# Avalanche with 2 fatalities. Helicopter skiing.

Location: Haines, Takhin ridge Date: March 13th. 2012

Location: UTM 59 18.16 N 136 02.13 W

Aspect: W Elevation: 5000'

Avalanche Type and Size: SS-ARu-R4-D4

Sliding surface: new/old Average depth: 70-100cm Average slope angle: 35 degrees

Run out distance: 1500'

Trigger point near rock outcropping on SSW aspect.

Time: 10:33 Report Author(s) Name: Kent Scheler

Affiliation: Alaska Heliskiing

**Location:** State: AK

County: Haines Forest: Chilkat Peak, Mtn Pass, or Drainage: Peak

Site Name: Swanny

#### Snowpack:

In general, the snowpack for the season appeared to be relatively stable, however the main concern was various density changes from constant strom cycles and possible buried surface hoar. Storm cycles were consistent and snow totals were above average for the city of Haines at sea level. For the operations area, consistent storms deposited deep snow to valley floors and lesser amounts of snow at elevation. Wind was light during storms leading up to the avalanche, however a few wind events were noted a week prior, which formed isolated pockets of instability and one large skier triggerd SS-AS-R3-D3 (from ski cut) on the 03/05/12. This avalanche was released just after a storm cycle. The weak layer was determined to be buried surface hoar on a hard bed surface formed during the previous wind event. The day prior (3/12/12) to the avalanche accident, operations completed a successful day of skiing in a zone approximately 16 air miles WNW of the accident site. Stability in that area was considered GOOD after 3 Test + pits and many ski cuts. Test + pits were dug to identify hard bed surfaces with apparent overlaying surface hoar. Pit results demonstrated a "right side up" snowpack with no results on the ETC/CT tests and the absence of surface hoar, operations completed 147 client runs that day with no results and slow sluffs. Some midelevation pockets (very small) were reactive in one area and storm releases (2-3 days prior) were observed on slopes.

## **Events leading up to the avalanche:**

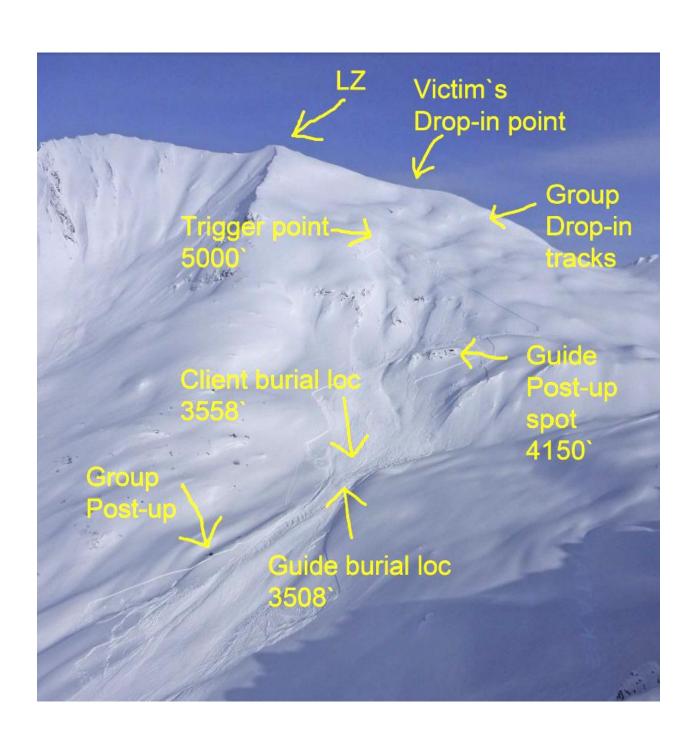
Heli-ski group of 5 and 1 guide departed base of operations to complete client objectives to free ski runs. The group skied one run previous to the avalanche. Snow on this run was variable and skiing was not ideal with grabby, wind textured snow. Due to these conditions, the guide moved to a zone across the valley that was more sheltered from wind. The guide was familiar with the run and had skied this run one week prior to the accident. A second heli-ski group was staged on the ridge waiting to ski slope. A third group was in flight to the same ridge just as the avalanche occurred.

