

VOLUME XLVIII

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# THE NATIONAL GEOGRAPHIC MAGAZINE

OCTOBER, 1925



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PUBLISHED BY THE  
NATIONAL GEOGRAPHIC SOCIETY  
HUBBARD MEMORIAL HALL  
WASHINGTON, D.C.

\$3.50 A YEAR

50¢ THE COPY



Photograph by Maynard Owen Williams

LIFE AT BATTLE HARBOR, PORT OF CALL, ON THE LABRADOR COAST FOR THE RETURNING MACMILLAN ARCTIC EXPEDITION

## MACMILLAN IN THE FIELD

*Commander Donald B. MacMillan is now engaged in preparing his complete report of the work of the MacMillan Arctic Expedition, under the auspices of the National Geographic Society, with the coöperation of the U. S. Navy. It will be published in an early number of the NATIONAL GEOGRAPHIC MAGAZINE and will be illustrated with photographs made by The Society's staff photographers who were members of the Expedition. With this number a large new map of the Arctic Regions, in six colors, will be issued as a special supplement.*

**T**HE safe return of the MacMillan Arctic Expedition will be a source of gratification to every member of the National Geographic Society who has followed the day-by-day news, received by radio, of the work of exploration and scientific research which has been carried on during the summer under the auspices of The Society.

The achievement of the United States Navy flyers in the face of seemingly insuperable obstacles is in itself an epic of Arctic aviation. Lieutenant Commander Byrd, at the request of The Society, has given a bare outline of the work which he and the members of his command in the air have accomplished, but behind each

sentence of that unembroidered, matter-of-fact account lies a story of initiative, skill, and daring worthy of the best traditions of the service to which these pioneers in Arctic flying overland belong.

An unprecedentedly severe season on this side of the Pole, with almost continuous fogs and snowstorms, and with an unexpected assault by icebergs on the anchored amphibian planes in the ordinarily safe harbor of Etah, has prevented the fulfillment of the expedition's plans to establish bases on the edge of the Polar Sea, from which the great "blind spot" on the map, aggregating an area of some million square miles, might be explored. Much has been accomplished for science,



Photograph by Maynard Owen Williams

THE MASTS OF THE "BOWDOIN" SILHOUETTED AGAINST A HIGH PROMONTORY AT BATTLE HARBOR, LABRADOR

however, and it is believed that the knowledge and experience gained by the Navy airmen will fortify the succeeding expeditions with data which will result in the eventual elimination from all maps the word "UNEXPLORED" which now disfigures for eager, acquisitive man that large region lying between Alaska and the North Pole.

PLANES FLEW MORE THAN 6,000 MILES  
WITH ONLY ONE FORCED LANDING

Commander Byrd's statement, transmitted by radio to The Society, is as follows:

"My records show that the planes have a total of 75 hours and 50 minutes flying time, which at 80 miles per hour equals 6,066 total miles flown—by NA-1 away from Etah, 2,506 miles; by NA-3, 1,713 miles; by NA-2, 1,073 miles.

"Total miles flown away from Etah by three planes on work accomplished for flight mission, 5,286 miles.

"Only one forced landing occurred on these flights. The NA-3 was forced down on the way to Igloo Dahouny, a half mile from Etah harbor.

"Approximately 30,000 square miles were seen from the planes on these flights. Of course, many of the flights were made over the same course south and southeast of Bay Fiord, extending for 70 miles.

"There are mountain ranges and mountain peaks, some of which reach an altitude of at least 7,500 feet and mostly covered with snow, except for a few comparatively low ranges near Bay Fiord.

"These mountain ranges do not show on any charts which I have seen. Mountain ranges lie nearly all of the way from Sawyer Bay to Cannon Fiord, and it is thought that most of this region is unexplored by white men.

"There is a lake about two miles long frozen over in the mountains between Sawyer Bay and Cannon Fiord about 20 miles from the northwest end of Sawyer Bay.

"The Greenland ice-cap reaches an altitude of at least 10,000 feet in a direction 100 degrees from Robertson Bay.

"It is thought that little has been known heretofore of ice conditions around Ellesmere Island in the summer period. Nearly all of the many fiords seen by us show them to be filled with ice which occasion-

ally opens up, but soon closes in again. Bay Fiord and Eureka Sound east of Axel Heiberg Island are filled with drifting ice. The land in Ellesmere Island is firm, but too rugged to afford a landing place.

"In all territory flown over the Greenland ice-cap a comparatively warm stratum of air was experienced at 7,000 feet, and a bitterly cold one at 11,000 feet."

While the Navy flyers and MacMillan were making airplane history in the Arctic, other members of the expedition were engaged in transcribing in a series of remarkable color photographs the tints and hues of the Frozen North—north Greenland's surprising flower vales, the bizarre costumes of Eskimos, the animal, bird, and plant life that only the eyes of occasional explorers have ever beheld.

Dr. Walter N. Koelz, chief naturalist of the expedition, has collected data on fish life of the north and has studied and photographed winged snails, found floating through the waters of Etah harbor. He has also obtained the juvenile plumage of many birds that, while resident of the southern and central portions of North America during the winter months, breed within the Arctic Circle and are consequently little known. Specimens of bird species poorly represented in most of the museums of the United States, such as the Greenland Redpoll and the Purple Sandpiper, have also been collected.

Commander MacMillan, an authority on early Norse history, has pursued his studies of the Norse ruins in Greenland.

DAILY NEWS REPORTS GIVEN OUT BY  
THE SOCIETY

A unique feature of the MacMillan Arctic Expedition was the daily contact maintained with civilization by means of the short wave length or high frequency radio transmission, and an important aspect of the work was the coöperation throughout the United States of some 1,200 amateur radio operators of the American Radio Relay League.

From the Atlantic to the Pacific, and from the Gulf of Mexico to Canada, these radio amateurs, who accept no pay for their services, have worked long hours in the night receiving messages of many thousands of words, addressed to the National Geographic Society and the



Photograph by Maynard Owen Williams

ON BOARD THE FLAGSHIP "BOWDOIN"

Commander Donald B. MacMillan, leader of the MacMillan Arctic Expedition; Dr. Gilbert Grosvenor, President of the National Geographic Society, and Dr. Wilfred T. Grenfell, medical missionary. The photograph was taken at Battle Harbor, Labrador.

Navy Department, and given by them to the newspapers and press associations. Thus the news of the expedition forwarded by Commander MacMillan, Lieutenant Commander Byrd, and by The Society's representatives was published daily.

The wave lengths used by the Zenith equipment ranged from 16 to 40 meters. These are especially advantageous, because they can be employed in the daytime and the expedition was working in 24 hours of daylight, and also because extremely high power is not required for their sending.

So successful was the radio communication that the expedition was not out of touch with the National Geographic Society or the Navy Department for a single day during the entire summer. Messages were picked up all over the United States

and also in England, Australia, New Zealand, and Canada.

Not until the complete report of Commander MacMillan is given to The Society for publication in the NATIONAL GEOGRAPHIC MAGAZINE, along with the pictures from the air and color photographs which give new impressions of the Far North, will the full results of the expedition be known and contributed to the world's knowledge. Preliminary reports, however, from the various members of the party show tangible results in the fields of topography, meteorology, zoölogy, ornithology, botany, and ichthyology which fully justified the labor, the hardships, and the sacrifices entailed.

Above all, the members of the National Geographic Society rejoice in the safe return of every member of the expedition.