DENALI NATIONAL PARK AND PRESERVE

1989 MOUNTAINEERING SUMMARY

For the fourth consecutive year, a new record was set for the number of mountaineers attempting to climb Mount McKinley. In 1989, 1,009 persons registered to climb the mountain. It was also the first time more than 1,000 people registered to climb the mountain during a single year.

There were winter attempts by three separate expeditions on Mount McKinley, including one soloist. One of the group attempts, by three Austrian guides, was successful on 2/20, by the West Buttress route. The second winter attempt, a few days later on the West Buttress route, was unsuccessful and resulted in the death of three experienced Japanese mountaineers who were apparently caught above high camp by a severe storm. The soloist, Alaskan resident and Mount McKinley guide Dave Stahaeli, completed the first winter solo ascent of the West Rib.

Temperatures were relatively mild during the mountaineering season but April through mid-June was consistently stormy. Exceptionally good weather from mid-June through mid-July salvaged what would have otherwise been a dismal year for success rate statistics. Beyond mid-July, summer storms dumped heavy snowfalls at all elevations making travel both difficult and hazardous.

The Denali Medical Research Project received funding and was in full operation this season. The team continued research into the causes and treatment of high altitude illnesses. The staff designed and had an aluminum pressure chamber constructed which was capable of sleeping two persons. They continued studies comparing oxygen breathing in association with pressurization as a treatment for High Altitude Pulmonary Edema (HAPE). They also extended 1988 studies of pulmonary vasodilation drugs for the treatment of HAPE. Results from 1989 investigations suggest limitations to the usefulness of pulmonary vasodilation drugs in the field treatment of HAPE. At the end of the season, Dr. Peter Hackett announced that the Denali Medical Research Project would not operate during the 1990 season, but that they planned to return to continue studies in 1991.

All statistics in this report are for portions of the Alaska Range within the boundaries of Denali National Park and Preserve.

Where specifically noted, statistics apply only for Mount McKinley.

Despite the record number of climbers on the mountain, there were only five search and rescue incidents (including one rescue in the Ruth Glacier area) in which the National Park Service was involved. This is the lowest number of search and rescue incidents since 1975 when 362 persons registered to climb Mount McKinley.

The National Park Service conducted three, three week patrols on Mount McKinley, as well numerous patrols into other areas of the Alaska Range. We continue to staff a ranger station in the town of Talkeetna where mountaineers register for their expeditions. A strong emphasis is placed upon the importance of environmentally sound expeditionary climbing and sanitation techniques. Additionally, mountaineers are encouraged to remain self-sufficient and conduct their own evacuations whenever possible.

INTERESTING STATISTICS:

Record Number of Climbers on Mount McKinley:

In 1989, new all-time records were set for the number of persons attempting to climb Mount McKinley.

1979 = 533
1980 = 659
1981 = 612
1982 = 696
1983 = 709
1984 = 695
1985 = 645
1986 = 755
1987 = 817
1988 = 916
1989 = 1,009

Success Rate:

* 524 (52%) of those attempting the summit of Mount McKinley were successful. This figure includes 14 people who successfully reached the North summit.

* For the first time in three years, climbing teams reached the summit of Mount Foraker. Five out of 13 climbers (38%) attempting Mount Foraker reached the summit.

* Eight out of the 24 climbers (33%) attempting Mount Hunter reached the summit.

Record Number of Climbers on Mount McKinley During a Given Week:

A new all time high of 367 climbers were on the slopes of Mount McKinley for the week ending May 13, 1989.

New Altitude For Mount McKinley?:

On June 21, a team of researchers and support climbers reached the summit of Mount McKinley. They carried a Global Positioning System receiver that when used in conjunction with a Global Positioning Satellite, can measure geographical heights. Preliminary indications show the elevation of Mount McKinley to be 14' lower than the height previously measured by more traditional survey methods. The newly computed height of 20,306' remains the official height of Mount McKinley.

