Mount Hubbard and Mount Alverstone

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Mount Hubbard is one of the mighty peaks marking the boundary between Yukon Territory and Alaska. Though not the highest of the St. Elias Mountains, it is very prominent, and it commands superb views of one of the world’s wildest areas of snow- and ice-covered mountains. This 14,950-foot* peak was the focal point of the National Geographic Society’s Yukon Expedition led by Bradford Washburn in the winter of 1935. He, Adams Carter, Ome Daiber and I hoped at that time to climb Mount Hubbard; but our mission was to survey an unmapped area, and the only side of the mountain we approached closely on the ground proved unclimbable. Though Washburn took some excellent airplane photographs of a route from the southeast, the party was unable to attempt it. In June of the same year, Walter Wood closely examined Mount Hubbard during an American Geographical Society expedition which made the first ascent of 16,644-foot Mount Steele.

Subsequently, expeditions to Mount Hubbard were several times discussed, but until the spring of 1951 none became an actuality. At that time I was delighted to learn that the Arctic Institute of North America was sending another expedition to the St. Elias Mountains to carry out glaciological research, that in connection with it an attempt would be made to climb Mount Hubbard, and that they wanted me to join it. In addition to this mountaineering venture, the party had two other objectives: its main purpose was to study glacier regimen and snow and ice mechanics; but it was also to test experimental clothing and equipment for the U.S. Army. This testing was to be my special job.

Personnel of the expedition included one of the world’s leading glaciologists, Professor Robert Sharp, of the California Institute of Technology. During the summer Professor Sharp managed to sink aluminum pipe to the record depth of more than 1000 feet in the Malaspina Glacier. Future examination of this pipe as ice deforms it should provide valuable information concerning the internal flow of glacier ice. Pipe was ferried to the Malaspina by the expedition helicopter, piloted by Albert H. Luke; and the whole undertaking

* Provisional triangulation by Walter A. Wood indicates a height of 15,050 ft.
was supplied from Yakutat by the expedition’s ski-wheel-equipped Norsman airplane, flown by veteran pilot Maurice King. The Norsman and its pilot formed the heart of the whole endeavor, just as Walter Wood was the nerve center and brain. The Norsman supplied and tied together the whole enterprise. Flying off the concrete runway at Yakutat on the coast, it was able to land supplies on the beach near the Malaspina Glacier, or at the base camp 70 miles inland on the Seward Glacier, or at the base of Mount Hubbard 100 miles to the east of the Yakutat airfield.

In late June I arrived at Yakutat, where I found Walter and Foresta Wood, their daughter, Valerie, and John Case. Dr. Sharp’s party was already at work on the Malaspina Glacier; and Peter Wood, Nicholas Clifford, Geoffrey Hattersley-Smith, of the Defense Research Board at Ottawa, and Paul Townsend, of the U.S. Quartermaster Corps, were ensconced at the nunatak which already had served as base camp for two post-war Arctic Institute expeditions to the area. On June 29th we flew in to join them at this strikingly beautiful belvedere. St. Elias, King Peak, Logan, Lucania, Vancouver, Cook and Augusta are some of the giants in full view of this rock island.

Townsend flew out on the plane that brought us in; but our party was soon augmented by William R. Hainsworth, whom Terris Moore flew in in his ski-wheel-equipped Super-Piper Cub, Archibald MacIntosh, Dr. Allan Bruce-Robertson and later Joseph Stein, of Haverford College. Mrs. Hainsworth also flew in later for a brief visit. Engine trouble at the beginning of July caused the Norsman to fly to Anchorage, where a new engine was installed. Meanwhile on the Malaspina and Seward glaciers perfect weather permitted rapid conditioning and testing, and scientific observations were carried out. At this point I foolishly thrust a ski pole through both the insulated rubber boot I was wearing and my foot, and was laid up for a few days. Thanks to John Case, who applied first aid, and to the skillful medical care of Foresta Wood, who was invaluable throughout the expedition, I was on skis again, after a fashion, in four days.

