

## OBITUARY

FRANCIS ARMENGAUD, Administrateur-en-chef de la France Outre Mer, was born on 14 June 1909 and died in Val-de-Grâce, France, on 4 May 1961. He entered the École Coloniale in 1930 and subsequently, with the exception of the war years, served in French West African territories until 1949. In 1950 he organized and took part in a reconnaissance expedition to Îles Kerguelen, and the next year organized and led the first party of the permanent expedition to Port-aux-Français. He returned to administer the station in 1954 and 1955.

Father BERNARD ROSECRANS HUBBARD, SJ, head of the Geological Department of the University of Santa Clara, died there on 28 May 1962 at the age of 73.

After education at St Ignatius College and the universities of Santa Clara and Innsbruck he joined the staff of Santa Clara University in 1926 and began a series of thirty-two annual visits to Alaska. His interests covered geology, vulcanology, ichthyology, palaeontology and oceanography and he gained a considerable reputation for his knowledge of the country. Two of his earlier exploits were the first exploration of the head of Taku Glacier and a crossing of Bering Strait by canoe.

Among his publications were *Mush, you Malemutes* (London, 1952) and *Cradle of Storms* (London, 1936) and numerous papers in scientific journals. He also made three films.

ALFRED HERBERT LARKMAN, who was chief engineer of *Aurora*, the vessel which transported the Ross Sea Party of Shackleton's Trans-Antarctic Expedition, 1914-17, died in Wanganui, New Zealand, on 15 July 1962. After the return of the expedition he went back to England but returned to New Zealand in 1920 to become head of the Engineering Department of Wanganui Technical College.

UKICHIRO NAKAYA, the Japanese physicist, was born in Katayamazoo, Japan, on 4 July 1900 and died on 11 April 1962.

He graduated at the University of Tokyo in 1925 and then studied at the Institute of Physical and Chemical Research and King's College, London. Returning to Japan, he became Assistant Professor at the University of Hokkaido, and Professor of Physics in 1932. His investigations of natural snow crystals began shortly afterwards, pioneering the making of artificial snow crystals, and in 1940 he was awarded the Imperial Academy Prize for his researches. In 1949 he visited Canada and the United States where he was concerned in the formation of the Snow, Ice and Permafrost Research Establishment (SIPRE) and worked there for two years on the physical properties of ice crystals. He also carried out field investigations on the Greenland ice sheet for several seasons. In 1957 he was elected Vice-President of the International Commission on Snow and Ice. He published numerous papers in scientific journals.

ROBERT POMMIER was born in Grasse-en-Vercors in 1921 and died in Paris on 31 May 1962.

He was first attracted to the polar regions during war service in Narvik and, in 1946, took part in a "shoe-string" expedition to Vestspitsbergen with J.-A. Martin and Yves Vallette. They crossed from the head of Billefjorden to Kapp Fanshawe, carrying out cartographical, meteorological and geological work en route, climbing Newtontoppen and returning after a successful 37-day journey.

The three men were now eager to visit Antarctica and were instrumental in aiding Paul-Emile Victor in organizing the Expéditions Polaires Françaises expedition to Terre Adélie in 1948-49 and 1949-50. A. F. Liotard was leader, and Pommier served as transport officer and photographer. Ice conditions prevented landing in 1948-49 and *Commandant Charcot* was obliged to return to France bringing the party out again the following year.

In 1952 he accompanied Paul-Emile Victor on the ice traverse west from Thule in Greenland, writing *Au-delà de Thule* (Paris, 1953) about the expedition. His last visit to polar regions was in 1955 when he accompanied the French IGY party to Terre Adélie as reporter on the ship.

He wrote numerous newspaper and journal articles and was a good photographer—the book in which he collaborated with A. F. Liotard, *Terre Adélie* (Paris, 1952) is illustrated by his photographs.

SHARAT KUMAR ROY, chief curator of the Chicago Natural History Museum, was born in India and died in Chicago on 17 April 1962.

After studying at the universities of London and Illinois, he spent a year in the geology department of the New York State Museum before joining the Chicago Museum in 1925 as assistant curator of geology. He accompanied the Rawson-Macmillan Expedition to Labrador and Baffin Land from 1927-29, and during the Second World War was assigned to special duty in Newfoundland, Baffin Island and Labrador. In 1947 he became chief curator of geology at the Chicago Natural History Museum and his subsequent and distinguished career was concerned mainly with the vulcanology of Central America.

VILHJALMUR STEFANSSON, who was equally well known as an explorer of the North American Arctic and as a writer on polar matters, died at Hanover, New Hampshire, on 26 August 1962.

