely not an issue Relative impact of helicopters to nearbyLikely not an issue					
(1) This site has good access, but it is ugly.properties within 1500' of site(30,3)51.61.0(1) This site may be acceptable.Approx no. properties, and developed properties, within 3000' of site(71,13)51.41.0(1) This site may be acceptable.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many172.93.0(1) Adjacent land is residential.Safety: (1) Adjacent and take-off surfaces are in residential areas.11.01.0(1) Approach and take-off surfaces are in residential areas.Clear approach and takeoff surfaces293.24.0Rate site compared to existing 33 mile and rescue293.54.01Rod, phone and power availability283.54.0No anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlands Relative impact of helicopters to nearbyNo anadromous stream	consideration.	0	36	2.6	2.0
Approx no. properties, and developed properties, within 3000' of site (71,13)51.41.0(1) This site may be acceptable.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1 = very many172.93.0Land Use: (1) Adjacent land is residential.Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)11.01.0Clear approach and take-off surfaces are in residential areas.Clear approach and takeoff surfaces293.24.0Rate site compared to existing 33 mile and 18 mile site for relative increase or decrease in flight time241.92.0Relative proximity to heli-destinations282.32.02.0Road, phone and power availability283.54.03.54.0Site contains or is adjacent to anadromous streamNo anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlands Relative impact of helicopters to nearbyNo an aissue			_		
During the stage of the stag	(1) This site has good access,		5	1.6	1.0
Image: (1) This site may be acceptable.properties, within 3000' of site (71,13)51.41.0(1) This site may be acceptable.Estimated frequency (relative) of helicopter flights from this site. 5=very few; 1= very many172.93.0Land Use: (1) Adjacent land is residential.Landowner willing to consider sale, lease or trade to Haines Borough for use as heliport (leave blank if don't know)11.01.0Clear approach and take-off surfaces are in residential areas.Clear approach and takeoff surfaces293.24.0Rate site compared to existing 33 mile and rescue293.54.04.0Relative proximity to heli-destinations282.32.0Road, phone and power availability283.54.0Site contains or is adjacent to anadromous streamNo anadromous stream nearby, Lutak Inlet provides important migration corridor for anadromous fish access to and from Chilkoot Lake. Likely not an issue.Site may be wetlandsLikely not an issue Relative impact of helicopters to nearbyLikely not an issue	but it is ugly.				
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Relative impact of helicopters to nearby					
Relative impact of helicopters to nearby		Site may be wetlands	Likely not an issue Likely not an issue		
		eagle or important bird habitat			

Site Specific Comments: (14) Eldred Rock

- No developed parcels within 3000 feet.
- One of sites with fewer environmental concerns.
- Site being transferred from USCG to Museum.

COMMENTS (# of times comment mentioned in parenthesis)

(3) Eldred Rock is a historic site and should be preserved as such.

(4) Eldred Rock should be considered for a heliport site. It would provide a truly unique heliski experience.

experience.	Heliport Evaluation Matrix Results			
		No.		
(5) Eldred Rock may be an		responses	Average	Median
adequate alternate heliport site.	Proximity to place to warm up & eat	29	2.5	2.0
···· · · · · · · · · · · · · · · · · ·	Nearby land available for commercial			
(1) Land at Eldrad Deals is	development	26	1.7	1.0
(1) Land at Eldred Rock is	Adjacent land use is compatible with			
owned by the US Coast Guard,	light industrial use/ heliport	31	2.6	2.0
and is in the process of being	Approx. no. properties, and developed			
given to the museum for non-	properties within 1500' of site (0,0)	5	4.2	4.0
helicopter uses.	Approx no. properties, and developed			
1	properties, within 3000' of site (0,0)	5	4.2	4.0
(1) Eldred Rock meets the	Estimated frequency (relative) of			
economic criteria of the	helicopter flights from this site.			
	5=very few; 1= very many	17	3.6	5.0
proximity to services that the	Landowner willing to consider sale,			
Haines town can best provide.	lease or trade to Haines Borough for			
	use as heliport (leave blank if don't			
(1) This site is hard to access,	know)	1	1.0	1.0
and should be used for	Clear approach and takeoff surfaces	30	4.0	5.0
	Has sufficient area for onsite firefighting			
emergencies only.	and rescue	27	2.9	3.0
	Rate site compared to existing 33 mile			
	and 18 mile site for relative increase or			
Natural Resources:	decrease in flight time	20	2.1	2.0
(1) Wetlands are an issue for	Relative proximity to heli-destinations	27	2.5	2.0
marine biology at this site.	Road, phone and power availability	28	1.8	1.5
	Site contains or is adjacent to			
	anadromous stream	Not an issue		
	Site may be wetlands	Not an issue	!	
	Relative impact of helicopters to nearby			
	eagle or important bird habitat	Not an issue	!	

Site Specific Comments: (15) Excursion Inlet Fish Processing Facility

• Higher number of developed parcels nearby compared to other sites.

COMMENTS (# of times comment mentioned in parenthesis)

- (2) Heliport location at Excursion Inlet is not acceptable.
- (1) What do the people in Excursion Inlet say about this?
- (1) This is a good site for accessing the Southern Chilkat Range.

F '	Heliport Evaluation Matrix Results			
Economics:		No.		
(2) The increase / decrease in		responses	Average	Median
flight time to destinations	Proximity to place to warm up & eat	24	2.3	2.0
relative to 33 and 18-mile	Nearby land available for commercial			
locations would depend on the	development	22	2.8	3.0
1	Adjacent land use is compatible with			
destination.	light industrial use/ heliport	24	2.9	3.0
	Approx. no. properties, and developed			
Natural Resources:	properties within 1500' of site (34,13)	5	1.4	1.0
(1) There is no threat to	Approx no. properties, and developed			
anadromous streams at this	properties, within 3000' of site (46,19)	5	1.4	1.0
site.	Estimated frequency (relative) of			
site.	helicopter flights from this site.			
	5=very few; 1= very many	14	3.1	3.5
	Landowner willing to consider sale,			
	lease or trade to Haines Borough for			
	use as heliport (leave blank if don't			
	know)	1	1.0	1.0
	Clear approach and takeoff surfaces	22	3.3	4.0
	Has sufficient area for onsite firefighting			
	and rescue	20	3.0	3.0
	Rate site compared to existing 33 mile			
	and 18 mile site for relative increase or			
	decrease in flight time	17	1.9	1.0
	Relative proximity to heli-destinations	21	2.4	2.0
	Road, phone and power availability	22	2.3	2.0
	Site contains or is adjacent to	Near two im	portant anad	romous
	anadromous stream	streams, South Creek supports a run of sockeye salmon important		
		for subsister		
	Site may be wetlands	Likely not an issue.		
	Relative impact of helicopters to nearby			
	eagle or important bird habitat	Likely not an	issue.	
		, , , , , , , , , , , , , , , , , , , ,		

Other Locations

(1) "Sites near town can be just as profitable to heliski companies if mountains near town are opened to skiing."

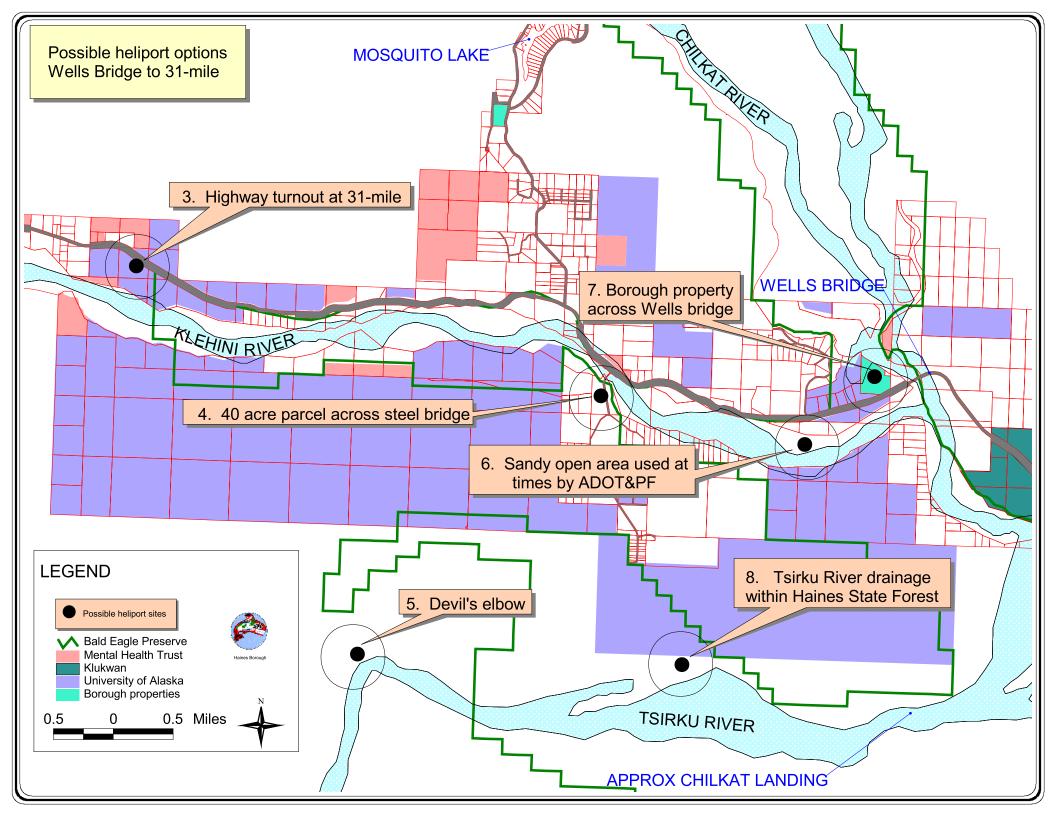
(1) "Any of the sites in the lower valley could be just as attractive by changing the destinations. Explore other destinations."

(2) The Skagway airport should be considered as a potential heliport location.

(1) "How about considering pulloffs on straight stretch at 35-37-mile, or private owners in that area?

(1) Haines needs to support more industry / tourism business. Heliports should be put where they will benefit businesses.

(1) A heliport near Chilkat Lake Road is inappropriate.



Julie,

I was mistaken with my assertion that I lived near Site 4. Looking more closely at the aerial image, I realize I am actually located south of Site 3. Ms. Platchta resides southeast of Site 3.

Please attach this correction to my previous comments, with my apologies.

Thank you, Ady Milos

Julie,

I am glad this study was done. We now know, with scientific evidence, what most of us out here have thought all along. That Ms. Platchta's complaints are much to do about nothing. I live in the area the study designates as Site 4, "Neighboring Estate", alongside Site 3, "Roadway". I can barely hear the helicopters. Residents Jessica Platchta and her partner, Nicholas Szatkowski live farther into the "Neighboring Estate"; nowhere near testing Site 4, farther away than I am.

While I am glad for the study (and pleased that the Borough is asking for a dismissal), I am enraged that we Borough residents have to pay to defend such a frivolous claim. The Borough could be using the money used to defend this suit to FIX THE DAMNED CHILKAT LAKE ROAD! One would think the claimants would spend their energies on something much more worthwhile and necessary for the neighborhood (not to mention our vehicles' shocks!). They'd certainly get more support from their neighbors!

