



MOUNTAINEERING CLUB OF ALASKA
AUGUST 1988

BOX 102037

ANCHORAGE, ALASKA 99510
Volume 31, Issue 08

AUGUST MEETING

The meeting will be held Wednesday, August 17th, 7:30 pm, at the Pioneer Schoolhouse, top floor, 3rd and Eagle Sts., downtown Anchorage. After the business meeting, there will be a slide show by Ken Zafren on climbing in Bolivia. THE CLUB PICNIC WILL BE HELD AUGUST 24th, DOWNTOWN ON THE PARKSTRIP at 6:00 PM, NEAR THE VETERAN'S MEMORIAL, 10th and I STS. The club was unable to get permission for alcohol, so save it for the Ice-Climbing School.

MINUTES OF THE JULY MEETING

The meeting, was held at the Pioneer Schoolhouse on the 20th. It was called to order by Vice-President John Baker, sitting in for the President, who seems to prefer to work on those days, it started at 7:43.

New members were welcomed.

I. COMMITTEE REPORTS

A. Hiking and Climbing

1. Harding Icefield - Dan O'Haire had a shake down meet with his group who's headed for the fifth annual crossing on July 13.
2. Lake Clark - Don Hansen is just back from his trip and judging from his tan, had a great, sunny adventure. He is ready to head for the Arrigetch Peaks next, for which nine had signed up so far.
3. Priscilla Lukens had an O'Malley climb planned for July 23.
4. Rick Maron announced Peak 3255 and Penguin Ridge.
5. The July 4th rock climbing weekend at Hatcher Pass was a success with many members from the MCA showing, the AAC Alaska Section organized it. There is a guidebook out on the area called, "A Guide to the Archangel Valley", available at AMH.

B. Huts

1. Pichler's Perch - members of the international Raleigh Group, spent time on the Eklutna Traverse and put metal on the roof of Pichler's, painted it and built a rock outhouse; all in all they did a tremendous job, especially since no one locally put their foot forward to do it. Gretchen mentioned though, that now with a tight roof on the hut, a vent may be needed to get rid of some of the heat created by cooking and people in the hut. Two members of the Raleigh group were at the meeting but didn't mention their names.

II. OLD BUSINESS

An invitation to the Polish High Mountain Club went out in mid July.

III. NEW BUSINESS

- A. Penny Miner from the U.S.F.S. was here to solicit information on recreational use of Chugach National Forest.
- B. The annual picnic will be on August 24th, one week after the next meeting.
- C. There will be elections in October.
- D. Priscilla Lukens is looking for someone to take over mailing the newsletter.
- E. There was a correction to last month's Scree : under New Business, the NPS is trying to "redefine the Wilderness Boundaries" rather than just the boundaries.

IV. TREASURER'S REPORT

| | | |
|--------------|---|------------------|
| Petty Cash | - | 91.00 |
| Checking | - | 41.18 |
| Money Market | - | <u>4061.59</u> |
| Total Monies | - | <u>\$4193.77</u> |

V. ANNOUNCEMENTS

- A. Screens - are off to the binder, done once every five years.
- B. Rabbit Lake - Ken Zafren informed us that the access to Rabbit Lake has been restricted by an inholder whose land the access crosses. The Millers (the inholder) want to trade land with or sell their land to the State Park for over a million bucks. After a lively discussion of the different angles, which amounted to ca. fifteen minutes, the club passed a resolution to send a letter to Chugach State Park, encouraging them to pursue any possible legal action to keep the access open. Ken was chosen to draft the letter. Exact records of his discussion is available on tape, including railroad whistles and unsolicited interruptions by other conversations.
- C. Mint Hut - Dave Staeheli informed us that the Alaska Mountain Guides will be using the hut over Labor Day for one of their events.

The slide show was courtesy of Dave Staeheli, about hiking the Copeland Trail in New Zealand, thanks for a great show, Dave!

The Secretatry has a request: all folks who have statements and comments to make, please mention their names before they speak and others should maintain a low noise level. Reason: the tape recorder has a hard time recording and reproducing at a high, distinguishable quality level and some details get lost in the general murmur of things.