### **Rescue description:**

At approximatly 10:10-10:15, 5 clients and 1 guide (group #1) landed the ridge of a run called Swanny. The guide instructed his group on the ridge and set the main ski track for the run on the W face, posting up on a lower bench near mid slope to oversee his group ski the slope. Three clients safely descended the slope following guide #1 tracks, traveled past guide #1 positions and then posted up on a terrain feature at the bottom of the run as per the guides instructions. The fourth rider descended, but chose a line much further to the skiers right of the set track, which had a more southerly aspect. This line took the rider next to a rock outcropping on a SSW aspect, which triggered the avalanche. It should be noted that the third rider had descended before the fourth and crashed, impacting the

snowpack very hard; this did not trigger the slide. A second group (group #2) had landed on the ridge LZ and was preparing to ski the run behind group #1. The LZ is high on the ridge and the ski run is not visible from this spot. As group #2 was organizing on the LZ, the avalanche occurred and group #2 was unaware of the event. A third group (group #3) was in flight for the same ridge and witnessed a large powder cloud in the valley. Group #3 informed group #2 of the avalanche, but told group #2 to hold on the ridge due to "hang fire". Group #3 guide contacted base to initiate the operation EMS plan, landed mid-slope at the top of the debris pile and began the course search. The helicopter (279CH) left guide #3 and flew to the ridge to pick up guide #2 on the ridge. It was determined at that time that two person were missing from group #1 including the guide. Also during this time, a second helicopter was dispatched to the accident site with three additional senior guides from base.

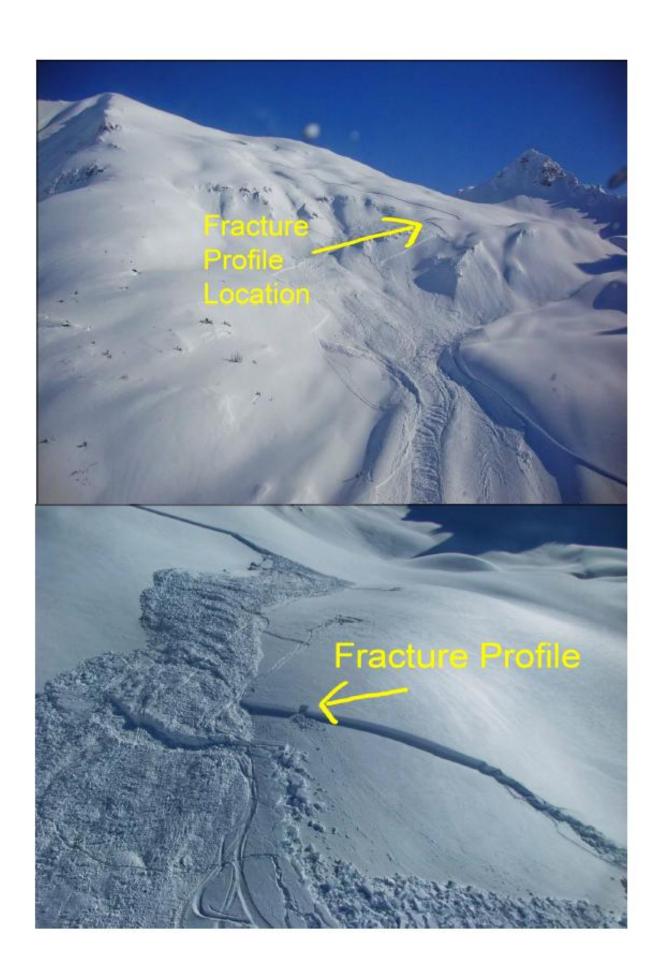
Guide #2 landed on the debris pile to join the rescue effort. Just after guide #2 landed, the second helicopter (350CH) was inbound to the mid-slope LZ. Guide #2 held at the LZ to land 350 and was joined by guide #4, guide #5 and guide #6. During this time Guide #3 had identified two beacon signals and a probe strike on victim #1. Guide #2, #4, #5, and #6 descended the bedsurface to assist guide #3. Upon arrival, guide #5 and #6 joined guide #3 to help excavate victim #1. Guide #2 and #4 continued down slope to pin point the second signal of the second victim. Victim #2 was quickly located by beacon and probe strike and resucers began the excavation. At this time 279CH was inbound with 3 additional guides. 279 landed close to victim #2 location and joined guide #2 and #4 with additional medical equipment. Upon arrival of the 3 additional guides, victim #1 and #2 airways had been cleared and rescue breathing was being initiated. For the next several mintues (10-18 min) great effort was made to fully excavate both victims from more than 2 meters of snow. Victims #1 was excavated approximately 8-10 minutes prior to victim #2. Both victims were given CPR during excavation and in flight to waiting EMS.









