DENALI NATIONAL PARK AND PRESERVE

1991 MOUNTAINEERING SUMMARY

The 1991 mountaineering season on Denali began with a rumble as a major earthquake hit the range on April 30th. Measuring 6.1 on the Richter scale, the epicenter was just south of Mount Foraker. Huge avalanches were observed throughout the range, as well as several reports of close calls among climbers. Luckily there were no injuries.

The winter of 1990-1991 was another heavy snow year in the Alaska Range. There were no winter attempts made on Mount McKinley. Weather in the spring was generally poor. An abundance of cold and stormy weather turned away most summit attempts until late May when a stretch of stable weather arrived. Still, the success rate remained low until another stretch of good weather in mid to late June brought the success rate up to its normal of 50% to 60%.

This year, in order to maintain safe, reliable, and timely air support for high altitude rescues on Mount McKinley, the National Park Service contracted an Aerospatiale Lama helicopter to be stationed in Talkeetna for the mountaineering season. Fortunately the Park Service was able to secure this contract this year, for U.S. Army Chinook helicopters were not available for high altitude rescues as they have been in years past. The Lama was successfully used on five major rescue missions this year. It's worthiness was especially proven after it completed two successful rescues above 18,000', one of which required four landings in the "Football Field" at 19,500'. In addition, for the first time in Alaska, the Park Service implemented "short-haul" rescue using the Lama. This is a technique of inserting rescuers, that are clipped into a fixed line suspended beneath a helicopter, into rescue sites where it is not possible to land a helicopter nearby. Once victims have been stabilized for transport they are extracted from the rescue site in a similar manner. The Park Service plans to keep the Lama helicopter under contract and stationed in Talkeetna for at least the next two years.

Due to the unavailability of air support from U.S. Army helicopters, the Denali Medical Research Project did not operate during the 1991 mountaineering season. However, the National Park Service maintained a camp at the 14,300' basin on the West Buttress. Mountaineering rangers were able to provide emergency medical care, coordinate rescues, and base their patrols from this camp.

The National Park Service conducted four, 24-day patrols on Mount McKinley, plus numerous other patrols in different parts of the Alaska Range. We continue to staff a ranger station in the town of Talkeetna where climbers register for their expeditions. Registration is required for all climbs and expeditions on Mount McKinley and Mount Foraker. Climbers headed to other areas in the South District of Denali National Park and Preserve are encouraged to register. A strong emphasis is placed upon the importance of environmentally sound expeditionary climbing and sanitation practices. Additionally, mountaineers must remain self-sufficient and conduct their own rescues whenever possible.

All statistics in this report are for portions of the Alaska Range within the boundaries of Denali National Park and Preserve. Unless specifically noted, statistics apply only for Mount McKinley.

INTERESTING STATISTICS:

Number of Climbers on Mount McKinley: In 1991, 935 climbers attempted to climb Mount McKinley. This is 63 fewer persons than attempted the climb in 1990. Although this is a drop of 6.3%, 935 climbers still represents a vast increase over the previous two decades:

1972	:	181	1982	:	696
1973	:	203	1983	:	709
1974	:	282	1984	:	695
1975	:	362	1985	:	645
1976	:	508	1986	:	755
1977	:	360	1987	:	817
1978	:	459	1988	:	916
1979	:	533	1989	:	1009
1980	:	659	1990	:	998
1981	:	612	1991	:	935

Success Rate:

- * 557 (59%) of those attempting to climb Mount McKinley reached the summit.
- * 10 expeditions attempted six different routes on Mount Foraker. Four out of 28 climbers (14%) reached the summit of Mount Foraker.
- * 9 expeditions attempted Mount Hunter via five different routes. Five out of 24 climbers (21%) reached the summit.

Acute Mountain Sickness: 79 (8%) reported symptoms of AMS. Of these:

- * 60 (76 %) were mild
- * 16 (20 %) were moderate
- * 3 (4%) were severe

Frostbite: 43 (5%) reported some degree of frostbite. Of these:

- * 26 (60%) were mild
- * 11 (26%) required physician care
- * 6 (14%) required hospitalization

West Buttress Route: 680 (73%) of climbers on Mount McKinley attempted the West Buttress. This by far remains the most popular route on the mountain. It is interesting to note, however, that the percentage of climbers on the West Buttress route has dropped during the past two years. Typically 80-85% of the climbers on Mount McKinley attempt the West Buttress.