Respectfully Submitted,
Pete Sennhauser

ADZE

Wanted

A volunteer to mail the Scree. Access to computer and knowledge of/or interest in learning DBASE III, or similar program preferable. Required commitment to print labels is less than two hours per month once familiar with the program. Meet with other volunteers for 1.5 hours to prepare Scree and deliver to post office. Call Priscilla 248-9557.

Massage Offer

Priscilla Lukens is going to be training in 1989 at the Rolf Institute. In preparation she will be doing massage training next month. The special offer is a refund on a massage, if paid before October, and a frequent customer discount afterwards.

Please let me know if you want to take advantage of this and support my career change...248-9557, Box 241112, Anchorage, AK 99524-1112. Very relaxing after a climb or work!

Half Price Maps!

The MCA will once again this fall organize a bulk map order. By combining all of our individual orders for topo sheets and other maps we can hopefully exceed the minimum order size of \$500.00 to qualify for the 50% discount. With this discount standard (1:63,360) quads will cost \$1.25 and 1:250,000 quads will cost \$2.00. Indexes for Alaska and out-of-state are available at the USGS map office downtown in the federal building and at APU campus. The October meeting (the 19th) will be the deadline for gathering orders (gladly accepted before then), and I expect to have them sorted and ready by Nov. 1st. Make checks payable to the MCA. I can be contacted about the order at meetings or at 349-3064. Start getting your list ready! --Rick Maron

For Sale : LaPrealpina bicycle rack. Holds three bicycles securely to your car roof. Includes two front wheel mounts. Best for road bikes, but will carry mountain bikes also. \$75.00 or interesting trades! John and Marcy 272-1811w, 274-0105h.

Nordic Ski Patrol

Looking for some enthusiastic patrollers for the 88-89 season. A great way to ski in the some of the finest backcountry areas in Southcentral. As a patroller you will receive training in first aid, avalanche awareness, crevasse rescue, CPR and backcountry rescue and meet great folks who have a great time skiing, helping others and throwing parties. The patrol is going to have its first Christmas party for 1988 on Saturday, August 13th at Eklutna Lake. For more info contact Nordic Ski Patrollers and MCA members Lisa Fotherby or Kenny Powers at 243-6483 or John Baker at 274-0105.

NOTICE

As of June 30th, two bridges had collapsed on local trails, closing them for the summer. They are on the Johnson Pass Trail off Seward Hwy., and Russian Lakes Trail on Snug Harbor Rd. They are unusable. Hikers should access the Johnson Pass Trail from the south at mile 33 on Seward Hwy. Access from mile 63 is not available. For the Russian Lakes, begin at the Russian River Campground, mile 52 on the Sterling Hwy. The bridge is out near Cooper Lake. The rivers may be unfordable due to high water. Heavy snow was the cause.

The Byron Glacier road and trail will be closed intermittently (7am - 5pm weekdays) during the rest of August. Heavy equipment is clearing the trailhead and preparing to extend the road to the edge of Portage Lake. Portage boat tours start next summer.

Chugach State Park and REI are looking for volunteers to assist with trail work at Williwaw Lakes on Saturday, August 13, 9am - 4pm. Food and beverages provided. Call 272-4565.

Aircraft in Chugach State Park

Todd Miner

Aircraft intrusions into Chugach State Park are increasingly a problem. In other parks overflights are already a big problem. Problems with such flights in Grand Canyon have even led to mid-air collisions. Glacier Bay, Yosemite and Sequoia-Kings Canyon all have existing problems. With Alaska's tourism push, now is the time to control the situation before the problem is "grandfathered."

In Chugach State Park much of the problem lies in a bureaucratic haze of responsibilities. CSP does not control its own air space and can only regulate landings. There is no one agency which fields complaints, and so the problem's extent is not known. Citizen complaints are on the rise and the matter has increasingly been discussed at the Citizen's Advisory Board, but how intrusive aircraft has been to wildlife and users is still a question.

Existing regulations are often unenforced, ignored or misunderstood. Outside of one designated airstrip, landings by helicopters and fixed wing aircraft are illegal. Civilian aircraft are required to keep a 500-foot ceiling over the park. Military aircraft are largely subject only to their commanders' sense of cooperation with the park and users. Despite the obstacles of hazy responsibilities and differing regulations, the public can make a difference if enough complaints are made through the right channels.

