Climbs and Expeditions

This year again we are extremely grateful to those friends who have done so much to help us to put this section together. Without their help it could not exist. We can not thank all those who have helped but do wish to express our gratitude in particular to Dr. Adolf Diemberger, Dr. G.O. Dyhrenfurth, Colonel James O.M. Roberts, Michael Cheney, Kamal K. Guha, Sohli S. Mehta, Ichiro Yoshizawa, César Morales Arnao, Ken Wilson, Vojslav Arko, Mario Fantin and many others.

UNITED STATES

Alaska

Mount McKinley. The number of climbers on Mount McKinley continues to rise. There were 27 expeditions, of which 15 put members onto the top. Of 188 climbers, 88 reached the summit. Two expeditions are described in articles earlier in this Journal. A Japanese expedition from the Tokyo Metropolitan Government Officers Alpine Club climbed the Muldrow-Karstens Ridge route. The following got to the top: on July 5 Susumu Maeda, Masayuki Ando, Noboru Ayabe; on July 6 Shinichi Kono, Yasuo Kuramochi, Tomoyuki Kaneko, Morikazu Ochiai; on July 7 Kazuo Ito, Matsuhiro Yamaura, Junji Yokota, Toshizo Kaneko and Morikazu Ochiai (again). On July 30 Charles Kroeger and Curt Chadwick and on July 31 Rick Boyce and Dwight Olsen reached the North Peak via Pioneer Ridge. All other climbs were of the South Peak via the West Buttress route: on May 28 Chris Chandler, Patrick Devorin, Ron Fear, Alex Murray, Robert Griswold and Leroy Kingland; in late May Ray Genet, Charles Petrie, Robert Halbersaat, Louis Blochinger, Walter Ruprecht, Paul Etter and Bernard Cabane; on June 7 Bertrand Dubois and Michel Fleuret of the Saudan expedition; on June 29 Paul Gerstmann, Carl Moore, Steve Casebolt, Bob Kastama, Les Gerstmann and Ted Silver; on July 1 Richard Beach, Nick Hartzell, Gary Kirk, James Clark, Bernard Hallet, Robert Thomas, Amy Jo Heyneman and Daniel Austin; on July 9 Hideyo Takeda, Kuniyoshi Yoroi, Mikio Kukukawa, Koichi Ikegami and Asao Ando of Hokkaido University, Japan; on July 13 Richard Barrett, Larry Schoenberg, Howard Marsden, Dennis King and John Rosser; on July 17 Ray Genet, Captains James Mc-Monigle and William Cottrell and Lieutenant Thomas Gardner; on July 21 Yoshio Ogama, Katsumi Nagai, Katsumi Sobue, Masao Yoshikama

NOTE: All dates in this section refer to 1972 unless otherwise stated.

and Kenichi Mimoto of Nagoya, Japan; on July 28 César A. Pérez de Tudela of Spain; on July 28 Ray Genet, Deborah Wolfe, Terry Cartee, Steve Hackett, Wolfgang Lutz, Gene Stanley, Hank Harrison, Karl Donner, George Walker, Roger Kirkpatrick and Lloyd Sumner. The Swiss Sylvain Saudan made a remarkable ski run from 19,000 feet, but it was not from the summit nor was it the first ski descent of the mountain as he reported.

McKinley, Attempt via West Fork of the Traleika Glacier. Dave Smith, Dan Halpern, Dave Pettigrew, Lavelle Burnham and I went over Mc-Gonnagal Pass, across the Muldrow Glacier and up the Traleika Glacier to its west fork, where we located Base Camp at 7500 feet. We were ready to climb on July 11, 1971 after airdrop difficulties. A mile above camp on the west fork was our first major objective, the first of two icefalls which rises from 8000 to 11,000 feet. A two-man team was always out in front, while the other three hauled loads. The icefall took 1200 feet of fixed rope and numerous ice screws and wands on everything from long ice slopes to very jumbled sections. On the 21st we established Midcamp between the two icefalls at 11,400 feet. On the 23rd we had all supplies at camp and started on the upper icefall, which went from 12,000 to 14,000 feet at the edge of Thayer Basin. The weather which had been fairly good turned bad from July 23 to 28. At 13,200 feet we ran into problems. Massive gorges blocked further progress. We had a good day on the 29th, and Pettigrew and I reached Thayer Basin at 14,200 feet by means of steep slopes south of the icefall. On the 31st we started to move camp but to our dismay found our cache at the bottom of the icefall had been destroyed by an avalanche. We probed for hours, finding little. We had lost most of our food, fuel and some climbing gear. Smith, Halpern and Burnham descended to Base Camp to hike out while Pettigrew and I made a summit try. We two reached Thayer Basin that same day and joined the South Buttress route. On August 1 much snow fell with little wind. Crossing Thaver Basin the next day in 21/2 feet of snow was much worse than we expected, but we still gained Thayer Ridge that evening. On the 3rd we made a summit push but were turned back at 16,700 feet by 100-mph winds and a white-out. With very little food (one lunch), we gave up and started down on the 4th, making Base Camp on the 5th after a 24-hour effort. The descent through the lower icefall was horrendous! I am sure we never could have made it without the faint trail of the other three, four days before. The route was totally different from on the ascent. Later we found that it took Smith, Halpern and Burnham 24 hours to descend the icefall alone. We then had a hungry and miserable five-day hike out from Base Camp with no food and large packs. Our climb was hampered by logistics, having a 3800-foot-rise from Base Camp to Midcamp and

3000 feet from Midcamp to Thayer Basin. There were no possible campsites in the icefalls and all three caches we had in them were destroyed sooner or later by avalanches.

DONALD BLACK, Unaffiliated

Mount McKinley, Western Rib of South Face. The Japanese ladies expedition was led by Michiko Sekita and composed of Nobue Yajima, Mitsuko Toyama, Sachiko Watanabe and Sueko Inoue. Misses Yajima, Toyama and Watanabe disappeared after leaving Camp V (17,700 feet) for the summit on June 29. Aerial and ground search continued until at last the three bodies were found at 14,500 feet at a spot between the Western Rib and the West Buttress on July 22. Ray Genet explained that the unhappy victims must have been caught in snowstorms on their way down to Camp V after possibly reaching the top.

ICHIRO YOSHIZAWA, A.A.C. and Japanese Alpine Club

Mount Foraker, Winter Attempt. On February 15 Cliff Hudson deposited Hank Noldan, Steve Hackett, Kurt Bittlingmaier, John Samuelson, Wendell Oderkirk, Norm Stadem and me with one month's supplies at 6500 feet on the Kahiltna glacier near the foot of Foraker's southeast ridge. We elected to attack the south spur of this ridge in order to avoid the traverse under a long row of ice cliffs on the route taken by the 1963 Carter party (A.A.J., 1964, 14:1, pp. 52-5), the only other group to have climbed the southeast ridge. In retrospect, the 1963 route would have been faster and would have required less fixed rope to reach 9500 feet, where the routes joined. A steep snow couloir led to a rotten rock rib which took us to the top of the spur, where we established our first camp in a seven-man, three-room iglooplex. Three days and several thousand feet of fixed rope were needed to push the route over the 3/4 mile of narrow, corniced, mixed rock and snow spur to its junction with the main ridge, where Camp II was constructed at the base of a triangular rock buttress at 9000 feet. High winds drove us into our igloos for two days before we could continue. The route then led to the right up a steep, shallow, snow couloir to the crest of the triangular buttress, then up a rib of corniced snow mixed with occasional islands of steep rock and into the icefall which forms most of the south aspect of the upper southeast ridge. Several perlon anchors left behind by the 1963 party still remained among the rocks. Camp III was established in a snow cave about 200 yards below the crest of the ridge, at about 11,000 feet. From there, we ascended a 30°-45° ice slope to the bergschrund, along the 'schrund for several hundred yards, and then to the top of the southeast ridge. The hardpacked snow of the wide ridge crest made easy cramponing, with only one difficult ice pitch just below the large dome which forms the shoulder of the ridge at 13,600 feet. On the dome, we assembled to survey the rest of the route. The $1\frac{1}{2}$ miles from 13,600 to 15,500 feet looked very tough—mostly knife-edged ice. The last 2000 vertical feet looked like an easy scramble. However, we were short on time and food, and almost out of fixed rope, having placed over 9000 feet on the lower parts of the mountain. Our supply of ice screws and pickets was almost gone. Reluctantly, we made the decision to retreat. Hudson managed to get us all out by March 5. We had had three weeks of glorious sunshine, unusual for this part of Alaska in February—and only lost 2 days climbing due to bad weather. The temperature ranged from -30° and -35° at night to an occasional 35° during the day.

WARREN BOWMAN, M.D.

Mount Foraker. Kurt and Peggy Bittlingmaier and Dave Scott made an attempt on the southeast ridge of Foraker but gave up after a week because of bad snow conditions.

Moose's Tooth. In July Yvon Chouinard, Galen Rowell, Sandy Bill and I made another attempt on the southeast face of the Moose's Tooth. After two days on the face in good weather we reached the high point of the year before. However I fell sick and later Rowell. The team continued but on the third day in the face of a developing storm and deteriorating cracks decided to descend.

JAMES P. MCCARTHY

P 8300, Buckskin Glacier, Alaska Range. From March 25 to April 9, Rick Erst, George Menard, Ted Moore, Pete Robinson and I skied from road to road up the Ruth Glacier and down the Buckskin Glacier, crossing via 7950-foot "Window Pass" to the northwest fork of the Buckskin and making the first ascent of 8300-foot "Mooseskin Mountain," 1.65 miles north-northwest of the Moose's Tooth via the west ridge. John Metzger was with us on the Ruth and flew out from Don Sheldon's blownover Mountain House, which we spent three days righting.