Maybe someone should explain to the claimants that Frivolous lawsuits are defined as "those filed by a party or attorney who is aware they are without merit, because of a lack of supporting legal argument or factual basis for the claims. Frivolous lawsuits waste time, money, and judicial resources, and fines and/or sanctions may be imposed upon a party or their attorney for filing such a claim."

Just sayin'

Thanks for the opportunity to comment,

Ady Milos

Dear David,

I am submitting comments as the creative director of Alaska Arts Confluence. My comments are in reference to the cultural norms and social/political background related to helicopter presence in Haines.

Before the 26 Mile heliport was permitted, there was general consensus that the airport is the appropriate location for helicopter take off and landing and that a heliport at 26 Mile would become a noise issue for residents in that area. Despite knowledge of this problem and considerable public objection from people outside of the study area, the heliport was permitted and went into operation. The Borough's unwillingness to find a resolution of the helipad location that would satisfactorily address the public concern has led to the challenge to the 26 Mile helipad.

The study uses standards and assumptions generally not appropriate to the Chilkat Valley. The level of noise people become accustomed to is a factor of conditioning. For example, the noise created by chainsaws is an accepted part of our culture. Chainsaws are used to cut down trees to provide firewood necessary for heating many of our homes. People here accept higher noise levels that relate to our daily lives. A number of years past the Haines Borough voted not to allow helicopter sightseeing tours during the summer tourism season when they saw how intrusive and disruptive the helicopter tours were in Juneau. Helicopter flights for hell skiing by the existing tour operators would be acceptable and appropriate if they used the airport and stayed within the designated flight paths.

We value our natural environment and the general quiet of a rural community. Although it is a small number of people who are negatively affected by the helicopter paths evaluated in the study, those residents should have the benefit of the same protection from helicopter noise that was established by the Borough.

The noise study, though scientific by FAA standards for the rest of the country is not appropriate for the Haines Borough. Regularly scheduled airplanes and helicopters should originate only from the Haines Airport, where the noise levels of helicopters would be totally within acceptable noise levels.

Please enter my comments into the record for public comment on the Noise Study, 2015.

Sincerely, Carol Tuynman Creative Director Alaska Arts Confluence Post Office Box 1664 Haines, Alaska 99827 907.303.0222

From:	<u>Weishahn</u>
To:	Julie Cozzi
Cc:	David Sosa; Janhill; Dave Berry; George Campbell; Thecases; Joanne Waterman; Diana Lapham; Ron Jackson
Subject:	Comments on Helicopter Noise Study
Date:	Friday, June 26, 2015 4:21:30 PM
Attachments:	Helicopter Noise Study, Comments, 6-26-15.docx

Hello Julie,

Please find my comments on the draft helicopter noise study attached.

Thank you,

Carolyn Weishahn

June 26, 2015

Comments re the Helicopter Noise Study

Due to the highly technical nature of this report, I suggest that after the study consultants present the webcast as described in "Task 4 -- Presentation of Results" of the study contract, the borough have another comment period. There are bound to be further comments in response to the webcast.

There are several things to keep in mind about this noise study.

First, the study often uses the 65 DNL metric, however it clearly states that the site DNLs can't be directly compared to the FAA 65 DNL significance threshold:

For this Study, the measured DNL from the sites above cannot be directly compared to the 65 DNL significance threshold because the annual average was not modeled using Integrated Noise Model. However, the measured average levels at the three sites during the study period (outside of the helipad itself) are generally below what measurements would be expected at the significant 65 DNL or higher level.

Second, even if the study had modeled an annual DNL average using the Integrated Noise Model, the FAA make it clear that the 65 DNL threshold for residential land use is not intended to substitute federal guidelines for local planning for noise compatible land uses. In other words, while the feds use one set of guidelines, each local community determines its own noise compatible land uses.

http://www.faa.gov/airports/environmental/environmental_desk_ref/media/desk_ref_chap17.pdf

14 CFR Part 150 land use compatibility guidelines. FAA established land use compatibility guidelines relative to certain DNL noise levels in 14 Code of Federal Regulations (CFR) Part 150. Chapter 5, Table 1 of this Desk Reference provides a copy of the Part 150 Land Use Compatibility guidelines.

(1) Different local land use compatibility standards. Although residential land uses are considered compatible with noise exposure levels below DNL 65 dB under 14 CFR Part 150:

