

Year-round operation of the whole of the Northern Sea Route, use of hovercraft and dirigibles, and the formation of new territorial-industrial complexes (TPK) were thought of as some of the means to the desired end. Since the Soviet sector of the Arctic is already much more developed economically than any other part of the polar regions, including Alaska, the fact that this high-powered expedition was sent out is testimony to the Soviet government's intention to expand further the economic exploitation of the area, and indeed of the importance of the Soviet north to the Soviet economy as a whole. The expedition will no doubt publish its findings, but Academician Aganbegyan notes that it will take 'some time' to digest the large volume of data acquired. (*Pravda*, 6 October 1980.)

MEMORIAL TO G. W. DE LONG

A party from the geography faculty of Moscow University, led by V. Korotayev and travelling in the ship *Nikifor Begichev*, has spent the last two seasons studying the Lena delta. During the 1980 season they visited the grave of George Washington De Long, the American commander of the *Jeannette* expedition, who died in 1881 on one of the islands near the most westerly channel and is buried at a rocky cliff called Skala Kyuyegel'khaya. The party honoured De Long's memory with a minute of silence. The grave, which had originally been marked by a cross, is now the site of a small obelisk surmounted by a metal model of a sailing ship, placed there recently by school-children from the town of Tiksi. (*Vodnyy Transport*, 1 November 1980.)

OBITUARY

FRANCIS DOWNES OMMANNEY, marine biologist and author, died on 30 June 1980 at the age of 77. Son of a London solicitor he was born on 22 April 1903 and educated at Aldenham School. After a brief but illuminating spell as an office boy in the City, Ommanney read Zoology at the Royal College of Science, London, and from 1926–29 was Assistant Lecturer at Queen Mary College. In 1929 he was appointed to the staff of the Discovery Committee and for the next ten years he spent much of his time in Antarctic waters, at first examining whale carcasses at the South Georgia whaling stations and later taking part in the oceanographic cruises of *Discovery II*. He was awarded the Polar Medal in 1942.

After service in the RNVR during World War II, Ommanney continued his marine biological research, first working for the Mauritius-Seychelles Fisheries Survey and later at the University of Hong Kong. In addition to his scientific publications he wrote a number of travel and adventure books, including *South latitude*, *North Cape* and *Lost leviathan; whalers and whaling*, as well as two autobiographies and a number of popular science publications.

Dr **MARY ALICE MCWHINNIE**, a leading specialist on the biology, distribution and life history of Antarctic krill, died in Chicago on 17 March 1980 aged 57. In 1974 she became one of the first two women to winter in Antarctica. Between 1962 and 1974 she took part in scientific cruises in Antarctic waters aboard the USNS *Eltanin*; during 1975–76 she continued her krill research at Palmer Station and aboard the research vessel, *Hero*. Dr McWhinnie, a member of the De Paul University faculty since 1946, devoted much of her time to national and international committees and worked tirelessly to promote the Scientific Committee on Antarctic Research BIOMASS programme. Her bibliography of world literature on krill is to be published shortly.

JØRGEN STUBBERUD, carpenter and last survivor of Amundsen's Antarctic expedition, died on 12 February 1980 in Oslo. He was 96. It was Stubberud who constructed the prefabricated wintering hut for the South Pole expedition, and although he took part in the first, abortive start for the pole in September 1911 he agreed to join Prestrud and Johansen and go to King Edward VII Land instead. After the expedition Stubberud returned to his native Norway. It was to be his only foreign travel.

Commander **JACOB BURSEY**, USCG (retired), a member of two of Admiral Richard Byrd's Antarctic expeditions, died in Shelby, Michigan, on 23 March 1980. He was 76. Born in St Lunaire, Newfoundland, Bursey joined Byrd's first expedition of 1928–30. Nine years later he went south again to take part in Byrd's 1939–41 expedition, as a dog driver, wintering at the expedition's West Base in the Bay of Whales. Bursey's career in the US Coast Guard also took him to Arctic regions, when he served as a navigating officer on the icebreaker, *Northwind*. After his retirement in 1954 Bursey made one further trip to the Antarctic; in 1955–57, he acted as a technical advisor to Operation Deepfreeze I.

MIKHAIL VASIL'YEVICH VODOP'YANOV, one of the best-known Arctic flyers, died in Moscow on 13 August 1980, aged 80. He started his aviation career in the 1920s as a civil airline engineer and then pilot, and one of his tasks was to pioneer the air route from Khabarovsk to Sakhalin. In 1934 he was involved in the spectacular rescue of the crew of the *Chelyuskin* after she had been crushed by ice north of Bering Strait, and for this he became one of the first bearers of the title Hero of the Soviet Union. He was one of those who took part in planning the first Soviet drifting station at the North Pole, and in 1937 he flew one of the aircraft which established Papanin's party there—the first one of four to land. During the World War II he commanded an air division and held the rank of Major-General in the Red Air Force. He wrote a novel and numerous children's stories, as well as an autobiography which appeared in English as *Wings over the Arctic* (Moscow, c 1955). He held four Orders of Lenin and four Orders of the Red Banner.