

a vital part in Snow Cornice in 1948, 1949, and early 1950, and was also used on the Baffin Island Expedition led by Mr. P. D. Baird last year, will again be flown by Mr. Maurice King. The surface of the Malaspina Glacier is not suitable for landings by winged aircraft and 1951 operations below the firn line will be supported, and equipment and personnel carried to the area of study, by helicopter. A helicopter has been secured for the project by contract with the Lewis College of Science and Technology of Lockport, Illinois.

Twenty-three scientific investigators and their assistants, representing California Institute of Technology, the University of Minnesota, the U.S. Geological Survey, Toronto University, Haverford College, the American Alpine Club, and the Institute, will take part in the 1951 project. Field work will begin in June and the project will be terminated for this year on September 1.

Gifts and contributions to expedition expenses

The Chairman and Board of Governors most gratefully acknowledge the following gifts to the Library and Museum

and contributions to expedition expenses:

Gifts to the Library and Museum

Books—Mrs. John W. Bell, Montreal; H. L. Eberts, Montreal; Major A. Taylor, Ottawa.

Maps—Hyacinth Lambart, Montreal.

Meteorological kite from Amundsen's *Maud* expedition—Department of Geology and Geography, University of British Columbia.

Propellor from first aircraft to fly in Hudson Strait-Baffin Island region, 1927—Charles Garnett, Edmonton.

Contributions to the Baffin Island project

M. H. W. Ritchie, Texas	\$2,500.00
A. H. Campbell, Montreal	100.00
J. W. A. Hickson, Montreal	100.00
G. C. McDonald, Montreal	100.00

Contributions to the "Blue Dolphin" project

Arthur Dean, New York	\$1,000.00
David Nutt, Etna, N.H.	1,000.00
L. H. Stubbs, Portland, Me.	600.00

John J. Teal

Carnegie Corporation	\$5,000.00
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NORTHERN NEWS

McGill University Geography Summer School

The following courses of special interest to students of the Arctic will be given at the McGill University Geography Summer School to be held at Stanstead College, Que., from July 2 to August 11. The arctic program will be directed by Mr. P. D. Baird, Director of the Montreal Office of the Arctic Institute.

Physical Geography of the Arctic. Lecturers: P. D. Baird, F. K. Hare, and Sir Hubert Wilkins.

Extent of the Arctic. The main physi-

cal features: climate, water bodies, ecology, snow and ice phenomena, landforms and terrestrial magnetism. Physical factors affecting human activity; living conditions; permafrost engineering; navigation; access by air. Main regional divisions of the Arctic.

Cultural and Political Geography of the Arctic. Lecturers: P. D. Baird, Sir Hubert Wilkins, et al.

Geographical regions and their characteristics. Exploration and discovery. National sovereignty and territorial claims. Native peoples, their origin, distribution, and activities. Economic

geography, including trading and transportation. Strategic considerations. Regional description.

Climatology. Lecturer: F. K. Hare.

Physical, dynamical, and ecological climatology, with special reference to the cool climates. Special emphasis will be laid upon (i) climatic classification; (ii) climate and vegetation, and (iii) climate and sea ice.

The Soviet Union. Lecturer: Bogdan Zaborski.

Territorial development of Tsarist Russia and of the U.S.S.R. Physical regions. Distribution of population, languages, and ethnic groups. Soviet agriculture and industry. Wartime and postwar changes in national economy.

Tuition for the six weeks' course \$ 90.00

Board-residence for the six weeks 110.00

Further information concerning the School may be obtained from Professor F. K. Hare, Director Geography Summer School, McGill University, Montreal, Que., Canada.

The magnetite occurrence at Grønnedal in Arsuk Fjord, southwest Greenland

In the August 1950 number of *Arctic* (Vol. 3, No. 2) Dr. Richard Bøgvad described the magnetic iron ore deposit at Grønnedal in southwest Greenland and mentioned that diamond drilling to establish the extent and content of the deposit would begin in the summer of 1950. We have now received the following note from Dr. Bøgvad:

In the spring of 1950 the Cryolite Mine repaired roads and houses at Grønnedal after the havoc of the winter storms and the following thaw. The equipment was then transported from the coast up the mountain slopes to the magnetite occurrence, in which work the U.S. Naval Base rendered much assistance.

