

## DENALI NATIONAL PARK AND PRESERVE

### 1985 MOUNTAINEERING SUMMARY

There were no winter ascents of Mount McKinley or adjacent peaks during 1985. A Japanese team, filming a movie about Naomi Uemura, made this season's first ascent. Their large filming crew arrived at the Kahiltna base camp on March 18th. Twelve team members continued beyond base camp, filming while they ascended. On April 18th, the tenacious group placed seven members on the summit. Even though they did not officially qualify as a winter ascent, they certainly experienced winter conditions throughout nearly all of their climb.

The months of May and June have traditionally offered the best weather for expeditions to the Alaska Range. For 1985 however, they were an extension of the arctic winter. Severe temperatures and abundant storms created conditions that kept the success rate to approximately 20 percent until the last week of June. Cold related injuries more than doubled from the previous year, effecting 11 percent of all the Mount McKinley climbers.

The High Latitude Research Project was funded this season. Their camp at 14,200' on the West Buttress was staffed from late April through late June. In addition to continuing past projects, the researchers began investigations into the effect of altitude upon brain function. As in past years, their talented staff assisted in and/or coordinated a number of rescues. Transportation of the project to and from the mountain was provided by the U.S. Army, 242nd Aviation Company, Ft. Wainwright, Alaska. Doctor Peter Hackett will submit a summary of the research results from the High Latitude Project for inclusion in the 1986 American Alpine Journal.

The National Park Service conducted three, four-week expeditions on Mount McKinley. All were on the West Buttress route. These patrols enabled the Mountaineering Rangers to contact nearly all the West Buttress climbers to emphasize the importance of proper sanitation and trash removal practices. Both the medical doctors and the rangers stressed the importance of self-sufficiency on Mount McKinley. Nearly all of the mountaineers who developed frostbite or altitude sickness were encouraged to conduct their own evacuation. For 1985, only seven people were air evacuated from Mount McKinley and the surrounding mountains under rescue conditions (two of these were body recoveries). Two others were assisted from 17,000' to the medical camp where they were later able to descend to base camp under their own power.

To addition to the pit latrine at the Kahiltna Base at 7,200', new pit latrines were provided at 14,200' on the West Buttress and at the landing strip on the Sheldon Amphitheater on the Ruth Glacier. These simple latrines have been very successful in concentrating human waste and thus reducing the sanitation problems at the more popular traditional campsites. We plan to expand the use of these units to include the 11,000' and 17,200' camps for 1986.

One American was issued a citation for littering. A German was cited for guiding without a permit. The number of people attempting to climb Mount McKinley decreased slightly this year. The decrease was in the number of foreign climbers and was probably a result of the strong American dollar in the foreign markets.

1978 =	539
1970 =	533
1980 =	659
1981 =	612
1982 =	696
1983 =	709
1984 =	695
1985 =	645

Approximately 645 mountaineers attempted to climb Mount McKinley in 1985. Severe winter weather continued through April, May and into late June. Conditions improved in late June in time to allow a large number of expeditions, who were waiting at the lower elevations, to try for the summit. Unusually good weather lasted throughout nearly all of July.

Interesting Statistics:

**Success Rate** - 321 (50%) of those attempting the summit were successful.

**Acute Mountain Sickness:** — 116 (18%) had symptoms, of these:

- 64 (10%) were mild
- 39 (6%) were moderate
- 13 (2%) were severe

**Frostbite:** 72 (11%) reported some degree of frostbite. Eight of these required hospitalization.

**West Buttress Route:** 511 (80%) of the climbers on Mount McKinley were on the popular West Buttress route. -

**Mountain Guiding:** 238 (37%) of the climbers were guided by professional mountain guides. The overall success rate of these groups was 62%. The majority of the guided trips occurred on the West Buttress, but other guided attempts on Mount McKinley included the Muldrow Glacier, South Buttress, Northwest Buttress, West Rib and Cassin.

**Foreign Climbers:** 121 (19%) of the climbers were from foreign nations. This was a 37% decrease from last year. Twelve nations were represented:

Australia - 3	England - 2	Japan - 34	Norway - 6
Austria - 2	France - 11	Kenya - 2	Switzerland - 7
Canada - 22	Holland - 3	New Zealand - 3	W. Germany - 26

Two thirds (66%) of all climbers completed the Post Climbing Report, the source of statistics for AMS and frostbite. Final figures were obtained by extrapolating the reported figures to represent the total number of climbers. Hospitalized cases represent actual cases, not assumed.

**Record Number Of Mountaineers On Mount McKinley During A Given Week:** A new all time high of 294 Mount McKinley climbers was recorded during the week ending May 19th. The previous high was during the week ending May 16, 1983 when 270 climbers were on the mountain's slopes during a seven day period.