"The responsibility for determining the acceptable and permissible land uses ...rests with the local authorities...Part 150 is not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses. "-14 CFR Part 150, Table 1.

~~~~~~~~~~~~~~~~~~

This study uses the A-weighting scale (dBA) which does not completely characterize helicopter sound. Since the A-weighting scale eliminates low and high frequency sounds, the FAA has questioned its use for assessing helicopter sound which has a low-frequency component. As the

FAA points out in the document below, another weighting scale, the C-weighting scale, is useful for measuring wall vibration energies that can occur from helicopter noise.

http://www.faa.gov/regulations\_policies/policy\_guidance/envir\_policy/media/04nov-30-rtc.pdf

# 3.5.3 Is A-weighting the optimum weighting for assessing helicopter sound?

As discussed above, there is some evidence that the A-weighting metric may not fully characterize human reactions to noise events with substantial low-frequency content.

.....

The C-weighting has been used in the United States for almost 30 years to assess blast noise and sonic booms in order to account for the noise-induced rattles generated by these sounds, and currently, several other countries also use the C-weighting for this purpose. It is primarily the sound energies in the 10 to 30 Hz ranges that induce wall vibrations. The C-weighting could be used to identify those helicopter sound energies that will induce wall vibrations.

.....

Helicopters, with their distinctive sound character, appeared to be more noticeable than other sounds for the same A-weighted sound exposure level.

.....

As discussed in "effects on individuals" (Section 3), there are multiple noise metrics utilized to assess noise (EPNL, ASEL, DNL, etc). However, civil helicopter annoyance assessments utilize the same acoustic methodology adopted for airplanes with no distinction for helicopter's unique noise character. As a result, the annoyance of unaccustomed, impulsive helicopter noise has not been fully substantiated by a well-correlated metric. The FAA favors the chartering a technical effort to focus on low-frequency noise metric to evaluate helicopter annoyance. (emphasis added)

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Another sound component of helicopter noise that this study does not include is helicopter 'blade slap.'

One issue that this study does confirm is that the neighborhood where SEABA wants to put a heliport is a **very quiet neighborhood.** (at L90, dBA measures at the 4 sites: 21.8, 29.9,17.5, and 16.9)

Another issue is that while SEABA reported 4 heliski user days for March 9, data was collected on other days as well during the study. Were these helicopter flights taken while "fully loaded" as required by the study contract? Were the landings and take-off made in compliance with permit flight requirements to obtain elevation as quickly as possible? Residents have reported that the flights were conducted at very low elevations. I feel that the use of this study as a basis for changing the way the borough assesses heliport impacts in any particular neighborhood is not appropriate due to the lack of confidence in DNL when evaluating helicopter noise and the incomplete nature of calculating the DNL in this study.

Please notify me when the webcast by the contracted company will be available. Again, I feel another comment period is necessary after the public has had a chance to view the webcast.

Sincerely,

Carolyn Weishahn

Hello David,

I notice in the noise study report that Task 4, Presentations of Results, will be accomplished by a Webcast. Do you know when that will occur? Will it be interactive so that questions may be asked during the Webcast? Will it be available to the public as well as borough officials?

Thank you for checking on this part of the noise study process.

Cary Weishahn

On 2015-06-19 16:03, David Sosa wrote:

Documents as requested

| From: | Derek Poinsette |
|----------|---|
| То: | Julie Cozzi; Ron Jackson; Joanne Waterman; Mike Case; Jan Hill; George Campbell; Diana Lapham; Dave |
| | Berry; David Sosa |
| Cc: | sunny@seaba-heli.com |
| Subject: | Helicopter Noise Study |
| Date: | Saturday, June 20, 2015 10:53:26 AM |

Haines Borough Assembly and Administration:

I live on Mosquito Lake Road. I have read the results of the helicopter noise study, and I have some specific comments.

The ambient noise level of the general neighborhood was measured at ~21 dBA (L50 from Table 4-1). This is a level of sound that is less than bird song. The sound of a helicopter measured at the most DISTANT measuring location ("neighboring estate") registered at 90 dBA, equivalent to a DC-10 take-off. At the helipad iteslf, measurements exceeded 104 dBA (Lmax from Table 4-1). To the human ear, 90 dBA is 128 times louder than 20 dBA. In actuality, 90 dB is 10 million times 20 dB. That's not how it sounds to us, but it may very well sound that way to other creatures.

The study computed the ambient average daily noise level (DNL) in the neighborhood and found it to be 30 to 51 DNL, including the helicopter activity. The SEABA property came in at 69 DNL. The FAA classifies "wilderness residential" as 35 DNL. "Urban row housing on a major avenue" is 68 DNL.

So, we can conclude from this study that the addition of a heliport to the neighborhood moves the character of the place from "wilderness residential", past "rural residential", past "agricultural land", on past "wooded residential" and "old urban residential", all the way up to "urban row housing on a major avenue".

No one who has invested time, money, sweat and tears building a home up here ever thought that one day the Upper Valley was going to to have sound characteristics similar to those of downtown Chicago. My place is exactly two miles from the SEABA heliport as the crow flies (according to Google Earth). There is a small mountain between us (Ski Hill), and yet I can hear, as plain as if we were next-door neighbors, all of the helicopter activities that occur there. I don't know exactly how loud it is, but it is loud enough to be heard through hearing protection and over the noise of my wood shop equipment. And it is much louder than the DOT chip sealing that is going on right now just 3/4-mile away.

This is a very quiet place up here; unlike the lower valley, we don't even have wind noise on most days. When you add something like regular helicopter activity into this environment, it completely changes the character of the place--from wilderness to urban row housing. And now we have the numbers to prove it.

Sincerely,

Derek Poinsette Mosquito Lake Box 555 Haines, AK 99827 767-5414 poinsette.ak@gmail.com

CC: Scott Sundberg

| From: | george figdor |
|----------|------------------------------------|
| To: | <u>Julie Cozzi</u> |
| Subject: | comments on helicopter noise study |
| Date: | Friday, June 26, 2015 4:04:29 PM |

RE: Comments on 26-mile helicopter noise study

The deadline is fast approaching, so i just wanted to get these brief comments to you before that. i have read some of the research from various places in the U.S. concerning the impact of helicopter noise on local residents. Several interesting points seem to emerge in many of the studies.

1. The concern over impacts of helicopter noise is not just a local one in the Chilkat Valley. Throughout the nation, nearby resident are quite frequently opposed to helicopter activities near their homes. And generally residents are passionate about wanting to end the disturbance.

2. Helicopter noises are perceived to be noisier than their decibel reading. In other words, the unique quality of the noise makes it result in the same perceived disturbance as a noise with higher decibel reading. So, many studies argue that in some ways one can't measure the impact helicopter noise with a meter.

3. The nature of helicopter noise has been shown to have a wide range of health impacts---particularly among young children. This can include brain and emotional damage. Thus helicopter activities must be evaluated in public health terms as well as the usual parameters. And these health impacts occur even when the activity is not regular. In fact, the stress caused by unpredictable nature of certain activies often caused greater health impacts related to stress.

4. The emerging consensus seems to be that residential areas and helicopter traffic do not mix well, and that helicopter traffic is most often best located in places where people do not live---liket in commercial airport areas.

George Figdor Box 612 Haines, AK

| From: | Gretchen Roffler |
|----------|----------------------------------|
| To: | <u>Julie Cozzi</u> |
| Subject: | comments noise study |
| Date: | Friday, June 26, 2015 9:32:47 AM |

Dear Ms. Cozzi and the Borough of Haines,

I appreciate that the Borough has taken into consideration the collection of sound data to help inform a decision about SEABA's proposed CUP. It appears the Mead and Hunt team have done an adequate job; however the sampling data are sparse, and likely not remotely representative of the noise that would be experience during a normal heli ski operating period.

I was dismayed by the poor interpretation of the noise data in this study. The DNL is a worthless noise metric as it unrealistically averages noise over a 24 hour period. The logic behind relying on this metric is flawed. Instead of accounting for the helicopter SEL and the number of takeoff and landing events, it actually merely washes them out over a longer period of time to devalue the numbers. Additionally, because these helicopters do not operate after civil twilight and before dawn, factoring in nighttime noise levels is a meaningless exercise. The DNL may be the FAA standard for residential noise assessment, and it might be convenient to use these values because they portray lower noise volumes, but I would hope that the Haines Borough would maintain higher standards than this.

Evaluating the values of the SEL and Lmax metrics, we can see that the noise disturbance caused by helicopters is in fact very high for all the recording sites, particularly those that are closest to the proposed heli pad, exceeding recommended levels for residential zones. These are the values that should be taken into the highest consideration, and not the 24 hour mean.

It is also important to consider that the actual time of very loud SEL and Lmax (and by default DNL) would be extended considerably during a normal heli ski day. There would be landings and takeoffs of multiple helicopters continuously throughout the day, in addition to lengthy refueling time. This study does not accurately capture this level of disturbance that would be present in a realistic operating scenario.

At the heart of the issue is promotion of one business over the residential way of life in the neighborhood. We purchased our property (adjacent to the proposed SEABA helipad) because we wanted to have a quiet place to occupy in a peaceful neighborhood. SEABA did not disclose their intention to build a helipad at the time of the land transfer. I am not opposed in any way to heli skiing (I have partaken in this activity), but I am opposed to landing helicopters in a residential neighborhood. The justification for supporting this plan by the Borough relies on faulty logic that it will promote economic development for the community. Consider that keeping heli skiers within Haines proper (at SEABA's current lodging at Ft. Seward) actually provides more of an economic pulse to businesses in the community than containing them in our neighborhood, where there is nowhere to spend money. If SEABA develops this land and builds an "all inclusive" heli ski lodge the clients will only be supporting one business, and not all of the stores and restaurants in Haines. See Cordova's Points North as an example of how to *not* create a sustainable business that benefits the greater community. This is not the model that Haines should want to follow.

I hope that you consider these comments in the decision process. There should be a way that heli skiing can flourish in Haines and benefit the majority of the community economically (not just the owners of one business) while at the same time allowing residents to maintain a peaceful way of life. Please consider creation of a helipad outside of residential neighborhoods (through land transfers or otherwise), or promotion of the multitude of heli pads that already currently exist.

Thank you for your consideration, Gretchen Roffler

To the Borough Clerk,

I am shocked and disappointed by not only the outrageous expenditure of borough funds on a helicopter noise study but also by the unhelpful, convoluted and almost irrelevant results of this study. The only meaningful things established by the report are that the neighborhood surrounding the proposed heliport is normally extremely quiet, and that the helicopters are really loud. (Appendix A. Sound Exposure Levels during the test period range from a (loud) low at the furthest test site of 69.5 dBA to a (painfully loud) high of 120.9 dBA at the nearest.)

Ironically, because of the way DNL was figured, the quieter the ambient noise of the neighborhood, the lower the DNL, even though the helicopter noise remains at the same level, very loud. A 2011 FAA technical report contained the following caution, "DNL has another major practical limitation. It doesn't work particularly well as a predictor of aircraft noise impacts."

Using DNL as its justification, the Haines Noise Report asserts that if you take a very quiet place and add a very loud noise for a relatively short period of time, you get a moderately quiet place, when actually, what you get is a very quiet place with a very loud thing in it. If someone bonks you on the head really hard in the morning, and then refrains from bonking your head for the rest of the day, did they actually just touch you gently the whole time? Obviously not.

Additionally, the study did not test the noise levels during regular operations that would include easily 90 landings or even more (2 helis per day, all day, times 6 days). So the average sound (DNL) would have been be enormously higher had a realistic scenario been studied. We should find it disturbing that professional sound consultants we paid about \$45,000, would make conclusions about the appropriateness of a particular development under conditions like this, where they clearly don't have measurements reflecting the actual level of use likely to occur with the establishment of a heliport there.

Even with the dampening effects of A-weighting, the noise levels measured ranged from 77.4 to 104.3 dBA. All of these noise levels are above reference ranges for

residential noise standards, standards preserving healthy hearing, and national and international standards protecting public health. (See Anchorage municipal codes, EPA Noise Control Act of 1972, and World Health Organization Guidelines for Community Noise.)

I urge the borough to file this report, write off the outrageous expenditure and listen to the concerns of the residents of the area.

Most respectfully,

Heidi Robichaud

| From: | bearded pigeon |
|----------|----------------------------------|
| To: | Julie Cozzi |
| Subject: | noise report comment |
| Date: | Friday, June 26, 2015 3:56:04 PM |