The Cryolite Company had engaged Svenska Diamantbergborrnings A/B to carry out a diamond drilling program proposed by the present writer, and work was started at the end of June. In the course of the summer six bore-

holes, totalling 750 metres in depth, were made at the most promising part of the magnetite occurrence.

The cores revealed that the deposit was smaller and of an inferior quality than had been expected from previous investigations. The geologists in the field estimated that up to a depth of 100 metres the tonnage of ore present would amount to about 1 million tons of ore only and that to obtain this it would be necessary to blast a corresponding quantity of country rock.

When the core samples had been analysed for iron, phosphorus, and sulphur, all results of the investigations were given to two Swedish mining experts, who independently arrived at nearly the same conclusion: up to 50 metres in depth 800,000 tons of ore containing 25-30 per cent of iron had been found. They considered that mining the deposit would not be an economic proposition and that further prospecting could not be justified.

In accordance with these views the technical investigations of the iron ore deposit at Grønnedal have been terminated and all that now remains is to complete the scientific study of the rocks belonging to this unique geological formation which includes nepheline syenite, diabase, and essexite together with magnetite, hematite, siderite, and calcite.

The 1950 Eastern Arctic Patrol¹

The 1950 Canadian Eastern Arctic Patrol, the twenty-eighth since the Patrol was inaugurated, marked the maiden voyage of the *C. D. Howe*, the new 3,600-ton Department of Transport vessel.²

The *C. D. Howe* sailed from Montreal on July 17 with Captain A. Chouinard in command, and returned to Quebec on September 22. The vessel called at Cape Harrison, Port Burwell, Fort Chimo, Churchill, Cape Dorset, Lake Harbour, Pangnirtung, Clyde, Pond

¹Reprinted in the main from the *Arctic Circular*, Vol. 3, No. 6 (1950) p. 70.

²For descriptions of this vessel see *Arctic*, Vol. 1, No. 2 (1948) p. 121 and Vol. 2, No. 3 (1949) p. 200.

Inlet, Arctic Bay, and Dundas Harbour, the most northerly place reached, and at Frobisher Bay on the way back to Quebec. Using the helicopter members of the Patrol also visited Makkovik from Cape Harrison, Labrador, and George River while the ship was in Ungava Bay. Unfortunately the helicopter was lost off Fort Chimo on August 5, causing the death of Sam Ford, official Eskimo interpreter on the Patrol. Craig Harbour was not reached this year owing to lack of time. It had been planned that the R.C.M.P. detachment at Dundas Harbour was to be taken north to reopen the post at Craig Harbour, but this move had to be postponed.

Fort Chimo has not usually been visited on the Patrol, but this year freight was brought in for the weather and ionospheric stations. The freight for Port Harrison, Cape Smith, and Sughluk, normally carried by the Patrol, was handled by the Hudson's Bay Company's ship *Rupertisland* and the Roman Catholic Mission ship *Regina Polaris*, both of which were in the Bay during the summer.

In recent years the scope of the Patrol has been enlarged as a result of the increased activity in the north. It is now a combined effort of six government departments: Resources and Development, National Health and Welfare, Transport, Mines and Technical Surveys, Justice, and Post Office.

The Officer in Charge of this year's Patrol was Mr. A. Stevenson of the Arctic Division, Department of Resources and Development. He was assisted by Mr. R. G. Johnston of the same Department whose duties were chiefly statistical in connection with family allowances, relief, decennial census, vital statistics, and old age allowances for the Eskimo.

Members of the Patrol organized plans for taking the 1951 decennial census in the Arctic. Making accurate returns for the 8,000-odd Eskimo scattered over the Arctic will be one of the most difficult census assignments in Canada. It will be carried out by the R.C.M.P. and must be completed by shiptime next summer.