To explain the process of reporting intrusive aircraft it will help to deal with one part of the problem at a time. If a civilian aircraft is observed under the 500-foot ceiling, note the time, location, type of aircraft and, if possible, identification numbers. A clear photo is worth the most.

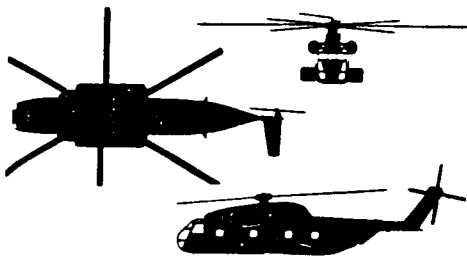
This information should be passed on to the FAA (271-5936). These people view regulations very seriously and will take action. The problem should also be reported to State Parks (345-5014), who may do little, but will at least be alerted to the growing problem.

Military aircraft is different. Although not under control by civilian agencies, they are sensitive to public opinion. They will work with the public

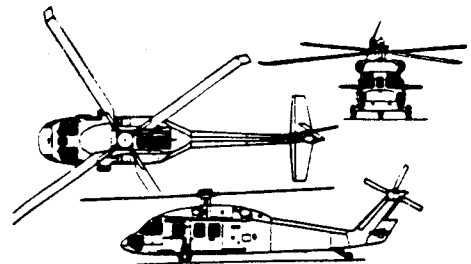
and civil agencies if they view requested changes as not seriously compromising their "mission." The key is to get the proper office where comments will goad action, and that's the rub. There are three branches of the military and it is difficult to know who to contact. But if you can identify the helicopter, then the branch will be known, as they each fly different ones...see drawings below.

Most pilots are considerate and law abiding. However, if you are bothered by aircraft or observe aircraft harrassing wildlife, let the authorities know. If we take the time to take action then Chugach State Park can remain the gem it is today. No one else is going to do it for us.

**Jolly Green Giant - US Air Force, 71st Aerospace Rescue
Public Affairs Office, 552-5514**

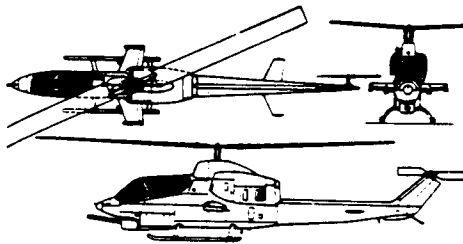


**Black Hawk - Alaska Army National Guard
Lt. Colonel Mock, 249-1560**

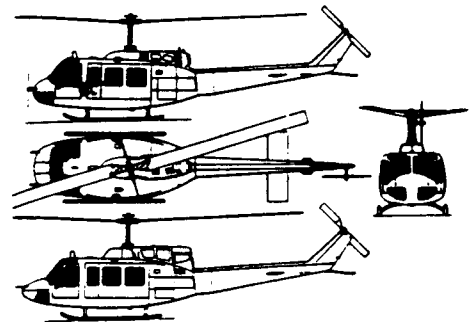


Above: Three-view of UH-60A Black Hawk.

**Huey Cobra - US Army, 6th Infantry Division
Major Bowers, 862-2101**



**Alaska Army National Guard
Lt. Colonel Mock, 249-1560
Huey - US Army, 6th Infantry Division
Major Bowers, 862-2101**



Above: Three-view of UH-1H with additional side view (bottom) of twin-engine Model 212 (UH-1N).

HIKING AND CLIMBING SCHEDULE

- August 9 EVENING BIKE/HIKE POWERLINE PASS
Leader: Kathy Burke 46-2841
- 13-14 REED LAKES - MINT GLACIER TRAVERSE
Backpack to Reed Lakes, then over Bomber Glacier (resting place of B29 bomber which can be explored), then over Penny Royal Glacier to Mint Hut (overnight here). Hike out to Hatcher Pass Road. 8 miles, 3200' gain first day and 9 miles second day. Need a harness for brief glacier crossing (inform leader if you need one).
Leader: Neil O'Donnell 276-1700w 274-5069h
- 26-28 MT. SOGGY
7190' peak behind Mt. Yukla. Meet 5:30pm Friday, camp along Eagle River. 6400' elev. gain from the river - strenuous.
Class E/TECHNICAL. Limit 6 climbers.
Leader: Willy Hersman 276-0925
- Sept 24-25 ICE-CLIMBING SCHOOL

Held at the Matanuska Glacier. Sign up at the August and Sept meetings. Members only. More details in next Scree .
Leader: Paul Denkwalter 272-1811

The Hiking and Climbing Committee is always looking for leaders. If you have an idea for a trip, whether for an afternoon or for several weeks, give Kathy Burke a call at 346-2841. Ideas need not be limited to the so-called open weekend dates, anytime is fine. H and C Committee: K. Burke, Chairperson, B. Wakeland, D. Hansen, M. Bassett, W. Hersman.

