

The Mount Wrangell Observatory

DURING the summer of 1953, an observing station was established on the summit of Mount Wrangell, Alaska. Mount Wrangell is located at almost exactly 62° North latitude and 144° West longitude, in the Wrangell range in southeastern Alaska. Its altitude is 14,006 ft. The observing station is located in a saddle about 200 ft below the summit. The Richardson Highway passes by the foot of the mountain. The settlement of Copper Center on this highway has proved a convenient base for trips to the top. The airline distance from the top to Copper Center is 43 miles. By road, the distance from Copper Center to Fairbanks is 270 miles; to Anchorage, 200; to Valdez, 100; and to the extensive CAA landing strip at Gulkana, about 15 miles.

Access to the summit is by air. During the summer, small airplanes with ski-wheel combination landing gear have proved practical. The plane takes off on wheels and, while the ship is in flight, the ski is lowered for landing in the snow on the summit. During the winter, skis alone would presumably suffice. The flight up from Copper Center takes approximately 1 hr; the return is made in about half an hour. The altitude of the Copper Center airstrip is approximately 1100 ft. To this time, some 3 dozen landings and take-offs on the summit have been completed. Some flights have been made with loads of 300 lbs. Thus, in addition to the pilot, a fairly heavy man and some equipment can be carried up in each flight.

The station consists of 2 Jamesway huts, one of which constitutes the living hut and the other houses the generators and serves for storage and for apparatus. A gasoline-driven generator rated at 5 kw is available, delivering 28 v dc, or 110 v 60 cycles ac if the rotary converter is run. This generator suffices for most experimental needs. A smaller generator supplies the electric light so that the domestic circuit and the experimental circuit are independent. Two standby generators are also present. For cooking, a two-burner gasoline stove is used, and ample food supplies are on hand. Several radio receivers are on the mountain, as well as transmitters for walkie-talkie communication with Copper Center and aircraft emergency communication with the CAA monitoring station. The possibility of direct radio communication with Fairbanks, not quite in a line-of-sight location, is being explored.

During the summer of 1953, it was found that weather permitted flights to and from the mountain on the average of 5 days/wk. The daily temperature of the air at the summit was about 5 to 25° F. The intense solar radiation on sunny days allows one to wear light clothing with comfort. The winter temperature regime is not yet determined, but it is planned to measure this during the next 6 months.

The pioneer work on the station was initiated in April, 1952, when Dr. Terris Moore, President of the University of Alaska, and the author flew over the various peaks in the Wrangell and Alaska ranges and selected Mount Wrangell as the most suitable. Since it was not known whether landings and take-offs at

14,000 ft would be successful, it was felt desirable to have a ground party on the summit before the first landing was attempted. Consequently, a party of 5 men (Charles Wilson, Phillip Bettler, and Robert Goodwin of Alaska, and Arthur Beiser and Hugo Neuburg of New York University) were flown to a glacier at an altitude of 8500 ft. From this point they ascended the mountain on foot. When they reached the summit, Dr. Moore made the 1st experimental landing alone and the 2nd landing with the author as passenger.

Although this station was originally established as a cosmic ray observatory, it is hoped that it may prove useful to other branches of science. Many other fields of research occasionally have need of high altitudes, northern latitudes, and low temperatures. Any institution or scientist interested in making use of the station is invited to write to Dr. Terris Moore, President, The University of Alaska, College of Alaska.

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Science and Public Relations

WHAT is science? It is a method, an attitude, and a tradition. Its method comprises the techniques of answering questions objectively, with recourse to facts. Its attitude is a respect for objective fact, and its tradition derives from the myriad investigators who have shared these attitudes and techniques, and applied them to the understanding and mastery of nature.

The scientific fraternity has become a palpable reality: scientists share in a common outlook and a common undertaking. And since scientific results have an unparalleled validity and usefulness, the impression that science makes on the man-in-the-street is deep. It is only natural that the nonscientist should have distinctive conceptions of science, and well-defined attitudes toward scientists and their work.

The character of these lay attitudes is of the most intimate concern to the scientist. His working environment is his society, and this is in the main shaped for him by lay opinion and power. Witness the strong and direct influence of public concerns on the rate and direction of scientific research. It is a matter of simple self-interest—to say nothing of human obligation—that scientists should promote public understanding of their methods and goals, and sympathy towards them. Science needs outstandingly good public relations. In an age in which organized social pressure is the most potent political force, science cannot afford the risks of isolation or misunderstanding. The many signs that something is amiss here reveal a great potential danger. We have selected several rather obvious phenomena in illustration. Though apparently unrelated, they have a portentous aggregate effect.

To begin with, there is the phenomenon of inordi-