DAVID JOHNSTON, Mountaineering Club of Alaska

Mount Huntington, South Ridge. An attempt in early July to climb the entire south ridge was an utter failure. Rotten sugar snow without any base prevailed due to the lack of the normal spring thaw. Avalanching was considerable. However, we did learn about all approaches to the southern side of the mountain. Basically there are two approaches. We started from a good landing area on the Ruth Glacier, southwest of Mount Dickey. By crossing a low col to the south of Peace Peak, we gained easy access to the south end of the Rooster Comb. There most of a badly broken icefall may be passed on the north side via a narrow ramp, at least in early season. Later it would be exceedingly difficult, but then climbing on the peaks would not be so threatened by heavy avalanching. A more feasible approach is to land on the upper Tokositna near the northeast ridge of Hunter, where Roberts landed. One has immediate access to Hunter and to the west ridge of Huntington. The south side of Huntington may be gained by climbing a low-angle ramp on the north side of the dangerous icefall. The ramp is separated by a few rope-lengths from a moderate gully that leads to the cirque formed by the west and south ridges. Personnel: Skip Hamilton, Vladimir Farkas, Mike Yokell, Mike Parker, Jeb Schenck.

JEB SCHENCK, Unaffiliated

Mount Russell, Northeast Ridge, Second Ascent by New Route. Three crowded Fourth of July flights brought Peter Brown, John Hauck, Dick Jablonowski, Dan Osborne, and me to the 8000-foot plateau of the east branch of the Yentna Glacier. Two days later we occupied a high camp nestled under a small ice cliff at 9900 feet on the northern end of the connector ridge leading to Mount Russell's northeast ridge. (Previous attempt: A.A.J., 1967, 15:2, p. 344.) Commuting along the 3/4-mile-long doubly-corniced connector ridge was delightful as views of Foraker and Hunter distracted one's attentions from more immediate problems, first and foremost of which was the bergschrund at the base of the ridge proper. Doing end runs around the schrund would have been difficult, and quickest would have been to aid-climb it, but we chose to work on the snakey beginning of the northeast ridge that merged with the top of the schrund. This initial portion was a very airy, frothy, rimey, well-corniced route requiring the removal of much crud. It also took us three days of uninspired effort to climb it. We put in a 90-foot jumar to avoid repeating all but the final 200 feet of the ridge as we worked on the route higher up. From there the route led up a small plate to a moat, a few hundred feet above the schrund, over the moat via a 60-foot ice chimney and out onto the second plate which lead steeply to an ice barrier slightly less than halfway up the ridge. The ice wall swept from steep loose rocks on the north to a 4000-foot drop-off on the east face, although it did contain a few flaws. Near the rocks was a tight chimney that started to overhang about 40 feet up, and at the other end was a five-foot-wide, sharply downsloping 45° unstable snow ramp. In between was a crevasse running perpendicular to the wall. Getting this far on the 11th, we were optimistic that the wall could be done and that the summit was only another day away. After a day of high winds we were back at it shortly after midnight on the 13th. Osborne crawled into a small opening at the base of the wall, was forced to descend 15 feet to get back into the perpendicular crevasse, and then proceeded to chimney up 50 feet with snow on one side and hard ice on the other. Seeing light through the snow canopy, he broke through and emerged about two-thirds of the way up the wall—above the vertical section, but still on a 60° slope. Now we were in the ice-cube tray—a mass of tumbled ice blocks and holes. The only problem was one of routefinding. After an hour in the maze the route went 1000 vertical feet up 45° to 60° snow slopes hanging over nothing. There were a few rime-ice bumps once we got off the east face and back on the ridge again. Their ten-foot pitches kept things interestingly and finally one lead us to the top of the summit rime-cap (11,670 feet). After Russell the trip became anything but anticlimactic as we spent a week negotiating the Yentna Icefall and getting over to the tundra on the north side of the Alaska Range. Then the 60 miles to Wonder Lake was the standard fare of oppressive swarms of mosquitos, swamps, endless willow thickets, circuitous detours around grizzlies, and five glacial rivers brimming with excessive summer melt.

THOMAS KENSLER, Alaska Alpine Club

P 6486. On April 29 Marty Corcoran and I snowshoed from the Glenn Highway 10 miles up still frozen Granite Creek. After checking out the peaks up one of the east forks of Granite Creek, on May 3 I soloed P 6486 for a first ascent.

LARRY SWANSON, Mountaineering Club of Alaska

Gurney Peak and P 8520, Kichatna Mountains. (See USGS map, Talkeetna B6). The north buttress can be seen from the "Glacier of the Shadows" (so named by the Roberts Party, A.A.J., 1967) which runs directly north from the summit of Gurney. The buttress is divided from the peak by a high hanging glacier. This second glacier falls over steep ice slopes and eventually joins a third glacier which lies along the whole western side of the mountain. Don Fredrickson's and my route of August 1 ascends from the "Glacier of the Shadows" over the steep icefall of this third glacier and joins the rocky north buttress at a point 100 feet above a bergschrund. Third-class climbing up and to the east of the ridge ends at the base of a difficult, icy, 300-foot chimney, best entered after a short rappel and then up and to the east (left). The chimney leads onto the hanging glacier at the top of the north buttress, which is followed straight up to the base of another chimney on the left. Two shoulder stands to gain entrance and some 500 feet of difficult climbing on snow, ice and bad rock lead to the summit ridge. The route required 15 hours on the ascent, a bivouac at the summit, and 8 hours to descend the same route as the previous day. P 8520 lies 134 miles north-northwest of Gurney Peak. Its east face, overlooking the "Glacier of the Shadows" is an impressive array of towers and gullies. From Base Camp on that glacier, the mountain appeared to be a moderate climb up to the summit via the ice and snow on the north slope. From camp, on August 3, Don Fredrickson, Ludwig Ferche and I ascended the icy tongue north of that

peak to gain entrance to a smaller glacier which lies on the western side of the peak. A snow couloir requiring 3rd- and 4th-class climbing ends at the north arête, which joins the snow slope visible from our camp. Near its top, snow turned to ice and we exited to the rock ridge on the right (west), around a difficult corner and up 250 feet on ice and decomposed rock to the top of the ridge. Some 500 feet of scrambling brought us to the base of a 300-foot 4th-class slope leading to the summit. Our route required 12 hours up, a bivouac at the summit, and a 10-hour descent over the same route.

WILLIAM KATRA, Unaffiliated

Middle Triple Peak, Kichatna Mountains, Attempt. In July Roy Kligfield, David Loeks and I were landed on the Tatina Glacier. Our main objective was the unclimbed Middle Triple Peak (8835 feet). Unfortunately we did not attempt the peak by the route suggested by Dave Roberts in his Summit article of June 1968 because of landing and approach problems. Instead we came from the west from the Tatina Glacier. Our aim was to do an alpine-style ascent; basically this was the main factor in our retreat. It took all day to reach the col between Middle and North Triple, involving very steep snow and ice climbing. Having arrived at the col, we discovered the "ridge" above us was in the nature of a Yosemite wall of 1500 feet which leads to the summit crest-a knife edge, roughly a half-mile in length with a few bumps along the way. After a long time on the first pitch, which from the distance we had guessed would be easy, we saw that we were grappling with a climb of perhaps four days' duration and possibly more equipment than we had carried; we dismally rappelled to the col, bivouacked a few hours and spent more than half the next day on the descent. The weather, untypically, during this attempt was perfect. Later we attempted P 7984 on the west side of the Tatina Glacier, approaching via the obvious snow couloir on the northeast side. However we had to descend off the ridge down onto the northwest snow-and-ice face. While I ensconsed myself luxuriously on a ledge, Loeks and Kligfield spent the next eight hours on the ice and on the final rock buttress, only to retreat 200 feet below the summit because of rotten rock and deteriorating weather.

ALVIN DEMARIA, Vulgarian Mountain Club

Witherspoon Attempt, Chugach. The Mountaineering Association of Higashimatusyama City of Saitama Prefecture Expedition was composed of Nakamasa Matsuzaki, Atsui Kojima and four others. They were landed on the Columbus Glacier by Don Sheldon in June. The weather was comparatively fine. There were only five days when they could not move during the two weeks. Witherspoon (12,023 feet) was too much for them because the crevasses were wide open so late in the season. They were defeated by a great crevasse just under the south peak (11,300 feet).

ICHIRO YOSHIZAWA, A.A.C. and Japanese Alpine Club

Mount Blackburn, Wrangell Mountains. There were two expeditions on Mount Blackburn (16,523 feet). The Mountaineering Association of Daito City was composed of Tadanobu Yokoyama, leader, Toshiyuki Shinto and four others. From Base Camp at 7700 feet on the Nabesna Glacier, they established Camp I at 9500 feet on July 28 and Camp II two days later. They climbed the west peak of Blackburn on July 31. (It is not clear whether this is the highest summit. —*Editor.*) The Jikei University School of Medicine Alpine Club was led by Yoshio Nagao. From the Nebesna Glacier they climbed the northwest ridge. On July 15 Ken Shinohara, Ryo Kohji, Tamio Ohoka and Tstsuro Iriokura stood on the summit.

ICHIRO YOSHIZAWA, A.A.C. and Japanese Alpine Club

Peaks North of Regal Mountain, Wrangell Mountains. An expedition of the Mountaineering Association of Osaka Prefecture operated in two groups. Group A, which consisted of Yoshihiro Nakai and five other members, landed at Green Hill on the east side of the Nebesna Glacier at 62° N, 142° 55' W on July 26, ascended the Nebesna and placed Camp III about six miles due north of Regal Mountain. On July 31 they climbed P 10,005, on August 1, P 10,000 and on August 2, P 10,340. Meanwhile the 12-man Group B, led by Shiro Nishimae, ascended from Green Hill a glacier that descends from south to north, just east of the Nebesna. From a high camp up this glacier they had on July 30 already climbed P 10,340, before Group A had done so. This group also climbed P 8516, some four miles east-northeast of P 10,340 on August 3.

ICHIRO YOSHIZAWA, A.A.C. and Japanese Alpine Club

Chisana Mountains. My wife Lena and I climbed in this range, some 70 miles south of the Alaska Highway, close to the Yukon border, to which we had access by plane. It is a nice wilderness area but not too interesting from a climbing point of view. The mountains rise to 7000-8500 feet with a rise of 3000-4000 feet. The rock is generally loose; there are a few small glaciers. On August 10, 1971 we climbed P 7770, north of Chavolda Creek. On August 13 we climbed P 8200, south of Chathenda Creek, via the short but difficult north glacier and west summit. This is probably the sharpest peak of the region.

