

LOUIS OTTO QUAM (1906–2001)

Louis O. Quam, highly respected geologist/geographer, academician, and government science administrator, died on 25 July 2001 at age 95. He was best known in the United States and Canada, but widely recognized in several other countries for his many contributions to the advancement of the field of geography, for his influence on expenditure of significant government resources to fund geographic and other research, and for his broad administrative support of research in both the Arctic and the Antarctic.

Louis was a son of Norwegian parents who emigrated from Oslo to Salina, Colorado. He attended public schools in Boulder, Colorado, graduating from high school in 1925, and later attended the University of Colorado there, earning Bachelor of Arts (1931) and Master of Science (1932) degrees in geology.

Numerous recognitions acclaimed his achievements in earth sciences and science administration: he was a fellow of the American Association for the Advancement of Science, the American Geographical Society, the American Geophysical Union, and the Arctic Institute of North America. He was also a member of the Cosmos Club, the Explorers' Club, and several professional organizations. He held two honorary doctorates, the first from the University of Colorado (1974), and the second from the University of Alaska Fairbanks (1988).

In 1935, Quam married Martha Louise Cushing, who would later become a highly regarded teacher of Latin in the public schools of Falls Church, Virginia. Following their marriage, he decided to complete his formal education at Clark University in Worcester, Massachusetts. There, holding the Libby Fellowship, he completed requirements for his doctorate in Physical Geography (1938). Next, he returned to the University of Colorado as Assistant Professor of Geography (1938–42). At this point, his promising career was interrupted by a period of service in the United States Navy (1943–46). Honorably discharged from the Navy with the rank of Lieutenant Commander, Quam quickly returned to university life as Associate Professor of Geography at the University of Virginia at Charlottesville (1947–50). This, however, proved to be his final academic appointment.

Several events in the immediate post-war years would dominate Louis' career. These included the founding of the Office of Naval Research (ONR) (1946) and the establishment of its Arctic Research Laboratory (later renamed Naval Arctic Research Laboratory (NARL) at Barrow, Alaska (1947) and then, the most dominating of all, the founding of the U.S. National Science Foundation (NSF) (1950). Each of these was to have future importance to Quam, and he was to give dedicated service and distinction to all.

It is most appropriate that AINA memorialize Louis Quam in the pages of *Arctic*, because doing so recalls important contributions the Institute made to Navy research in the Arctic and Subarctic under ONR support. At the same time, it reflects the importance of Quam's judge-



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ment and influence in support of many AINA goals, which enhanced the growth of the organization and advanced scientific investigation of the North. When Quam accepted appointment to the ONR as Head, Geography Branch, Earth Sciences Division in 1950, he many not have foreseen the importance of this appointment.

In the ONR, Quam was drawn into membership of many committees and panels of other organizations that were related in diverse ways to his fields of responsibility. Many sought his participation on boards, standing committees, and study groups, which, in some cases, endured for several years. The quality of thought and action he offered were much valued in both government and civil organizations, and his record of hard work and dedication to excellence put his time in great demand. He was often asked to represent organizations at international meetings, and he traveled widely, contributed wisely, and was known and depended on for his lucid and thorough reports. In fact, he was offered far more of these responsibilities than his position or family life permitted.

Shortly after his arrival at ONR, the Environmental Sciences Branch, Biological Sciences Division, elected to give up support of its Arctic research program, including NARL in Alaska. ONR management had to determine quickly whether to let the program lapse or to find another administrative entity within the organization willing to take it over. The program and its budget were small, but Quam, with characteristic enthusiasm (seeing an important avenue to enhance the scope of Geography Branch programs and to stimulate all forms of research in the North), was determined to take on the responsibility. First, however, he conducted a careful study of

the prospects for success or failure. In this study, it was essential that he visit NARL and assess the importance of its potential. Thus, he made his first visit to the Arctic in 1950. Impressed by the possibilities for success and growth of the laboratory, he returned to Washington, D.C., and announced his desire to accept the challenge of an Arctic program.