At each port of call the senior medical officer, Dr. J. C. Osborne of Edmonton, examined the Eskimo. Dr. Osborne was assisted by F/L J. R. Wynne and Nursing Sister M. P. Brown of the R.C.A.F. who joined the ship at Churchill. The general standard of health of the Eskimo appeared to be good and over a thousand were X-rayed. Eighteen sick Eskimo, mostly suffering from tuberculosis, were moved to Pangnirtung Hospital or outside hospitals for further medical treatment. Dr. R. S. Robertson, a dentist from Cobourg, Ontario, was kept busy checking, extracting, and filling the teeth of both whites and Eskimo.

Mr. R. A. Hadden of Ottawa, was in charge of postal service. He noted a marked increase in the use being made of the mails by the Eskimo, who communicate with each other by syllabic script which nearly all can read and write.

Among the passengers picked up or dropped along the route were the Right Reverend D. B. Marsh, Anglican Bishop of the Arctic, several Oblate missionaries, Mr. J. W. Anderson and other officials of the Hudson's Bay Company, Inspector Henry Larsen and Staff Sergeant W. C. Dodsworth of the R.C.M.P., and Dr. J. H. Nesbitt. At Clyde fourteen members of Mr. P. D. Baird's expedition were taken on board, after having spent three and a half months in the Clyde area.

Weather conditions were exceptionally good and only loose ice was encountered in Lancaster Strait and Admiralty Inlet.

A. STEVENSON

Auroral observations in the Barents Sea, 1949

According to a report published in *Polarforschung* (Bd. 2, Heft. 1/2 (1950) p. 285-6), Dr. Werner Sandner accompanied the fishing vessel *Berlin* of Hochseefischerei-Gesellschaft "Nordsee" (Bremerhaven) on a cruise to the Barents Sea in November and December 1949. His object was to study northern lights and haloes in that area.

The *Berlin* left Bremerhaven on November 18, was off Nordkapp (North Cape) on November 23, and on reach-

ing the Barents Sea cruised in the area round lat. 71°N., long. 41°E. The home-ward voyage began early in December: Nordkapp was passed on the 4th and Bremerhaven reached on the 11th.

The weather was favourable and northern lights were seen on November 21, 22, 24, 26, 28, and 29, and again on December 6. Few haloes occurred because the sun was already below the horizon and the moon was not full until

December 5, when the *Berlin* was home-ward-bound. However, lunar haloes were observed on December 6-7, from 15.00 to 08.00 hr., in about lat. 70°N., and again on December 11, from 06.00 to 08.00 hr., at Bremerhaven. A solar halo occurred on December 10, from 11.00 to 13.00 hr., when the vessel was passing through the North Sea.

Wind and temperature measurements were recorded throughout the voyage.

CORRESPONDENCE

BARTLETT MEMORIAL FUND

To the Editor:

The Explorers Club is inviting contributions to a fund in memory of Captain Robert A. Bartlett whose name for so long has been associated with Arctic exploration.

In view of the many years that Captain Bob devoted to schooling young men in the lore of the Arctic and stimulating their interest in exploration in the North, it seemed fitting to establish a Robert A. Bartlett Scholarship at the Memorial University College in St. John's, Newfoundland, so near to Brigus.

It is hoped that all friends of Captain

Bob and others interested in exploration will contribute to this project. Cheques should be made payable to The Explorers Club, earmarked for the Bartlett Memorial Fund, and mailed to 10 West 72nd Street, New York City. We have been advised that United States citizens may deduct such contributions from their income tax.

Very truly yours,

Bartlett Memorial Fund Committee

William K. Carpenter, Chairman

Amos Burg

John H. Foster

E. Irving Huntington

Alexander Wetmore

ELECTION OF FELLOWS

At the meeting of the Executive Committee held in Washington on 19 December 1950 the following were elected Fellows of the Institute:

Dr. C. Earl Albrecht, Department of Health, Juneau, Alaska.

Dr. G. Malcolm Brown, Kingston General Hospital, Kingston, Ont., Canada.

Dr. S. Richard E. Bøgvad, Grøndalsvej 42, Copenhagen, Denmark.

Joseph T. Flakne, 3039 Macomb Street, Washington, D.C., U.S.A.