I am a resident in the area of the SEABA noise report. I find the data in this report inconclusive and more data would need to be recorded to get a full understanding of the noise levels in the area. I also find this study a political tool for the validation of one companies agenda. if any laws are passed or permits given based on the data in this report it would be insulting to those that would like to continue to live and enjoy a quiet existence. Thanks for hearing my comment,

Josh Grimm

| From: | John Norton |
|--------------|----------------------------------|
| To: | <u>Julie Cozzi</u> |
| Subject: | Fw: Noise Study comments |
| Date: | Friday, June 26, 2015 6:31:24 PM |
| Attachments: | wlEmoticon-smile[1].png |
| | Helicopter noise study 2015.doc |

From: John Norton Sent: Friday, June 26, 2015 11:17 AM To: jcossi@haines.ak.us Subject: Noise Study comments

Hi Julie, Finally; a rainy day so I can get some correspondence taken care of \mathfrak{S} . I've attached a few comments regarding the Noise Study that I'd appreciate you forwarding to the appropriate staff. Cheers, John Norton

Borough Staff and Assembly Members,

Thank you for the extended comment period of the 2015 Noise Study. I believe that the Lmax measurements are the most important metric in the discussion of allowing the development of a heliport in the Chilkat Lake Road area. The Lmax represents the loudest sound experienced during an event and in my opinion should form the foundation for deciding the impact of noise in that area. If my reading of that document is correct it appears that noise levels of 90dBA or greater occurred during helicopter flights in the monitored area.. These noise levels are categorized as "Very Loud" and I believe that this metric is key to understanding the concerns that the local homeowners have brought to the Borough. I am in agreement that this level of aircraft noise, in an area that is attractive to residential homeowners due to it's quiet, rural character, is inappropriate.

I agree with comments made by others that the DNL metric is not helpful in this discussion as the DNL averages over a 24 hour period a small number of loud events within an area that is normally very quiet. This is especially inappropriate where darkness precludes aircraft flights to less than half of that 24 hour period. To use the DNL figures to base ones decision would misapply that metric which is more appropriately applied to noise from a busy freeway, industrial site or large airport. An analogy would be to average the fatal burns received in the flash fire from fuel thrown into the woodstove with the pleasant warmth of the slowly burning fire over 24 hours. It is the single event that is useful in guiding our behavior, not the averaged data.

To conclude, I would like to suggest that the appropriate staff and Assembly members take a few minutes to experience 90+dBA sound levels during discussion of this issue. It may be as simple as bringing a boom-box into the assembly chambers and turing the volume to full . That simple exercise would be very helpful in understanding why local homeowners are so opposed to the development of a heliport near their homes. Thank you for your consideration.

Regards, John Norton Haines, AK

Greetings,

I have looked over the noise study. It was rather technical and not easy reading for me. I have a college degree, and I'm not sure what percentage of our community has post-secondary education. Perhaps in the future, when the Borough hires an outside firm to perform a technical study, part of the contract should be for the firm to host a public presentation where they explain the methodology and the results. An informed public should be the goal.

One thing I noticed is that the noise study indicates that the ambient noise level is at the low end of the scale for a 'wooded area." That is what people live there and who moved there are used to, and have come to expect. Even with the helicopter activity, the average noise level was low. With an average of 51 being the norm for wooded areas, and the noise level in the study area being 30-51, this tells me that this is a quiet neighborhood. So introducing a noisy activity into that type of environment would be particularly intrusive.

Also, to use averaging to try to describe the impact of noise events is misleading. One serious noise event can ruin some people's entire day, and setting up a helipad with multiple take-offs and landing on a daily basis is sure to change the character of the neighborhood. And the study was only for 9 "operations" over a six-day period. How does this compare to the number of "operations" allowed if this was to become a true base of operations for SEABA and how would that compare with the data collected? I do not see that information in the study but it is a critical piece of information. Was it included somewhere but I missed it?

I also note that they have said there is no "noise standard" for the Haines Borough. Without setting a standard, there is no way to decide whether or not this noise level is excessive. For us to accept the FAA standard without public discussion and involvement would not be fair nor wise. We have a history of preferring to make our own decision as a community when possible, rather than allowing the federal government to decide what our standards should be.

The reason conditional use permits were required and strict criteria set in place for helicopter landing pads is because helicopter activity can have a profound negative affect on local residents. Putting a helicopter pad in a quiet area is not a good idea. We have an airport for noisy air activity, and that is one of the designated landing places for helicopters. There are three other dedicated areas for helicopter use.....the airport, 18 mile and 33 mile. I also understand that helicopters are taking off from the Big Nugget mine in Porcupine, even though it is not one of the designated areas but has been somehow "grandfathered" in. These are places that people moving into the area can expect will have helicopter noise and activity.

I am worried about the precedent that allowing a helicopter pad in a quiet neighborhood will set. If the conclusions gleaned from this study are that helicopter noise is a "nonissue, ' as one of our Assembly members was quoted in the CVN, what is to stop helipads from turning up all over the Borough? Certainly it makes sense from the economic standpoint of a helicopter tour operator to have their lodge and heliport on their private property. There are presently three helicopter ski companies in Haines, and no limit on the potential number of companies allowed to operate. If SEABA gets permission to put a helipad at their lodge, they will have a competitive advantage over the other two operators. The logical next step will be for the other two operators to build helipads on their private property and so we will have more helipads in the Borough. The original intent of requiring a conditional use permit for helipads was to limit their proliferation in the borough and contain their growth. Certainly, there is some point where we would have too many heliports in our valley. Many of our citizens believe we have already reached that point.

I am also concerned about SEABA's involvement with the study. SEABA has a documented history of not following rules that they have agreed upon. How do we know that they followed the rules for this study? How much of the information for this study was provided by them and how do we know if it is accurate? How do we know that they will follow the rules in the future? How many Borough resources will need to be utilized to keep track of whether or not they are following the rules, and what sort of penalties will they received when/if they are caught breaking the rules? And will these penalties be serious enough to ensure that they follow the rules in the future? These are serious questions which I have been asking since I was on the Helicopter Advisory committee in 2011 and they have never been adequately addressed.

Another serious concern I have is the allegation that the flights used in the study were flown at an elevation of 200 feet above ground level. It says in the newspaper that these allegations were dismissed as "unsubstantiated.' I would hope that there is accurate GPS data from the 9 flight operations that took place during the study. If this information was not recorded or is not available to the public, then the results of the study are at best, inconclusive, and, at worst, seriously flawed. For what we paid, I would think that the citizens have a right to know if this allegation is true or not. The elevation of the flight has a significant effect on the noise signature.

I am open-minded and hope to hear more from the Borough about the study and how the results planned to be used. I recommend that we consider this study preliminary and proceed with extreme caution before we base any sort of planning or policy decisions on this dubious exercise.

Sincerely and thanks,

Joe Ordonez

Joe Ordonez

Rainbow Glacier Adventures LLC P.O. Box 1103 Haines, Alaska 99827 Phone: <u>907-766-3576</u> Fax: <u>907-766-3580</u> joe@joeordonez.com www.tourhaines.com To: Haines Borough

Did we really need to spend 52K to conclude Helicopters are loud on both take-offs and landings? How much taxpayer money is still being spent on Borough Attorney fees defending a Conditional Use permit appeal?

The Plaintiff in the CUP appeal has more expertise and knowledge , of what the base noise level of the Chilkat Lake Road area is than the FAA? Interesting.

This isn't about noise or Helicopters, Heli-Pads, or a Ski Lodge. Nor is this about the lovely quiet rural life style some of us have here.

This is about a couple of people trying to force their life style choices on their peaceful , hard working and quiet neighbors, and it will never stop. They will never be happy, or satisfied until we all live under a pile of brush. More frivolous lawsuits, more petitions , more complaint forms. More time spent from the Assembly to the Planning Commission, and the Borough staff wasting countless hours, defending itself.

Thanks for the opportunity to comment on this Regards,

Maria Paquet, Eagle Bluff Drive Hi Julie,

My comments on the Draft Haines Noise Report are attached.

Thanks,

Jessica Plachta

Comments re. Draft Haines Noise Report 2014 Jesssica Plachta HC 60 Box 2621 Haines, AK 99827 jessica.meadow@gmail.com

While there are a few useful data sets contained within the Draft Haines Noise Report, its assumptions, methodology and conclusions are mostly problematic to the point of being inoperable. Some of these problems are not the fault of Mead and Hunt, but derive from the actions of the commercial heliski operator, Southeast Alaska Backcountry Adventures, (SEABA). Some of the problems derive from the difficulties inherent in attempting to apply an urban (public airport) equation to a rural (wilderness residential) setting. And still others of the problems may derive from factors unknown to this commenter.

Problems with Methodology:

Insufficient Data

Nine flights is an overwhelmingly insufficient amount of data from which to draw conclusions, especially since-according to SEABA's biweekly flight operations report-- the 4 flights on the first day of the study were the only flights that were actually part of their commercial tour operations. Nine flights over the course of seven days are being used to calculate the expected impacts of a heliport at the site. The data has been misused. What should be calculated is the sonic impact of two to four helicopters using the site constantly from the hours of 8 am to 6 pm, for three months. With that amount of use, the sound of helicopters almost never goes away.

Inaccurate Data

Even the data recorded from the nine flights aren't representative of lawful commercial tour operations from the site. SEABA was observed consistently and dramatically violating their flight rules, by skimming the treetops between the CUPLZ and mountaintops. This further skewed the results of the noise study by altering the profile and duration of each helicopter noise event. Sound Exposure Levels, LEQs, and DNLs are all highly related to the duration of noise events. SEABA's unlawful flight behavior corrupted the results of the study by artificially curtailing the duration and intensity of noise detected by the measuring devices.

Missing "Raw" Data, 1/3 Octave Data

The contract Mead and Hunt signed with the Haines Borough says that they will "include unweighted, "raw" sound data measured in decibels." The Draft Report includes only A-weighted (dB(A)) sound data. The official contract between Mead and Hunt and the Haines Borough also specified that they would include "1/3 octave sound level measurements at each location from which noise levels are measured and such ratings will be included in a standard sound measurement report." Presumably, the 1/3 octave sound measurements would show us what frequencies are emitted by the helicopter, and what percentage of the total noise is low-frequency noise. This information might be useful, but has not been provided by the Consultant. Mead and Hunt contracted to prepare the following metrics: DNL, SEL, LMAX, and Time Above," using the FAA's Integrated Noise Model. This also was not done.

Omitting the raw, unweighted data might be considered an breach of contract with the citizens of the Haines Borough, who payed for the Noise Study. Omitting the raw data is especially egregious when Mead and Hunt acknowledge that A-weighting carves off as much as 50 decibels from the decibel number of low-frequency sounds, because its purpose is to de-emphasize the impact of low-frequency sound. Helicopters obviously make abundant low frequency sound. The World Health Organization says that low-frequency sound emitters should be effectively penalized for their additional health and annoyance effects by adding decibels, not subtracting them.

Low frequency sound has particular effects on structures, human health and stress disorders, birds and wildlife, and has even been developed into a tool for fighting fire. Low frequency noise, aimed at the base of a fire, can extinguish the flame. Conducting a noise study which specifically excludes measuring the particular effects of low frequency sound, when assessing the impacts of a low frequency noise emitter like a helicopter, is

simply inadequate, ultimately misleading, and cannot be considered authoritative.

Problems with Assumptions/Sources for Information:

The Draft Noise Report claims that, "There are no local noise standards in effect, so in comparison, the only federal standard for noise and land use compatibility is from the Federal Aviation Administration. This standard is based on the DNL, which identifies the acceptability of various types of land use with aircraft noise exposure. Under this standard:

Residential uses are compatible with noise up to 65 DNL and up to 70 DNL with sound insulation; "

In fact, **"The FAA does not regulate aircraft noise**," according to Ian Gregor, the public affairs manager for the Pacific region of the FAA. "If a noise complaint involved an allegation that an aircraft was flying improperly low or unsafely, we would investigate the safety component of that complaint." Furthermore, the FAA plays absolutely no role in local planning decisions regarding questions of compatibility with residential uses. The 65DNL standard is an averaged noise level that the FAA believes is compatible with areas surrounding urban airports, and has no relevance whatsoever in rural Alaska. Mead and Hunt's suggestion that this would be an appropriate standard here undermines their credibility and professionalism, and begs the question, "Are they impartially gathering data, or are they preparing a report to suit the boss?"