**Minimum Temperatures:** Near the end of the 1984 climbing season, the Mountaineering Rangers cached a minimum recording thermometer at 17,200' along the West Buttress route. The thermometer was checked during early May of 1985. The minimum temperature was -58 degrees F. The same NPS patrol experienced -49 degree F. temperatures while camped at 17,200'. The 1913 Stuck/Karstens Expedition left a minimum recording thermometer at 15,000' on the Muldrow Glacier route, near Brown's Tower. It was recovered 19 years later by members of the 1932 Lindley/Liek Expedition. The thermometer indicated -94 degrees F which was the lowest possible recording for that instrument. The accuracy of that reading has been questioned because of the high possibility that one of Denali's numerous earthquakes jarred the instrument. According to personnel at the US Weather Service Forecasting Office in Fairbanks, the lowest officially recorded Alaskan temperature was -80 degrees F. recorded at Prospect Creek on January 23, 1971. This was during the coldest month on record for the city of Fairbanks. The average daily temperature was -32 degrees F. The coldest official temperature for the Northern Hemisphere was -94 degrees F. recorded at Verkhoyansk, Siberia.

## **New Routes:**

Mount McKinley: No new routes were completed during 1985, however Sarah Doherty, a 25 year old American, became the first amputee (one leg) to climb the mountain. She summited in May via the West Buttress and utilized special crutches for the ascent.

Mount Hunter: A new line up the East Buttress was completed by Americans Jack Tackle and Jim Donini.

Kitchatna Spires: Alaskan mountaineers Roman Dial, Chuck Comstock and John Harpole made two first ascents:

\* Peak 8055 - "Vug Tor" - a route up the southeast face.

\* The 6000' peak south of Bluff Spire - "Talkeetna Tor"

## **Accidents:**

In early May, a German climber was descending Denali Pass on the West Buttress when he slipped and fell. He was travelling unroped, had his ice ax strapped to his pack and was walking with ski poles. He was unable to self-arrest, tumbled 200 yards and disappeared into a crevasse. He was fortunate to land on a small ledge about 10' down. He was helicopter evacuated from 17,200' with possible cervical injuries.

In mid May, another German climber who was part of an illegally guided expedition from Germany, fell at the same place. Again, he was unroped, his ice ax was on his pack and he was using ski poles. This time the fall was fatal. This climbing party evacuated the body to 14,200' where it was flown out by ski plane.

In early May, an American guided party on the Muldrow Glacier was caught by a severe windstorm along Karsten's Ridge. Winds were so strong that two packs were blown away. Travel became impossible. Members of the team were literally blown off their feet. This overstressed the polypropylene fixed line the climbers were descending. The line broke and climbers fell approximately 200'. There were no injuries during the fall but climbers were forced to bivouac overnight where they landed. In one case, a climber maintained an ice ax arrest position all night long. This individual received third degree frostbite to his left hand. The team requested and received helicopter evacuation for this man and another who had lost all of his equipment during the storm.

In mid May, an American climbing party of four reached the 16,100' level on the West Rib. As they prepared camp, one member moved to the down-sloping edge of their tent platform to drive a snow picket to anchor their tent. He had unroped, removed his crampons, was wearing smooth soled overboots and was carrying only a rock hammer. He slipped, was unable to self-arrest and fell 1,200' to his death. The body was helicopter evacuated.

In early June, two American climbers were caught on the Lowe-Kennedy route on Mount Hunter by one of the heavy snowstorms. Avalanche danger was high. Calls for help were heard at the Kahiltna base camp. When rangers made an overflight, the two climbers indicated by arm signals that they needed transportation off the mountain. Food, fuel and a CB radio were air dropped but only the food was recovered by the climbers. On the next overflight, one climber again indicated they needed help. They were evacuated by helicopter. The climbers later said they felt it was too dangerous to move from their location, they were low on fuel, and weather appeared to be deteriorating.

At the end of May, an American party of two reached the 17,200' camp on the West Buttress. One member elected to camp in a tent, the other camped in an igloo where another climber cooked and melted snow with a white gas stove for an extended period of time. The newly arrived climber developed a severe headache, slept poorly and by morning was ataxic, had a pulse of 120/minute and respirations of

26/minute. He was removed from the igloo and oxygen was administered. Improvement was rapid. With some assistance, he was able to descend to the 14,200' medical camp where he was diagnosed as having carbon monoxide poisoning from the stove operating in the poorly ventilated igloo.

Another American climber showed symptoms of dehydration, carbon monoxide poisoning, and Acute Mountain Sickness at the 17,200' West Buttress camp. Personnel from the 14,200' medical camp responded, administered oxygen, IV solution (two liters), and medication. He was lowered down the upper portion of the "rescue gully" and then assisted under his own power to the medical camp. After rest he was able to walk to base camp. This rescue should have never occurred. The victim was ill at high camp with headache and vomiting and was unable to take liquids during the day. He chose to attempt a summit climb that evening despite these clear warning signs. This expedition demonstrated little of the self-sufficiency that is so important on Mount McKinley. Rescue efforts were left to other climbers and members of the research camp. Members of the expedition were either too exhausted or did not have sufficient experience to conduct their own evacuation.

Many of the most common causes of rescues and tragedy in the Alaska Range are clearly avoidable:

\* **Acute Mountain Sickness:** Allow for proper acclimatization by adopting a conservative ascent rate. The recommended ascent rate is 1,000' (300 meters) per day above 10,000' (3000 meters). This rate may be either too fast or too slow for certain individuals. It is important to learn the symptoms of Acute Mountain Sickness. Once symptoms appear, immediate descent to reacclimatize is essential. An excellent concise guide to AMS is the American Alpine Club's Climber's Guide: Mountain Sickness, Prevention, Recognition and Treatment, by Peter H. Hackett, M.D.

