

overhang on the second pitch; Dave Beckstead bong-bonged his way around a dangerous ceiling (both a leader and a second's fall here from pitons pulling out of an expanding crack; some day the entire block will split off). Leif Patterson and I divided the arduous work of marginal pitoning and bolting the rest of the third and the difficult fourth pitch. The fifth pitch proved a nuisance, when in the spring Patterson and I lost almost a half-day on route exploration; we finally just bolted up from a very exposed hanging belay. Later, Eric Bjornstad finished the pitch on aid, despite wet moss. We spent a day hauling bivouac loads and water up to the protective overhangs of the great ledge (Astro Ledge), which had ample firewood. This was the high-point for the saw, with which we had eliminated hanging brush and shrub evergreens. These fell to the wall's base without touching—such was the steepness. Above the ledge came more hard pitoning beneath a great curving overhang; I managed some very difficult, exposed free climbing, trusting to questionable roots and sprouts. Above, we entered the great V crack, finding it a beautiful combination aid and free climbing problem. Our final push came from June 7 to 10, the successful party being Patterson, Bjornstad, Alex Bertulis and I. We worked in pairs, one team climbing and one hauling, and spending the now lovely nights by the fireside on Astro Ledge. The last pitch of the great V proved hard, free work, which Bertulis somehow managed. I did hard overhanging nailing on a thinning crack, which Bertulis later finished with a succession of A4 tied-off pins. From another hanging station I bolt-laddered left under overhangs; then Patterson completed a hard lead, zigzagging around and through overhangs on pendulums and tricky pitoning. Bertulis had the largely overhanging last lead. In a race against darkness, he and Bjornstad got through the tense pitch by "pitons only," cheating a blank section by going across a 20-foot overhang by using a series of root tie-offs, which nearly tore the root out before we finished this antic. Once on the crown, the serious problems were over, there was a delicate catwalk, a long pine pole across a blank traverse. One more log-and-slab problem ended the true difficulties. (NCCS VI, F8, A4; 164 pitons and 44 bolts, and a number of root and shrub tie-offs.)

FRED BECKEY

*Squamish Chief, Unfinished Symphony Route.* Finding a completely new route on the oft-climbed Apron on the lower 700-foot extension of the Squamish Buttress took considerable study. Convinced that there was a possible line between the "Diedre" and "Snake" routes, Jim Sinclair and

I explored a continuing thin crack on the low to medium angle, but highly polished slabs. On our first effort we got a lead above former high-points, marked by a bolt. Rains delayed the completion of the route until November 4. Much of the upper crack involves the tipping-in of pitons, with great faith in the holding power of a few grains of granite. When the crack finally ended, we placed a bolt ladder to complete what is really a lovely route line. Both the free climbing and aid, at times, push the limit, despite the deceptive low angle. (62 pitons and 19 bolts. NCCS IV, F8, A4.)

FRED BECKEY

## GREENLAND

*Mount Forel Region, East Greenland.* The Imperial College East Greenland Expedition went as a sequel to the Imperial College Expedition to the same area last year. (*A.A.J.*, 1967, 15:2, pp. 377-8.) Our 1967 expedition intended to attempt as many of the unclimbed peaks as possible and to continue glaciological work which had been started on the Paris Glacier the previous year. We consisted of the following: M. C. Clark, C. M. Holt, R. J. Peckham, G. J. Pert, R. G. Swainson and me. Because of the long time needed for the walk in by the normal route, we decided to use a new route to the Mount Forel region, sledging straight up the Glacier de France from its snout at the head of Kargerdlugssuatsiaq. This proved much quicker and easier than previous routes but again an accident delayed us. However we set up a camp on the north side of the Avantgarden Glacier from which we managed to climb all the major peaks of the Avantgarden with the exception of Navigation. Almost Flat Top (2900 meters or 9519 feet) was climbed by Peckham and me on August 13 from a col between it and Table Top, a pleasant snow and ice climb taking six hours from the glacier to the summit. Flat Top took Holt and Swainson ten hours on the 13th via the south ridge, which was unpleasantly gendarmed. Double Top, climbed by Clark and Peckham on August 15, took six hours from the Avantgarden Glacier, the route following a subsidiary glacier running north between it and "Stephensonsbjerg" and the northeast ridge, an enjoyable mixed snow and rock climb. Very similar was the ascent of "Stephensonsbjerg" (3240 meters or 10,630 feet) by Clark and me on August 17, the subsidiary glacier being followed to the same col and the southwest ridge to the summit taking eight hours from the main glacier. This peak is the third highest