ANDERS KARLKVIST, Svenska Fjällklubben

California Mount St. Elias Expedition. Arriving at Kluane Lake on June 9, Bill Feldmann, David Gladstone, Richard May, Charles Ringrose,

Timothy Tracey and I had by June 13 been landed by ski-wheel plane at a Base Camp at the junction of the Jeannette and Seward Glaciers (6200 feet), had carried supplies to Jeannette Col and arranged two airdrops on the Newton side. Following the route of the 1971 Hall party, we ascended the five-mile snow slope to Jeannette Col (9000 feet), then descended steep snow on the south side to set up Camp I at 8000 feet on June 13. (To avoid cliffs, route of descent begins several hundred feet southeast of the low point of the Col, drops straight for the first 600 feetfixed rope would be helpful-then goes right diagonally down to the glacier.) After some bad weather, Camp II was established on June 17 by our first airdrop at 7000 feet. From here, we descended to the Newton Glacier (6000 feet) by passing directly below the ridge extending southwest from Mount Jeannette and continued up the Newton to place Camp III in the uppermost icefall at 7500 feet on June 20. Then, unable to find a route through above this point, we retreated to 7000 feet and ascended the glacier between the east and southeast ridges of St. Elias, setting up Camp IV at 8700 feet on June 21. From this camp, we crossed the east ridge and descended to the main Newton about half a mile above the upper icefall, where on June 25 we recovered our second airdrop (8600 feet). The only obstacle on this route was a 30-foot icy overhang on the north side of the ridge, where it was necessary to place a fixed rope for climbing and hauling packs. On June 26, passing through the avalanche danger zone of the upper Newton basin between midnight and four A.M. (time of least activity), we carried camp and five-days' food up steep snow slopes and through an intricate crevasse field to Russell Col where Camp V was set up (12,300 feet). After waiting out a three-day storm, all six expedition members reached the summit of Mount St. Elias (18,008 feet) on June 30 via the Abruzzi Ridge route in a 23-hour round trip climb from the Col. We descended from Russell Col on July 1, again traveling by night through the avalanche area and after climbing the fixed rope and hauling packs up the overhang, dropped down to a campsite at 7000 feet. Then, in continuing good weather, we crossed Jeannette Col and returned to Base Camp on July 3; we were picked up by our glacier pilot the next day.

BARBARA LILLEY

Brooks Range, Alaska. Our wish: to search out and experience the most remote wilderness skiing available: our objective: to ski from the Arctic Circle to the Arctic Ocean, over the Brooks Range. Bettles, Alaska (67° N.) April 1. Wayne Merry, Ned Gillette, Jed Williamson and myself. The local bushpilot mumbled, "There ain't no living out here" as he helped us lay two caches on our proposed route, ten days apart. Then, on skis, we followed the all-but-forgotten Sled Trail along the Koyukuk River. Three days of knee-deep snow made us wonder if we'd even reach the Range, but upon turning up the North Fork we encoun-

tered a few stretches of wind pack and bare ice which became more frequent towards the windy core of the Range. Our most watched enemy, Cold, became relentless and severe at -30° and we had misgivings about initiating an Alpine mode of traveling in the Arctic winter. An ally of cold itself was the overflow: free water insidiously hiding in various forms on the river. Wet feet meant imminent frostbite. Another danger -alarmingly unexpected-were the grizzlies, early out of hibernation. Prodigal in caution, however, none of us froze or were eaten. Eleven days of harder work than we cared for; then we passed through the grand mountain Gates of the Arctic. Concern for our cache at Ernie Creekbecause of the grizzly and wolverine tracks in great number-proved unfounded, and we had three days of feasting, a ski ascent of Two Prong Mountain (6200 feet), and investigation of the Valley of the Precipices (described by Robert Marshall as "the Yosemite of the Arctic"). This wilderness peace was rudely shattered by an oil company helicopter, whose oily occupants were looking for lost others of their ilk. On the trail again. Mount Doonorak's chilling presence was made no more real by the flocks of white birds-the ptarmagins-against her white flanks, nor by the cawing black Harpies overhead, nor by the prints, in bas relief, of huge wolves never seen. We approached the precipitous couloir leading to the Arctic Divide, expecting trouble. Carrying our skis we climbed steep shale on the east side-"impossible," according to Marshall. It went without difficulty. Now we entered a different world. At our backs was the broad river of spruce forests, flanked by steep-sided peaks. Climbing to the pass put us high among the mountains, as we skied on their barren shoulders which rolled gradually downhill towards the Arctic Slope. Jagged peaks on all sides called to us like Sirens, but tightly scheduled rations kept us plugging towards our next cache. Skiing was a special joy for each of us, often strung out miles apart, each left with his own thoughts. We skied, lower down, into a broadening valley; the wind, now at our backs, pushed us easily along the glare ice of the meandering Itkilik. Ground squirrels on the sun-facing banks of river terraces jerked to attention as we skidded by, and alarmed caribou exploded across the frozen flats. We paused to marvel at the 15-foot high blisters of ruptured ice, and peer down through thick blue windows to the sun-lit stones on the riverbottoms. Our second cache was on the Arctic Slope. We opted to use it for exploring rugged mountains near the front of the Range. Later we might push across the barren, flat Slope to the Arctic Sea, as originally planned, but for now the call of the Sirens was too great. From a single camp near the Atigun River, we climbed four fine peaks, P 6200, P 7610, P 7410 and P 7100, all between the Atigun and the Sagavanirktok A sudden Spring breakup dispelled further thoughts of skiing to the Arctic coast, and we sadly skied and walked into the oil camp of Galbraith. We had come 300 miles, counting side trips, in 30 days, and crossed the Arctic mountains, climbing five of them. Being first to do these things is even more precious than usual, for the Brooks Range is rapidly losing its primitive quality. The oil companies have moved in efficiently—the land is nearly theirs.

JACK MILLER

The Tusk, Juneau Icefields. Because of a time limit, our mini-expedition to the northwestern portion of the Icefields was hurried by helicopter to the upper Taku Glacier. Our objective was unclimbed Tusk (c. 6700 feet), which actually towers atop an isolated north-trending ridge which flanks the Battle Glacier: not only a climbing problem, but a possible approach nightmare. Several of Austin Post's aerials gave it the resemblance of Bugaboo Spire's north side, only in a more glacierized region. On August 2, just as the weather was closing down, John Rupley, Dave Beckstead, Ray Ketcham and I made the climb, with Illa Rupley hosting our camp. Fortunately a long glacier traverse, then steep névé on the west flank provided a narrow route to the north corner. Here two class-5 pitches brought us to a summit ridge, long but simple. After being pinned in the tents 6 days, Rupley and Beckstead made some climbs on the Snow Towers, to our south, while Ketcham and I skied to Maynard Miller's J.I.R.P. Camp Ten. Here we were treated to gracious alpine hospitality before departing from this magnificent "land of the spirits."

FRED BECKEY

Juneau Icefields. On August 10 John Rupley and I climbed the east ridge of the Snow Towers. After seven leads of friable rock we were on the northeast point, the lowest of the three-summited peak. NCCS III, F5. On the way back to our camp south of the Tusk, we scrambled up the middle summit of Tricouni Peak.

DAVID L. BECKSTEAD

Mount Nesselrode, Northern Boundary Range. In August the first ascent of Mount Nesselrode (8100 feet) was made by a party including Aylmer Thompson, A. Clough, John Schuff, Heidi Goodwin, Simon Waldram, Lock and Lance Miller and me.

MAYNARD M. MILLER

The Cats Ears, Devils Thumb. The Cats Ears is a spectacular double tower mounted on the west face of the Devils Thumb. It was climbed in July by Paul Starr, Fred Douglas, and me from Vancouver, British Columbia. Our approach was from Petersburg by a short float-plane hop to Scenery Lake—thence over a low col into the Witches Cauldron, a wild and desolate chasm between whose branches the Thumb erupts. This glacier, whose ice stream is tilted back toward the chasm headwall, was our base and airdrop site, a day's pack from the lake. The climb was made from here in two bivouacs, with one entire day required on the final 800-foot spire. Rock on the tower itself was good, and there was only minor aid despite steepness. The route, however, was devious and not obvious, requiring nine leads on the east side. Incidents included one fall and a major, unprovoked landslide which took out half our bivouac ledge a couple hours before we were to reoccupy it in descent. Two other class-5 rock peaks were climbed further south toward Scenery Lake, and on one of these we experienced the major earthquake which shook Alaska this summer. A memorable sensation! There are many technically difficult unclimbed peaks in the Thumb area, and some nice routes on the Devil itself.

RICHARD R. CULBERT

Colonel Foster, East Face. The main attraction of this wall is that it is quite likely the largest on Vancouver Island—about 3300 feet high. It was climbed in September by Fred Douglas, Paul Starr and me by a buttress leading to the highest peak of the many-summited massif. Rock was fairly good and generally easier than had been expected, with trivial aid. Only one bivouac was required. This peak, however, is a long, complex and demanding climb by any known route. (First visited in 1968 by Mike Walsh solo!) It required the balance of that day to get off the beast. Other buttresses on the north part of this wall may offer sustained difficulties on good rock.

RICHARD R. CULBERT

Washington—Cascade Mountains

Snow Creek Wall, Country Club Route. Thwarted by bad weather, and somewhat put-off by the overabundance of people heading for the north side of Mount Stuart, we sighted instead on nearby Snow Creek Wall for our after-Christmas adventure. On December 30-31, P. Ekman, J. Ossiander, J. Weis, and I made the first winter ascent of the Country Club route. Conditions were such as to make the climb rather different from the usual summer romp, and it took us two days going alpine style to complete the eight roped pitches to the top, two of which were quite severe (ropes were also used below the first pitch due to almost continuous powder snow slides coming off the top of the wall). The pitch leading to the Northern Dihedral makes a 165-foot rope a definite asset. The climb was mostly mixed, and crampons were worn at all times.