Walter Wood, John Case and William Hainsworth had crossed the Seward to occupy survey stations and had made a stiff rock climb up what they called the Old Gentlemen’s Pinnacle. Another party, MacIntosh, Peter Wood and Nicholas Clifford, also was active,
with the result that the whole climbing-testing group was well ac-
climatized and keenly anxious to get to Mount Hubbard long before
the work on the Norsman could be completed. Unfortunately for
us, the weather before the Norsman's return was excellent, while
afterwards it was only fair, so that valuable time for Mount Hub-
bard was lost. Even more serious was the loss of Case, Hainsworth
and Macintosh, who were not able to prolong their vacations and
stay for the delayed attempt on Hubbard.

They reached Mount Hubbard, however, for when the weather
broke, on July 14th, Walter Wood and I flew an exciting recon-
naissance of the mountain from Yakutat, and pronounced that the
route Wood and Washburn had previously reconnoitered from the
air looked as if it would go. Crevasses appeared unusually bad in
the three icefalls along the route, but we both thought that a landing
could be made at about 6000 feet, with a good chance of our work-
ing through to the Hubbard-Alverstone plateau at about 13,000.

When Walter Wood, John Case and I conferred at Yakutat, it
was agreed that Case and I should be flown in to establish a camp
at 6000 feet, while Wood prepared supplies for parachuting and
other members of the party were brought in from the Seward
Glacier. Accordingly, on July 16th, King landed smoothly on what
we later called the Cathedral Glacier, on the southeast side of
Mount Hubbard, and taxied to within a mile and a half of the first
icefall. Case and I, feeling fit, were eager to come to grips with the
mountain; but, since there were only two of us and the area was
badly crevassed, we decided not to begin our real reconnaissance
until nightfall, when the snow would freeze and our operations
would be safer.

Travel at night in the St. Elias Range in summer is practical,
for sunset and sunrise so merge that no darkness deeper than
twilight occurs, and the snow surface, often soggy in the sunlight,
becomes safe and firm. Case and I skied to the base of the icefall
and carefully worked out a route from the true right bank to a
point where the going appeared smooth clear to the second icefall.
Much of the going was tricky, and we were forced back once or
twice. At one point, the séracs seemed to block us; but a lightly
supported bridge, finally discovered, led us to firm snow. Near
this point, in the worst of the séracs and crevasses, I saw what ap-
peared to be a stone. Since no rocks were anywhere near, I went
over to pick it up. To my surprise, it jumped up, ran to a near-by crevasse and dove in. Since we were not in Ireland, the rock proved to be only a Cony, miles from the nearest grass. Whether he, too, was on a Mount Hubbard expedition or "just looking" we did not learn. Peter Wood, who had been trying to trap conies for a museum, doubtless thought us derelict in our duty for not capturing this one.

Back at camp at six in the morning, we had hardly fallen asleep when the Norsman taxied up beside our tent. Hainsworth, Clifford, MacIntosh and Walter Wood climbed out. All were in fine fettle and anxious to get on the mountain, but Walter had to return to Yakutat to parachute loads at 8000 and 13,000 feet, so that we could attack Hubbard without relaying loads.

Later that day the Norsman came back, and we saw parachutes leaving the plane, though from where we were we could not see where they landed. Our party now was ready to attack the mountain as soon as Walter and Peter Wood came in, but we had not figured on the weather. Before these two could join us, heavy clouds rolled in from the Pacific, and for nearly a week we were kept close to camp. Hainsworth and Clifford made an adroit snow and rock climb, and the rest of us tested boots and skis; but we were a restless party.

Finally, on the 24th of July, Walter and Peter Wood came in and told us how they had been flying the beaches, searching for a Canadian Pacific air liner, bound for Korea, that had disappeared near Yakutat. The 10th Air Rescue Squadron from Anchorage was directing a big search in the Yakutat area, and Canadian planes and others were helping.

