

# Arctic Research Laboratory, Office of Naval Research, Point Barrow, Alaska

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THE INCREASING INTEREST IN the Arctic has revealed an acute absence of any systematic body of scientific information about the basic biological and geophysical conditions of the region. The accumulation and synthesis of systematically collected data is very much needed. Observations during the past century have been gathered chiefly by the toil of individuals or small expeditions operating, in general, for short periods with limited technical and financial resources. Although many parties have gone into the field for seasonal studies, it has been apparent for years that long-term studies are essential to the understanding of Arctic phenomena. The establishment of fixed bases (field stations and laboratories) for the collection of regional data is of vital importance for carrying on Arctic research, particularly for studying the influence of physical and biological factors upon the function of man and machine. Advances in the technology of research which have been made during the past two or three decades are of a magnitude which demands greater financial support than can be managed without some public aid.

On August 13, 1946, the Office of Naval Research initiated an inquiry regarding the establishment, in the Arctic, of a basic scientific research laboratory where civilian scientists from universities could, under contract with the Navy, conduct investigations of biological and physical phenomena as related to that environment. The replies from various Navy organizations indicated a general enthusiasm and support for the idea of a laboratory for basic research in the Arctic.

In conformance with a general policy of the Office of Naval Research to seek counsel of qualified scientific investigators, well-known Arctic specialists, including Vilhjalmur Stefansson, Sir Hubert Wilkins, Dr. Laurence Gould, president of Carleton College, Dr. A. Lincoln Washburn, director of the Arctic In-

stitute of North America, and Dr. Harald U. Sverdrup, director of Scripps Institution of Oceanography, were solicited for their opinions. All not only confirmed the need for such facilities but expressed a keen interest in the program and an enthusiastic appreciation of the Navy's assumption of aid and support of the work in this unexplored field.

It was envisioned that the initial program of any such organization would be focused on specific research projects rather than attempt to develop large physical plan facilities. A program for the pursuit of basic research in the Arctic was undertaken by contract between interested research groups and the Office of Naval Research (*Science*, August 22, 1947, pp. 164-165). The Director of Naval Petroleum Reserves and the Bureau of Yards and Docks of the Navy Department, which administers a contract for exploration of the Naval Petroleum Reserve No. 4 (including the Barrow area), cooperated in the support of the research teams.

In the article which follows, Laurence Irving has described some of the facilities now available to qualified scientists for carrying on basic research in the Arctic. Plans are under way for expansion of the program to include studies of a biological nature—ecological, physiological, mycological, and limnological—and of a geophysical nature—magnetic, auroral, meteorological, etc. Some problems in need of investigation have already been described (1-3); and new ones continue to appear as work progresses. It is believed that real opportunities exist in the Arctic for the scientist.

## References

1. SHELESNYAK, M. C. *Science*, 1947, **106**, 405-409.
2. ———. Problems in polar research. Special publication, American Geographic Society, 1928.
3. ———. A program of desirable scientific investigation in Arctic North America. Bull. No. 1, Arctic Institute of North America, 1946.

Per F. Scholander, of the Department of Zoology, Swarthmore College, a member of the Point Barrow research team, is shown on this week's cover (*extreme right*) with three Chandler Lake natives who recall the Leffingwell, Stefansson, and Wilkins Expeditions to Arctic regions.