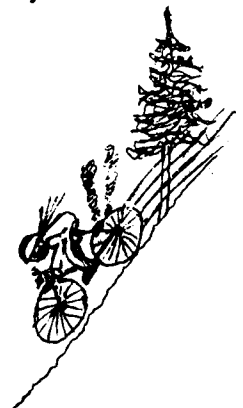
TRIP REPORTS

The Hatcher's Pass Grin and Bear It Downhill Bike Ride

Kathy Burke

The clouds were hanging low over the Chugach so we loaded up our bikes and headed for Hatcher's Pass. Our plan was to ride from the A-frame, up over the pass and down to the Willow Creek bridge, and keep our eyes open for any mischief we could get into.

We started out and up the road to the pass at a pretty good pace, but the hill quickly got too steep for our uphill pedaling ability. Before Doris Curtis left for Seattle, she told us to tape record the hoots and hollers of some of our trips and send them to her. As we pushed our bikes up towards the summit we said we should have recorded some of the comments and gasps for breath, but then we figured Doris would have thought it was an obscene tape with all that heavy breathing! Linda's shoulders hurt, my back was aching, and Mary kept getting back on her bike and trying to pedal up to the summit, even though Linda and I went faster walking and pushing our bikes up. We just looked back at her and cheered her on. In less than an hour (and no less than five refusals to offers for a ride to the top) we



reached the top of the pass which was cloudy and misty. We grabbed some water, caught our breath, said good-bye to what we just came up and headed down.

The trip down was full-voice-Yeehaa-style accompanied by smoking brakes. We flew down that mountain with the wind and bugs in our hair. (There's a saying, "You can always tell a happy biker by the bugs in his teeth.") Pikas, marmots and parka squirrels watched from the roadside and rocks.

There was a side trip up the Cragie Creek Trail, till we'd scrambled our brains enough, then back on down the main road. Down through fragrant fields of heather, a little car dust, bird songs, car wavers and smilers, and past old mining ruins.

Lunch was by the beautiful boulder-strewn Willow Creek. There was the usual lunch-time-verbal-abuse about each others lunch and past trips. The only thing holding my banana together (now turning to pudding) was its peel.

The last stretch to the truck was flat, but it was fun pedaling and flying along on two wheels, feeling at one with the bike. The only problem fo the trip was that Mary wore a pair of brake pads down to the metal! Still hoarse from all the yaahooing are Mary Savage, Linda White and Kathy Burke.

Turquoise Lake to Lake Telequana

July 2-10

Rob Schwebel

The 1988 Lake Clark expedition, led by Don Hansen, got underway Saturday with the assembly of all participants at Rust's Flying Service at Lake Hood. After waiting for weather to clear and the line-boy to fill up the tanks, our party was airlifted in two red and yellow Beavers. We took scenic Merrill Pass on our inbound flight, noting the ice-bound peaks and elevated valleys which beautify the Iliamna vicinity, not to mention the carcasses of airplanes below which failed to finish the route.

We flew over our destination, Lake Telaquana, enabling the pilot to point out a good assembly point for our pick-up a week hence. We saw a herd of caribou and a view of Trail Cr., which we would have to ford on our way north. The floatplanes touched down on Turquoise Lake and taxied us to our rocky disembarkation.

We set up camp on the north side of the lake over an area which allowed us to disperse our 7 tents into smaller groups with snorers nearer the water. Along with Don were MCA members Pamela Babb, Ed Bovy, Fred Kampfer, Karen Forsythe, Rob Schwebel, Bob and Kay Small and Linda White. The Smalls constitute the Maryland branch of MCA, receive Scree there and had selected this trip as part of their annual vacation in Alaska.

