LINCOLN ELLSWORTH, who died at New York on 26 May 1951, was one of the pioneers of polar flying, both in the Arctic and the Antarctic. He was born at Chicago on 12 May 1880. His first employment was on survey work for the Grand Trunk Pacific Trans-Continental Railroad, and he later acted as assistant engineer in goldfields in Alaska, just after the gold rush. During the First World War he served with the United States Army Air Corps. In 1924 he took part in an expedition to Peru to make a geological cross-section of the Andes.

In 1925 his father decided to finance a flight which Roald Amundsen was planning to make to the North Pole. Two Dornier-Wal flying-boats were used, the N 25 with Amundsen as navigator and H. Riiser-Larsen as pilot, and the N 24 with L. Dietrichsen as pilot and Ellsworth as navigator. The flying-boats left Kongsfjorden (King's Bay), Spitsbergen, on 21 May 1925. About 8 hours later, it was decided to land on a lead in the pack ice to make an astronomical observation. The take-off, however, proved extremely difficult; the N 24 had to be abandoned, and it was only after very great efforts to make a run-way that the N 25 was again airborne on 15 June and a return made to Spitsbergen from a farthest north latitude of 87° 44′.

In the following year Ellsworth accompanied Amundsen and Umberto Nobile in the airship *Norge*, which left Kongsfjorden on 11 May 1926, crossed the North Pole, and landed at Teller in Alaska 71 hours later, having flown an estimated distance of 3393 miles.

In 1931 he began a long and intimate association with Sir Hubert Wilkins by assisting him in his plans for an arctic voyage in the submarine Nautilus. The same summer he accompanied the airship Graf Zeppelin on her arctic flight from Friedrichshafen over Zemlya Frantsa-Iosifa (Franz Josef Land) and back by Severnaya Zemlya and Novaya Zemlya.

Ellsworth's first antarctic venture was in 1933-34, when he visited the Bay of Whales in the motor-vessel Wyatt Earp (ex-Fanefjord). Wilkins undertook the meteorological work and Bernt Balchen went as pilot of the Northrup monoplane, Polar Star. The aircraft was severely damaged by a sudden movement of the sea ice shortly after arrival, and no important flights were made. In the following summer the Wyatt Earp went from New Zealand to Snow Hill Island on the east coast of Graham Land. Ellsworth's intention was to fly across the antarctic continent to the Ross Sea, but his plans were not fulfilled. Finally, in November 1935, Ellsworth made a third, successful, attempt to fly across Antarctica. On this occasion H. Hollick-Kenyon was pilot of the Polar Star. Preliminary flights from Dundee Island on the north-east coast of Graham Land were made on 20 and 21 November. The main effort began on the 23rd, down the east coast of Graham Land. A new range of mountains, the Eternity Range, was discovered, and a second range beyond, lying in lat. 73° 30' S. Soon afterwards, wireless messages ceased, causing some fears for the safety of the fliers. Ellsworth and Hollick-Kenyon had meanwhile made a temporary landing in lat. 79° S., long. 104° W. Next day the flight was continued for about 30 minutes. On 27 November the aircraft took off again but landed after 55 minutes. From this third camp the final flight began late on 4 December, and next day the aircraft landed on the Ross barrier some miles inland from the Bay of Whales. The two fliers were rescued on 15 January 1936 by the Discovery II, which had been diverted from her oceanographical work following a report from Wilkins in the Wyatt Earp that the aircraft might be in difficulty. Ellsworth's spectacular flight was the most successful yet achieved in the Antarctic and the three landings, made in bad weather, were a new departure in polar aviation.

Ellsworth made one more antarctic voyage in the Wyatt Earp, in the summer of 1938-39. A landing was made on some islands off Princess Elizabeth Land, and with J. H. Lymburner as pilot a flight was made along the 79th meridian to lat. 72° S. No further flights took place, and on his return to Australia Ellsworth sold the Wyatt Earp to the Australian Government, having decided to regard this expedition as his last antarctic venture.

In 1938 he published an autobiography entitled Beyond horizons (London).

J.M.W.