Soloists: 14 (1.5%) persons attempted a solo climb of Mount McKinley. Eight reported reaching the summit, including two via the Cassin Ridge.

Mountain Guiding: 265 (28%) of climbers on Mount McKinley climbed with one of the seven authorized guide services. The success rate for the guided groups was 67%. Guided groups attempted the West Buttress, West Rib, Muldrow Glacier, and West Buttress - Muldrow Glacier Traverse.

Nationalities: 531 (57%) of the climbers on Mount McKinley were Americans. 404 (43%) were from foreign countries. This represents a large increase in foreign climbers. The average for the past ten years is 30%. A total of 28 nationalities were represented:

Argentina - 5 Barbados - 1 Columbia - 3 Finland - 3 Hong Kong - 1 Japan - 29 New Zealand - 2 Puerto Rico - 1	Australia - 14 Canada - 25 Czechoslovakia – 13 France - 21 India - 1 Korea - 50 Norway - 4 Scotland - 9	Austria - 29 Chile - 1 England - 47 Germany - 51 Italy - 21 Mexico - 13 Poland - 2 Spain - 13
Puerto Rico - 1 Switzerland - 42 Yugoslavia - 2	Scotland - 9 USA - 531	Spain - 13 USSR - 1

NEW ROUTES AND INTERESTING ACTIVITIES:

Mount McKinley:

In May, Zolo Demjan and Joseph Nezerka, of Czechoslovakia, climbed a new variation to the start of the Cassin Ridge. It starts just right of the Denali Diamond and joins the Cassin Ridge at the hanging glacier at approximately 14,000'.

In June, Americans Phil Powers, Tom Walters, and Greg Collins completed a new route on the Northwest Face. The route started at 9,000' on the Peters Glacier and consisted of 7,000' of mixed climbing to the 16,000' level on the West Buttress.

In June, Americans Bob Gammelin and Lee James climbed a new variation on the upper South Buttress Route. Their route took a line up the remote east side of the mountain above Thayer Basin.

On June 5, Mugs Stump completed a spectacular solo ascent of the Cassin Ridge in an astounding 15 hours from the base of the Japanese couloir to the summit ridge. Starting from the 14,000' basin on the West Buttress, Stump climbed up to the West Rib Route, skied and down climbed the Rib to the head of the Northeast Fork of the Kahiltna Glacier, climbed the Cassin Ridge, and descended the West Buttress back to the 14,000' camp. Total round trip time was 27 hours, 30 minutes.

On June 21, 12 year old Taras Genet, son of the late McKinley guide Ray Genet, became the youngest person to reach the summit.

- Mount Foraker: In June, Americans Jim Donini and Jack Tackle climbed a new variation to the Southeast Ridge, joining that route at approximately 13,000'. The 27-pitch route is named "Viper Ridge."
- Mount Huntington: In May, Americans Paul Teare and Jay Smith established a new route on the west face, right of the Harvard Route. It is named Phantom Wall, 5.9 A2.
- Mount Dickey: In May, Italians Fablo Ledni, Coser Corrado, and Paolo Fanton climbed a new route on the south face. The "Italian Direct" has 40 pitches and is rated 5.10 A4.

Mount Barrille: In June, Jack Tackle and Jim Donini climbed a new route on the southeast face called "Cobra Pillar".

<u>Peak 6800' "Werewolf", Ruth Gorge</u>: Austrians Andi Orgler and Angelica Stern established "Anemona Pillar".

Accidents/Incidents: The National Park Service conducted five major rescues on Mount McKinley in 1991, resulting in nine climbers being evacuated by helicopter. An additional nine incidents were reported to the mountaineering rangers. Of these, two climbers were evacuated by helicopter incidental to other rescue operations in progress. The remainder of these climbers were able to conduct their own self rescues without assistance from the Park Service. For the first time since 1982 there were no mountaineering related fatalities in the Park. Following are the more significant accidents and incidents that occurred in 1991.