Acute Mountain Sickness:

95 climbers (9%) had symptoms of AMS, of these:

* 39 (4%) were mild
* 33 (3%) were moderate
* 23 (2%) were severe

Frostbite:

54 (5%) reported some degree of frostbite. Of these 3 (0.3%) required hospitalization.

West Buttress Route:

854 (85%) of the climbers on Mount McKinley were on the popular West Buttress route. This is exactly the same percentage as during 1988.

Soloists:

17 persons registered for solo climbs this year. A number of these were able to team up with other groups once they got to the mountain. The body of the Spanish soloist who disappeared late in the 1988 climbing season was discovered just North of Denali Pass. It appears he died of hypothermia.

Mountain Guiding:

265 (26%) of the climbers on Mount McKinley travelled with one of the authorized guiding companies. The overall success rate of the guided groups was 43%. The majority of these trips occurred on the West Buttress route, but other guided trips attempted the Muldrow Glacier, West Rib and South Buttress.

Foreign Climbers:

360 (36%) of the climbers on Mount McKinley were from foreign countries. 27 nations were represented:

Austria- 27	Australia- 3	Canada- 5
Chile- 8	France- 29	Germany- 47
Iceland- 6	Kenya- 1	Indonesia- 4
Italy- 26	Japan- 39	Korea- 24
Mexico- 8	Czechoslovakia- 6	New Zealand- 6
Poland- 17	Russia- 1	Spain- 7
Sweden- 1	Switzerland- 42	Great Britain- 41
Belgium- 2	South Africa- 2	Romania- 1
Luxembourg- 1	Taiwan- 2	Northern Ireland- 4

New Low Temperature Reading:

The National Park Service maintains a minimum recording thermometer, supplied by the National Weather Service, at the 17,200' level on the West Buttress route. The winter of 1988-89's coldest recorded temperature was -77 degrees F. It is likely this temperature was associated with an extremely cold arctic front which dominated Alaskan weather for two weeks and later moved south to bring very cold temperatures to Canada and much of the United States.

New routes and Interesting Activities:

Mount McKinley:

On March 12, Dave Stahaeli reached the summit of Mount McKinley via the West Rib, thus completing the first solo winter ascent of this route. This was the route's second winter ascent. On the lower glaciers, Dave carried an aluminum ladder suspended from his sit harness to help protect himself from crevasse falls. He experienced relatively mild temperatures... (-20 degrees F, was the lowest). During his climb, a violent storm raked the upper mountain, but the West Rib remained relatively protected from the extreme winds that took the lives of three Japanese climbers on the West Buttress.

In June, Alaskan Vern Tejas completed the first launch with a parasail from the South summit to the 19,500' plateau on the West Buttress. This was to be a test flight for a longer flight to Denali Pass later in the day, however, the weather deteriorated and

forced cancellation of further flights. The following day Tejas sailed from the 17,200' high camp on the West Buttress to the 14,200' basin.

On June 16, Frenchmen Bertrand Doligez and Serge Tauz completed the first parasail descent from the North summit to the 14,200' basin on the West Buttress.

The National Science Foundation sponsored an expedition which collected, where accessible, rock samples from the summit to the foothills to the south.

Mount Foraker:
In June, Americans Jim Nelson and Mark Bebie completed the second ascent of the Infinite Spur route.

Mount Hunter:
On July 1st, Americans Seth Shaw and Conrad Anker completed a new route on the West Face.

On May 28th, British climbers Jonathon Preston and Roy Ruddle climbed a new line ("Eroica" route) on the South Face which joined the SW Ridge at the plateau. They did not continue to the summit because of a storm.

Mount Huntington:
In late May, Americans James Quirk and David Nettle climbed the West Face via the 1978 variation to the Harvard Route, then on to the summit.

Moose's Tooth:
After their Mount Huntington climb, Quirk and Nettle moved to the Moose's Tooth and completed the second complete ascent of the German Route.