MANUEL A. GONZALEZ, Unaffiliated

Other winter climbs include the Esmeralda Gully and Gerhardt's Crystal Blue Persuasion as well as the annual attempts on the North Ridge of Mount Stuart.

Dragontail, Northeast Arête.* Another Grade III, 5.7 route on this increasingly popular mountain.

Thunder Mountain, North Face. A 6600-foot peak about eight miles south of Stevens Pass with a 600-foot granite face.

Elephant Head. A tower northwest of Dome Peak. The south side was climbed and was variously described as 5.5 and fourth class.

Spider Mountain, North Face. A climb of the hook-shaped snow finger leading directly to the summit.

Eldorado Peak Area. Several climbs in this area include the North Ridge of Tricouni Peak, "Thunder Peak" near Mount Logan, the serrated ridge running northwest off of Eldorado, and "Early Morning Spire" northwest of Dorado Needle.

Mount Triumph, South Ridge. A mixed scrambling and fifth-class route.

Mount Hayden. Near South Twin Sister and climbed by the southwest side.

Icy Peak, North Face. A glacier climb with steep sections.

Mount Sefrit, Northwest Glacier. A glacier leading to a 400-foot rock face.

Miscellaneous Rock Climbs. These include several climbs on Kangaroo Ridge, a climb on Acropolis Tower, Vasiliki Ridge, several climbs near Darrington, and the usual new climbs in the Leavenworth area.

California-Yosemite

El Capitan. Four new routes were made on El Capitan. Canadians Hugh Burton and Steve Sutton had worked for three days in 1971 on a new route which starts to the right of the Muir but could not continue because of bad weather. In 1972 they completed their route in eight days. It crosses the Muir route at Mammouth Terraces and follows crack systems between the Muir and the route done in 1971 by Sylvester and Wreford-Brown. Jim Dunn made a solo new route, "Cosmos," which lies between the Dihedral and Salathé routes. He had started with the Canadian Gordan Smaill, who was hurt in a fall some 800 feet up. The pair descended, leaving several fixed ropes and a few slings to bypass places where piton placements were poor. Then Dunn returned alone to complete the route in nine days. He placed some 70 bolts. Other notable climbs involved Charlie Porter. He and Gary Bocarde made a new route which started up the Muir Wall. From below the Gray Bands they climbed left to the "Shield," an overhanging, nearly blank area left of

^{*} Further information on these climbs is available in the Mountaineer Annual.

the upper dihedrals of the Muir. Porter is an expert with rurps and in one spot placed 35 in a row. They used only 24 bolts on the seven-day climb. Porter did a solo first ascent, "Zodiac," a route he had previously attempted between El Cap Tree and the East Buttress routes. He completed the route in seven days, placing 74 bolts. Earlier in the summer Porter made the third ascent of the Wall of Early Morning light in ten days solo! He started differently from on the two previous ascents, following the route attempted by Schmitz, Madsen, Chouinard and others on the left side of El Cap Tower. He traversed to the right onto the Harding-Caldwell route, part way up placing some 15 bolts.

Generator Crack Area. In April 1971, Jerry Coe and I explored a hitherto hidden small 200-foot cliff band directly above the generator building of Generator Crack infamy. This cliff, characterized by knobs, has thus far yielded four fine short routes: The Electric Gully, Chimney for Two, Chickie Pie, and New Diversions (Claude Wreford-Brown also in ascent party). The latter two are exceptionally fine. All are in the F8 range.

RICK SYLVESTER

The Drop-Out. This is a short severe jam-crack at the base of the Leaning Tower ascended by Larry Young and me in August 1971. NCCS I, F10.

RICK SYLVESTER

Job. Ben Read and I become well-acquainted with the meaning of short autumn days as we were twice forced to retreat due to darkness from a partially overhanging open-book just below the Braille Book on Higher Cathedral Rock. This seven-pitch climb, Job, pushed us to our limits and still had the last laugh as eight feet of the fifth pitch eluded our vain efforts to keep the route entirely free. NCCS III, F10, A1.

RICK SYLVESTER

The Syllable. On November 7, 1971, Sibylle Hechtel shared with me the first ascent of a fine line just left of The Sequel, which we christened "The Syllable". There is some speculation that Jim Madsen and partner climbed this route before us, mistaking it for the Sequel, though we found no evidence of a prior ascent. A huge dangerous flake can be avoided by moving left below it. NCCS III, F8.

RICK SYLVESTER

Pass or Fail. In November 1971 Gib Lewis and I climbed a threepitch climb to the west of the Cross Country Crack in the Arch Rock area. The crux is a jam-crack. NCCS II, F10.

RICK SYLVESTER

The Chopper. After seven known attempts and seven known falls, this severe one-pitch climb behind Camp 4 was finally solved by Mead Hargis with me following. The summit of this climb is a moderate fifth-class move. NCCS I, F10.

RICK SYLVESTER

Wildcat Buttress. Six miles northwest of Tuolumne Meadows is Glen Aulin, a two-mile-long parkland through which the Tuolumne River flows. Unlike most other areas on the western slope of the Sierra, Glen Aulin has groves of aspen, scattered juniper and sagebrush. In August Dale Bard and I went exploring in Glen Aulin. We found a large granite wall, Yosemite grade V or VI variety, for which we had neither the time nor the equipment. The second largest wall was a buttress above California Falls, connected to Wildcat Peak by a long ridge.

After several false starts, Dale found a way to free climb the first 75 feet. Both of us took falls trying to lead a shallow overhanging groove above, and I finally used two pitons for aid. Dale was able to follow the lead without aid, staying much farther out of the groove than when he had attempted to lead. Higher, we met two leads of F8 and F9, followed by a short nail-up to the base of a leaning dihedral. Delicate nailing (A4) brought us to a ledge not too far below the summit. An improbable, but easy traverse to the left put us below a crack system that we free climbed (F8) to the top of the rock. Parts of two days were spent on the rock, although the total time was less than a full summer day. NCCS IV, F9 or F10, A4.

GALEN ROWELL

Hiatus. Between California Falls and the High Sierra Camp is a large buttress on the north side of the valley, split by a single large dihedral. In September, TM Herbert, Joe Kelsey, and I headed for the cleft early in the morning, after a bivouac at the base. The climbing was all free and somewhat easier than we expected. Most of the pitches were low fifth class and by lunch time the seven pitches had brought us to the summit. NCCS III, F8.

GALEN ROWELL

California-Sierra Nevada

Ericsson Crags, North Face. East of Mount Brewer the immensity of the surroundings almost renders dimensions immeasurable. So it is in much of the high Sierra. Packing in ropes and iron 19 miles is a proven way to get in shape for a good high-country wall before summer's crowds arrive. The flame on the candle was Ericsson Crags; a Geological Survey photograph provided the incentive, for it pictured a magnificent north face. Reed Cundiff and I did the route on May 25, finding it a fine classic, nearly 1500 feet in height, with consistently steep pitches. The remaining

traces of a fresh snowfall slickened the ledges, but not the delicate work. The face is wide enough to offer more routes. The rock is good. The upper north face of Mount Ericsson, while steep, appears shattered with suspicious coloring. NCCS IV, F7.

FRED BECKEY

Junction Peak, North Buttress. A late winter attempt on the north buttress of Junction Peak by John Rupley and me was frustrated by stormy conditions, although the long trek via Kearsarge Pass brought us to the foot of serious climbing. The buttress is a classic in views from the north, but as a climb it is pleasant for only the first few pitches. We returned to make the ascent on June 17, reaching the summit just before twilight. Frost-shattered rock made two pitches "horror problems," not to be recommended for an encore. Our general line was closely west of the buttress crest. Near the middle of the route some solid pitches spurred us onward again to the last "bad" pitch, where I placed two bolts, for pitons and nuts simply would not warrant safety. NCCS IV, F7.

FRED BECKEY

Mount Thor, South Face. An interesting new route on the south face, to the east of existing routes, was done May 7 by William L. Putnam, Tom Cosgrove, and me. The route climbs a series of jam-cracks, with one aid pitch, on the left side of a prominent truncated buttress. The rock was very sound. Rappel slings indicated the route had been previously attempted. NCCS II, F7, A1.

FRED BECKEY

Eagle Beaks, East Face. On October 6, Hooman Aprin and I made the second climb of the south (first) peak of the Eagle Beaks, a craggy granitic formation on the Shuteye Peak ridge, high above the upper San Joachim River. Our route was a new one, via the east cracks, the only system in the monolithic east face. The final two pitches, largely jamming, were strenuous but extremely interesting. NCCS II, F8, A1.

FRED BECKEY

West Lone Pine Peak, Red Baron Tower. At the head of Tuttle Creek the western continuation of Lone Pine Peak curls in an extension of the high erosion surface to a really separate summit, which has been called "Peak 13,016," but which could equally well be termed West Lone Pine Peak because of the high connection. When viewing the peak from the highway near Lone Pine, the sharp east buttress is very apparent and enticing. After packing to the foot of the serious climbing, Barry Hagen and I, on May 19, climbed the buttress to the top of a high major culmination, which we dubbed "Red Baron Tower." The rock was quite good. After some preliminary scrambling, the buttress presented two continuous and exposed aid pitches, then considerable interesting free climbing along

Aerial Photo by Bradford Washburn

Mount Russell from East. The new route ascended the ridge on the right.

Photos by Jack Miller

Approaching the Brooks Range on the North Fork of the Koyukuk River.

PLATE 71

An unnamed side valley of the Itkilik River.

Photos by Galen A. Rowell

Southeast Face of the Moose's Tooth from the Buckskin Glacier. The attempt followed cracks left of water streaks in center of face.