Avalanche; Multiple Injuries; Self Rescue: On April 25, 1991 Klass Wierenga, Frank De Vos, Frank Kleinbekman, and Matthijs Wiggers of the Dutch Mount Foraker Expedition, were climbing near the 8,000' level on the 1974 Variation of the Southeast Ridge of Mount Foraker. At a point just a few feet below the crest of the ridge, the group triggered a large slab avalanche with a five foot crown and running approximately 1,600'. All four climbers were swept to the base of the ridge. Kleinbekman and Wiggers received minor injuries, and were able to dig out Wierenga, who was unconscious and suffered a pneumothorax. DeVos was semi-conscious, suffering a pneumothorax, dislocated shoulder, and fractured humerus. The climbers were unable to raise help with their radio, and began a self evacuation to the landing strip on the West Fork of the Kahiltna Glacier. On April 28, they were able to contact their air taxi pilot, and were flown out to Talkeetna.

Falls with injuries; Frostbite; Acute Mountain Sickness; Helicopter Evacuation: On 5-14-91, four members of the Korean Blue Fire Expedition left their high camp at 18,200' at Denali Pass on the West Buttress route of Mount McKinley, en route to the summit. Due to fatigue, AMS, and poor weather conditions, the climbers became separated on their descent. Il Soon Go, Jong Ho Ann, and Beom Kyou Lee bivouacked in the open on the night of 5-14-91. On 5-15-91, the frostbitten Ann fell 100' while descending to camp, sustaining a minor head injury. Go sustained frostbitten hands while descending to camp. Meanwhile, Lee and Jun Chan Park, who had been waiting at Denali Pass, fell approximately 500' while attempting to descend to the 17,200' camp to obtain food and assistance. Park sustained a fractured thoracic vertebrae and Lee a cervical strain. On 5-16-91, mountaineering rangers and the NPS Lama helicopter evacuated Ann and Go from Denali Pass, and Lee and Park from 17,200'.

HAPE; HACE; Frostbite; Helicopter Evacuation: On May 22, 1991 Korean Kim Hongbim, who was camped at Denali Pass at 18,200' on the West Buttress Route on Mount McKinley, became seriously ill with severe AMS and high altitude pulmonary edema. Hongbim was lowered to the 17,200' camp by other climbers high on the mountain. On May 23, 1991 Hongbim was lowered down the Rescue Gully to 14,200' by the pararescue team of the 210th Air National Guard, assisted by rangers and other climbers at the 14,200' camp. On May 24, Hongbim was airlifted from 14,200' by an Air National Guard Pavehawk helicopter. He suffered from severe frostbite to both hands and pneumonia complicated by high altitude pulmonary edema. In a related incident on May 23, Geo Bong Kim, of the Korean Mokpo University Expedition, became seriously ill with high altitude cerebral edema while camped at 17,200' on the West Buttress. Kim was lowered down the Rescue Gully to 14,200' by members of his own expedition. On May 25, Kim's condition remained critical and a ground evacuation was determined not feasible. He was airlifted from 14,200' by the NPS Lama helicopter.

Crevasse Fall; Multiple Injuries; Helicopter Evacuation: On May 29, 1991, New Zealander Tara Wingfield of the "Taking The Dog For a Walk" expedition was ascending from Windy Corner to the 14,200' camp on the West Buttress Route on Mount McKinley. While crossing a heavily crevassed area near 13,400', a large snowbridge collapsed, and Wingfield fell approximately seven feet before her fall was arrested by the other members of her rope team. Wingfield was immediately hoisted from the crevasse. She sustained a dislocated patella, knee sprain, and fractured ribs. With assistance, Wingfield was able to continue to the 14,200' camp. On May 31, Wingfield was airlifted from 14,200' by the NPS Lama helicopter, after it was determined that a safe ground evacuation was not feasible by the remaining members of her expedition.

