

ridge. I traversed on the west side until I reached easy slopes that led to the true top. The north face of the South Peak is a very complicated network of ridges and gullies, where difficulties would begin. Four rappels on a 300-foot rope, plus some descent on foot, brought me to a bivouac site. Early the next morning I made a final rappel into the notch between the South and Middle Peaks. The climb up the south face of the Middle Peak was not difficult but proved to be only the third ascent of that peak and the first via this route. It was here that I ran out of water, which was serious for this was the hottest day of the year and temperatures even at 5000 feet rose to over 80°. The descent of the north face of the Middle Peak was interesting, as after the last of my three rappels I found that I was 150 feet horizontally east of the notch between the North and Middle Peaks and separated from it by a very steep and exposed wall. Rather than to retreat and start over again, I made a grade —V traverse to the notch. The climb of the North Peak, previously unclimbed from the south notch, was the most difficult part of the entire traverse. The ridge crest was avoided by climbing below and on the east side for 200 feet; then the route continued for 300 feet on the west side. This was mostly grade IV or more difficult. An overhang where it was necessary to chin on branches was the crux pitch. Above this I ascended a subsidiary spur which drops down the west face to a notch where I had to master an extremely exposed and overhanging pitch (—VI). Another 150 feet brought me to the top of the North Peak, where I felt near exhaustion from lack of water. I stopped for an hour 300 feet below the summit on the descent to eat snow, and feeling somewhat refreshed, continued the descent via the very intricate regular route, which made me draw on all my route-finding experience to find the way down the unfamiliar 2500-foot face. The brush and scrub fir are so thick in places that it is impossible to see where you are going, or even where you are. Twice I had to reascend 300 feet to regain the route; setting rappels was especially tiring. Just as I thought I was going to spend another night on the mountain, I discovered the way down the last 400 feet and stepped off the North Peak 31 hours after leaving the car.

EDWARD COOPER

*Mount Shuksan via Nooksack Ridge.* Although Mount Shuksan has been climbed by so many different routes, the bastion from Nooksack Tower to the summit plateau, between the Nooksack and Price Glaciers on the northeast face, was unexplored territory. The extension of the Nooksack logging road makes the region much more accessible. Ron Niccoli and I climbed to the alpine ridge at timberline above the river bottom and bivouacked by

a fire. We left the smoke at four A.M. and were soon cramponing up snow and ice slopes beneath Nooksack Tower. After about 2000 feet of steep névé and ice with some step-cutting, an exciting alpine climb, we found ourselves in the chilly notch west of the tower. We climbed the crest of the very narrow Nooksack ridge for hours, occasionally avoiding fragile flakes by traverses but usually working along the top. The exposure was magnificent, with great walls sweeping majestically down to the glacial abysses on both flanks. Although one of the most alpine settings in the Cascades, the rock unfortunately ranks as some of the most unstable in the range. Though we never used a piton, some of the leads were quite dangerous, and we had difficult moments because of the rock. After reaching the final glacier, we climbed the east ridge to be on top at one o'clock.

FRED BECKEY

*Ingalls Peak, East Ridge of the East Peak.* This route, first climbed on October 11 by Don Anderson, Barry Prather, Gene Prater and me, ascends the prominent "dike chimney" in the south face of the ridge. This chimney offered grade IV climbing, with several short nearly overhanging pitches, while the remainder of the ridge provided scrambling on rather loose serpentine rock.

DEE MOLENAAR

*Mixup, East Face.* On September 11 Larry Baum and I made a new route on this face, beginning up the second large chimney north of Gun-sight Pass. This chimney, which might also be called a gully, runs in a north-northwesterly direction from its base at the edge of the glacier and appears from a distance to lead to the summit. After we had rappelled into the bergschrund, an easy scramble on loose rocks straight up the chimney brought us to our first major obstacle, a barrier of chockstones. A short fifth and sixth class pitch on the right wall of the chimney took us above the obstacle and returned us to the chimney. From here we climbed another fifth class rope length out of the chimney and onto the ridge to our right in order to pass more chockstones. Once past this second barrier, we continued up the chimney, now definitely a gully, until we were sure that it was leading us north of the summit. We left the gully and angled up to the left over easy rock towards the summit. We met the regular route about 50 feet below the top and climbed to the narrow notch just to its north and then to the summit.

DAN DAVIS, *Seattle Mountaineers*