Meanwhile, there are **other federal agencies that have generated standards for noise** and land use compatibility, such as the EPA, which is charged with protecting public health. Congress adopted the **Noise Control Act of 1972**, which set out much stricter guidelines than those recommended by the FAA. This federal law indicates for rural residential areas a standard of 35-45 dB.

Mead and Hunt could have looked closer to home for guidance. Other municipalities in Alaska do have noise regulations. The **city of Anchorage has noise regulations** prohibiting noise of 60 dB or greater from crossing residential property lines. Allowing a heliport at this site would regularly submit the nearest neighbors to sonic impacts that are more than 100 times greater than those allowed in urban Anchorage! Obviously, this constitutes "undue noise."

The city of Los Angeles has even more protective noise regulations. In residential areas of that city, sounds above 50 dB during day and 45 dB during night are unlawful. The more than 100 private properties within the mile radius around SEABA's heliport would be subjected to sound levels between 50 and 100 decibels--all levels that would be unlawful in urban Los Angeles.

Let's remember now that **70 dB is 10 times louder than 60 dB, and that 80 dB is 100 times louder**. **100 dB is 1000 times louder than 70 decibels**, while 70 dB will already cause hearing loss. No one should be subjected to that kind of noise in their own homes, on their own private properties, against their will, and for no appreciable benefit.

In 1979, the **EPA's "Noise Effects Handbook"** implicated noise in a number of health problems, including strokes, ulcers, heart disease and high blood pressure, as well as other stress-related disorders and mental health issues. International health organizations have recognized extensive effects of noise on human health. The **World Health Organization** has determined that, besides hearing loss, noise can cause loss of concentration, cognitive and behavioral problems, and stress disorders, especially in children and other sensitive populations.

Problems with Conclusions:

DNL:

Mead and Hunt erroneously diluted (via misapplication of DNL metrics) the extremely loud helicopter noise impact with the ambient neighborhood quiet, rather than merely impartially reporting the contrast, as they should

have done.

"Undue Noise:"

Haines Borough law instructs the PC to determine whether a CUP applicant has proven an absence of undue noise on neighboring properties. No part of the HBC suggests that an "average" (more accurately a dilution) of impacts at locations arbitrarily chosen by Borough administration can be used as a substitute for the standards outlined in HBC.

It is the job of the Haines Borough Planning Commission and affected citizens to determine whether the noise is "undue," not the job of a hired consultant. It seems inappropriate for a technical sound consultant to draw conclusions regarding what level of noise impact should be considered acceptable in a community. Furthermore, Hunt et. al.'s suggestion that the FAA's standard of 65 decibels for communities surrounding (primarily urban) airports should be applied in a quiet residential area in rural Alaska is downright ludicrous.

Useful Components of the Noise Report:

Despite the significant problems marring the usability of the Haines Noise Report, there are some refreshingly simple truths reflected therein. One, the background noise in **the neighborhood is inarguably quiet**. Quieter than any category available in the Consultant's charts. This simple fact should lay to rest forever the false assertion that this neighborhood is somehow a pre-existing industrial area that is already so loud that helicopters won't be noticed above the din of all the other industrial activities. There are, in fact, no other industrial activities in the neighborhood. The other undeniable fact is that **helicopters are extremely loud**; represented in the Noise Study by the Lmax numbers. Despite the reduction imposed by A-weighting, the numbers show that **the heliport would not be allowed** in any municipality that has noise regulations, nor would it be allowed by national or international regulatory bodies. The development of a heavy industrial activity like a commercial heliport is not compatible with a "wilderness residential" area, and is not excused in any way by the \$42,000 spent on this report. The Haines Borough should make a note to listen to its citizens next time a question like this comes up, and save itself some dough.

Conclusion:

Haines Borough Code 18.30.010 specifies under "Finding," "A permit approval shall include a written finding that the proposed use can occur consistent with the comprehensive plan, harmoniously with other activities allowed in the zone and will not disrupt the character of the neighborhood."

Regardless of how much of the taxpayer's money the Haines Borough spends on outside studies, the proposed use **cannot comply with Borough code**. A heliport in this neighborhood is not consistent with the Comprehensive Plan, it cannot coexist harmoniously with other activities allowed in this zone, and it will absolutely disrupt the character of the neighborhood. The heliport was unlawfully allowed by the Haines Borough Assembly, and unlawfully operated by SEABA. This is why there has been **consistent, vigorous, widespread opposition to allowing the heliport**, and there will continue to be opposition until the issue is put to rest.

| From: | <u>Kip Kermoian</u> |
|--------------|---|
| To: | David Sosa |
| Cc: | Julie Cozzi |
| Subject: | Draft Haines Noise Study comments |
| Date: | Friday, June 26, 2015 4:15:42 PM |
| Attachments: | K. Kermoian draft Haines Noise Study comments 62615.doc |
| | |

Dr. Mr. Sosa,

Please find my comments regarding the Draft Haines Noise Study comments attached.

Thank you,

Кір

Kip Kermoian PO Box 1024 Haines, AK 99827

June, 26, 2015

Mr. D. Sosa Manager Haines Borough

Re: Helicopter noise study

Dear Mr. Sosa,

I am assuming that you feel strongly about the integrity of all of those serving in the borough while conducting borough business and support the precept that personal biases should be put aside when, in this instance, a scientific study has been commissioned to objectively assess impacts to residents living adjacent to the proposed helicopter operation at .6 mile Chilkat Lake Rd. It is, after all, what each of us rely upon if a democracy is to function effectively.

If my above assertion is accurate, the results of the noise study do not accurately reflect their intended purpose, but rather, serve to support an obvious bias.

Who in the borough administration responded to Jessica Plachta and Nicholas Szatkowski's confirmed allegation - using GPS data of the helicopter test flights – that the helicopters were "flying at less than 200 feet above ground level during most of the 16-mile roundtrip between the helipad and a drop-off point." (Source: Chilkat Valley News, Thursday, June 18, 2015), which is contrary to the borough's flight operation agreement requiring helicopters to "attain as quickly as practicable after takeoff and maintain a minimum elevation of 1,500 feet above ground level while in flight", characterizing their concern as "unsubstantiated allegations"?

If the GPS data is confirmed to be accurate, this assessment by the borough administration mitigates the purpose of the noise study and casts doubt on not only the findings, as the results do not accurately reflect noise levels should helicopters abide by the borough's agreed upon flight standards, but raises the question of unethical bias within the borough administration.

To base any assessment of the impacts of this impending noise upon residents that will permanently and negatively impact the quality of their lives, on a manipulated methodology, only serves to disenfranchise all those who have contributed to this process is good faith.

I hope that you will conduct a fair assessment of the methodology, and insist that only an accurate measure of real impacts be used to support a position on this issue by the borough.

Sincerely, Kip Kermoian Regarding the Borough's noise study report:

Grade: F

The Borough lost its way when public officials who are supposed to serve the folks who live here decided to ignore those very people they have sworn to serve.

A midnight reconsideration of a vote after the public had left a Borough meeting?

Stating that public comments on the rezoning for of a residential neighborhood for a commercial heliport were not given "much consideration"?

By making back-room deals with any business entity that walks in the manager's door while treating the general public as if their comments do not matter?

By spending thousands to "justify" a poor decision with a meaningless report?

By thinking that a measurement of decibels has anything to do with the constant intrusion that a heliport represents over others living within a neighborhood?

The Borough would be just as wise to do a decibel study on a tent full of mosquitoes, rather than ask those in the tent whether or not the mosquitoes were interfering with the peace and quiet of their lives.

Borough public officials need to take a giant step backwoods and remember the public that they have sworn to serve. Develop of system whereby folks can listen to each other and share ideas before plunging forward with plans that do not have community support.

It will take some practice, but we can do it..listen to each other and work together toward common goals and a healthy, sustainable community that serves all its residents.

Regards, Kathleen Menke

Hello,

I have just read the results of the noise report and deem it somewhat irrelevant to the decision at hand; whether or not to grant SEABA permission to use their property as a heliport. Helicopters are loud, obnoxiously loud. This report hints at this when discussing the single noise events i.e. SEL and Lmax, but really misses the mark when using the DEL metrics to measure an average noise increase over a 24 hour period. You can not average a noise, especially a loud relatively short noise over a 24 hour period. It doesn't make sense to me and I consider the findings here a moot point, a very expensive moot point in my opinion. The numbers here are based on nine flights over 5 days. Even if one were to use the DEL metric system the results here do not indicate a normal day of flying for SEABA. I have heard, that at least 9 (that is the whole data set for a week used in this report) flights would leave and return to the SEABA property per day. The average or DNL is not only the wrong metrics to be using to determine if helicopters are annoying and disruptive, but the results were created based on low number of flights per day which is also does not accurately reflect what will occur here.

Another point I would like to note is we are using federal averages to as a baseline comparison however we, as residents of a small community in rural Alaska are in no way close to being comparable to federal regulations. It seems to me that most live here, especially out the highway, to be as far away from the normal standards of living especially to those living in the lower 48. I understand the federal averages are being used for lack of anything better, but do they accurately reflect the reality of living at 26 mile? I would not think so.

As a resident and property owner in the proposed heliport neighborhood, I do not want to be hearing a helicopters two months out of the year- a especially quiet and peaceful time of the year. Aside from myself and my neighborhood, I would strongly urge you to question whether this is a good move for our community as a whole. Granting things such as this heliport in our residential neighborhood will create hostile feelings towards our seasonal visitors. This I gaurentee. There are other places already in use as heli-ports that are not in the middle of neighborhoods. Why not use those? Would you permit this activity to happen in town? It is already louder there, perhaps no one would notice? I would guess not.

Thank you for your time and patience dealing with such a heated issue. Lauren McPhun

| From: | Nancy Berland |
|--------------|---|
| То: | Julie Cozzi |
| Subject: | Noise study comments |
| Date: | Friday, June 26, 2015 9:09:09 AM |
| Attachments: | NBHeliNoiseComments.doc |
| | Effects of Airport Noise on Housing Value.doc |

Julie, please accept these comments.

Thanks.

Nancy

In looking over the Noise Study and looking at the cited FAR Part 150, it's apparent that the contractor used a methodology designed for different circumstances. Basically the Noise Study concluded that the DNL measured at 4 Haines sites met the FAR Part 150 acceptable noise "standard" for residential areas near airports, with a DNL less than 65 dBA.

That FAR Part 150 applies to **existing airports** is extremely clear: it "is the primary Federal regulation guiding and controlling planning for aviation noise compatibility **on and around airports**." (Emphasis added.) The 26 Mile site is not an airport. Airports have more than 9 noise events over a 7-day period. All the fancy colored charts, graphs and tables generated by these 9 noise events and presented in the Haines study have no context, and are absolutely meaningless.

DNL is the <u>average</u> sound pressure level in A-weighted decibels for an <u>average</u> day of the year. According to FAR Part 150, this methodology works for assessing airport noise because it takes into account the effects of intensity, duration, frequency, and time of occurrence of aviation noise events, as measured against the background noise of the area. This average is used to determine compatibility at existing airports operating 365 days per year, and often 24 hours a day. Obviously there are many aviation noise events to be averaged at airports, and this is a way of ascertaining how much additional noise is created by the airport. However, the DNL for the Haines study includes only 9 noise events, that lasted a maximum total of 38 minutes (at the non-helipad sites) over a 7 day period. The impact of these 9 events becomes totally diluted in the calculated DNL by the low background noise levels at these sites for the rest of the 144 hours of the study. In other words, the DNL calculated for these sites consists of 99.66% background noise and .44% helicopter noise. What the charts and graphs really show is that this is a quiet, rural residential neighborhood that will be greatly impacted by allowing a heliport there.

Of more significance is the information (Figure 2-2) that an increase of 10 dB is humanly perceived as being twice as loud, an increase of 20 dB is perceived as 4 times as loud, an increase of 30 dB is perceived as 8 times as loud, an increase of 40 dB is perceived as 16 times as loud and an increase of 50 dB is perceived as 32 times as loud, and so on. Table 4-1 shows ambient noise levels are between 17 and 30 dBA 90% of the time, with noise events ranging from 77 to 94 dBA at non-heliport sites. This means a person at one of these three measured sites would hear an increase from 47 to 77 dB from normal background noise, per event. Using the information presented, this means a resident would experience noise events that were between 16 and 128 times as loud as normal. To say the least, this would be disruptive in the extreme. This certainly could be considered a "taking" of a person's right to the quiet enjoyment of their property. (Attached please find information regarding how property values decline near airports.) In this regard there is ample literature available (from the US Forest Service and even NASA) concerning the "annoyance" component of helicopter generated noise, and ample information regarding health impacts such as increased stress levels. Unfortunately, none of this information made it into the Noise Study.

