

THE FACTORS LEADING TO THE CLOSING OF TWO ALASKA HELI-SKI OPERATIONS IN SPRING 2000

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1. INTRODUCTION

The snow and avalanche cycle that took place in January and early February throughout many parts of Alaska, that closed highways, destroyed homes and took lives other than backcountry enthusiasts was well documented by national T.V. and newspapers. Friends would ask me "What are you going to do when you start heli operations in March?" My answer was, "I hope by that time the cycle would be over." As it turned out, that cycle was replaced by another that basically lasted until April 5 and ultimately shut down two heli operations, Valdez Heliski Guides and Alaska Backcountry Adventures (VHSG and A.B.A.).

From February through March, Mountain Safety Inc. was doing avalanche forecasting for the company repairing powerline poles located directly in front of our heli base. They reported clear below freezing temperatures, period of snow, low lying fog and several days of inversions resulting in at least two different surface hoar layers forming in the 1600' - 4000' elevation.

2. WHAT WE SAW

When I first arrived on March 6, several 1-5' crown lines up to 250 yards wide, traveling up to 4000' vertically were clearly visible on many of our runs. Our snowpits revealed at least two different surface hoar layers in the first 20" below the snow surface, along with a substantial layer on the surface. Compression test results varied from easy to hard depending on aspects and elevations. Our E, NE, N, NW & W aspects at 1600' - 4000' were showing the weakest layer of buried surface hoar 10" below the snow surface. In some pits, 1 of 3 columns would fail before isolation. This buried layer was very dense with individual crystals up to 1 inch long. It was hard to find that same profile throughout one particular slope. On the other hand, 1 inch long surface hoar was uniformly existing on the surface of most of our runs below 4000' and for the next 5 days continued

building.

The slope angles in these elevations generally begin at 20-30 degrees and increase to 35-50 degrees the last 1-2000' to the valley floor. A.B.A. helisking operates from 1200' to 1500' in elevation east of Thompson Pass on mostly E, NE, N, NW & W aspects. A.B.A. uses a road run as our clients last run of the day. This allows us to pick clients up with a shuttle van at various points along the Richardson Highway. It also requires guides and clients to travel through the surface hoar zone. It began snowing on March 12 for 3 days and deposited up to 2' at upper elevations and 6" on lower elevations. We continued to get snow storms every few days with amounts up to 3' at upper elevations with each storm. As the skies would clear between storms, we would see numerous natural slides on our buried surface hoar layers. At the beginning we were able to tiptoe around, next to and in the old slide paths. During our daily guide meetings, we were constantly reevaluating our strategies as new slide paths and snowfall continued. We continued to have good luck up high on our steeper faces, yet as we descended we were constantly reminded of the instability by settling and rumbling under our feet on lower elevations and lower angles of 15-30 degrees. Higher angles at lower elevations were easily triggered by the guide and allowed clients to ski edges with an immediate safety zone on the triggered slide path.

3. NATURAL FACTORS

Wind and cloud cover are two major factors that keep us from flying. There are periods of time when we are unable to keep in touch with our building snowpack. Tree skiing does not exist as treeline is at approximately 1600'. During flat light periods, the visibility can be zero, unless you ski right behind someone or in a tight rock lined chute or "chase a tennis ball." Besides the previously discussed surface hoar layers, every year we go through a cycle that a few of us jokingly refer to as "its over in the Chugach." This

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is the isothermic stage that transpires sometime in April in our 1600 - 4000' elevations. Historically, it takes 2-5 days to change into more stable corn conditions, as compared to the Rocky Mountains where it may take up to 2 months. Last spring the isothermic cycle happened the first week of April. This combined with our weak buried surface hoar layers were 2 major factors.

4. BUSINESS FACTORS

Helicopter = \$, \$ = pressure, pressure = time concerns. Heliski operators in the Valdez area have to sign contracts with their helicopter supplier who was ERA Aviation for three of four heliski operations. In the contract, the heliski operator guarantees the payment for X amount of their hours over X amount of time. This puts a certain amount of pressure on the operators. The weather can shut down operations so you can run out of flyable hours to meet your contract. The rate you charge clients is factored by the rate your pay heli company and heli time it takes per lift per client. Safety and snowpack concerns can and do change the heli costs per lift per client.