Case, Hainsworth and MacIntosh were by now due back in the East. Reluctantly, they climbed aboard the Norsman, wished us luck, and took off. Our party of four was anxious and ready to go. Walter Wood had laid plans so carefully and dropped loads so accurately that with a minimum of worry we could now set forth. Skiing to the first icefall, where we substituted snowshoes for skis, we dodged crevasses by following the trail markers placed on our earlier reconnaissance. The thin bridge was still holding, and soon we were on relatively smooth glacier and heading for the airdrop at 8000 feet. We found two chutes easily, and by three o'clock camp was pitched, just below the second icefall, well out from avalanche

ROUTE THROUGH ICEFALLS TO HUBBARD-ALVERSTONE PLATEAU
Photo, W. A. Wood
danger, and we were enjoying both our tea and the thrill of at last being on the way.

Next morning we rose at three and were soon at grips with the second icefall. This was the steepest of the three and perhaps the hardest to reconnoiter; but our false leads were few, and by ten o'clock we had made our last jump, done our last chopping, and started on the way up a smooth valley below East Hubbard. One o'clock found us through the third icefall and on the 13,000-foot plateau between Hubbard and Alverstone, where three high camp loads had been neatly dropped.

The view here thrilled us. Hubbard and Alverstone dominated everything, but East Hubbard and more distant peaks to the south held the eyes; while if one walked across a gentle slope to the height of land, the vast immensity of the Ice Field Ranges spread before him. That night we had a magnificent sunset view from this fine point of vantage, and returned to camp secure in the feeling that we were in a superbly stocked camp within easy striking distance of our objectives.

In the morning we led around old avalanche débris, up a slope deep in powder snow and between two broken schrunds. Once it appeared that a pair of snowshoes would slip from a pack and drop into the bigger schrund; but they did not fall, and we zig-zagged on upward, kicking steps until the edge of a small cirque suggested a second breakfast and a look around. East Hubbard had now dropped below us, and even Alverstone had lost stature. Again we faced the peak. Gradually, as we moved steadily toward the summit ridge, deep powder gave way to shallow powder, then to wind-packed snow. Then suddenly the slope disappeared in front of us, and we gazed out over the vast snow fields and massive ranges beyond. There were Logan, Vancouver, Institute Peak and, under a sea of clouds at 8000 feet, our base camp. There, as we did not know, pilot Maurice King, with Foresta and Valerie Wood, was just taking off to fly to Yakutat.

For several minutes we enjoyed our success, but the biting wind soon urged us to more sheltered slopes, where we could relax, eat pan forte and discuss a faster route down. The new route proved good, and by one o'clock we were back in camp after a fairly easy day.

What fun it was to relax, to enjoy a high tea, and to mull over

HIGH CAMP AND ROUTES ON HUBBARD (LEFT) AND ALVERSTONE

Photo, W. A. Wood
the day's exertions or the morrow's attempt on Mount Alverstone! This peak, about a mile from camp and 500 feet lower than Mount Hubbard, was technically a more serious obstacle.* Reconnaissance had disclosed that a shattered granite rib on the east side of the summit pyramid offered the most likely method of attack, and it was to this point that we snowshoed early the following morning. Though the weather had clouded a bit, no storm appeared likely for some twelve hours. This, at least, was our estimate as we approached the fractured granite and began to climb. On either side of the narrow rib, blue ice covered by a thin veneer of wind-packed powder was uninviting; but, when the rib narrowed and disappeared under this coating, we had no choice.