FAR Part 150 explains the purpose of a Noise Exposure Map, which requires identifying present and future noise patterns. This is obviously important for airport planning. While 9 events does not create a pattern, the concept that there may be significantly more than 9 events per each 7 day period in the future is neither considered nor analyzed in the Haines report.

It must be said that DNL methodology used in this report could be used to justify citing a heliport just about anywhere in the Borough, perhaps even next door to where you live. Municipalities confine aviation noise to one or two airports for a reason. The three existing heliports are already excessive considering the amount of helicopter use.

The Haines Noise Study is further deficient in that it does not state if the events measured occurred underneath flight paths, which would affect the amount of noise recorded at each site. Also Nicholas mentioned in the CVN that the flight logs (not available on the Borough web site) indicated the helicopters were flying at 200 feet AGL. If this is indeed the case, 14 CFR Part 135 was violated, as it requires a 300 foot minimum AGL.

The Haines Borough has wasted an incredible amount of time, energy, and money on this issue. The Planning Commission decision to deny a permit should be upheld.

Thank you for the opportunity to comment.

Nancy Berland

AVIATION NOISE LAW

Airport Noise and Residential Property Value

Effects of Airport Noise on Housing Value

In 1994 the consulting firm of Booz-Allen & Hamilton, Inc. prepared a report titled The Effect of Airport Noise on Housing Values: A Summary Report for the Federal Aviation Administration. The report describes a methodology for evaluating the impact of noise on housing values. The methodology essentially compares market prices in similar neighborhoods that differ only in the level of airport-related noise. In pilot studies using this method, Booz-Allen found that the effect of noise on prices was highest in moderately priced and expensive neighborhoods. In two paired moderately priced neighborhoods north of Los Angeles International Airport, the study found "an average 18.6 percent higher property value in the quiet neighborhood, or 1.33 percent per dB of additional quiet." (See Bibliography: Impacts of Noise on Property Value.)

A 1996 study funded by the Legislature of the State of Washington used a somewhat similar methodology and found that the proposed expansion of Seattle-Tacoma Airport would cost five nearby cities \$500 million in property values and \$22 million in realestate tax revenue. The study of single-family homes -- all in "very good" condition, with three or more bedrooms and two or more baths, and excluding the most expensive and inexpensive units to provide more representative comparisons -- found that "a housing unit in the immediate vicinity of the airport would sell for 10.1 percent more -- if it were located elsewhere."

The Washington study also concluded: "all other things remaining equal, the value of a house and lot increases by about 3.4% for every quarter of a mile the house is farther away from being directly underneath the flight track of departing/approaching jet aircraft." (Details can be found in Sections 9.01 - 9.07 of the study.)

In 1997 Randall Bell, MAI, Certified General Real Estate Appraiser, licensed real estate broker, and instructor for the Appraisal Institute, provided the results of his own professional analysis to the Orange County Board of Supervisors. Comparing sales of 190 comparable properties over six months in communities near Los Angeles International Airport, John Wayne Airport, and Ontario Airport, Bell found a diminution in value due to airport proximity averaging 27.4 percent. (See the full report.) Bell has also developed a list of over 200 conditions that impact real estate values -- airport proximity is categorized as a "detrimental condition."

Disclosure of Airport Noise to Buyers

California law requires sellers to reveal noise and other nuisance factors in a Real Estate Transfer Disclosure Statement prior to sale, permitting prospective buyers to look elsewhere or to lower their offers. As of January 1, 2004, residential property owners in California are required, under certain circumstances, to disclose to prospective buyers that the property is in the "vicinity" of an airport (Assembly Bill 2776, 2002). (See AB 2776.)

Avigation Easements

Airports can acquire avigation easements in the airspace over neighboring properties in order to (1) prevent construction of buildings and towers, planting of trees, installation of lighting, or any other development that might interfere with aircraft takeoff and landing, or (2) protect against liability for any nuisance caused by airplanes using the airport, i.e., the impact of noise, fumes, and vibration on the "use and enjoyment" of properties under the flight paths to and from the airport. The former is a type of "hazard easement" while the latter is a type of "nuisance easement" but in practice both are called avigation easements. The two types are not typically combined in one legal document, although they may be.

Airports rarely take the trouble to acquire nuisance avigation easements by initiating condemnation proceedings. The nuisance easements are sometimes imposed on new developments near an airport, but only if the airport owner (a city or county) also has jurisdiction over the land surrounding the airport. An airport may also require a nuisance avigation easement as a condition for installing insulation against noise in homes and schools. When sued for nuisance by neighboring landowners, airports assert that they have a prescriptive avigation easement over the plaintiff's land and therefore are not liable for any nuisance due to aircraft noise, fumes, or vibration. In theory a prescriptive avigation easement is acquired by simply flying over the property for a number of years (the number set by state law to perfect a claim for adverse possession). However, only California courts have come close to recognizing avigation easements acquired by prescription (see link below to discussion of prescriptive avigation easements).

If the provisions of the easement are written broadly, the easement could preclude the property owner from successfully suing the airport for maintaining a nuisance (such as noise, air pollution, or airport lighting). For example, the easement might contain language that grants the airport the right to create noise, dust, vibration, fumes, etc. from aircraft presently using the airport as well as any future aircraft at the airport. If at the time the easement was granted the airport was used only by small, propeller-driven planes, but now a variety of helicopters fly in and out of the airport, the property owner would have difficulty arguing that the airport had exceeded its rights under the easement.

Avigation easements are recorded in the county recorder's office and show up in a title search. Like most easements, they are binding on any future owners of the property. See the following:

California Public Utilities Code section 21652 (statutory authority for avigation easements)

Sample avigation easements: California sample, FAA model

Prescriptive Avigation Easements

"Avigation Easements, and Lawsuits for Inverse Condemnation and for Nuisance" by Ronald D. Steinbach, Attorney at Law (California)

[Revised Nov. 13, 2004]

| From: | Nicholas Szatkowski |
|--------------|---|
| To: | Julie Cozzi; David Sosa; jessica meadow |
| Subject: | Noise Report comments |
| Date: | Friday, June 26, 2015 4:56:42 PM |
| Attachments: | Szatkowski Noise Report Comments, 26Jun2015.pdf |

Hello Haines Borough Administration-

I have included my comments as an attachment in the preferred pdf format. However, I have also copied the same comments into the text of this email below.

Thanks for reading them!

The only really meaningful things established by the report are that our neighborhood is normally extremely quiet, and that the helicopters are really loud. The report authors included lots of graphs and text that recalculate and refigure this basic information in ways that hide the basic facts.

Report's methodology invalid

The only metrics in the report which are relevant to our situation in planning Heliport sites in the Haines Borough are "single event metrics" because they are the only representation of the real volume of helicopters experienced in the neighborhood. Single event metrics (Lmax, and SEL) simply report actual recorded sound volume. Very simple, easy to understand, and provide accurate reflections of actual noise events. This is the only measurement of sound that is appropriate for comparing noise impacts of specific loud events in the context of a quieter background noise environment. The SEL graphs are mostly detailed in Appendix A. Sound Exposure Levels during the test period range from a (loud) low at the furthest test site of 69.5 dBA to a (painfully loud) high of 120.9 dBA at the nearest. (SELs combine the recorded Lmax with the duration of the sound event into a single metric, to offer a single number representing total noise impact of an event).

By contrast, "cumulative" (i.e., averaged) metrics become very convoluted. They involve sometimes complicated formulae which average the sound of a single event with other, unrelated sounds or background sound. Therefore, metrics such as LEQ (hourly averages) and DNL (daily averages) give a distorted view of actual noise events. For example, during one hour with background sound of 35 dBA, a helicopter might refuel, for 5-10 minutes, causing sound of 83 dBA. The LEQ would average these out, using a complicated formula, and end up with a number around 50-60 dBA. But the sound of the helicopter is not 55 dBA, it's actually 83 dBA. The metric called DNL is even further off-base in our particular situation, as it averages the helicopter sounds (which of course still occur at the same volume) with the quiet background sound level of the entire day and night, over 24 hours. This is why the report can say that at the adjacent property, the DNL was the very moderate sounding 51 dBA, even though the Lmax of the helicopter was consistently recorded at 82-87 dBA (SELs. This comparatively low number is not the result of the quietness of the helicopter, but rather the result of the quiet background noise level. In other words, the quieter the ambient noise of the neighborhood, the lower the DNL, even though the helicopter noise is just as loud as it is in a loud location. The DNL metric is therefore especially inappropriate for determining the impact of loud sounds within quiet environments, because quieter locations will have lower DNLs, falsely masking the true volume of the loud sound events. A 2011 FAA technical report contained the following caution, "DNL has another major practical limitation. It doesn't work particularly well as a predictor of aircraft noise impacts."

http://www.faa.gov/about/office_org/headquarters_offices/apl/research/science_integrated_modeling/noise_impacts/media/6-14-2011_FinalReport_MetricsMestre_etal_061411_part1.pdf

Using DNL as its justification, the noise report is attempting to assert that if you take a very quiet place and add a very loud noise for a relatively short period of time, you get a moderately quiet place, when actually, what you get is a very quiet place with a very loud thing in it.

No matter how quiet it was when you got up and had breakfast, when the loud helicopter sound occurs, you experience it at its volume at that moment. In fact, the quieter the background is, the *MORE* disruptive loud sounds are, because they are so out of place, and they shatter the peace that otherwise prevails.

Additionally, even if DNL were to be used, it could only have any possible meaning if the number of helicopter landings during the test period were exactly the same as they would be in a real situation. SEABA landed at the site 9 times during the entire week of the noise test. And according to SEABA's own biweekly operations/skier day report, only the 4 landings on March 9th were actually transporting skiers to the mountains, reflecting actual conditions of a real heliski operations base. In regular operations that number could easily be 90 landings or even more (2 helis per day, all day, times 7 days). So the average sound (DNL) would be enormously higher. But of course we don't have that actual number. Therefore the Noise Study's data set isn't reflective of the very thing it was supposed to measure. Again, *all averaged metrics (LEQs and DNLs) in the report are invalid, because they aren't based on conditions equivalent to real operations at the site, but rather on a minimized sample of helicopter traffic.*

Also, the study's recording of actual sound measurements was skewed for the following reasons:

-all of SEABA's flights using the 26-mile helipad skimmed the treetops on approach and departure, without even attempting to reach the elevations (minimum 1500' AGL in all cases, and 2640' AGL above valley floors) required under their existing Borough permit. Their failure to abide by this requirement was reported to the Borough multiple times, and the administration labeled the reports as "unsubstantiated allegations" even though the GPS data showed the citizen reports to be accurate. Flying in this manner very significantly changed that sound signature of the helicopters during the noise test period, so that only the Corona property (adjacent to SEABA) experienced sound levels that would occur if the helicopters flew in accordance with the requirements of the tour permit.

This means that only the data recorded at that location ("home by helipad") has relatively accurate readings. (We don't know if the noise recording equipment was located inside or outside the Corona cabin, which would make an obvious difference in recorded noise levels. If the decibel recorder was actually inside the cabin, then even those data are invalidly decreased, because property rights apply at owners' property lines, not just inside our homes or cabins). This is yet another reason the results of the study do not reflect the actuality of lawful, regular operations of a commercial heliport at the site.

-The FAA uses a very specific metric for measuring helicopter sounds, called Effective Perceived Noise Level (EPNL). The study didn't use this metric approved and used by the FAA. The report authors not only failed to explain why, but they also failed to even mention knowledge of EPNLs.

-the entire study used ONLY the "A-weighted" decibel scale, rather than recording the actual volumes as raw data. The A-weighted system is a curve that subtracts more and more from actual recorded dB as frequency decreases. From very low frequencies, as much as 50dB would be subtracted from the actual dB level that truly occurred (see page 9 of the report). This weighting scale was created to attempt to emphasize sounds in the mid-frequency range that are more clearly heard by most people. But it distorts the actual record of the true volume of sound pressure. The report states that "most community noise analyses are based upon the A-weighted decibel scale". However, it is not appropriate for measuring low-frequency sound emitters, such as helicopters. A thorough, professional account of A-weighting scales would acknowledge that, in fact, there has been much questioning and criticism of A-weighting for measuring sources of low-frequency sounds such as those emitted by helicopters. The contract required Mead and Hunt to provide raw-data for helicopter noise measurements. They failed to meet this term of their contract, and only included the A-weighted numbers.