Peak 7,400', Ruth Gorge:
In late June, Americans Tom Bibler and Doug Klewin completed the first ascent of the West Face leading to the Southwest Ridge.

Mount Russell:
After two years of attempting Mount Russell climbs, Americans David Auble and Charlie Townsend completed the first ascent of the

East Face. After enduring a multi-day storm near the summit, the men parasailed from the mountain. Their full packs made for an interesting descent flight.

Accidents/Incidents:

The following incidents are the more significant accidents or incidents that occurred in 1989:

Winter attempt, multiple hypothermia fatalities, ground and helicopter evacuation by own support group: On 2/16/89 a very experienced four person Japanese team flew into the SE Fork of the Kahiltna Glacier to attempt a winter ascent of the West Buttress. The leader, Noboru Yamada, was on a quest to become the first person to climb to the summit of the highest mountain on each of the seven continents in the winter. Teruo Saegusa, Kozo Komatsu and Shunzo Sato were the other team members. Sato became ill early in the climb and returned to base camp to wait for the others. The remaining three reached the 17,200' high camp on 2/20... the same day a team of Austrians returned to high camp from a successful summit bid. On 2/21, neither team could move because of severe weather. On 2/22 there was a short break in the weather and the Austrians began their descent. The Japanese team was still in their camp. They were not seen alive or heard from again. Weather soon deteriorated and an extremely severe wind storm enveloped the upper mountain. Wind speeds were estimated to be 200 mph and continued through 2/26. Winds then decreased somewhat to 60-90 mph through 3/9. On 3/10, search flights located what appeared to be three bodies below Denali Pass. Search efforts were terminated on 3/11. It is believed that the climbers tried for the summit during a brief lull in the severe wind storm and were caught near Denali Pass as the winds again increased. The bodies were recovered later in March by a 17 person team of Japanese climbers who came to Alaska for that purpose. The three men died from hypothermia.

Fall with injuries, survival epic, helicopter evacuation: On 4/14/89 Anchorage climbers Jim Sweeney and David Nyman flew into the Ruth Glacier. They did not take a radio. The eventually decided to climb a couloir known as the Elevator Shaft located on the North Face of Mount Johnson. On 4/19, the first day of their climb, Sweeney began leading the fourth pitch. He placed an anchor, climbed about 40' above it, then encountered an ice window. He grabbed under the window then leaned out for a better look at his options.

Suddenly the entire formation upon which he was climbing collapsed. Sweeney, and the 15'-wide, 35'-high and 6'-thick ice formation fell down the couloir. His anchor held, but his hip was fractured in the resulting 100' fall and avalanche. The events of the next seven days are too involved to detail here (CIR #890016) but proved to be a test of endurance and of their will to survive. During this time, either one or both of the men were hit by eight different avalanches. Weather deteriorated and prevented all access to the mountains by rescue teams. The two men were eventually rescued by a military helicopter on 4/26.

Fall, triple fatalities, ground and helicopter recovery: On 5/17/89, three British climbers, Chris Massey, John Lang and Julian Dixon, began their summit attempt from the 16,500' camp on the West Rib. As the day progressed, weather began to deteriorate. The three men were seen by other parties who had turned back due to weather, but the British team indicated that they planned to continue on. Early the next day, a National Park Service Mountaineering Ranger camped at the 14,200' basin on the West Buttress, noticed what appeared to be bodies at the base of the Orient Express, a couloir which cuts across the upper West Rib. The rescue team discovered all three of the Brits died in a fall. It appeared the men were probably descending the West Rib, roped together, in extremely poor weather, when one of them slipped and pulled the others down the couloir.