Better snow seemed to lie on the north side, and we hoped that crampons would help us to cross a rope-length of 45- to 55-degree ice to the top of an ice mass whose bottom hung out over the huge northeast face. Above this point the slope appeared to be slightly less steep. Clifford belayed me as I angled across to the edge of a small schrund, whose lower lip provided a short traverse to hard-packed snow. The angle was steep, and each step was delicate. Fortunately, we found a good belay point at the crevasse and another a rope-length away. Gradually we kicked steps upward, angling around to the north, where better snow seemed to lie. Below us, to the east, we caught glimpses of the site of our high camp on the Yukon Expedition, but the view was quickly blotted out by thickening clouds. Persistence and care finally brought us all to the summit ridge, where, as we had noted on our airplane reconnaissance, a great 40-foot cornice topped the mountain and hung out over the northwest wall. Clouds began to form around us as we happily belayed one another out towards the edge. They were a warning: while we had been engrossed on the northeast side of the summit, the weather to the southwest had been deteriorating. We began the descent without delay.

Half an hour later, at the tricky slope between the small crevasse and the rocks, a furious blast struck us. Screaming wind whipped powder horizontally across the snow, stung our faces, and seemed bent on knocking us from our steps. We were all glad to reach the upper part of our rock rib; but the surfaces had already become glazed, and easy pitches were now slick with verglas. Our axe handles, parkas, mittens and beards quickly iced over, so that the

* Provisional triangulation by Walter A. Wood indicates a height of 14,560 ft.
descent to our snowshoes required constant care. One gust even threw me clear off the rocks onto the adjacent slope; but my axe held, and I was back in a moment.

When we reached the snowshoes, the whole world was white: snow and sky blended. Our only direction markers were the ridge, dropping down below us, and faint snowshoe imprints, rapidly becoming obscured, leading off into the whiteness. In 15 minutes the tracks were completely blotted, and everything about us was white. For a time we kept on, judging our position by the slope of the snow, until that too became deceptive, and we were forced to await a lifting of the clouds! We were warm; but we knew that our tents, with sleeping bags and food, lay annoyingly close at hand. As patiently as we could, we waited until, at a slight lifting of the clouds, we viewed with pleasure our tents only a few hundred yards away.

During the rest of this day and the next two, the storm blew; and on July 31st we awoke to find a pale sun and deep powder snow. Should we wait for the snow to settle or work our way down to the camp below? Engine trouble of the Norsman and recent bad weather had so delayed the work of the expedition that it was important to use every possible day before the end of the season. Our mountaineering objective had been attained, and our equipment tests completed. It was time to go. Although deep snow covered many crevasses, we believed that caution, good rope technique and a total party of four would ensure a safe descent.

The highest of the three icefalls was passed without trouble as we snowshoed ahead through deep powder. Between this icefall and the next, deep powder had drifted across a relatively flat area. Here we stopped for a good breather. Just beyond lay an obvious crevasse, which seemed well bridged. Clifford gave me a tight rope as I started to cross. Probing was impossible, for the surface powder was more than ice-axe deep. Halfway across, I felt the snow drop out from under me, and instinctively threw myself at the far side. My axe went in, did not hold—and I disappeared into the crevasse!

My immediate reaction was annoyance that I had selected a bridge that would not hold. Five feet from the surface the rope checked, and I grabbed it immediately with both hands. Then, to my surprise, it began running free. The side walls shot by me like sidewalks passing a speeding car in a narrow street. Again a jerk
came—violent this time—and I could feel the rope stretch. Immediately my pack was thrown violently over my head. It hung down mainly on my right arm.

I was hanging free, six feet from either wall of the crevasse and at least 40 feet below the surface, with my head pulled down by the weight of a 60-pound pack. Holding the rope with one hand, but unable to get any other purchase, I struggled to get my pack back into position as I swung free. It was impossible. Since the pack kept my head down, I reluctantly dropped it; it broke through a screen of snow 60 feet down, but I never heard it land! Since the crevasse at the snow layer below me was over six feet wide, the pack probably dropped at least 50 feet farther.

The impetus given by the pack made the rope turn, and I began to go round and round like an apple on a string. As the blue walls rotated, I shut my eyes and held on desperately until the twirling stopped. Then, looking up, I saw that for at least ten feet from the edge of the crevasse down, the rope was tightly wound. For some strange reason, and to my great pleasure, it never did unwind.