AMS; Search; Self Rescue: On June 21, 1991, Japanese climbers Hiroshi Sakurai and Hiroshi Urayama arrived at 15,500' on the Haston-Scott route on the south face of Mount McKinley. The pair had ascended 3,500' from the bottom of the face that day. Urayama was struck with severe Acute Mountain Sickness and felt he should be rescued. That evening, the pair began calling "May Day" on their CB radio. The NPS responded with a search plane attempting to locate the "May Day" calls. Numerous contacts were made with many climbers including the Japanese, but due to a communication barrier, the two remained unidentified. "May Day" calls were again reported on June 22, and the NPS Lama helicopter began to search. Again the two Japanese were not identified. Urayama decided that he wasn't going to be rescued, so the pair began ascending the route very rapidly, summiting early the next morning. They then descended and reported to the NPS ranger camp at 14,200' that they were the ones calling "May Day'. With this information the search was called off.

Open Bivouacs; Frostbite; Helicopter Evacuation: Late on July 3, 1991, Polish climber Krzysztof Wiecha began climbing alone to the summit of Mount McKinley from the 17,200' camp on the West Buttress route. As Wiecha approached the summit from the 19,500' area, the weather rapidly deteriorated with clouds, snow, high winds, and visibility near zero. Wiecha became disoriented, and by early on July 4 decided to seek shelter in a small snow cave that he dug near 20,000'. He carried no bivouac or survival gear. At 7:00 am, Wiecha was reported as overdue to NPS mountaineering rangers. The weather remained extremely poor on July 4th and 5th, with heavy snowfall, high winds, and high avalanche hazard prohibiting any air and ground search attempts. Meanwhile, Wiecha wandered around near the summit, attempting to find the descent route, taking shelter in several different locations. He began to suffer severely from the cold, altitude, dehydration, and exhaustion. By midday on July 6, the weather began to clear, and an air search was begun. Miraculously, Wiecha was spotted crawling from a crevasse just below the summit at approximately 19,800'. The NPS Lama helicopter was dispatched from Talkeetna, and two mountaineering rangers were flown to the "Football Field" at 19,500'. Rangers climbed to Wiecha, who was coherent but could barely move due to exhaustion and severely frostbitten feet. He was lowered approximately 900' to the Football Field, where the Lama helicopter once again landed, and flew Wiecha off the mountain early on July 7. Both of Wiecha's severely frostbitten feet were amoutated.

There were a number of other incidents of altitude illness and frostbite this season. Many were treated at the NPS first-aid rescue camp at 14,200' on the West Buttress.

Trends and Items of Special Concern:

Heavy use: Near record numbers of climbers attempted to climb Mount McKinley this year. Climbers spent more than 17,000 user days on Mount McKinley alone. Over 12,000 of these were on the West Buttress. The use on the West Buttress is even higher when considering that many other routes are accessed via the West Buttress, plus many climbers that acclimate on that route as well.

Rescues: Ten of the eleven climbers (91%) that were rescued by helicopter this year were foreigners. 1.2% of climbers attempting Mount McKinley this year required rescue.

Sanitation: With the heavy use, it is more important than ever for mountaineers to properly dispose of human feces and urine. Many camps, especially at higher elevations, are littered with feces and frozen urine spots that are not covered with the annual accumulation of snow. Not only is this an environmental degradation of the mountain, but there is risk of contamination of snow that might be melted and used as drinking water by future expeditions. We are still suggesting the use of plastic bags for latrines, which should be disposed of in a deep crevasse. The Park Service maintains pit latrines dug deeply into the snowpack, at base came on the Kahiltna Glacier, 14,000' on the West Buttress, and at the landing area in the Ruth Amphitheater.

Trash: Many expeditions are hauling their trash to base camp where it is flown off the mountain. Still others continue to dump their trash in crevasses. Trash accumulation on other popular mountains of the world continues to receive considerable publicity. Trash dumps and appalling sanitation conditions at the more popular campsites in the Himalayas, Europe, South America and elsewhere threaten human health, degrade the mountaineering experience, and threaten the mountain environment. Mountaineers of all nationalities must take the responsibility for, and the initiative in, preserving the quality of the world's mountain environments. A combination of education, leading by example, and peer pressure are probably the most effective tools that can be brought to bear against less considerate mountaineers.