ROBERT J. FLAHERTY was born in Michigan on 16 February 1884 and died at Dummerston, Vermont, on 23 July 1951. He was educated at Upper Canada College, Toronto. In 1910 he was engaged by Sir William Mackenzie, president of the Canadian Northern Railway, to examine the iron-ore deposits of the Nastapoka Islands on the eastern side of Hudson Bay. Flaherty crossed James Bay from Moose Factory to Fort George by boat in August 1910, and with native guides sledged northwards to the islands. On this journey, Flaherty was given a map by Wetalltok, an Eskimo servant at Charlton Island post in James Bay, showing a group of large islands to the west of the Nastapoka Islands. At this date British Admiralty charts, following information obtained in the second quarter of the eighteenth century by Captain W. Coats of the Hudson's Bay Company, showed two distinct groups of small islets, the North Belchers and South Belchers, lying between lats. 56° and 57° N., somewhat more than 100 miles from the eastern coast of Hudson Bay. Nothing was known at the Great Whale River post about the extent of the islands, but when he returned south in March 1911, Flaherty examined seventeenth-century maps, possibly based on information copied by Hessel Gerritsz. from Hudson's chart of 1610-11, and found that large islands had at one time been charted off the coast between lats, 56° and 58° N.

In the summer of 1911 Flaherty bought a 36-ft. sailing craft, the Nastapoka, and attempted to reach the islands, but this vessel proved to be unseaworthy and he wintered at Fort George. His plan to cross the sea ice in the following spring was thwarted by an exceptionally early break-up, and he then decided to sledge across the base of the Ungava Peninsula in order to examine a possible northward extension of the Animikean ore-bearing rocks known to exist along the lower reaches of the Koksoak River. Together with two Eskimos, Omarolluk and Wetunik, Flaherty made the eastward crossing from White Whale Point on Hudson Bay by way of Lake Minto and Leaf River to Leaf Lake on Ungava Bay, and thence south to Fort Chimo. The distance from Fort George, some 750 miles, was covered in 35 days, in March-April 1912. The return journey was made by canoe in June-July 1912, up the Payne River from Payne Bay, and down the Povungnituk River into Hudson Bay.

In 1913 Flaherty bought the 83-ton schooner Laddie and made another attempt to reach the islands. The departure from Newfoundland was delayed until August 1913, and Flaherty spent the winter of 1913–14 at Amadjuak, on the south-west coast of Bassin Island. The Laddie returned to Newfoundland until the following summer. During the winter Flaherty made sledging journeys to explore the area west of Cape Dorset and round Amadjuak Lake. In August 1914 the Laddie reached Amadjuak for the second time. Bad weather was encountered during the voyage south along the east coast of Hudson Bay and early in September the schooner grounded on a shoal off the north-eastern end of the uncharted Belcher Islands. A week was spent there making preliminary geological investigations and repairing the schooner.

In September 1915 Flaherty returned with W. Robertson and spent a year on the Belcher Islands making exploratory journeys by sledge and boat. The group was found to extend some 91 miles from north to south between lats. 55° 30′ and 57° 10′ N., and 57 miles from east to west between long. 79° 25′ and 81° 10′ W.,

covering a total area of more than 5000 sq. miles. During his stay Flaherty made a film record of the life of the islanders. Motion pictures taken on Baffin Island were shown to an appreciative audience there, to all but the eldest of whom the caribou was a mythical animal. The party was picked up by the Nastapoka in October 1916.

In 1920 Flaherty visited Baffin Island once more and in the following two years collected material there and round about Cape Dufferin on the east coast of Hudson Bay for his first film, "Nanook of the north" (1922). He later described his experiences in My Eskimo friends, "Nanook of the North" (New York, 1924). He also wrote two novels with the Hudson Bay as background, entitled The Captain's chair and White master.

In later years Flaherty turned his attention to other subjects for documentary films, and became a master of the art of using the film medium to express life. "Nanook of the north" is assured of a place in film history as one of the earliest documentary films and as the one which first clearly demonstrated their immense possibilities.

SAMUEL D. FORD was born at North-West River, Labrador, on 29 June 1880 and was killed in a helicopter accident at the mouth of the Koksoak River in Ungava Bay on 5 August 1950. He joined the Hudson's Bay Company in 1905 as post servant at Fort George, and a few months later became post manager's assistant at Great Whale River. In 1908 he was transferred to Fort Chimo, and from 1909 to 1914 acted as interpreter for the firm of Revillon Frères, which was at that time a keen competitor of the Hudson's Bay Company.

In 1917 Ford rejoined the Hudson's Bay Company as interpreter and assistant at Wolstenholme. In 1919 he was moved to Coats Island and in 1924 established a new post at South Bay on Southampton Island. From 1937 to 1942 he was post manager at Clyde, and later at Cape Smith and Povungnituk. He retired in 1945.

Ford was an outstanding Eskimo linguist. He was responsible for the translation into syllabics of the Department of Mines and Resources publication *The book of wisdom for Eskimo* (Ottawa, 1947). At the time of his death he was attached to the Eastern Arctic Patrol in the C. D. Howe as interpreter.

