His loyal devotion to these clubs and his enthusiasm for their activities will be missed.

J. HOWARD CARLSON

GEORGE HUBERT WILKINS 1888-1958

Our Honorary Member, Sir Hubert Wilkins, died on December 1, 1958, and with his passing the Club, in concert with many groups and individuals, has lost a true friend. Science and Arctic development have felt the loss of one of the truly greats of polar exploration.

Wilkins was a man possessed of a rare quality of perception and vision that enabled him to appraise correctly the potential of new developments, and to project his thinking into the future in terms of their eventual application. Thus he evaluated the infant Air Age as a revolutionary tool in the service of mankind and the submarine as a scientist's platform in man's study of the seas. As his experience in polar exploration and research broadened, he applied these logistic aids with such confidence and success that, by example, he set the pattern upon which the present quest for fundamental understanding of the Polar Regions is founded.

Wilkins was born in 1888 on his father's sheep station at Netfield, South Australia, and developed during his education at the Adelaide School of Mines a burning desire to see the world. He became a newsreel photographer and, on his arrival in Great Britain, sought to combine his metier with aviation. Learning the fundamentals of flying he was one of the first to take motion pictures from aircraft and also one of the first to parachute from an airplane. The Balkan War found him assigned as a photographic correspondent to the Turkish Army and he is credited with taking the first successful motion pictures of actual combat.

In 1913 while on assignment in the West Indies he received a cable inviting him to join a polar expedition as photographer. At that time the names of Amundsen and Scott were on everyone's lips and, as an Australian, the lure of the Antarctic was strong in him. He accepted the invitation and one can imagine his astonishment at finding himself a member of the Canadian Arctic Expedition 1913-1918, under the leadership of Stefansson.

So natural was his competence and so avid his interest in the North, that his contribution to the Canadian Arctic Expedition extended far beyond his responsibilities as photographer. In fact, photography became a minor matter, for when the *Karluk* was crushed in the ice most of the

photographic supplies were lost. Undeterred, Wilkins set about advancing the scientific aims of the expedition and from 1914 to 1916 he traveled more than 2500 miles by dogteam and small boat, collecting scientific data in the fields of meteorology, oceanography, and tidal studies.

When news of World War I reached him Wilkins left the expedition and traveled to Australia where he was commissioned in the Australian Flying Corps and, after traveling more than 301,000 miles from the Arctic, arrived at the battlefronts of Western Europe, where he participated in every engagement fought by the Australians. He was wounded nine times, was twice mentioned in dispatches, and was awarded the Military Cross and Bar for exceptional bravery.

During his long sledge journeys in the Arctic, Wilkins had dreamed of the day when the airplane would supplant the dogteam in polar work. That such a day would come he never doubted, but he recognized that the effective use of aviation in the north must depend upon an understanding of polar meteorology. Even as he led the British Museum's Expedition to northwestern Australia in 1923-1925 and witnessed the devastating droughts of his native land, he conceived the need for a worldwide expansion of weather-reporting facilities, not only in the interest of polar work but as an essential tool to agriculture, industry, and commerce. He presented a long-range plan to meet this need but it was discarded as premature and twenty years were to pass before his proposals were to materialize.

These years were filled with polar activity on Wilkins' part. He was perhaps the most perapatetic man who ever lived, for scarcely a season passed between 1926 and 1938 that failed to record his presence in one or the other polar area. In 1926, under the auspices of the American Geographical Society, with which his scientific objectives were to be continuously associated, Wilkins began a program of aerial exploration of the Arctic Basin that carried through 1928. In that year, and with Ben Eielson as pilot, he performed what was undoubtedly his greatest polar exploit—a flight from Barrow, Alaska, to Spitsbergen. This flight stands unparalleled as an example of combined piloting and navigation. It also failed to confirm the existence of "Crockerland" as reported by Peary. On his arrival in England, Wilkins was knighted by King George V, not, as is popularly supposed, in recognition of this outstanding flight, but as a reward for his wartime services, his contributions to the natural sciences, and his polar accomplishments.

Then came two Antarctic forays, the former in 1928 resulting in the

first flight ever made in Antarctica, and both recording important delineation of the coastline in the Atlantic and Pacific sectors.