Tent with occupants blown from ridge, injuries, helicopter evacuation: On 5/27/89, a guided expedition from Genet Expeditions was camped at the 16,400' level on the West Buttress. For the previous three days, the weather had been intermittently windy. Winds increased during the evening. One especially violent gust tore one of the tents, with three occupants, from its anchors. The tent and occupants began a tumbling fall toward the Peter's Glacier. One occupant, John Richards, the assistant guide, was ejected early in the fall and came to rest 300' below the ridge campsite. The other two occupants, Jim Johnson and Howard Tuthill, fell 1,000' and came to rest on a small ledge dressed only in polypro underwear. All equipment and clothing were lost in the fall. The assistant guide was able to ascend to the camp and alert others of the accident. The chief guide, Dave Stahaeli, was able to descend and provide some survival equipment to Johnson and Tuthill. Others on the mountain, including the Denali Medical Project personnel and private mountaineers, organized a difficult and dangerous

rescue effort, eventually stabilizing the two men who were flown off the mountain the following day via helicopter. Johnson suffered a compression fracture of a lumbar vertebrae and Tuthill frostbit his fingers. Both men were saved by the rescue efforts.

Tent and occupant blown from ridge, equipment lost, no injuries: In a very similar incident to the one previously described, a Rainier Mountaineering Inc. guided expedition was camped at the 16,100′ camp on the West Buttress during an extended storm. Chief guide Curt Hewitt was alone in the tent when a severe wind gust ripped the tent from the anchors and lifted it and Hewitt over 3-4′ snow walls. The tent began a tumbling fall. Hewitt was able to escape through an entry tunnel and climb back to the campsite, however the tent and the equipment were lost. Fortunately no rescue or significant injuries were involved, but the expedition was forced to retreat.

High Altitude Pulmonary Edema, ground evacuation: A Genet Expedition trip led by Dave Stahaeli reached the 17,200′ high camp on 6/21/89. There they waited three days for weather to improve. One of the clients John Michel, had been feeling poorly earlier in the trip. At high camp, he lacked energy and spent most of the three days sleeping. It was decided he would not attempt the summit. On 6/24 all expedition members left for the summit except for Michel who remained in camp. No other parties were at high camp. Late that afternoon, another Genet team arrived at high camp and discovered Michel to be suffering from HAPE. They evacuated him to the 14,200′ camp where Michel received treatment and recovered.

There were other incidents of altitude illness and frostbite this season. Most of these were treated at the Denali Medical Project camp at the 14,200′ basin on the West Buttress.

Perforated ulcer, peritonitis, ground evacuation to base camp: On 5/24/89 Japanese climber Tetumi Inoue developed severe abdominal pain while at the 9,800′ level on the West Buttress. He was evacuated with assistance from the American "Poko Denali III" expedition, to base camp and was flown to Talkeetna and then transported by ambulance to Valley Hospital. There he underwent surgery for a perforated peptic ulcer and peritonitis resulting from gastric emptying.

Trends and items of special concern:

Percentage of foreigners requiring rescues: Foreigners accounted for 36% of the total number of climbers on Mount McKinley. Fourteen persons required some sort of organized rescue/recovery effort this year. Seven (50%) were from foreign nations. All six of the fatalities during 1989 were foreigners.

Solo ascents: Each year we see more people register for solo climbs on Mount McKinley. This year 19 persons registered solo... two more than in 1988. Some of these were able to team with other expeditions at least to traverse the heavily crevassed portions of the lower glaciers.

Increasing use: For the last four years we have had new records set for the number of climbers attempting to climb Mount McKinley. In 1989, climbers spent a total of more than 19,000 user days on Mount McKinley alone! Over 16,000 of them were on the West Buttress. This is approximately the same, or somewhat more, mountaineering use which occurs annually on Mount Rainier.

Sanitation: With the increasing use, it is more important than ever for mountaineers to properly dispose of their human waste to prevent the contamination of snow that might be melted and used for drinking or cooking water by future expeditions. We are still suggesting the use of plastic bags as latrines. When moving camp, tie the bags off and toss into a deep crevasse. The use of biodegradable plastic bags is recommended. Use the latrines in the camps where they are provided. This season, a new latrine was installed at the 17,200' high camp on the West Buttress. It seems to be successful in concentrating human waste in the pits beneath the latrine. Unfortunately, the latrine had to be moved four times as the pit filled. The snow/ice pack at the high camp moves very slowly. This causes concern for the eventual proliferation of waste filled pits. For 1990, the latrine will be relocated farther out in the 17,000' basin where there is greater movement of the glacier.