He was born on 8 November 1879 in Manitoba of parents who had recently emigrated from Iceland, but before he was two the family moved over the United States border to North Dakota. He attended the State Universities of North Dakota and Iowa, proceeding then to Harvard where he spent the years 1903-06 on anthropological studies, first in the Divinity School and then the Graduate School. His interest in the north began at this time, when he was an assistant instructor in anthropology. After making a summer trip to Iceland in 1904, he returned there in 1905 with an archaeological expedition under the auspices of the Peabody Museum. In 1906 he was invited by E. de K. Leffingwell, then planning an expedition to the Beaufort Sea region with Einar Mikkelsen, to join him in order to make a study of the Eskimo of the lower Mackenzie. This led him to spend his first winter in the Arctic, and gave him his introduction to the people whose customs and way of life were to become a major study.

He was no sooner back from the Mackenzie River than he was preparing an extended exploration of the whole region from northern Alaska to the western islands of the Arctic archipelago. Supported by the American Museum of Natural History and the Canadian Geological Survey, he went north with R. M. Anderson in 1908, and remained there until 1912. He wintered successively at the Colville delta in northern Alaska, Cape Parry, Coronation Gulf and again Cape Parry. During these travels he made a detailed study of the Copper Eskimo, and he published *My life with the Eskimo* in 1913.

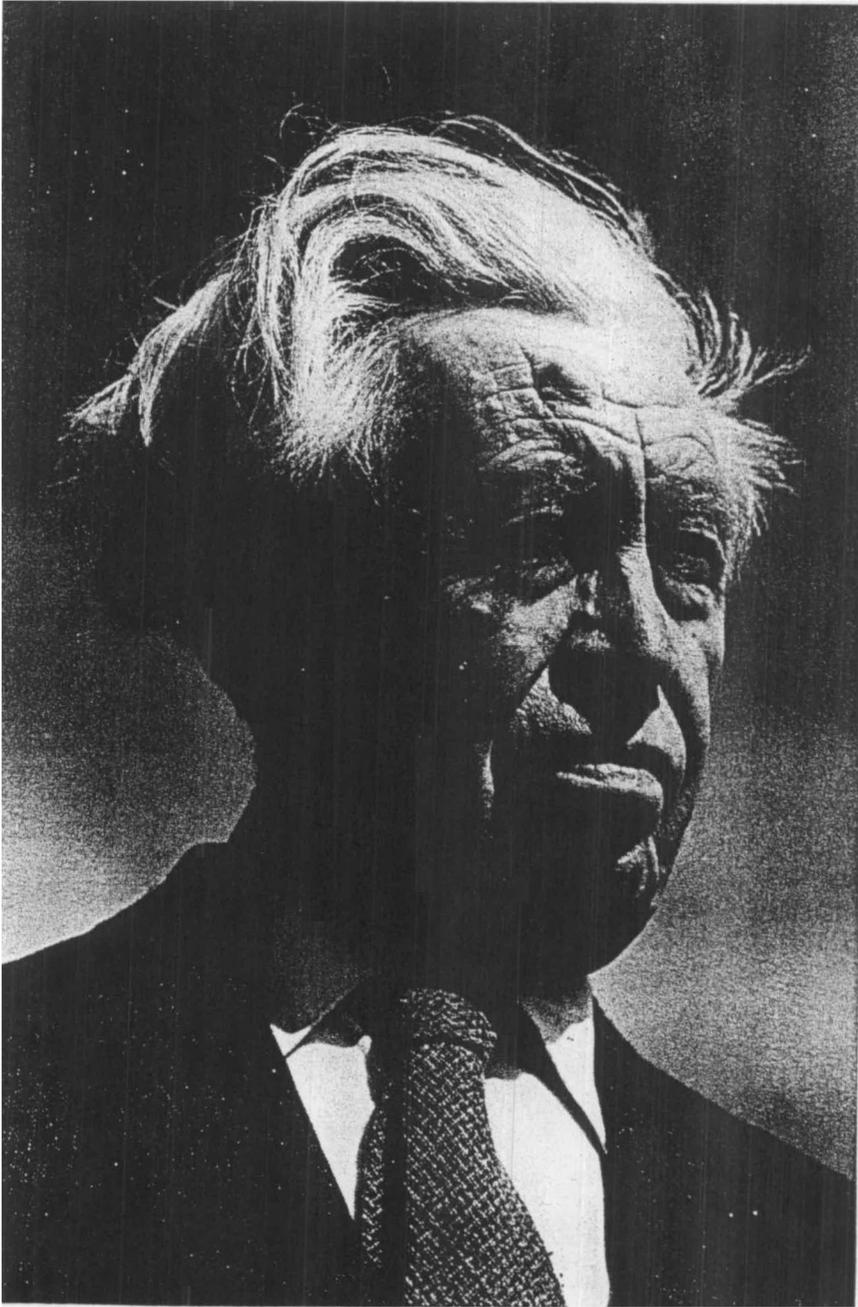
His appetite for the north was by no means satiated by having spent five out of the previous six years there, and he at once started planning an even more ambitious and extended expedition to the same general area. He obtained the backing of the Canadian Government, and became the organizer and leader of the Canadian Arctic