In all his flying over the Arctic Ocean no land had been discovered on which permanent weather-reporting stations could be established. Unwilling to accept the floes of moving pack-ice as observation platforms, and unsatisfied that surface vessels could penetrate the ice to suitable locations, Sir Hubert turned to the submarine. He acquired the obsolete U. S. Navy submarine O-12, converted her into a floating laboratory, and proposed a journey under the ice from Spitsbergen to Bering Strait. Renamed the Nautilus, his submarine met adversity at every turn, yet despite a number of critical malfunctions of mechanical equipment, Wilkins directed her under the polar pack-ice, and thus set an example, the full exploitation of which was to require twenty-seven years. It is hardly coincidental that the nuclear-powered Nautilus was the vessel designated the task of finishing the job Wilkins had begun, or that the U. S. Navy had Jules Verne entirely in mind in planning her trip.

From 1933 to 1936 Sir Hubert was closely associated with the Antarctic projects of Lincoln Ellsworth and he had much to do with the planning and field work that led to Ellsworth's epic first aerial crossing of the Antarctic continent in November and December 1935.

No sooner returned to the United States than Wilkins was to perform his last great feat of Arctic exploration, this time as Samaritan. In August 1937 the Soviet aviator Levanevsky was lost on a flight from Moscow to Fairbanks. Wilkins was put in charge of the aerial search on the North American side of the Pole. During this search he flew more than 40,000 miles and scanned an area of 150,000 square miles that had never been seen by human eyes. Though Levanevsky was never found, these search flights added immeasurably to our knowledge of ice conditions and of Arctic weather as it affects flying operations.

With the outbreak of World War II Sir Hubert turned his vast experience to the interests of the U. S. Army. He joined the Office of the Quartermaster General as a consultant and was influential in the development and application of military needs in the new concept of total war. He continued this association until he died, adding to it responsibilities on behalf of many national organizations concerned with polar research.

Never a climber—in a strict definition of the term—Wilkins possessed in abundance the spirit that motivates the true mountaineer—a love of the high ranges and of the wilderness, and the ability to live and travel within them. Honors came to him from all parts of the world, yet he took pride

most in those that expressed the respect and admiration of his own colleagues. Thus he valued his association with the American Alpine Club, to which he was elected an Honorary Member in 1948.

Tangible honors are momentary in their reward and historical in their significance. In Sir Hubert's case the living monuments to his memory must be the network of polar weather-stations for which he strove for twenty years; the scientific stations on the drifting ice of the Arctic Basin; the maturity of the submarine as a vehicle free to move in polar waters; and the reorientation of geographic thought—political, economic, and scientific—that the airplane engendered.

WALTER A. WOOD

NATHANIEL LEWIS GOODRICH (1880-1957)

Mr. Goodrich was born in Concord, N. H., February 9, 1880 and died in Boston, April 30, 1957. He was the son of Arthur Lewis and Mary (Bachelder) Goodrich. On July 30, 1908 he married Alice Lyman, who survives him. He was graduated from Amherst in 1901 and received their honorary LL.D. in 1941. He took a B.L.S. degree from New York State Library School in 1904.

Goodrich served as chief of the order section, New York State Library, 1906-07; librarian of the University of West Virginia, 1907-09; and librarian of the University of Texas, 1910-12. He went to Dartmouth College as librarian in 1912 and directed the move, sixteen years later, into the new Baker Library, his greatest memorial. At Dartmouth he was awarded the honorary faculty M.A. in 1916 and was made a full professor in 1943. During World War I he served as captain with the map department of the Army military intelligence branch, and later developed the outstanding map collection of Dartmouth. At the time of his retirement in 1950, his portrait was painted for the Baker Library.

In the 1941 degree citation, Goodrich, among other qualifications, was mentioned as an "alpinist," referring, of course, to his avocation as climber, skier, and outdoor enthusiast. He joined A.A.C. in 1926. He was also a member of the Appalachian Mountain Club, Alpine Club of Canada, Ski Club of Great Britain, the National Ski Association, and Kandahar. He was editor of the American Ski Annual (1934-40), a contributor to Appalachia, and was the author of a small volume, The Waterville Valley (1952), expressing his lifetime familiarity with this area of the White Mountains. In his early years at Hanover he served on the Council of the