Citations were issued for unauthorized guiding, littering, and improper disposal of human body waste.

Administrative notes for 1991:

* The 1991 South District staff consisted of:

South District Ranger:

Mountaineering Rangers:

Bob Seibert
Renny Jackson
Ron Johnson

Ron Johnson Daryl Miller Jim Phillips Roger Robinson Steve Stotter

Student Conservation Aid: Steve Stotter
Administrative Clerk: Kathy Sullivan
Helicopter Manager: Scott Beattie

- * A portable radio repeater was again installed in the Ramparts west of the lower Kahiltna Glacier. This repeater helps to improve communications between the Talkeetna Ranger Station and the mountaineering patrols.
- * The newly constructed Park Service building in Talkeetna was occupied this year. It serves as seasonal quarters, year round office for the South District Ranger, and search and rescue coordination center.
- * A Development Concept Plan is in progress for the south side of Denali National Park. The planning process will address what level of development, or lack thereof, is appropriate for the area between Cantwell and the Southwest Preserve. The process will

primarily deal with that portion of the Denali Park resource which is more readily accessible to, or able to, accommodate hiking. It will not address mountaineering activities on Mount McKinley and other major peaks of the Alaska Range within the National Park. The planning process will also address interpretive and access opportunities along the Parks Highway and the potential for a major visitor center somewhere on the south side of the range.

For more information or to request mountaineering information and/or registration forms, please contact the Mountaineering Rangers, Talkeetna Ranger Station, P.O. Box 588, Talkeetna Alaska 99676. Telephone: 907-733-2231.

Jim Phillips Mountaineering Ranger Bob Seibert South District Ranger

DENALI NATIONAL PARK AND PRESERVE

1991 MOUNTAINEERING SUMMARY

	EXPEDITIONS	<u>CLIMBERS</u>	SUCCESSFUL CLIMBERS
West Buttress West Buttress (guided) W Buttress/Muldrow Traverse W Buttress/Muldrow (guided) Muldrow Glacier Muldrow Glacier (guided) Muldrow/W Buttress Traverse West Rib West Rib (guided) West Rib Cutoff Cassin Ridge Cassin Ridge Cassin Ridge (guided) Haston-Scott South Buttress Reality Ridge Northwest Face Northwest Buttress Wickersham Wall	145 24 7 3 2 2 3 15 3 19 18 0 1 2 1 1 2 0 248	475 205 26 23 4 22 9 58 15 46 37 0 2 4 2 3 4 0	275 137 15 20 0 10 7 33 11 16 24 0 1 2 0 2 0 0 553
MOUNT FORAKER			
Archangel Ridge Infinite Spur Northeast Ridge Southeast Ridge Southeast/Viper Ridge Talkeetna Ridge	1 1 3 3 1 1 10	4 2 8 10 2 2 2 28	0 0 0 4 0 0 0
MOUNT HUNTER			
Kennedy-Lowe North Buttress Southeast Spur Southwest Ridge West Ridge	1 1 1 5 9	2 3 2 3 16 24	0 0 0 3 2 5

	EXPEDITIONS	CLIMBERS	SUCCESSFUL
			<u>CLIMBERS</u>
MOUNT HUNTINGTON	6	18	2
MOOSE'S TOOTH (west summit)	9	26	9
MOUNT SILVERTHRONE	1	6	6
MOUNT DAN BEARD	1	7	0
PEAK 11300	2	5	3
RUTH GORGE PEAKS	4	9	7
MOUNT BROOKS	2	5	5
MOUNT RUSSELL	0	0	0
MIDDLE TRIPLE PEAK	1	2	2

NOTE: Since registration is required only for mountaineers attempting Mount McKinley and Mount Foraker, statistics for other mountains represent those climbers who voluntarily checked in with the mountaineering rangers. Other climbs, especially in the Ruth Glacier area, are likely to have occurred.