crawled numbly out of our car and sorted hardware. The route was obvious, a crack system cutting the middle of the east face. Layton led the first 120-foot pitch, a strenuous 5.8 crack, by jamming and stemming, using three aid pitons. The second lead was a 130-foot dihedral, accessible by a rotten crack overhanging the belay spot. This was moderately to fairly hard 6th class, and used virtually all bong-bongs and wide angles plus three bolts. The last pitch goes from the summit saddle to the highest, or south, summit and was climbed by a ladder of three bolts and a very poor bugaboo. Local Indian legend has it that tribes had long used this spire for target practice; the summit was supposedly festooned with arrows. We were disappointed to find that there was barely room for a summit register, much less any Indian artefacts.

FRANK A. MAGARY, Dartmouth Mountaineering Club

## CANADA

## Yukon Territory

Icefield Ranges Research Project, St. Elias Mountains. The Icefield Ranges Research Project completed its second field season in August 1962. Whereas the 1961 field program was devoted to reconnaissance and the commencement of scientific study of a portion of the St. Elias Mountains, Yukon Territory, the 1962 effort saw intensive study initiated in a number of scientific disciplines. Study was concentrated on a broad area of snow accumulation which includes a part of the divide between the Hubbard and Kaskawulsh Glaciers. Scientific emphasis included the disciplines of glaciology, meteorology and seismology, which aimed at an understanding of factors influencing accumulation, ablation, movement and the threedimensional conformation of the glacier mass. In addition, periglacial studies were carried out in the Slims River Valley and in the Shakwak Valley at the southern end of Kluane Lake. The former sought data on the sedimentation of a major glacial stream; the latter on the glacial geology and geomorphology of the area. The field party was comprised of seventeen members representing eight institutions. In addition, the wives and children of several members passed varying periods of time at the project Base Camp on Kluane Lake. As in 1961, primary logistics were provided by the project aircraft, a ski-wheel equipped Helio Courier, which flew more than 135 missions between mid-May and early September. From a mountaineering point of view, it is pleasant to report the second ascent of Mount Walsh (14,780 feet) by Ueli Zysset (Arctic Institute of North America), George Denton (Yale University), and Mr. M. E. Alford, (Water Resources Division, Canada), on August 14. The Icefield Ranges Research Project is jointly sponsored by the American Geographical Society and the Arctic Institute of North America and, in 1962, was under the field leadership of Richard H. Ragle.

WALTER A. WOOD

## Interior Ranges

Selkirks. A Geological Survey of Canada field party under the leadership of John O. Wheeler was again active in the Selkirks during the summer of 1962. During late June and early July they undertook a month-long backpacking trip from Mount Revelstoke north along the watershed past Mount Carnes to Downie Creek. A number of peaks and ridges were climbed en route, the most notable being Mount LaForme, Mount Carnes and the Carnes Tower. Later in the summer the same party made two traverses through little-known sections of the Monashee Range, northwest of Revelstoke. The first trip was from the head of Copeland Creek north past the heads of Jordan River and Frisby Creek to Big Eddy Creek. The second started from the head of Pettipiece Creek and followed a route to the northwest to the head of Oliver Creek. Lack of time precluded any ascents on these two traverses. Members of the field party, besides Wheeler, were Nick Close, Doug Craig, Randy Harrison, Ken MacKenzie, and Terry McCullough.

Carnes and Bridgeland Peaks, Northern Selkirks. On July 16, with David Michael, Graham Matthews and Jed Williamson, we left Downie Creek Auto Court and drove up a logging road some seven miles south of Downie Creek. By this we gained 2000 feet of altitude on the easy way into the Keystone Basin. After a three to four-hour bushwhack we reached alps, where we found an old pack trail, which follows the contours, sometimes passing through woods. The lateness of the season and a three-day storm made it difficult to find in places. Our hope had been to follow this as an easy, high-level route to the peaks. We sat out the storm on the third day and struggled through it under whiteout conditions on the fourth. After much confusion we finally descended into a valley that had a Kelly green hue and camped in the big timber. The next day we pushed on to the A & E Cabin at the head of Kelly Creek, a site we could have reached in one long day via Kelly Creek. The 21st was decreed a day-off to allow the recent snowfall to consolidate and to slide off the hills. On the 22nd Dr. Ferris took charge of the long movie lens and the other four of us left camp at some unmentionable hour and finally climbed into the sunlight, four miles later, on the southwest ridge of Carnes Peak. Along the way we had gone over the summit of "Gothhörd". The break in the ridge beyond this point was so severe that we detoured onto the west face and