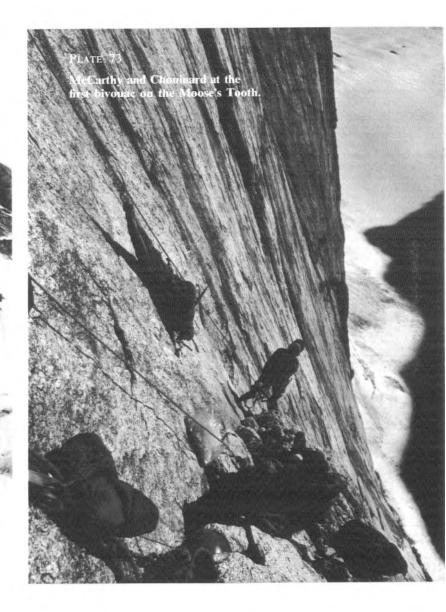
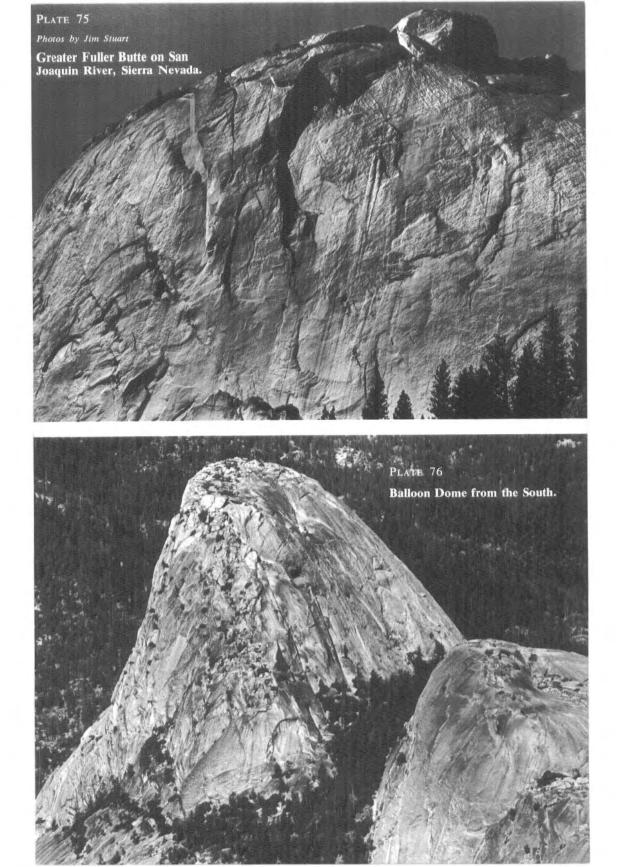


Photo by Richard R. Culbert

Devil's Thumb and Cat's Ear Spire (center) from the South.



Tony Qamar placing a runner, on the North Face of the North B of Mount Cotter, Sierra Neyada.

A A BEAR

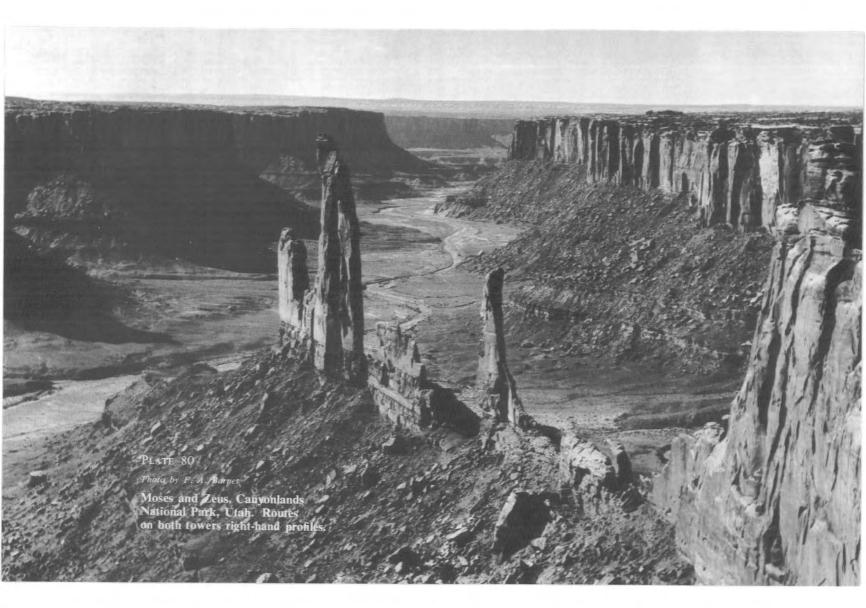
PLATE 78

Photos by Galen A. Rowell

Doug Robinson follows the black dike on the first pitch of Adam's Rib, Sierra Nevada.

Photo by Edward Cooper

The Painted Wall of the Black Canyon of the Gunnison, Colorado. The start, finish and bivouacs are marked.



CLIMBS AND EXPEDITIONS

the narrow crest to the tower's peak. The wisdom of continuing to the upper portion of the buttress for a few more pitches was not apparent, in view of the problems involved in descending the knife-edge to the notch, and in returning, for we had planned the descent along the climbing route. NCCS III.

FRED BECKEY

Mount Corcoran, Southwest Face. A long approach up the south fork of Tuttle Creek leads to the eastern side of Mount Corcoran's towers. On May 2 Hooman Aprin, Jack Roberts, and I tried a route on the east face of the second tower of Corcoran, but found that fresh snow and unpromising cracks might consume more than our one-day time limit. We descended after two pitches, then found a more compromising, yet interesting new route on the southwest face with a number of 4th and 5th class leads.

FRED BECKEY

Domeland. Packing into the center of Domeland on April 16, Chuck Haas and I still found time to climb a truly classic six-pitch crack system in the center of the east face of Radiant Dome (F6 and F7). If the dome were near a road, like Tahquitz Rock, the climb would be appreciated by many. NCCS II. The next day we scrambled south to the Windy Towers. While both rocks were previously unvisited, only the northern one provided a challenge, this consisting of two excellent pitches on the west face (F6). Recent logging roads extending off the Sherman Peak road provide a feasible access to the southern fringe of Domeland. Near Church Dome stand two obvious and impressive towers, only 11/2 miles from the road end, and unclimbed until October 13. Reed Cundiff, Leland Davis and I first climbed the spectacular and highest "Taj Mahal" (3 pitches, F6). From the "boulder problem" top, on a clear windy day, we could almost see both Mount Whitney and the brown air of Los Angeles. Cundiff and Davis then made the climb of the adjacent "Mosque." The vertical first pitch (F7) goes "clean" (all on jam nuts). The climbs are recommended for a pleasant one-day outing in solitude.

FRED BECKEY

Mount Dragtooth, Northeast Arête. When one views the Sawtooth Ridge from the vicinity of Bridgeport, the prominent northeast arête stands out on Mount Dragtooth. In closer views a classic line is seen directly up its northeast face in a dihedral. The line has attracted climbers, but there is something intimidating about it. Three rappel points were found atop the first pitch, but nothing further. On June 16, 1971, Reed Cundiff and I completed the route. The first pitch approaches the face of the arête from the left side and ascends obvious cracks and chimneys (F6) to ledges. The second pitch (F7) leads to a belay spot just left of the dihedral. The third (F8) ascends 150 feet of joyous jam crack; the next continues until the increasing steepness of the wall forces nailing. A blocky traverse left leads to an open-book or trough, from which one can exit right to easier climbing, or climb an exhilarating jam crack (F9) straight up. NCCS IV, F9, A2.

JACK MILLER

Mount Gilbert, Northeast Couloir. On September 3, Al Fowler, Ron Cale and I climbed the prominent ice chute on the northeast face of Mount Gilbert. The roped portion began at the first obvious crevasse (a very low snow year) and continued for six 150-foot pitches. A phlegmatic mid-morning start exposed us to increased rockfall. The angle of the ice varies from 50° to 65° near the top. From the notch atop the couloir we headed down 40 feet, the left and upward. An optional 40-foot dihedral led to the summit plateau. NCCS III, F6.

DANIEL K. EATON

Middle Tooth, West Face. A casual August ramble in the Sawtooth Ridge area, by Bill Sumner and me, turned up this interesting new route. Traveling light with no particular objective in mind, we walked up Blacksmith Creek, crossed to the west side of the ridge, and were pleasantly surprised to be at the base of this 600-foot wall. Steep jam-cracks led up the left center of the white granite for three hundred feet; there increasingly difficult free climbing forced us to pendulum on a small chock across a smooth section to another crack system near the wall's southern edge. Three more moderately difficult and strenuous leads brought us to the summit at sundown. All chocks and runners (did it clean). NCCS III, F9, A1 (the pendulum).

MICHAEL HEATH

Mount Tyndall, East Face. In early August Bill Sumner and I walked in over Shepherd Pass to the rocky basin at the foot of the esthetic 1500foot triangular wall, a dry tiring trek made somewhat easier by carrying just skeletal bivouac gear, chocks and a short climbing rope. Smooth steep rock cut only by thin vertical cracks made a direct line up the face center seem questionable; instead we entered the southernmost of two parallel chimneys that descend one on either side of the plentiful cracks and angular blocks common to most high Sierra climbs. During the 16 leads and 9 hours to the summit we had the security of just a few good chocks and runners; happily we had left our boots behind and climbed with PAs and a light pack. Tyndall has fine rock, several other promising lines, and imparts a feeling of primitive grandeur and isolation that is harder to find each season in the summer Sierra. NCCS IV, F8.

MICHAEL HEATH

Stone House Buttress, Jeanne Neale Route. Our first attempt of this route on February 12 was cut short by an unfortunate fall by a young

lass on another route. Dan Hurd and I descended to help on what was to be an exciting rescue. March 4 found us again at the base of the southeast face of Stone House Buttress in the Tuttle Creek area. Climbing begins just left of an obvious, large triangular flake. Unprotected climbing leads to a jam-crack which ends on top of a small flake. From a bolt, traverse down and right, nail a groove and crack up the left of an overhang and then dogleg right. The first pitch ends on the sloping floor of a flared overhanging chimney visible from below. Proceed up the chimney via difficult climbing using a bit of aid at the top. Belay in slings from a bolt left of the overhang. Mixed climbing leads left, then straight up to a small ledge with a bush. A bolt protects a difficult move to another small ledge. Wander up and right to the only comfortable belay on the climb. Traverse right and enter a dihedral with a huge overhang at its top. Two long mixed pitches ending in sling belays ascend the dihedral and turn the overhang on the left. Above, climb the left of two cracks to a belay at a dead tree. One more pitch leads to the unroping spot. A few hundred feet of scrambling lead to the summit which we reached on the afternoon of the second day. We took 40 pitons including 4-2", 3-21/2", 2-3", 1-4", and only 4 horizontals. NCCS IV, F8, A2.