Holding the rope above me with one hand, I now pulled out a safety loop from my waist and put a foot in it. Almost at once I heard Walter call down, “Are you all right?” He had seen me fall and had rushed forward. Clifford, carrying a big pack and belaying on snowshoes on unconsolidated powder, had been pulled over on his face by the sudden jerk; and the rope had run out, breaking two of his fingers. Walter had helped him and now began to pay out a rope to me. As he did so, I saw to my disgust that it coiled around my belay rope like a tendril of a vine. By the time it reached me, the ropes were well snagged; but thankfully I set my foot in a loop, put my weight on it, and felt better.

Another rope was lowered, in order that we might use the Bilgeri method of crevasse rescue; but we had not reckoned on the stretch of nylon rope. On my first transfer of weight, the rope elongated so much that I lost four or five feet. The strain on my arms all this time was considerable. We could talk to one another, however; and, as our efforts became better coordinated, the hole above, where I could see blue sky and blowing clouds, began to grow closer. Masterful handling of the rope from above brought me close to the icicles growing on the bottom side of the six-foot-

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HIGH CAMP ON HUBBARD AND ROUTE TO SUMMIT

Photo, W. A. Wood
thick bridge. After a rest, we all hauled, and I emerged into the sunlight.

Since I had lost one snowshoe in the crevasse, progress to the camp below was somewhat slower; but the location of the most important of our old route marks brought us to camp without further incident about the middle of the afternoon. That night Walter shared his sleeping bag and air mattress with me, and next day we pushed down to base camp through softening snow.

August 2nd had come, and we were all somewhat disturbed that we had seen no sign of the Norsman since our departure from base camp. Various Air Force planes, flying search patterns, had come over; one had even buzzed our camp. But we had never seen the Norsman. On August 3rd we again saw search planes; and on the 4th, when two more Army planes appeared, we took skis, snowshoes, rope and ration boxes and marked out in the snow the word NORSMAN? The lower of the two planes, a ski-wheel-equipped Air Rescue C-47, now swung over and dropped a note asking us to mark the temperature, wind direction, altitude and direction of nearest crevasses. A postscript was added: "Norsman still missing."

The next minutes, until the C-47 landed down glacier, were terribly long. Immediately we loaded our gear, and after an in-terminable wait the plane took off for Yakutat. The pilot could tell us only that the Norsman had been missing since July 27th, and that it was believed Foresta and Valerie Wood were aboard. Bob Sharp was helping to direct the search.

When our plane landed at Yakutat, we stepped almost immediately into a waiting B-17, piloted by Major Bradburn, a top-notch officer, and flew back and forth over King's normal route from the Seward Glacier to Yakutat. We found no trace of the missing plane. Some of our searching was at 50 feet, but four-engine bombers are not the best for such close-in search, and a wire was sent to Terris Moore, asking for his help. Dr. Moore, president of the University of Alaska, was just about to leave for Maine; but he cancelled his trip and started at once for Yakutat in his small plane.

Bad weather on the 5th, 6th and 7th now delayed our search, but on the 8th all planes were out. Moore and I flew to the Seward base camp, where the Norsman had taken off, and for a week combed the areas near by that the big Air Force planes could not cover so thoroughly. Every man at the base was determined to
find the Norsman, and every bit of flyable weather was used. Gradually, however, we began to realize that the Norsman was not sitting somewhere in the open waiting for rescue and minor repairs, and that something sudden and final must have happened. Stein and Bruce-Robertson, the two men at the camp from which the plane departed, had heard the motor for double the normal length of time after the take-off—20 minutes by the clock—and one of the two thought he had then heard a crash. Whether he did we may never know.

Somewhere the deep snows of the St. Elias cover our dear companions, a brave and skillful pilot and two generous, courageous and very lovely ladies. The majestic peaks of this wild and beautiful area mark well their last resting place.

*Ave atque vale.*