\* **Crevasse and Denali Pass Falls:** Travelers on snow covered glaciers should be roped and have the proper equipment and knowledge to extricate themselves or an injured partner if a crevasse fall should occur. Over the years, Denali Pass has proven especially dangerous for unroped climbers traveling without an ice ax.

\* **Frostbite:** Temperatures at altitude in the arctic are too extreme for the protection offered feet and toes by the plastic double boot. Fully insulated overboots that also cover the bottom of the foot are essential during April and May and highly recommended for June and July. Special attention must be given to maintaining proper circulation in the foot and toes, keeping the inner boot insulation dry and the body properly hydrated.

\* **Carbon Monoxide Poisoning:** Cooking in poorly ventilated areas such as tents with all doors and vents closed, or old ice glazed igloos and snowcaves, produced two serious cases of CO poisoning this year. We suspect that many others also suffered lesser forms of CO poisoning. Furthermore, it seems very likely that CO poisoning may be a common contributor to AMS. It is difficult to diagnose the difference between Mountain Sickness and early symptoms of CO poisoning. Avoid the temptation to heat shelters with cooking stoves. Allow for good ventilation. Extra caution is necessary if two stoves are being used at the same time.

\* **Sanitation:** Intestinal disorders, vomiting and diarrhea may result from contamination of food, or more likely, drinking water. The resulting dehydration can become a serious problem at altitude. All drinking water is obtained from snowmelt. Since most Mount McKinley expeditions camp at sites commonly used by previous expeditions, the chance of gathering snow in the immediate vicinity of a previous expedition's latrine is very high. Conditions become worse as the season progresses and old latrines melt out. For the health and safety of all, it is imperative for every to follow these simple steps:

- 1) Use the public latrines where they are provided. At other locations:
- 2) Dig a shallow hole in the snow.

- 3) Line the hole with the proper size heavy duty plastic bag.
- 4) Stake the corners of the bag open (wands work well). When not in use, simply close the top of the bag to prevent it from filling with snow.
- 5) Use the bag as a communal latrine for all members of the expedition while in that camp. A little attention to prevent overfilling will make the process of disposal much easier.
- 6) When you move camp or a bag fills, simply tie it off and toss it into a deep crevasse. If no crevasses are immediately available, the bag should be carried until a suitable crevasse is found. The wastes are usually frozen and will ride well on the sled. On steep technical routes, the bag can be tossed away from the climbing route or feces can be deposited on snow blocks and shoveled off the route.
- 7) Crevasse only human waste. All trash must be carried out!

\* **Self-sufficiency:** Those who depend upon rescue efforts or the strength and expertise of others to extricate themselves from difficult positions are inviting disaster. Helicopters and/or acclimatized rescuers are often not available or the weather prohibits their response in the Alaska Range. Travel prepared with the knowledge, equipment, strength and common sense to support your own expedition.

The Talkeetna Ranger Station is staffed year-round. For more information, please contact me.

Robert R. Seibert  
South District/Mountaineering Ranger  
Talkeetna Ranger Station  
P.O. Box 327  
Talkeetna, Alaska 99676

DENALI NATIONAL PARK AND PRESERVE

1985 MOUNTAINEERING SUMMARY

<u>MOUNT MCKINLEY</u>	<u>EXPEDITIONS</u>	<u>CLIMBERS</u>	<u>SUCCESSFUL CLIMBERS</u>
West Buttress	104	311	153
West Buttress (Guided)	25	200	116
Muldrow Glacier	6	15	9
Muldrow Glacier (Guided)	2	26	19
West Rib	14	35	5
West Rib (Guided)	2	13	13
Cassin	6	14	4
Cassin (Guided)	1	2	0
South Buttress	4	14	0
South Buttress (Guided)	1	5	0
South Face	1	2	2
North West Butt. (Guided)	<u>1</u>	<u>8</u>	<u>0</u>
	<b>167</b>	<b>645</b>	<b>321</b>
MOUNT FORAKER	4	9	0
MOUNT FORAKER (Guided)	1	3	0
MOUNT HUNTER	8	18	2
MOUNT HUNTINGTON	4	8	0
MOOSES TOOTH	4	14	9
MOOSES TOOTH (Guided)	1	2	0
KITCHATNA SPIRES	3	7	3
MOUNT CROSSON	3	9	0
MOUNT DICKEY	3	10	10
MOUNT BARRILLE	2	5	3
LITTLE SWITZERLAND	<u>2</u>	<u>8</u>	<u>0</u>
	<b>35</b>	<b>93</b>	<b>27</b>
<b>TOTAL</b>	<b>202</b>	<b>738</b>	<b>348</b>

Note: Since registration is required only for Mount McKinley and Foraker climbs, statistics for other climbs represent those climbers who voluntarily checked in with the Mountaineering Rangers. Other climbs, especially in the area of the Ruth Glacier, are likely to have occurred.