DAVID BOYD, Unaffiliated

Fuller Buttes, Southeast Face. The Fuller Buttes are located some 50 miles east of north fork on the Mammoth Pool road. A short distance past the Jackass Creek bridge, a logging spur leads down to within a quarter of a mile of the summit. Approach the dome by hiking down along the east side to the base of a flake. Many hundreds of feet above is a right-facing open-book, which begins as a chimney and narrows as it curves upward out of sight. The flake and open-book comprise the route. A short awkward chimney on the right side of the flake gains a third-class ledge. From the high point of this ledge, a bolt ladder connects the route to the crack system above. Above the bolt ladder, the route is virtually all free until the crack in the dihedral narrows. As the angle eases, a horn-like flake provides an exit from the open-book to the face on the left, and two short pitches complete the climb. The ladder contains several bat-hook holes which require 3/16" hooks, and we used 12 bongs up to 4". The climb was completed in May by Fred Beckey, Jim Stuart, Walt Vennum, and me. NCCS IV, F8, A2.

GREG DONALDSON

Salt Spring Reservoir Area. The rock wall on the north side of the canyon about a mile west of Salt Springs Dam has yielded two enjoyable routes. In May, Walt Vennum and I climbed the Gully Cat. The route lies in the classic left-facing open-book on the left side of the canyon's north wall. Due to the roughness of the rock, the majority of the dihedral is 4th or easy 5th class. However, the overhanging arch capping the climb

provides an interesting exit. NCCS 1, F7. In June, Brian Cox and I climbed Gemini Cracks. Directly above the point at which the PG & E aquaduct enters the north wall are two very thin parallel cracks. A right-slanting crack system leads to their base. The steepest portion of the cracks forms the crux and leads to an unusual hand-traverse right to a tree. Two more 5th-class pitches finish the headwall above the tree. NCCS II, F8.

GREG DONALDSON

Mount Cotter, North Face. In June Tony Qamar, Marek Glogoczowski and I climbed this steep 1000-foot wall to the north summit. The climb from a distance appeared to be at least half artificial, but we only used aid in two places. The first was a long and difficult tension traverse, low on the route. The second was a piton for aid at the beginning of an F9 jam-crack. There were several difficult free pitches, especially in the first half of the blank-appearing wall. NCCS IV, F9, A3.

GALEN ROWELL

Fin Dome, East Face. Marek Glogoczowski and I also climbed a new route on the east face of Fin Dome, near Rae Lakes, that was F7 and two pitches long. NCCS I, F7.

GALEN ROWELL

Peak 12,893, East Face. This impressive 1200-foot wall is on the Great Western Divide north of Mount Brewer. Jeanne Neale and I climbed it in a long day early in September 1971. A short icefield was encountered at the base of the wall and also rising from a ledge near the middle. The route begins in a dihedral on the right side of the wall, reaches the icy ledge system, traverses left for two pitches and continues straight up to the summit block. Twelve leads of free climbing on quite good granite make this a recommended climb. NCCS III, F8.

GALEN ROWELL

Four Gables, East Face. A very complicated mountain, Four Gables has at least four well-separated summits. A large cirque to the east ends in upper Horton Lake, and the longest, most continuous wall is north of the lake, just out of sight from the outlet. In June 1971 Jeanne Neale and I climbed this face up a prominent buttress on its right edge. Cracks and chimneys lead for ten pitches in nearly a straight line for the summit. From two-thirds of the way up the route, we saw something fall through the air very near us. It was brown and appeared to be a strangely shaped piece of wood. Another similar object followed soon after, and before we had time to figure out what had happened, the first plummeting object spread its wings just above the ground. The second followed suit and a pair of golden eagles climbed past us on a thermal, happily chasing each

other. The strenuous route ended at 13,000 feet late in the day. NCCS III, F8.

GALEN ROWELL

The Saddlehorn, South Face. This prominent tower is located east of Mount Ruskin and can be seen from the vicinity of Taboose Pass. In May, Steve Roper and I climbed three steep pitches of free climbing up a very straight crack system on the south wall. An overhang that appears to be the crux from below is only F7, but the shallow crack above is F8. NCCS II, F8.

GALEN ROWELL

Peak 12,416, North Face. In September 1971 Jeanne Neale and I climbed five pitches of free climbing up a diagonal crack system. Moderate but continuous fifth class brought us to the virgin summit of the highest peak on Glacier Divide, a 15-mile-long wall of small peaks separating Cloud Canyon from Deadman Canyon in Kings Canyon National Park. NCCS II, F7.

GALEN ROWELL

Bear Creek Spire, North Arête. In August 1971 Jeanne Neale and I climbed this narrow arête which is plainly visible from the roadhead at upper Rock Creek. The northeast ridge is an unroped scramble and should not be confused with the steep slabs of the true arête. NCCS III, F8.

GALEN ROWELL

Tulainyo Tower, East Face. One mile northwest of Tulainyo Lake is a large granite spire facing east into a cirque at the head of one of the forks of George Creek. If that sounds confusing, Tulainyo Lake is only two miles north of Mount Whitney as the crow flies. In October, Marek Glogoczowski and I hiked up the long approach from George Creek roadhead (6200 feet) to the base of the climb at 12,000 feet. On the right side of the truly perpendicular tower is a crack system which begins some distance above the base. We started even further right in a wide chimney that we followed for two leads until a broken area of reddish rock allowed us to reach the base of the main crack system. Three consecutive pitches of F9 crack climbing past frequent overhangs brought us to a point where Marek became sick and weak. The temperature was freezing and we had begun the route only one day after leaving sea level. The back side of the tower appeared to be easier and so I soloed toward the top while Marek rested on the ledge. I climbed within walking distance of the summit, then descended 300 feet to Marek's position, where he told me that he was still too weak to even ascend fixed ropes. We were forced to rappel the face and we descended the canyon after dark, with Marek feeling much better once the elevation diminished. He had been to 22,000 feet only a month before and seemed more fit than I on the approach. It is highly possible that he was in the early stages of pulmonary edema, as even rest at nearly 13,000 feet did nothing to return his breath or his strength. The climb is a true classic: a steep and narrow face on the Sierra crest on excellent rock. NCCS IV, F9.

GALEN ROWELL

Adam's Rib. Early in 1971 Doug Robinson and I climbed a 1000-foot tower on Wheeler Crest named "The Smokestack." It proved to be the most continuously difficult free climb of its length that either of us has encountered. Adam's Rib is an equal-sized tower between the Smokestack and Well's Peak. It looked just as hard with even fewer cracks. In the spring of this year Doug and Jay Jensen climbed the first three pitches, surprisingly without direct aid. But a steep and blank fifteen-foot headwall stopped them. They did not want to use bolts for aid. In September, Doug and Chuck Kroger joined me on another attempt. We followed the ethic of the first try: no pitons were carried, just nuts and bolts. Wherever protection was inadequate with nuts we would use a bolt. In this way subsequent ascents could be made with just a selection of nuts. No pitons or hammers would be needed. It must be admitted that the climb was chosen carefully for the first use of this ethic. Piton cracks were scarce anyway, and the average angle, although ominous from head-on, was probably not more than 65°. We quickly reached Doug's old high point, where he spent half an hour threading a crack with four nuts before attempting the blank area above. He quivered. We quivered. The rope slowly paid out and we passed the first major obstacle. I led the next section and wandered back and forth across the face, trying to follow weaknesses which usually proved to be in myself, not in the rock. I placed two bolts, bringing the total on the climb to seven. Chuck led the next pitch without a bolt, and as darkness began to fall, Doug was heading for the summit. He couldn't make it go. Unlike the Smokestack, which placed us on the prow of a tower with no avenue of escape for a 1000 feet, Adam's Rib has several places where a traverse would be possible to easier climbing in gullies on either side of the buttress. We chose to traverse right 50 feet into a gully, which we followed to the top of the spire. Darkness was upon us and it took us until after midnight to descend a 4000-foot boulder-strewn couloir and reach the valley floor. The climb was not quite as difficult and varied as the Smokestack. It had seven pitches instead of nine, although a more direct finish might very well have nine. At one point, each one of us in succession had a lead of F9 face climbing, and we can highly recommend the route, especially as it can be climbed without hammers, pitons or bolts now that the route is established. The seven bolts on the route are never next to cracks, although a daring leader might have been able to avoid one or two by placing pitons in a higher or lower crack system. NCCS IV, F9.

Kerckhoff Dome. Near Shaver Lake, a year-round road passes within a mile of little-known Kerckhoff Dome. Huge penstocks bring energy to the Big Creek power station and the tramway used in their construction provides a quick and brush-free access. A year ago Jim Stuart photographed the rock and persuaded Fred Beckey to take a closer look. Fred, Joe Kiskis and I reconnoitered the first few pitches of clean solid granite. A feeling of guilt because Jim was not with us prompted an early descent. However, our next rendezvous in January 1973 lacked Fred, but this time we three completed the 500-foot route. The face is split by a long continuous fissure and capped at the top by a radically leaning arch. At the base of the wall, a squeeze chimney and an improbable traverse left around a bulge leads to a pedestal. Above, the route goes behind a blade-like flake to a belay beneath a chockstone in the chimney system. Two leads of jamming and stemming attain the beginning of the curving arch. Unfortunately the arch required aid; many thin wired nuts proved useful in the remaining two leads. No bongs were needed and a selection of 20 pitons is ample, augmented with many chocks. NCCS III, F8, A1.