Turquoise Lake is bounded by mountains on the east and southeast, including 8070-foot Telequana Mt., from whose slopes dangle several impressive hanging glaciers. It is fed from these and other glaciers which lead into a braided network of streams on the eastern side. The first hike in the area was to follow the major braid until we could see the source glacier. We had our only bear encounter on this day when we rounded a bend and found a young grizzly 50 yards ahead of us using the same path in the same direction. We allowed him to proceed at his own pace until he reared up, made a flagpole out of his nose and evidently winded us, for he took off up the nearest slope with alacrity, displaying

commendable bushwackability.

Another hike was made up a nearby 5400' peak with a triangular cross-section, from which we were able to see the mountain-borne glaciers bedecking Telequana and the valley glacier to the northeast below us. The evening of July 4th was spent quietly, because it did not get dark enough for us to shoot off our flares, and a party of five from New York were camped out close enough so that we didn't want to alarm them. The fishermen in the group were able to land two trout and a grayling which turned into an after-supper snack.

On the 5th we broke camp and ascended a series of ridges as we proceeded south in a persistent mist. Don led the party by map and compass and we came out to Trail Cr. in the late afternoon. Crossing the creek turned out to be relatively easy at the time we made it; the heaviest stream of the braid was knee deep. We camped by the stream in a very nice flat spot below a ridge where we had seen some caribou silhouetted.

The next day we spent sneaking up on caribou. A herd of about 500 had just finished their beverage of Lake Telequana and had ascended to several snow patches to avoid the bugs. We were able to approach them to very close distances until one member of our party walked right up to them and precipitated a stampede. A hike up to a nearby 5000' peak gave a view of distant mountain sheep, distant caribou, and a scouting Super Cub.

The following day we broke camp and proceeded to Lake Telequana, again in mist. Once more Don's compass spent a day of constant use. Marvelous that those compass batteries last so long and hardly ever need to be replaced. Fortunately, by the time we were sick of looking at the compass, we could see the lake. Unfortunately, between us and the lake was over a mile of bushwacking. Fortunately, Don located a moose trail winding its way through. Unfortunately, moose don't care what they step in. After we made it to the beach, we went looking for a camping spot, and set up camp.

The rest of the time was spent largely walking along the lake, sleeping in tents, swimming or fishing. We were picked up on time and in good weather so had a glorious flight back to Anchorage.

Thanks to the many caribou, the one bear, the cooperative clouds, the lake trout that went down with garlic and hot pepper, and:

Don "I think we'd better keep going north" Hanson, Fred "I just like to catch them" Kampfner, Rob who "almost stepped on" more stinging wildlife than anyone else, Pamela "stripped leotards" Babb, for constant inspiration, Buffalo Bob Small who, with Kay, made a good fish fry fire, Kay Small, who gave new meaning to the words "Avon calling" in demonstrating that mosquitos won't land on her skin "so soft". Karen "come on in, the water's fine" Forsythe, Linda "what's that bird look like and I'll tell you what it is" White who I.D.'d just about every fowl on the trip including the three kinds of seagulls on Telequana, Ed "I'll bring Robert Ludlum next time if you don't shut up" Bovy.

'1988 Harding Icefield Crossing'

by Dan O'Haire

Thirteen club members crossed the Harding Icefield from Tustumena Glacier to Exit Glacier, taking a week to make the crossing. The mountaineers were myself, Steve Cook, Ken Farmer, Mike Fenster, Stuart Wellings, Lisa Fatherby, Cliff Gill, Liz McCoy, Kenny Powers, Mary Ann McKean, Glenn Brown, Cathryn Clunies-Ross and Jenny Magee.

Kenai guide George Pollard dropped us off in his boat at the far end of Tustumena Lake and with him went our last chance to turn back. We walked the mile through the woods to the Tustumena River. My pack was very heavy, perhaps the heaviest that I had ever carried. I didn't walk with it, I staggered. The weight of the pack pulled the shoulder straps so they slipped and then too much of the weight was on my hips. We walked a mile over moraine and outwash to the Tustumena Glacier and made camp on a moraine.

The next morning we strapped on our crampons and found our way through the seracs to the smooth ice in the middle of the glacier. The best route was all of the way to the right. Otherwise, the way was blocked by mazes of seracs. A couple of years previous there had been a mucky little pond here and last year it was empty, but now it was full of water again.