5. SHARING INFORMATION

In the past, VHSG and A.B.A. Guides would keep in touch regarding various conditions. This communication became almost daily as Doug Coombs, Mark Newcomb and I had numerous phone conversations concerning conditions and strategies we were each using. We were all being very conservative and cautious. We also agreed that as guides on recon, we were able to negotiate the instabilities without problems. When you added the client, the picture changed dramatically.

6. "CLIENTS THE WILDCARD"

Some of our return clients have seen and experienced enough with us over the years to really pay attention and have a great respect for the mountains, the heli and the guides. On the other hand, a fair amount of our new and old clients have watched the videos and read the magazines. This gives them a distorted reality. Typically, this is the line you get from those clients, "We've climbed and heliskied all over Europe, Canada and the Himalayas, we're experts. We want the extreme." They have a list of runs they want to do straight out of magazines and

videos. At this point, we usually take them to beginner runs and slowly work their way into bigger things as experience allows. After descending somewhat stable steep upper elevation runs, it was difficult convincing clients to use good procedures at unstable lower elevation and lower angle runs.

7. ALTERING HELI PROCEDURES

Usually we have two helicopters shuttling people into different zones. Often times when a refuel was required, the refueling heli would take a new group up as it left the refueling base. This practice was stopped, improving our communications and response time if a complication occurred.

8. ALTERING GUIDING PROCEDURES

Most of the times after a snowfall event, we will change our guide ratio from 1/5 to 2/4. This helps us to gather more snowpit data and have a tighter rein on the clients. We will keep that ratio for maybe half a day and return to 1/5 as safety allows. By mid-March we were permanently in a 2/4 ratio. We also tried to have a backup group within physical reach without heli assistance at all times. This put an economic crunch on both owners and guides - yet everyone still gratefully supported this ratio.

9. GUIDES MENTAL STRESS

The most direct connection from snow stability to clients well-being is through the guide. We've had complete heli seasons when a large percentage of slopes were either rated low to moderate instability. This past season was not one of those. As a guide during that 4 week period, every day was a rapid physical and mental-expanding experience. You would go from ripping a stable 1500' 50 degrees powder filled chute to tiptoeing around highly unstable 20 degree slopes, thinking and looking intently for your next "safe" zone. These "safe" zones were vanishing quickly as increasing snow load was decreasing snow stability. The persistence of these instabilities and experiences every guide was going through led to a number of guides declining to go out in the field.

10. JOINT MEETINGS

lines of communication continue to be as open as in the past.

On April 5, after 2 days of near isothermic conditions on lower elevation slopes, we had an excellent day heliskiing deep powder with increasing stability on lower elevation slopes due to temperature transforming the near isothermic conditions into frozen corn. That night an impromptu informal meeting was held between VHSG and A.B.A. employees and owners. This was a positive, healthy, let it out, stress relieving meeting, mostly about the past months experiences and snow stability conditions.

Three factors fell into place the following morning:

- The public relations manager of ERA Alaska Division happened to come to town the next morning to show off his heliskiing program.
- VHSG put him in a heli and flew around giving him a birds eye view of all the slide activity.
- The heliski owners were not doing very good financially and were looking at the possibility of it getting worse. This led to the owners and ERA sitting down to discuss the contract options, which is a major economic force. ERA offered to contract out, which A.B.A. and VHSG accepted.

11. AFTER SHUT DOWN

In conversation with Doug and Emily Coombs, we discussed the possibility of observing the continued stabilizing that was occurring on lower elevation slopes without the pressure of clients in the field. We were looking forward to another month of great snow conditions. This transformation did happen within days and VHSG was able to reopen both public and private heliskiing, while A.B.A. resumed private heliskiing only with no further incidents and a lot of smiles.

I'd like to thank all the guides and heliski owners for the excellent job in keeping all the clients and themselves alive in the adverse conditions we were encountering and hope the

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