GREG DONALDSON

Utah

Moses, Canyonlands National Park. One of the last great desert towers, this one discreetly hidden in remote Taylor Canyon east of the Green River, was climbed October 26. Lin Ottinger, Moab tour guide, had long known of it under the name "Moses," its curious shape resembling the image of the desert leader of history. Eric Bjørnstad and I had examined the 500-plus-foot tower in 1970 during the climb of "Zeus," then climbed the overhanging first pitch a year later, only to become stalled by a heat wave. With a solid base camp resembling a safari, with the jeep, VW bus, tents, assorted friends and a kennel of three hungry dogs the climb had to be a success this time. Our timing was perfect, for downpours preceded and followed the climb. Our party was Jim Galvin, Thom Nephew, Greg Markov, Eric Bjørnstad, and I. The climbing was largely careful aid on the wingate sandstone, with three "super-solid" hanging belays featured. NCCS V, F6, A3. Total 102 pitons, 4 nuts and 48 bolts used. The climb eats large numbers of 11/4", 11/2", and 2" pitons. Next party bring 10 nuts and hangers for 1/4" studs, 5 nuts and hangers for 3/8" studs.

FRED BECKEY

P 7700, North Face. On Memorial Day weekend George Lowe and I made the first ascent of P 7700 in Kolob Canyon in Zion National Park. From Lee's Pass we hiked down Timber Creek to the side canyon below Nagunt Mesa. After scrambling up this canyon, we reached the base of P 7700's impressive north face. (P 7700 is on the ridge running

west from Nagunt Mesa). We ascended the face following crack systems slightly to the right of the prominent center dihedral. The climb was on the best sandstone either of us had ever seen and was about half free and half aid. NCCS IV, F8, A1.

DAVID R. SMITH

Bridge Mountain Annex, West Face, Zion National Park. North of and adjoining Bridge Mountain is a smaller, 1000-foot shoulder, the Annex. Mike Wies and Andy Carson climbed a route to the right of the center of its west face in January 1973. After three pitches of free climbing in an immense dihedral that ends 400 feet up in a large ledge, they proceeded into a 200-foot chimney. At the rear of the chimney are two more chimneys, of which they climbed the right one. At the top of the chimney, which ends in a pedestal, a large sinuous crack goes to the summit block. Another crack 30 feet to the left provided a free and an aid pitch to the summit block. They did not climb the rotten summit block but went around to the right and descended. NCCS IV, F7, A1.

JEFF LOWE

Arizona

Superstition Mountain, West Face. From the vicinity of Blue Bird Mine Kris Walker and I approached the obvious Flatiron Buttress by hiking up the Syphon Draw trail. The route we climbed on February 27, 1971 ascends the obvious prow. A general selection of nuts and pitons up to two-inches-wide is adequate. To date, the Forrest-Garbert route on the right (1965) and the "Evil Edge" (1971) are the only routes on this beautiful buttress. This fairly solid rhyolite formation should yield many fine grade II and IV routes in future years.

BILL FORREST

Chinle Spire. Jutting out off the north corner of the wingate sandstone, Round Rock is a spectacular reddish spire, some 300 to 400 feet high. It is very apparent while driving along Monument Valley to Canyon de Chelly. Eric Bjørnstad and I spent two days making its first ascent, concluding the climb on a windy 29th of March. There was a surprising amount of free climbing on the lower half; rock was good for desert standards, so that we were able to use mainly ¼-inch bolts on the long summit bolt ladder. In all, 18 pitons and 32 bolts were used. Grade III or IV.

FRED BECKEY

Esperero Canyon Towers, Mount Lemmon. From the outskirts of Tucson it is apparent that several notable towers crest the high western backbone of the immense Mount Lemmon massif. It being late February, John Rupley and I had planned a lower altitude wall, but an unseasonable heat wave turned our thoughts upward. Rupley expressed certainty that the towers on the crest above Esperero Canyon were unclimbed. A tedious backpack on the 26th took us to the last water. In the morning a rocky chapparal scramble took us to the foot of the largest and most impressive (western), though not highest, tower. With the heat-inflicted lassitude, we settled on this objective for the day. The rock was a solid granite, steep, but with such good holds that the climb went free. The second pitch had some taxing enjoyment; the summit block was an unprotected 30-foot boulder problem (F9).

FRED BECKEY

Idaho

Finger of Fate, Sawtooth Range. Dick Dorworth and I made this new route in August. We followed several small open-books on a dihedral 75 feet to the right of the existing route, which goes up the prominent right-facing open-book. The first 75 feet are third-class scambling to just below and left of a small clump of trees. Here, on a large ledge, we roped up and started the climb in earnest. Moving left off the ledge and around a corner, the first pitch follows a small right-facing open-book which runs to an overhang 100 feet above the belayer. The overhang can be climbed (probably F9) or it can be circumvented by moving some ten feet to the left into a small jam-crack. If you follow this alternative, you have to traverse right again over the overhang. The pitch ends 10 feet above the overhang. The second pitch follows a jam-crack straight up for 25 feet; then you stay to the left and follow small right-facing open-books to the top of a large flake 160 feet above the belayer. Pitch three follows an easy crack straight above the belayer to a large ramp. From here there are several ways to the top. Our route followed a squeeze chimney above the first half of the climb, which ends at the bottom of the summit block. You tunnel beneath the summit block to the back side of the pinnacle. The summit is easily attained via the right side of the block. We used only nuts. NCCS F8.

LANCE POULSEN, Unaffiliated

Elephants' Perch, West Face. In July my brother Greg and I climbed the first lead of Beckey's original route. Then, rather than traverse left to continue that route, we headed straight up, basically free, until after seven pitches we diagonaled left toward the Beckey line, which we followed essentially to the top. We avoided a short bolt ladder on that route by climbing a chimney a few yards to the right. NCCS IV, F8, A2, 11 pitches, 8 hours.

JEFF LOWE

Wyoming—Tetons

Nez Perce, First Winter Ascent. David George and George Lowe made the first winter ascent of this peak in February. Our original objective was the traverse from Nez Perce to the Middle Teton, but a foot of new snow during the day of the climb provided an excuse to quit after the first peak.

GEORGE LOWE

Mount Owen, Winter Ascent. On March 20 Peter Lev, David Lowe and George Lowe made a fast winter ascent of Mount Owen, travelling from the Beaver Creek area to the summit and back to Beaver Creek in one day.

GEORGE LOWE

Mount Owen, Run-Don't-Walk Couloir. Named from a distance several years ago, this couloir which lies between the north ridge and the Crescent Arête of Mount Owen has a particularly evil appearance, marked by rock scars and running water when it is not filled with ice. It was first climbed on July 6 by John Bouchard and me. The couloir was approached via the northeast snowfields to a point where we could traverse right to a narrow ridge, just left of the couloir. After a bivouac on this ridge, we started at five A.M., climbing the couloir until just below the first ice bulge. This 30-foot overhanging ice bulge had melted through, leaving an impassable gap of 15 feet. This section was bypassed by climbing a very difficult rock pitch to the left (F9-A3). We continued up the extremely narrow couloir (some objective dangers from falling ice if the weather is warm), encountering three more steep ice bulges before emerging onto the upper section of the couloir. Moderate-angle snow was then followed for six pitches. From near the top of the couloir we traversed left to the northeast snowfields which we followed to the summit, arriving at seven P.M. For optimum conditions this route should be done earlier in the season when the ice would still be intact.

STEPHEN ARSENAULT

Grand Teton, Exum Route, First Winter Ascent. From February 19 to 21 David Lowe, Jock Glidden, and David Smith made the first winter ascent of this popular summer climb. Leaving Moose at seven A.M. on the 19th, we skied to the Platforms in Garnet Canyon and cached our skis. From there to the Lower Saddle was simply walking up the windblown moraine. On the 20th we ascended the Exum Route in marginal weather, encountering mixed ice and rock all the way. Although prepared for much snow, there was relatively little on the ridge proper. Still, crampons were justified throughout but awkward in places, especially the Friction Pitch and the last move off Wall Street. This latter, a breeze in the summer, proved to be the crux of the climb, led by Lowe

in breathless delicacy. Near the summit we avoided the totally berimed "V", traversing onto the east side of the ridge through deep, unconsolidated snow. We reached the summit about 5:30 P.M. and raced the oncoming night and deteriorating weather to descend. After an hour of fruitless searching for the rappel point, we returned to the summit ridge and bivouacked in a snow cave. On the 21st the weather was beautiful, the storm having passed in the night. The rappel was quickly found and after a brief stop at the Lower Saddle for breakfast, we skied out Garnet Canyon to the valley. It was a fine climb amid the beauties of the Teton winter.

JOCYLYN C. GLIDDEN and DAVID SMITH

Grand Teton, North Face, Simpleton's Pillar. June 16-17 Jeff Lowe made an important new variation on the north face of the Grand Teton on an "early season solo climb. In general the route follows the first section of the standard north-face route, then, ascending the buttress or pillar of rock which rises to the left of the First Ledge, it meets the east ridge at the prominent hump in the snowfield. Lowe left the small ledges below the standard chimney leading onto the First Ledge and followed a snow- and ice-filled chimney leading up and somewhat to the left (east) for several hundred feet until it became possible to leave the gully for the pillar itself. Two right-leaning dihedrals traverse the face of the pillar. The lower one was used and followed to its western end, where a short but steep wall led to a left-trending crack system. Lowe followed this crack system until near the top of the pillar it rounded the left corner of the pillar and became more of a ledge. Some easy 3rd-class leads then took Lowe to the hump on the east ridge and the junction with that route. This remarkable climb traversed considerable new ground on the much-climbed north face and was rated by Jeff Lowe as IV, F8.

Wyoming-Wind River Range

Pingora, South Face Direct, Cirque of the Towers. On August 7 Rich Mathies and I began on the grassy ledges running across the south face below the rope-up point of the standard route. (We could have started at the bottom of the wall as the crack system continues to the base; this would have made the entire climb a long III.) About 300 feet across the face, one can make out two parallel cracks running up to and crossing the normal route, proceeding straight above it. Our first lead meandered up a slabby wall to the base of the right crack. Jamming this led to a ledge under an ominous overhang, which we turned to the left. After gaining a ledge shared with the normal route, we completed the climb with one more lead in the system. Nuts were sufficient for protection. NCCS II, F7.