Expedition of 1913-18. Among the team he assembled was Hubert Wilkins, whose introduction this was to polar lands. The necessarily complicated narrative of this many-sided piece of exploration is given in Stefansson's *The Friendly Arctic* (1921). There were tragedies, for the expedition ship *Karluq* drifted off in the ice almost as soon as she had reached the north, and was crushed, hundreds of miles to the west, months later. But there were triumphs also, the survival of the leader and his party after long and difficult journeys on which no food supplies were taken being the most noteworthy. This point was one which Stefansson himself strongly emphasized, and he developed at length on many subsequent occasions the argument that living off the land was possible in the Arctic, which was thus basically "friendly". This technique allowed him, for instance, to put a group on an ice floe and permit them to drift away with it—a method of increasing knowledge of the polar basin subsequently widely used by Russian and American scientists.

The Canadian Arctic Expedition was his last major field excursion. He was the organizer of one further expedition, however. In 1921 he sent a party of four young men and an Eskimo woman to Ostrov Vrangelya [Wrangel Island] off the north-east coast of Siberia. His object was to establish a claim to the island through settlement (it had never been inhabited). But most unfortunately, the four men died before the relief ship reached them in 1922, and only the Eskimo woman lived to tell the tale of how scarcity of game had led to starvation. This tragedy earned Stefansson much unpopularity, and his search for a government to which he might give the island was also unsuccessful. He put his case forcefully and well, however, in *The Adventure of Wrangel Island* (1925).

The other, and no less significant, side of Stefansson's activity was the scholarly. Over most of his life he collected books on the Arctic. The "Stefansson collection", as it came to be called, contained many rarities and soon became the most comprehensive Arctic library in North America. It was purchased in 1952 for Dartmouth College, in New Hampshire, and it is now housed, as a separate entity, in the College's Baker Library. Stefansson continued to work in it still, acting as a consultant. This very fine collection enabled him to compose or edit a large number of works on Arctic matters. Such were *The Northward Course of Empire* (1922), *Arctic Manual* (for the US Army, 1935, commercial edition, 1944), *Unsolved Mysteries of the Arctic* (1939), *Great Adventures and Explorations* (1947), *Compass of the World* (1947, and revised edition 1949), *Northwest to Fortune* (1958), and a great many shorter papers. The collection was the basis, too, of a notable undertaking—a 20-volume *Encyclopedia Arctica*. Entries were assembled during and after the Second World War at the instigation of the Office of Naval Research, but a change of government policy resulted in its never being printed. The collection retains the contributions in its files, and they run to six million words.

Stefansson's own output was great, always readable, often stimulating and provocative. He was constantly urging new ideas. In 1919-20 he was the moving spirit in schemes to introduce reindeer on a commercial scale into the Canadian north, and domesticate musk-oxen there. These were not successful, but their failure was not necessarily any fault of Stefansson's. His iconoclasm found practical expression, too. Just as he had demonstrated in the Arctic his technique of living off the land, so several times in his later life he went on an all-meat diet, to provide doctors with new ideas on dietetics. He did much to encourage young explorers, and the collection, over which his wife Evelyn presided as librarian, became a focus for polar people from many countries.



VILHJALMUR STEFANSSON

*(Facing p. 514)*

HARRY WEXLER was born in Massachusetts in 1911, and died in Boston on 11 August 1962.

He graduated from Harvard in Mathematics in 1932 and joined the United States Weather Bureau two years later, remaining in this service except for periods as Assistant Professor in Meteorology at the University of Chicago (1940) and in the Army Air Force (1942-46). In 1946 he became head of the research programme of the Weather Bureau.

His appointment as Chief Scientist of the United States Antarctic IGY Program led to an increasing interest in Antarctic glaciology; he also took a prominent part in the establishment of Weather Central at "Little America" and in the inter-exchange of Russian and American scientists. He was one of the first to foresee the use of satellites for weather observations, and at the time of his death he was taking part, under the auspices of the World Meteorological Organization, in the planning of a "World Weather Watch", a co-operative project in which Soviet and United States satellite observations would be pooled to provide improved synoptic weather reports for universal use.

Wexler served as Vice-President of the American Meteorological Society, was a Fellow of the American Academy of Arts and Sciences, and published a large number of papers in scientific journals.