Trash: Many expeditions are hauling their trash to base camp where it is flown off the mountain. Still others continue to crevasse their trash. Trash accumulation on other popular mountains of the world has recently received 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 from 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.

Administrative notes for 1989:

The 1989 South District staff consisted of:

South District Ranger:	Bob Seibert
Mountaineering Rangers:	Roger Robinson
	Ralph Moore
	Jim Litch
Student Conservation Aid:	Peter Fielding

A new German translation of the Mountaineering brochure was completed during the fall and is now available for distribution.

A portable radio repeater was installed in the Yenlo Mountains, south of the Alaska Range, in effect to improve communications between the Talkeetna Ranger Station and the mountaineering patrols. This location proved generally unsuccessful in accomplishing this objective. The repeater was removed later during the summer.

Looking ahead to 1990:

The National Park Service plans to coordinate a pilot study to survey users' perceptions of sanitation, trash and crowding issues on Mount McKinley.

Mountaineering registrations will be entered into a data base to allow better investigation of trends and more efficient daily management of the registration process.

Construction is scheduled to begin at the end of the 1990 mountaineering season to build a seasonal housing unit to replace the old surplus trailer which has served as seasonal housing for the Talkeetna mountaineering staff.

Monies have been appropriated and the process begun to acquire property in Talkeetna upon which a mountaineering contact will eventually be constructed.

Since the Denali Medical Research Project will not operate during 1990, the National Park Service will staff a small Weather Port at the 14,200' basin on the West Buttress. This camp will primarily serve as a communication and coordination base for rescue incidents.

A radio repeater will be installed on the top of the Alaska Regional Office in effort to improve communications between the mountaineering patrols and the Talkeetna Ranger Station.

For more information or to request mountaineering information and/or registration forms, please contact me.

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DENALI NATIONAL PARK AND PRESERVE

1989 MOUNTAINEERING SUMMARY

NT McKINLEY	EXPEDITIONS	CLIMBERS	SUCCESSFUL CLIMBERS
West Buttress	176	625	329
West Buttress (guided)	28	229	115
Muldrow	10	34	20
Muldrow (guided)	1	15	11
West Rib	15	38	9
West Rib (guided)	3	13	6
Messner Couloir	1	2	2
Cassin	10	28	22
Cassin (guided)	0	0	0
South Buttress	2	6	0
South Buttress (guided)	1	8	4
American Direct	1	3	0
Reality Ridge	1	2	0
Northwest Buttress	1	6	6
Pioneer Ridge	0	0	0
Wickersham Wall	0	0	0
MOUNT FORAKER	5	13	5
MOUNT HUNTER	11	24	8
MOUNT HUNTINGTON	2	4	2
KAHILTNA DOME	1	8	0
KAHILTNA DOME (guided)	1	6	6
KAHILTNA PEAK	0	0	0
MOUNT RUSSELL	1	2	2
MOUNT RUSSELL (guided)	1	6	0
MOUNT BROOKS	3	9	2
MOUNT BROOKS (guided)	2	24	10
MOUNT SILVERTHRONE	0	0	0
LITTLE SWITZERLAND	4	12	NA
LITTLE SWITZERLAND (guided)	1	14	NA
GORGE PEAKS	7	15	2
MOUNT DICKEY (guided)	1	5	0
MOUNT BARILLE	1	2	0
MOOSES TOOTH	5	10	2
MOOSES TOOTH (guided)	1	3	0
MOUNT DAN BEARD	1	1	0
MOUNT FRANCIS	1	3	3
ROOSTER COMB	1	2	0

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