GREG DONALDSON

Raid Peak, South Buttress and Face North of "Ambush Peak". On July 16 and 17, John Bouchard and I climbed the 2000-foot south buttress of Raid Peak (12,532 feet). The climb starts 100 feet from the toe of the buttress. Three pitches led up an obvious ramp on the right side of the buttress. We continued up the middle, passing several large overhangs. A huge ledge was found in the area of the tenth pitch. We continued five pitches more to a block-covered ledge, where we sighted a golden eagle. The final pitch ascended an enjoyable face. From there it was third class to the summit. Several pitches were relatively unprotected. The rock is generally solid. Iron: 2 horizontals and one angle of each size up to 11/4"; 15 assorted nuts up to Chouinard N° 10. NCCS V, F8. Just north of "Ambush Peak" (12,173 feet) a steep face is bordered on its northern edge by a snow couloir. The right side has three prominent crack systems. John Bouchard and I climbed the lefthand system, which leads directly to the summit blocks. We ascended steep snow or talus to a small stance below an overhang, followed cracks for two easy pitches, then traversed left to a large ledge (cairn). We continued up cracks, eventually reaching an overhanging flake system slanting left. Very difficult free climbing brought us to a small stance below another overhang (hanging belay). We passed a notch in the overhang, using a few nuts for aid, and got up to a belay. After stepping right, we climbed a hard crack to a right-facing corner. Another crack led to a belay on chockstones. We stepped right onto delicate face climbing and ascended to a large ledge on the left. A 40-foot chimney took us to a stance on the right. Easy climbing on superb rock led up to a ledge, above which we followed hard cracks on the right to another ledge, just below the summit blocks. This route, with excellent nut protection, is comparable to the northeast buttress of Higher Cathedral Rock in Yosemite. Iron: 2 horizontals and 1 angle of each size up to 11/2"; 20 assorted nuts up to Chouinard N° 10. NCCS IV, F9 to 10, A3.

STEPHEN J. ARSENAULT

Mount Helen, North Face. Bob Beall, Bob Hritz and Jack Turner made the first ascent of the snow gully between Towers 1 and 2 in July. Climbing was on 1000 feet of hard snow of 45° to 50° .

Colorado

The Painted Wall, Black Canyon of the Gunnison River. On May 3 Kris Walker and I completed the first ascent of the Painted Wall. The ascent of 2600 feet of vertical and overhanging rock ranks as my most extreme rock climb. The immensity of the wall, coupled with the knowledge that determined efforts by Layton Kor and Rusty Baillie had been repulsed, intensely magnified the concomitant doubts and fears of a big wall first ascent. From the beginning, Kris and I had ruled out the Kor-Baillie line. The wall was big enough to preclude trespassing.

So we picked our own line (about 100 yards downstream from theirs) and spent parts of three days making a reconnaissance of the first 700 feet. By the end of the third day we were getting positive vibes about the route, but a sudden snow storm and a rash of poison ivy forced us to retreat. We returned two days later with calamine lotion and determination. Once on the wall we climbed continuously for five days. Fortunately we found three tiny bivouac ledges along the way. During those five days and 26 pitches, rockfall was our chief danger. As I started the fourth pitch I dislodged a 30-pound block which crashed squarely onto my right thigh and then grazed Kris' ear. On pitch thirteen, Kris shoved off a 75-pound block, hoping to direct it, but the block took a bad bounce and plummeted directly for me, blotting out the sun. I was tied to my anchors and couldn't move. It looked like death, and then the sun reappeared. Leading was more difficult for the remainder of the day. On pitch 17 we hit a dead end, so Kris led a dangerous pendulum, and then struggled up an ugly overhang on the right. This pitch ended in "Death Valley," an 85° rock gully filled with loose stones and down-sloping holds. It took us five rotten pitches to get up Death Valley. The belayer was in constant rockfall danger, and the leader seldom had adequate protection. As Kris led the twenty-first pitch the haul line dislodged a watermelon-sized block about twenty feet above my belay. I dodged in time, but a water bottle, gorp bag, and one Jümar were smashed. Two quarts of water and a thousand sunflower seeds splashed and tumbled into the depths. From the top of Death Valley we spotted our final bivouac ledge 75 feet below us. We rappelled and settled into our perch, but our sitting sleep was restless, the summit overhangs were too close-too ominous. The last day was awful and it was beautiful. We wanted off. The top was near. The rich pink and red hues of the gigantic overhanging blocks and the absolute reality of nearly 3000 feet of exposure, coupled with questionable anchors and nearly impossible leads were agony and ecstasy. Kris led free up pitch 23; it was rotten face climbing which ended in a hanging belay from five tied-off angles in a crumbling white band. Pitch 24 took me 51/2 hours; it sapped my last reserves. It was the pitch I'd been wanting-an ultimate physical and technical challenge where success was imperative but doubtful. The pitch ended with a pendulum, vertical scrambling, and a lot of praying. Kris' pitch was just as demanding. It led over a series of overhanging bulges and ended in a typical rotten pegmatite band. It was an awful place; 70 feet below the summit, we hung from five bongs in an unstable crack. Pitch 26 led through an easy chimney. We arrived on top at dusk and stood together as the sun sank. We knew the secrets of the Painted Wall, we knew each other, and we were happy. NCCS VI, F9, A4. Considering the size of the Painted Wall and the discontinuous nature of its crack systems we are pleased with the directness of our line. We're also pleased that we had the good fortune to complete the route without using expansion bolts. To my knowledge, this is the first boltless grade VI in the country. We made a conscious effort to achieve this. Certain risks were involved in that effort; it is very satisfying to have succeeded.

BILL E. FORREST

Black Canyon of the Gunnison, North Buttress of Chasm View. In May Rob Kiesel and I braved the regular descent gully, north of the northern rim of Chasm View. We crossed the river to the foot of the northern buttress of the south rim of Chasm View. The climb began in a crack system 100 yards left of the toe of the buttress on its east face. The sixth lead broke out left of the first crack system and went under a narrow roof into a new crack system that led eventually to a large brush patch at the end of the eleventh pitch. After scrambling to the upper right corner of the brush just a few feet from the buttress crest, we climbed a jam crack to a step on the actual buttress. A difficult free move gave access to the final, lower-angle leads of the upper buttress. NCCS V, F9, A3. In September Mike Wies and Wick Beavers climbed the buttress from its foot starting on the right side.

JEFF LOWE

Mount Alice, East Wall. The route first climbed by Jack Turner and me on July 8 and 9 ascends the 1200-foot east wall of Mount Alice in Rocky Mountain National Park. It is the continuation above and below the left of two parallel white vertical streaks three-quarters of the way up the left side of the face. The first half follows dihedrals directly up slabs with a mixture of aid and free climbing. The ledge that bisects the climb halfway up provides a good bivouac spot. The second half ascends directly up vertical and overhanging rock. A surprising amount of free climbing was done. We used mostly nuts. The few pitons were needed because of dirt-filled cracks. No bolts were placed. This is comparable to the best of the Longs Peak Diamond routes. NCCS V, F8, A3.

ROBERT D. CULP

Diamond, Longs Peak, New Routes. Christopher Robin and Waterhole N° 3 are two new Grade V routes on the Diamond of Longs Peak. I did both solo, taking two days on each. These right-side routes begin with difficult nailing on the lower sections, but the cracks improved to A1 near the summit. Christopher Robin is blessed with a comfortable bivouac ledge while Waterhole N° 3 required a hanging bivouac.

KRIS WALKER, Unaffiliated

P 13,841, North Face. In May Larry Derby and I climbed this 800foot face, at the head of Square Gulch, some 15 miles south of Lake City.

We scrambled up the lower face via a third-class rounded buttress in the right center of the face and climbed a snow arête to the first steep cliff band. We followed a snow ramp to the right for two pitches to the ledge separating the upper from the lower cliff band. We then climbed directly above on a sometimes rotten prow to the flat summit. NCCS III, F8.

JEFF LOWE

CANADA

Yukon Territory

Mount Logan. On June 10 Bruce Gilbert, Paul Swift, Dick Folta and I were landed at about 8900 feet on the Quintino Sella Glacier. By June 16 Camp IV A was established in the séracs above King Col. However, our push toward the plateau on June 18 was thwarted by mishaps, including falling into crevasses. Not wishing to push our luck further, we decided to return to Camp II at 12,700 feet and attempt the route shown on our map as the one pioneered by the 1925 first-ascent party. By June 26 we had located Camp IV B at 16,100 feet on the plateau. On June 29 we reached the AINA research camp site. After waiting out the weather for a day, we made our summit "dash" of 21 round-trip hours, arriving at the top on July 1 in calm, clear, mild weather and a beautiful late evening sun. We discovered when we arrived at Kluane that what our map had marked as the first-ascent route was inaccurate. We had actually turned back from the standard route and perhaps pioneered a new route up the headwall between Queen Peak and the peak to the west.

MALCOLM ULRICH, Unaffiliated

Mount Logan. The Mountain Travel group for which I was responsible climbed Mount Logan on July 7. The main peak was reached by Dr. L. Olin, Dr. J. Prahl, Dick Dietz and Sharon Crawford. The same four plus John Fischer and Mr. and Mrs. L. Sherwood climbed the west peak. A party from Haines, Alaska included Bruce Gilbert, Richard Folta, Malcolm Ulrich and Paul Swift. Although they had trouble with the route, crevasses and sickness, I believe they reached the summit on July 1.

M. E. Alford

Mounts Gibson, Wates, McCoubrey, Above Steele Glacier. In early July John Tuthill, Jim Santos, Merry Farnum, Cathy Putnam and Chip Morgan, led by Tom Lyman with Jürg Hofer and me as whippers-in, were dropped by helicopter on the east side of the Steele Glacier, just above the old main camp of the 1967 Centennial Expedition. We all climbed the west summit of Mount Gibson (9810 feet) from the northwest and a day or two later made a new route to its main summit from