NOTES

METEOROLOGICAL RESEARCH AT LAKE HAZEN, 1961

During the International Geophysical Year observations of the surface weather were made at Lake Hazen, Ellesmere Island, N.W.T., Canada; they indicate that considerable differences exist between conditions at this inland site and the nearest coastal weather stations Alert and Eureka[1]. In particular, there is an unusual prevalence of calms and an almost complete absence of winds over 20 m.p.h. To investigate this phenomenon in more detail a series of pilot balloon observations was made at Lake Hazen during the summer of 1961.

The writer, assisted by David Feather of Cambridge University, was enabled to join the 1961 phase of "Operation Hazen" through the courtesy of the Defence Research Board of Canada. Financial assistance was obtained from the Banting Fund through the Arctic Institute of North America, and instruments were lent by the meteorological services of the United States and Canada.

Helium-filled balloons were tracked visually by the single-theodolite method to provide data on winds up to 25,000 feet. Cloud conditions were not ideal, but adequate data were obtained for the critical layer below 6,000 feet. Balloons were released at 6-hourly intervals from May 16 until August 18. During the first half of August ten balloons were released each day and the value of this detailed series was increased by almost cloudless conditions during much of the period. Preliminary results indicate that the quiescent surface conditions normally extend to a height of several thousand feet.

To provide comparison with IGY data regular surface weather observations were made during the entire period. Other work included collection of plankton samples from Lake Hazen (for Dr. I. A. McLaren of the Fisheries Research Board of Canada), and of specimens of *Salix arctica* for growth-ring studies. Physiological experiments were also carried out at the request of Dr. M. Lobban (U.K. Medical Research Council).

The writer desires to express his gratitude to the sponsors of the expedition and also to his field assistant, whose help was invaluable. A detailed analysis of the results will be published later.

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[1]Jackson, C. I. 1959, 1960. The Meteorology of Lake Hazen, N.W.T. Defence Research Board, Hazen 8, 9, Parts I-IV, 295 pp.

UNIVERSITY OF ALASKA GULKANA GLACIER EXPEDITION 1961

Glaciological studies initiated during the summer of 1960 on Gulkana Glacier in the central Alaska Range by members of the Department of Geology, University of Alaska, were continued during the summer of 1961. The program is being supported by a grant from the National Science Foundation awarded to Dr. Troy L. Péwé, project supervisor and head of the Department of Geology.

Gulkana Glacier lies on the south side of the Alaska Range about 4 miles east of the Richardson Highway and about 135 miles southeast of Fairbanks. The two-man field parties, each led by