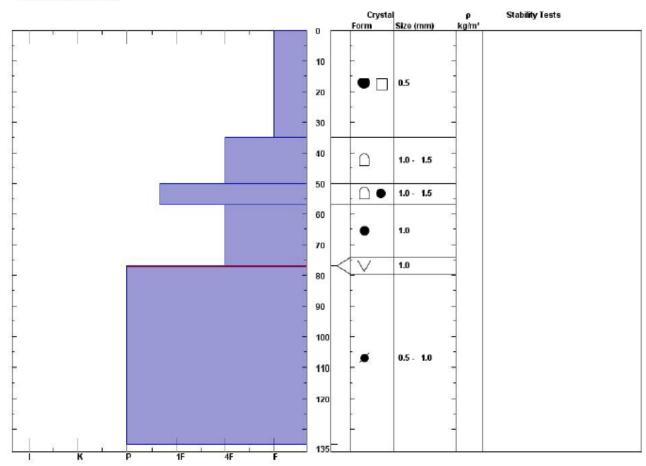


Stability Test Notes: Snow Pit Profile Observer: Kent Scheler Stability on similar slopes: Fair

Layer notes: Sat Mar 17 03:07:00 AKDT 2012 Swanny Air Temperature: 0 C 0-35: some wind textur Co-ord: 136 W 59 N 76.9-77: Problematic Layer Chilkat, AK Bky Cover, Clear Elevation (m) 5000 Slope: 0 Precipitation: None Weak layer, 1mm su Wind loading: previous Wind: N Calm 77-135: Bed surface, very pl Aspect 207

Specifics Avalanche Pit: crown; We skied slope. Ski tracks on slope. Supportable crust.

Notes: See attached notes.



Fracture profile was conducted to ID structure associated with a SS-AR-R4-D4-I, which was started SSW face @ 5,000° and the propigated onto the W aspect. The weak layer was a 1mm layer of buried su on wp bed surface. Avalanche was 750-800' wide x 3500' fall. Due to minimal time conducting investigation under "hang fire" no stability test were conducted.

# Anchorage Daily News Article Second heli-skier dies from 'huge' Haines-area avalanche Heli-skiing client was near Haines on Takhin Ridge.

By CASEY GROVE (03/15/12 10:48:44)

A second man has died after a Haines-area avalanche Tuesday that killed a heliskiing

guide, Alaska State Troopers said.

The "huge" avalanche buried two men from a group of six skiing Takhin Ridge about 11 a.m. Tuesday, said troopers spokeswoman Megan Peters, relaying reports from a trooper in Haines. The ridge is south of Mile 33 of the Haines Highway, where helicopters whisk skiers to and from the backcountry.

Six to eight feet of snow covered the guide, 35-year-old skier Robert Liberman, and Nick Dodov, a 26-year-old client said to be riding a snowboard, Peters said. Everyone in the group was wearing avalanche beacons, and a second group of skiers in the nearby vicinity rushed to help uncover the two men, troopers said. Liberman, a Telluride, Colo., resident and frequent visitor to Haines, was found dead. Dodov, from Truckee, Calif., was flown to Seattle for treatment and died there Wednesday, troopers said.

Liberman was guiding the group for Alaska Heliskiing.