After an exhausting day of stepping over crevasses and sidestepping seracs we made our way to a moraine between the north and south forks of the glacier. There we put away our crampons and skied a short distance to snow good for camping. The weather was partly cloudy with a light breeze blowing down the glacier from the icefield.

The mountains intercept clouds that are full of moisture from the Pacific Ocean, forcing the clouds to rise and cool, and drop their load of moisture. Even though the Kenai Mountains are not unusually high as far as mountains go, they are perpetually snow covered. The icefield may receive 100 feet of moisture in a year, most of which is snow and cannot all melt away during the short Alaskan summer. As the snow piles up it is slowly metamorphosed into glacial ice by time and the weight of snow above. The valleys of the higher Kenai Mountains have all filled with ice, so that only the ridges and peaks poke up through the ice. Truuli Peak (6612') is the highest point on the icefield. The surface of the ice slopes gently away from the crest of the mountains and the ice flows down drainages to about three dozen glaciers that are fed by the icefield. The glaciers cascade down to the Pacific Ocean and Kenai lowlands.

The edge of the continent here is subsiding, being dragged down by the Pacific plate as it cools and sinks into the earth's interior. From the edge of the icefield

you can see once lofty glacial cirques that are now facing submersion as they sink down into the ocean.

The next evening we would be camped on the Harding Icefield. In the morning we awoke to cloudy skies with patches of blue. There was continuous snow cover on the moraine at the edge of the icefield and more snow than usual this year. It felt good to get some of the weight off my back and onto the sled. The skis too were on snow now instead of on my back. The crampons were put away for the rest of the trip.

We followed a snow filled trough between the south fork of the glacier and the mountain flank on its north side; it was exciting to think that we might be going where nobody had ever gone before. That evening with wisps of clouds floating across the icefield we made camp in a snow patch behind the lateral moraine; our site had ski slopes, running water, rocks to shelter us from the wind, view of the icefield, and good flat snow, with no crevasses. Nearly everyone did some telemark turns on the snowy slope behind camp. There was good corn snow in the late afternoon sun. I took pictures of the icefield from the top of the slope before performing my downhill run.

The history of the Harding Icefield starts around 1910 when Sargent surveyed the Kenai Peninsula to publish the earliest U.S.G.S. topographic maps of the area. Consequently, he was the first person to realize the existence and extent of the Harding Icefield. In the year 1936 Yule Kilcher attempted a crossing from Seward but was forced back by a storm. In 1940 Eugene "Coho" Smith and Don Rising skied across the Harding Icefield from Bear Glacier to Tustumena Glacier. In 1966 Dave Johnston, Grace Jansen and Vin Hoeman failed in an attempt to scale Truuli Peak, highest on the icefield, but climbed it later. In 1970 a couple of Seward residents erected a shelter on the icefield near Lowell Glacier. They flew in supplies and snowmobiles. Everything was later buried in snow and lost forever. In 1968 the same three and others crossed the icefield from Homer to Seward and descended the Exit Glacier, so named because to this day it is the easiest place to get on and off the icefield. In 1982 Roman Dial skied across the Harding Icefield from Skilak Glacier to Chernoff Glacier in one day as part of his route in the Hope to Homer foot race. Beginning in 1984 with Willy Hersman, Stuart Grenier, and Phil King, the Mountaineering Club of Alaska has crossed the icefield every year during July, ascending the Tustumena Glacier and traveling across the icefield to Exit Glacier trail. We were part of this tradition and this was my fourth trip.

One of the joys of wandering the icefield is the opportunity to trundle rocks, because of the numerous large boulders left precariously perched by the rapidly dropping ice, and half the group teamed up to set in motion a huge boulder that may be a club record. The behemoth rock appeared to hang in mid air before before landing with a

great thud and rolled out onto the icefield where it was finally stopped by the soft snow.

The edge of the icefield slopes gently down to the moraine, and we skied up onto the flat surface of the icefield in five rope teams of two and three. Clouds were piling up on the ocean sides of the icefield, on the south and the east. Our progress was rapid over the flat hard snow.