The Chief of Naval Research agreed to transfer the program, along with the pertinent budget, and Louis took over (1951). For four years, he was the sole manager of the Arctic Program (the official name within the Geography Branch) and fully responsible for all details of budgeting, program planning, selection of research projects, and provision of required laboratory and field services, primarily at NARL. These functions were, of course, additional to his other duties as Head of the Branch. He exhibited exceptional organizational skills in plotting the future course of the program and, to this end, made extensive use of expert individuals and committees as consultants. He was able to employ a Scientific Officer (1955) to share the workload but then relinquished all Branch-level management roles upon being promoted to the position of Director, Earth Sciences Division (1959). In that position, however, he remained a stalwart support of the Arctic Program. Of greatest importance, he was now in a position to influence decisions of the Chief of Naval Research and, through him, other Navy offices—and on rare occasions, the Congress of the United States.

Dr. Quam would have been pleased to know that some specific instances of his distinguished accomplishments are recorded here, not to be forgotten. Some may seem small in today's world of big science budgets for polar investigations, but each represented a major advance in its time. Here follow some examples:

- A contract with the University of Alaska (1952), which vested in it the operational responsibility for NARL, an arrangement that was to endure throughout the remaining years of its funding by ONR;
- A contract with AINA (1952), which authorized subcontracting of research, primarily at NARL; provided for furnishing advice and guidance (the entire AINA membership could be called upon as needed to stimulate research proposals and conduct peer review of proposals received) and performing other functions, such as organizing seminars and symposia and publishing special studies of ONR interest; and called for ONR to contribute funding for the compilation and publication of the excellent Arctic Bibliography;
- Establishment of an air support facility at NARL (small and medium aircraft, pilots, mechanics, and an aircraft hangar, all under NARL operational control);
- Initiation of a program of research on drifting ice, both pack ice and ice islands in the Arctic Ocean, conducted with NARL expertise and resources;
- Completion of all necessary approvals and funding for the construction of the completely new and modern living and laboratory facilities at NARL in 1967.

Two years later, Quam was an honored guest at the dedication of the new facilities.

In the opinion of the author, Quam's greatest single policy decision on behalf of Arctic research was his action to operate NARL as a Navy-funded laboratory, and also to recognize it as a national asset that should be made available for the use of others besides the ONR contractors or subcontractors (e.g., AINA under the terms of the ONR contract) for whom it existed. Since NARL was in a remote area where research logistics costs were high and often prohibitive, Quam argued, it should be legally possible to share its resources with personnel of other federal agencies or other institutions using federal funds. The goal was to use the tax-funded laboratory flexibly to support all possible applicants meeting its very intricate and stringent legal requirements. The Chief of Naval Research approved this innovation, and NARL attracted much basic and engineering research that would otherwise have been more expensive or impossible. All may be assured that this very intellectually honest, modest, and even humble gentleman was always made visibly happy when complimented by an individual or an institution enjoying benefits from his most important actions.

By 1967, Quam had enjoyed major successes in the field of Arctic research. At age 61, he was capable of further challenges, and a notable challenge was at hand: the NSF offered him the prestigious position of Chief Scientist of its Office of Antarctic Programs. This could well have been interpreted as a career-crowning position, and the Arctic element of research was becoming more prominent in NSF since Congress had designated NSF the lead agency for that function. For whatever reasons, Louis accepted the offer and served two years in the Chief Scientist position (1967–69). At this point, the office was renamed in recognition of its total responsibilities, becoming the Office of Polar Programs. Louis was designated Acting Head of the office, a position he held for two years (1969–71); he then served as Chief Scientist for two more years, until his retirement in 1972.

In retirement, Quam enjoyed a good and happy life with Martha, their daughter Margaret Quam Bonifant (her husband and children nearby), and son Phillip (with wife and their two children), a few more hours distant. Louis was content until he lost Martha (1987), his companion for more than half a century. About five years later came the onset of his own health problems, which increasingly and persistently plagued him for the rest of his days. Daughter Margaret, always near him in his succession of retirement and nursing homes, gave him every needed assistance, a fact he regularly acknowledged. He was a good and decent man, whether at home or in the office, and he will be affectionately remembered and missed by all who knew him.

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