Conclusions Invalid and Unprofessional

The report falsely claims that the only standard available for comparison is the FAA's promotion of 65 dBA as a threshold for areas surrounding urban airports. This contention is wildly inaccurate, and undermines the credibility of the report

Even in urban Anchorage, noise regulations do not allow noise levels above 60 dB from crossing property lines in residential areas. (Because of the logarithmic nature of the decibel scale, 70 dB is 10 times higher than 60 dB. **80 dB** is 100 times the sound pressure as 60 dB). Allowing a heliport at this site would be imposing noise onto neighboring properties that is 100's of times louder than would be allowed in urban Anchorage.

*The WHO recommends the following guidelines, recognizing the following related health concerns:

For outdoor living areas, a 55 dB noise level will result in "serious annoyance". 50 dB will result in "moderate annoyance," daytime and evening.

For indoor dwellings, for speech intelligibility, noise levels should not exceed 35 dB.

For sleep disturbance, 30 dB background; 45 dB is expected to wake, or otherwise disturb, a sleeping person.

In outdoor parklands and conservation areas, "existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low."

... "For indoor environments, reverberation time is also an important factor. If the noise includes a large proportion of low frequency components, still lower guideline values should be applied."

The Haines Noise Report neighborhood ambient noise measurements show an extremely quiet background noise level, between 16 and 29 decibels. That's quieter than any category they have in their charts. Quieter than "Wilderness Residential," at 35 decibels, vastly quieter than 51 dB "Wooded Residential," which they attempt to characterize this neighborhood as being, and dramatically quieter than the 65 dBA level that is being proposed as a standard for our neighborhood. The report authors suggest that a drastic elevation in neighborhood decibel levels is appropriate, without any supporting evidence whatsoever for why this is acceptable on a social or municipal planning level. The Federal Noise Control Act of 1972 recognizes detrimental impacts of increasing neighborhood noise, and says that an increase of 20 dB "will result in widespread, vigorous public opposition."

Even with the dampening effects of A-weighting, the maximum noise levels measured during the study period ranged from 77.4 to 104.3 dBA at the four sites. All of these noise levels are above reference ranges for residential noise standards, standards preserving healthy hearing, and national and international standards protecting public health. (See Anchorage municipal codes, EPA Noise Control Act of 1972, and World Health Organization Guidelines for Community Noise.)

The Haines Noise Report concludes with a DNL metric, (mis)calculated by *averaging the excessively loud helicopter noise events with the extremely low ambient noise levels*. The study failed to use EPNLs, and the report fails even to acknowledge existence of this metric, the FAA's preferred and best metric for measuring helicopter sounds. The report's authors admit that they failed to use the FAA's Integrated Noise Modeling, which was another requirement of the contract they signed and were paid for. This model is the method used and approved by the FAA by which to arrive at a DNL. Nonetheless, having failed to use the modeling system approved by the FAA, Mead and Hunt make assertions about the expected noise levels in the neighborhood, at surrounding properties. However, they are using a sample time period during which SEABA was flying unlawfully, hiding their "cone of sound" from the noise monitoring stations. They are also using a preposterously small number of flight events to arrive at their DNL.

The Haines Borough was warned not to waste our public funds to pay an outside consultant for something that does not return meaningful value to the public. Measurements of ambient background versus helicopter sound levels could have been obtained for a small fraction of the price paid to Mead and Hunt. Most of the expense went to their analysis and production of a "cooked-book" report which appears to be using obfuscatory jargon and graphs to make it look like a very loud sound is somehow, impossibly, rather quiet. I wonder who in our Borough might have suggested that angle to Mead and Hunt.

sincerely, Nicholas Szatkowski 26-mile Chilkat Valley, Alaska Hello Julie and David,

I hope you are well.

Please find attached the comments that Rafe and I wish to submit in regards to the recent Noise Measurement Study.

Julie, could you confirm receipt when you get our comments tomorrow? Thank you!

-Sally and Rafe

Sally Boisvert & Raphael McGuire P.O. Box 578 Haines, AK 99827 (907) 767-5515 June 25, 2015

Hullo,

We are writing to share our opinion on the recently published helicopter noise report. It appears to us the most relevant part of the study was the measurement of how loud it was during the moments a helicopter was passing, which was extremely loud. The report indicated that averaged over an entire day, it wasn't that loud, at least not compared to a neighborhood near a commercial jetport. This is entirely irrelevant. How disruptive something is should be measured while it is occurring, not over an arbitrary extended time frame.

We have both worked around helicopters and it is distinctly obvious that they are incredibly loud and disruptive. This study measured the noise of a small number of flights and compared it to an average lower 48 neighborhood, whereas the reality is a very quiet and peaceful remote rural neighborhood being overrun by a much higher daily number of flights. Furthermore, the noise of a helicopter depends partly on how it is operated. Since the company operating the flights during this study has a strong interest in the outcome, they presumably flew to minimize noise, low to the trees and gently on the throttle. Normal operations could be substantially louder.

Helicopters are loud, too loud for a wooded residential neighborhood. The people who live near the proposed heliport say they think it is too loud. There are already several operating heliports nearby. This heliport in the 26 mile neighborhood should not be permitted. Nor should heli-ports be permitted in the nearby Moose Valley where we, and many other families reside.

We believe it would be in everyone's (i.e. the Haines Borough, the helicopter skiing industry, and local taxpayers) best interest to strategically locate heliports away from residents' homes; in so doing, the Haines Borough could continue to promote the successful helicopter-skiing industry, while the people of Haines who work in other local industries can continue to enjoy the places we reside yearround, and continue to be welcoming to winter ski tourists. Visitors often remark on how friendly and welcoming our small town is. Let's keep it that way by locating heli-ports away from the homes of the locals, who will then feel more inclined to continue to make heli-ski tourists feel welcome and invited.

Respectfully, Rafe McGuire & Sally Boisvert P.O. Box 578 Haines, AK 99827

| From: | Sally McGuire |
|----------|---|
| To: | Julie Cozzi |
| Subject: | Fwd: Helicopter noise assessment comments |
| Date: | Friday, June 26, 2015 7:13:45 AM |

Hi Julie, could you please post this with the other helicopter noise report comments? thanks, Sally ------ Forwarded message ------From: **Sally McGuire** <<u>chilkootmcguire@gmail.com</u>> Date: Fri, Jun 26, 2015 at 7:11 AM Subject: Helicopter noise assessment comments To: Sally McGuire <<u>chilkootmcguire@gmail.com</u>>

I have read the helicopter noise assessment. I must say I was surprised by the poor quality of the work- I would have expected better research from a college freshman (and especially considering what we paid for it). It also reads like it was written by an apologist for the wind industry.

To site something as noisy and disruptive as a heliport in a residential neighborhood is an example of exceptionally poor planning, bound to create serious problems. The point of any kind of zoning is to ensure neighborhood homogeneity and consequently peaceful coexistence. Those citizens of Haines who support heliskiing must have noticed by now that the people who have to live with it don't get used to it and they don't stop being angry about it. Those problems won't go away until the heliskiing industry is required to operate away from people's homes. Haines has endured many years of disruption and disintegration of community from this. Allowing SEABA to site their heliport in a small, formerly quiet, rural community will ensure that the problem continues.

The citizens of Haines who live up the highway do so because they value peace and quiet and are willing to pay for it (just driving back and forth to work costs a lot). They are well aware of the hypocrisy of their being forced to live in a helicopter landing zone, while downtown residents are protected from even as much as a crowing rooster.

Incidentally, the way the noise report should have been conducted would have been to send someone around to ask the neighbors what they think. Then you pool and weight responses from people who live close to the facility or under the flightpath. You put those who live a mile away into another pool, and so on. Any averaging that is done, if you want to average, should be only within each pool. Using averages to prove that an extremely loud noise is actually nice and quiet is a fine example of how to lie with statistics.

As far as I can see, the only point of spending forty grand of our money on this "noise assessment" study was to prove that the opinions of the people who live up there don't matter.

Sally McGuire

| From: | David Sosa | |
|--------------|---|--|
| То: | Julie Cozzi | |
| Subject: | FW: comments for noise study | |
| Date: | Friday, June 26, 2015 3:43:32 PM | |
| Attachments: | CommentsforNoiseStudyatBSVproperty 6 26 2015.docx | |

From: Sunny Sundberg [mailto:sunny@seaba-heli.com] Sent: Friday, June 26, 2015 3:33 PM To: David Sosa Subject: comments for noise study

David see attached. Thank you

Scott Scott Sundberg GM / Guide SEABA LLC www.seaba-heli.com 907 314 0445 To: Dave Sosa Borough Manager

I would like to say that when asked for public comment on the study it was difficult to decide what to comment on. The study was done through empirical methods, it was meant to be objective and without the subjective content that has made this CUP so difficult to interpret. I think the last paragraph of the study below sums up the considerations of this study:

"As stated above, the three sites outside the helipad ranged from 30-51 DNL. Typical noise measurements at an average "wooded residential" land use is generally around 51 DNL. This means that the measured average noise level at the three sites fairly closely matches, or is quieter than what would be expected in wooded residential or quieter land use types. However, it is important to note that these comparisons do not link to any specific noise standard or regulation, but rather give a generalized comparison between what is typical in similar land uses and the results measured during this Study".

Also, after reading through it a couple of times, it dawned on me that the noise levels that are near or close to light commercial noise determined by the study only would affect 5% of residences out in the 26 mile area. In effect information stating otherwise was not present. **Context number 1:**

This area is zoned generally allowed use, which encompasses about every imaginable use from private residential, to commercial and even heavy industrial. The report say that during this testing and information gathering period that the dnl levels stayed very close to what one might experience in a wooded residential area. This is stated as 30-51 DNL.

In this context the DNL levels could be much higher and still be compatible with all the allowed land uses in this area.

In the chart that they use to compare noise in figure 2-2 they group these same decibel levels, 30-51 as quiet.

Context number 2:

The Lmax time duration of the events is limited to when the heli is going to take off and land. In the appendixes you can look at each event and determined that the average amount of noise generated at the location averaged around 4 minutes and 45 seconds, the LMAX averages total 85 seconds per occurrence. 75% of the remaining noise is 90% lower.

If you had a rock crusher or a sawmill running at this site, (both do not need a permit under current zoning) which at the industrial scale both generate peak noise over 110 decibels, with an average length of time for peak noise could be 6 plus hours a day.

A helicopter landing and taking of 20 times a day would have a LMax duration of 1700 seconds or 30 minutes over the course of the working day. This would account for only 10 percent of the industrial noise generated by a permitted activity like a rock crusher or sawmill.

Comparatively one could conclude that the allowed uses are much more intrusive, probably do create a level of undo noise, and generate a more continuous LMAX and SEL levels. So why is this activity supposedly given so much attention? Why are we even discussing this issue.

Context 3:

In everyday life through the borough, along highways, and in the commercial and residential areas of the borough, sound is generated from 7 in the morning to 11 at night in some circumstances.

Turner Construction operates a CUP gravel pit at the top of 4th street next to residences. Large equipment cut into the hillslopes above the residences, load trucks with gravel, and then proceed down the hill through the residential area to deliver their product to customers. In terms of noise there are probably similar if not higher noise levels involved with this activity. It also would qualify that unlike the 4th street gravel pit, helicopters noise moves away from all residences over public lands identifiednear the test site, over lands allocated as resource development and multi purpose recreation. This includes recreation machinery that delivers high levels of noise. This happens both in personal recreation, as well as commercial operations. Noise is part of everyday life in economy and in enjoyment. For true quiet one must retreat to wilderness, and even then a International jet can disturb the solace.

My other thoughts after giving certain scenarios demonstrating realities associated with this topic, I want to mention a few things about the environment of the study. Haines and specifically 26 mile had a very light snow year. This affected a few crucial aspects that were not in the study.