RODGERS DEAN HAMILTON of the Museum of Zoology, University of Michigan, was reported missing when the Norseman aircraft in which he was flying on 9 May 1950 from Tigvariak to Point Barrow, Alaska, a distance of some 220 miles, failed to reach its destination. An immediate and prolonged search failed to discover any trace of the missing aircraft, and it is now presumed that Hamilton and the pilot Burt Galbraith, were killed.

Hamilton, who was born at Pittsburgh, Pennsylvania, on 7 December 1919, first visited Alaska in 1947. In 1948 and 1949 he made an ecological study of *Rana sylvatica*, the Wood Frog, along the major river systems from Kotzebue in Alaska to Coppermine in the Northwest Territories. At the time of his disappearance he was making field studies of arctic invertebrates on behalf of Johns Hopkins University.

Sydney Evan Jones was born on 21 August 1887 and died on 17 February 1948. He was educated at Ipswich School, Queensland, and St Andrew's College, University of Sydney. In 1911, after a year as resident medical officer at the Royal Prince Alfred Hospital, he joined the Australasian Antarctic Expedition of 1911–14 and was appointed medical officer of the expedition's Western Party. This eight-man group, led by Frank Wild, was landed from the Aurora in February 1912 and established winter quarters on a floating shelf ice formation, thenceforth known as the Shackleton Ice Shelf. This wintering station was only some 170 statute miles east of Gaussberg, 40 miles north of which the German Antarctic Expedition in the Gauss had spent the winter of 1902–03, beset in the pack ice.

Jones had his first sledging experience as a member of the southern depot party which made a short journey inland in March 1912, and in the following winter he proved himself to be an excellent plumber, brazier, and tinsmith. At this time he experimented with mixtures of "glaxo" and butter, and succeeded in producing a firm biscuit which proved admirable for sledging.

In the spring he led the western depot party which attempted to travel westwards along the sea ice, but found its way barred by the broken surface of Helen Glacier and open water beyond. On the return journey Jones and his four companions were overtaken by a blizzard which lasted for 17 days and made travel impossible. Jones also led the western coastal party consisting of G. Dovers and C. A. Hoadley, which had the task of confirming that Queen Mary Land was continuous with Kaiser Wilhelm II Land. This man-hauling sledge party discovered at Haswell Island the greatest of known Emperor Penguin rookeries; also the first known breeding place of the Antarctic Petrel. Gaussberg was reached on 23 December, 46 days after leaving winter quarters. The party finally returned to base on 20 January 1913, having covered a total distance of some 550 statute miles over the crevassed inland ice.

After his return to Australia in 1913 Jones entered the Mental Hospital Department of New South Wales. In 1925 he became medical superintendent of Broughton Hall Psychiatric Centre, and devoted the remainder of his life to occupational therapy.

Poul Nørlund was born in Slagelse, Denmark, on 4 November 1888 and died in Hellebæk on 26 May 1951. He studied history at the University of Copenhagen and took his degree there in 1912. In 1917 he became an assistant at the Danish Nationalmuseum. Norlund undertook his first expedition to study the former Norse settlements in West Greenland in 1921, and later returned to continue his field work in 1926, 1930 and 1932. These four expeditions represent the first systematic excavations of Norse remains in Greenland, and made a major contribution not only to the history of the early settlements there, but also to the wider field of European history in the Middle Ages. The most important results were published in *Meddelelser om Gronland* (1924, 1929 and 1934) and deal with his excavations at Herjolfsnes, Gardar (together with A. Roussell), and Brattahlid (together with M. Stenberger).

His duties at the Nationalmuseum prevented him from visiting Greenland after 1932, but he supported many subsequent expeditions to investigate the Norse settlements. He himself continued active archaeological work in the Scandinavian area, and from 1934 to 1942 personally directed the excavation of the Viking fortified camp at "Trelleborg" in Denmark. He became director of the Nationalmuseum in 1938.

Kommandor Henrik Olufsen Ravn was born on 13 November 1868 and died on 21 October 1949. As a young naval officer he specialized in navigation and marine survey, and took part in the *Ingolf* expedition to the waters of Iceland and Greenland in 1895–96. From 1900 to 1909 he was instructor in navigation at the Danish naval college, and in 1910 became head of the survey section of Kongelige Sokart-Arkiv (Danish Hydrographic Office). He was appointed Direktor (Hydrographer) in 1919, and held this post until he retired in 1933.

It was Ravn who in 1933 proposed the construction of the 800-ton survey vessel *Hejmdal* for a maritime survey of Greenland. He planned a series of seven coastal charts on a scale of 1:400,000, from Upernavik in the north to Kap Farvel in the south. The first of these, covering Disko Bugt, was published in 1937, and the other charts in the series will appear in the near future.