Rapid changes in the glaciers and the icefield have made the topographic maps somewhat out of date. Northwestern Glacier has retreated a couple of miles from its plotted position. Bear Glacier has withdrawn behind an outwash plain which now separates it from the lake it used to dump into. The nunataks and ridges show more rock around the edges of the ice now.

The temperature on the icefield is rarely colder than a few degrees below freezing in the summer but it is a wet type of cold and hypothermia is a real threat. Down and cotten clothing soak up moisture and become waterlogged and useless. As we progressed upwards we passed from the slates and phyllites that make up most of the Chugach and Kenai Mountains, to the diorite that forms the core of the icefield. There were wonderful paper thin spires.

We headed out onto the ice flats and a mile out we set up camp in a drizzle and whiteout, building snow walls from blocks excavated from sunken tent floors. In the evening the clouds lifted for a while but in the morning we headed up into more whiteout and drizzle, marking time as we slowly passed a ghostly knife-edged nunatak where we turned left and set our compasses for Exit Glacier, and headed up to the high point of our traverse.

The weather meanwhile was turning nasty, with a thirty-mile per hour wind and a steady rain. The cold penetrated deeply when we stopped, and we had to stay moving for warmth. With hypothermia threatening we stopped near the high point of our traverse and worked as a team to build a formidable snow wall, after which we huddled in our tents behind the wall. After hot drinks we turned to whiskey to sit out the storm.

The next morning we were still in whiteout and visibility was a few yards. We were in a cloud. There was a discernable mist in the air, and I could feel it on my cheeks and at the same time, I felt the burning rays of the sun there, too. Occasionally, there was a ghostly horizon and then it disappeared in the mist. The icefield here was very flat, with about a three hundred foot elevation change over four miles. It was almost perfectly featureless on a large scale, like an ice planet. There were only ripples in the snow cover.

It was deceptively easy to wander off course. During the early part of the day, when the topography was still influenced by the line of nunataks a mile to the west, we had some gentle ups and downs and had to correct our direction every ten to twenty paces or we would begin to

wander off course. It was essential to remain on course because we knew only one way off the icefield.

It became a real mental strain to lead in the whiteout, concentrating on following the compass. We traded leads when concentration wavered. Our brains would get confused if our eyes had only the mist to look into, and there were fleeting moments when it was difficult even to know up from down or right from left. The sensory deprivation was not as bad for those behind the rope leader, because they had something to look at, and use for reference. I found it easier going if I concentrated on my compass, glancing occasionally to my skis to check the alignment and avoided gazing into the mist. After our third day of whiteout and rain, we stopped to build another camp in the snow and hoped for a view through the mist to verify our position.

In our tent we had another spaghetti dinner. Some people read books and others played bridge. In the evening the clouds began to dissolve and we could pinpoint our location on the map. Around 10 pm, the surface of the snow was covered by thousands of ice worms crawling over the surface. It was in an area of watermelon snow. The worms were threadlike and about an inch long. They wriggled slowly through the coarsely crystalline snow, weaving between rounded crystals of ice, surfacing when the burning rays of the sun had faded, to feed on algae and pollen.

It had been a week since the trip began when we broke camp for our final day on the ice. I prepared for the day with factor 29 sunscreen, and clown white. A dance broke out spontaneously in celebration of the good weather. With cameras set for the automatic timers we posed for group photographs before roping up a last time. We looked back along our tracks in the snow, past the diorite monoliths in the highest part of the icefield. The farthest one was 15-20 miles away. There was a lot of snow this year and the crevasses which we would normally see on the Exit Glacier above the trail were snow-covered. The upper half of the trail was snow-covered too. Clouds were boiling up from the Resurrection River, and mists moved around on the icefield.

To reach the trail we followed the north side of the upper Exit Glacier, then dropped off the ice onto moraine and glaciated bedrock. The first half of the trail down was mostly snow covered, and here it was a struggle to maintain control over a heavy pack. We saw where the bedrock has been polished and striated by the grit in the glacier. The surrounding mountains were rounded up to a common level, up to the highest point of filling by the ice, and above this elevation we could see rough and jagged peaks that have always stood above the ice.

The trail descended down through tundra, then alders and forest. Later from the access road across the Resurrection River from the glacier, we caught a glimpse of the icefield, gleaming white on top, like the rounded edge of an ice cream cone seen from below.