- 1. As a result of the low snow levels, SEABA was forced to cancel it snowcat tours which leave from the immediate study area. In 2014 we did 28 cats ski trips. An abundant amount of ambient or background noise was left out of this study because of this. Noise not captured that normally would exists would include snow plow riggs both for state and private roads near the study area, private vehicles using BSV and SEABA roads to get to the activity, the startup and shutdown of the SEABA snow cat which is a diesel tractor that needs to warm up and cool down every time it departs for the excursion.
- 2. We also have snow mobile tours that leave from this area that were not facilitated because of low vegetation cover as well. We had enough snow to move the machine on the snow, but because of the lack of deep snow our rental business and general activity was down 80%. Most rental occur with deep snows that the riders are targeting.

This noise study identifies that while there is noise, it is no greater than what has been and is accepted throughout communities including ours, noting the example of the 4th street in commercial and more importantly in line with residential areas.

Without a doubt I feel that this study demonstrates that this is a compatible use for this area, giving the current zoning, and the relatively infrequent amount of noise that is will contribute to the area.

Finally the other comment is that noise is apart of any economy, and thiszoning within in the borough was specifically left open for private landholders had options to do what they want. Unde consolidation this was requested and lobbied for during consolidation by the people who owned property outside of the town site.

When the borough assembly added the requirement to get a CUP from the Planning and Zoning, under title 5, if a person wanted to develop a heliport, it errored by not allowing the

exclusion of Generally allowed uses. This study shows that if the proposed development of a heliport was in a residential or commercially zoned area, then the validity of getting a CUP has merit.

I believe an easy fix for the borough is to remove this condition from ordnance from title 5, and put into title 18 under the appropriate zoning.

Thank you for your time.

Scott Sundberg

| From: | Thom Ely |
|----------|--|
| То: | Julie Cozzi |
| Cc: | David Sosa; Lynn Canal Conservation; Chilkat Valley News; AQRC Board |
| Subject: | Helicopter Noise Study - Public Comment |
| Date: | Wednesday, June 24, 2015 6:55:34 AM |
| | |

Dear Haines Borough,

The results of the Helicopter Noise Study at the 26 mile residential area came out exactly as predicted. Helicopters make noise at a level that bothers some people and not others.

The fault in the study is that the flight path and elevation of the helicopter was not regulated or monitored. In addition, nine flights is an extremely low sample. The noise monitoring stations were set up, but no official was there to tell the pilot where and at what elevation to fly. This lack of data parameters and scientific analysis renders the study useless.

In addition weather data for the days that the monitors were in place was not collected or factored in. Wind direction and velocity affect the soundscape. The microphones had wind shields on them but this has no relation to how the rotor noise is affected by the wind.

The 70 DNL standard used for comparison in a wooded residential area is also subjective. Most people living in the Chilkat Valley want peace and quiet at home. This local standard may be 25 DNL. That is why there are noise ordinances in residential areas. Dogs barking, heavy equipment working, chainsaws and helicopters are all considered a nuisance and annoyance.

The fact of the matter is that heliports do not belong in residential areas. If approved, as an adjacent property owner I would pursue legal action and monetary compensation from the Haines Borough. All commercial aviation needs to take off and land at at the Haines Airport.

Sincerely,

Thom Ely POB 1014 Haines, AK 99827

Chilkat Valley News

News

April 24, 2014

Volume 44, Number 16

SEABA fined \$21K, put on 4 years of probation

By Karen Garcia

Local heli-ski company Southeast Alaska Backcountry Adventures on April 17 agreed to pay more than \$20,000 in fines and be placed on four years of probation after pleading guilty to repeatedly and intentionally trespassing on Bureau of Land Management property.

The dozens of illegal landings came to light after a BLM Office of Law Enforcement investigation into the death of SEABA guide Christian Cabanilla revealed the March 2013 fatal accident had occurred on BLM land off-limits to heli-ski companies.

Assistant U.S. attorney Andrea Steward recommended in her April 10 sentencing memo that SEABA be sentenced to two years' probation, \$11,556 in restitution to BLM and \$10,000 in fines.

However, during the April 17 sentencing hearing, Judge Timothy Burgess imposed a harsher sentence, bumping the probation to four years and requiring SEABA to create a compliance plan to protect against future unauthorized use of BLM land.

"(Judge Burgess) wanted a longer period of time to ensure they are complying with everything. They can seek early termination, usually; they still have the potential to get off after two years," Steward said.

Regarding the compliance plan, SEABA attorney Tracy Knutson spoke at the sentencing hearing and said SEABA was already taking steps to ensure compliance "including disassociating with certain guides they had worked with in the past," Steward said.

One of SEABA's probation conditions is that it maintain GPS data and provide it to BLM upon request to ensure the company isn't continuing to operate out of bounds, Steward said.

Steward said cases of trespassing on BLM land are usually resolved outside of criminal courts, with the BLM ticketing companies or users for violations instead of pursuing criminal charges.

"The reason this wasn't handled that way is because through the investigation it was apparent there was a pattern and practice of this over time," Steward said.

When the 2013 accident occurred, SEABA also misrepresented the situation by phoning BLM and claiming Cabanilla's group had "accidentally" been skiing on BLM land. Steward said this misrepresentation also led to the matter being prosecuted criminally instead of administratively.

Federal prosecutors charged SEABA with one count of unauthorized use of BLM land in December. An investigation into SEABA's maps, GPS flight information, flight-following logs, guide meeting notes and company financial information revealed SEABA was on

BLM-managed land approximately 54 days out of 78 total operation days in 2012 and 2013.

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AGREEMENT REGARDING FLIGHT OPERATIONS AND PRACTICES OF COMMERCIAL SKI TOURS

PARTIES

THIS AGREEMENT entered into this day of <u>March</u>, 2011 by and between the Haines Borough, ("Haines" or "Borough") an Alaskan municipal corporation whose address is P.O. Box 1209, Haines, Alaska 99827, and Alaska Mountain Guides & Climbing School, Inc., ("AMG" or "Permittee"), an Alaskan corporation whose address is P.O. Box 1081 Haines, Alaska 99827.

RECITALS

- 1. Haines issues permits for the conduct of commercial ski tours within the Haines Borough in accordance with the provisions of Chapters 5.04 and 5.18 of the Haines Borough Code.
- 2. AMG has received a permit from Haines authorizing AMG to conduct commercial ski tours.
- 3. AMG contracts with a certificated air carrier authorized to operate helicopters in connection with the commercial ski tours operated by AMG.
- 4. A number of residents of Haines are impacted by AMG's permitted activities and have expressed concerns to Haines and to AMG about potential impacts of AMG's use of helicopters on wildlife, recreational users and Borough residents.
- 5. AMG is willing to commit to take action to address concerns of some residents of Haines regarding AMG's permitted activities through a voluntary agreement with Haines.
- 6. Haines is willing to enter into a voluntary agreement with AMG to establish requirements to be followed by AMG and Haines to reduce the impacts of AMG's permitted activity on Borough residents and wildlife in lieu of involuntary regulation of AMG activities through provisions of the Haines Borough Code.

CONSIDERATION

For good and valuable consideration the receipt whereof is hereby acknowledged Haines and AMG agree as follows:

Agreement Regarding Flight Operations and Practices of Commercial Ski Tours Page 1 of 5

Terms and Conditions

A. Flight Rules

- 1. Unless weather, safety conditions, mechanical difficulties or Federal Aviation Administration requirements dictate otherwise, AMG shall require any helicopter transporting AMG customers to:
 - a. follow the access route described below:

From the 33 Mile heliport- Use Porcupine Creek, McKinley Creek or Glacier Creek to access Porcupine Peak and Flower Mountain areas. Avoid Jarvis Creek, and the Klehini River to keep noise away from residences. Access the Mt. Jonathan Ward area from the Porcupine Peak area. Use a route directly behind 33 Mile to access Four Winds area.

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.

From the Haines Airport – Fly directly up the Takhin Valley to access areas south of the Takhin and Tsirku Rivers. Fly directly across the Chilkat River and up the slope between Haska Creek and the Kicking Horse River to access areas south of Mt. Emmerich, including the Rainbow and Davidson Glacier areas. Avoid Haska Creek and Kicking Horse River. Avoid traversing slopes facing Chilkat Inlet to avoid residences.

Helicopters transiting between heliports should fly on the opposite side of the valleys from residences.

b. attain as quickly as practicable after takeoff and maintain a minimum elevation of 1,500 feet above ground level ("AGL") while in flight.

c. maintain a minimum distance of one-half mile from wildlife on public lands while in flight and shall not hover over, circle or harass wildlife.

d. maintain a distance of 1/2 mile above the valley floors except when (1) shuttling passengers from the bottom to the top of a run, (2) during landing and takeoffs.

e. maintain a distance of 1/2-mile horizontal (ground level) distance or 1,500 feet AGL above observed recreational users except when (1) shuttling passengers from the bottom to the top of a run, (2) during landing and takeoffs.

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B. Shared Use Policy

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AMG and Haines shall implement and comply with the following policies for shared use of backcountry within the Borough:

1. AMG shall yield to non-motorized, recreational backcountry users ("User"), within the boundaries of the area known as Telemark Ridge at the head of the Haskat Creek drainage on a by request basis provided the User has complied with the procedures set forth in this agreement.

2. User must contact AMG by phone or email at least 48 hours in advance of User's planned activity and request to use a specific area on a specific day or days up to a maximum of three (3) consecutive days.

3. User must notify the borough clerk by phone or email of the request.

4. Confirmation of receipt of the request shall be given to User and the borough clerk by AMG within 24 hours of AMG's receipt of the request.

5. Modifications of User requests may not be made less than 48 hours in advance of User's planned activity.

6. Any cancellation of the request shall be communicated by User to Permittee before 9am on the day of User's planned activity.

7. AMG is not required to yield to a User who has previously failed to communicate a cancellation to AMG.

8. AMG is not required to yield to the same User for more than ten days per month.

C. Investigations of Reported Failures

Any failure by Permittee to follow Flight Rules or follow the Shared Use Policy of this Agreement ("Permittee Failure") may be reported to the borough manager ("Manager").

Any failure by any User to follow the Shared Use Policy ("User Failure") may be reported to Manager.

Agreement Regarding Flight Operations and Practices of Commercial Ski Tours Page 3 of 5 Upon receipt of a reported Permittee Failure or User Failure, Manager shall investigate the matter and make a determination regarding whether either a Permittee Failure or User Failure has occurred. The results of this investigation shall be provided to Permittee and User and preserved in writing.

D. Consequences of Failure

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1. Any Permittee Failure may be considered by the Borough Assembly when acting on future permit requests of Permittee.

2. Any Permittee Failure may be considered by Manager when making future allocations of skier days to Permittee.

3. The parties recognize that the damages resulting from any Permittee Failure are not capable of being measured in economic terms and include, among other things, a perceived reduction in the general quality of life of Haines residents, possible reductions in wildlife populations, reduced opportunity for quiet recreation and general inconvenience to the public. For this reason, the parties agree that Permittee shall pay to Borough as damages for any Permittee Failure and upon Borough's demand a sum of two-hundred dollars for each Permittee Failure.

E. General Provisions

1. <u>Notices</u>. Any and all notices required or permitted under this Lease shall be addressed as follows and may be mailed by certified or registered mail or hand delivered to the following addresses or such other addresses as may be designated by each party:

| Haines Borough | AMG |
|-----------------------|-----------------------|
| P.O. Box 1209 | P.O. Box 1081 |
| Haines, Alaska 99827 | Haines, Alaska 99827 |
| ATTN: Borough Manager | ATTN: General Manager |

2. <u>Rights or Remedies</u>. No right or remedy herein conferred upon or reserved to Landlord is intended to be exclusive of any other right or remedy, and each and every right and remedy shall be cumulative and in addition to any other right or remedy given hereunder, or now or hereafter existing at law or in equity or by statute.

3. <u>Waiver and Forbearance</u>. Except to the extent that such party may have otherwise agreed in writing, no waiver by such party of any breach by the other party of any of its obligations, agreements or covenants hereunder shall be deemed to be a waiver of any subsequent breach of the same or any other covenant, agreement or obligation. Nor shall any forbearance by

Agreement Regarding Flight Operations and Practices of Commercial Ski Tours Page 4 of 5 such party to seek a remedy for any breach of the other party be deemed a waiver by such party of its rights or remedies with respect to such breach.

4. <u>Integration and Modification</u>. This document contains the entire agreement of the parties hereto. All negotiations, statements, representations, warranties, and assurances, whether oral or written, which are in any way related to the subject matter of this Agreement or the performance of either party hereto are merged and integrated into the terms of this document. This Agreement may not be modified or amended except by a writing signed by both parties hereto, and any purported amendment or modification is without effect until reduced to a writing signed by both parties hereto.

5. <u>Governing Law and Venue</u>. This Agreement shall be construed and governed by the laws of the State of Alaska. All suits related to this Agreement shall only be brought in state court in the First Judicial District, State of Alaska, at Juneau.

Entered into this $\beta 4 + 1$ day of MARCH , 2011.

HAINES BOROUGH

Mark Earnest Borough Manager

ALASKA MOUNTAIN GUIDES & CLIMBING SCHOOL, INC.

ITS:

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