

KEITH CHARLES ARNOLD (1931–2014)

“A happy, ebullient character, he brought with him an immense enthusiasm for both work and play. Whether it was in fancy dress on New Year’s Eve, or muffled up in wind proofs at his theodolite, Keith put his heart and soul into the job in hand.” Thus did Cdr. Jim Simpson, R.N., leader of the British North Greenland Expedition 1952–54, describe Keith Arnold, who joined the expedition as a surveyor in 1953 (Simpson, 1957).

Keith Charles Arnold was born to George and Dorothy Arnold on 5 June 1931 in Birmingham, United Kingdom, but grew up in Cornwall. He was intensely proud of his Cornish roots and indeed called himself a Cornishman. He took a BA in Geography at Cambridge University in 1953 and then joined the British North Greenland Expedition in Dronning Louise Land, northeast Greenland, in August of that year. Keith remained with the expedition until its return to the U.K. in August 1954. For his services to the expedition, Keith was awarded the Polar Medal by H.M. The Queen.

While working in Norway, where he traveled extensively and became fluent in Norwegian, Keith met and married Anne Gunvor Rogstad in 1954.

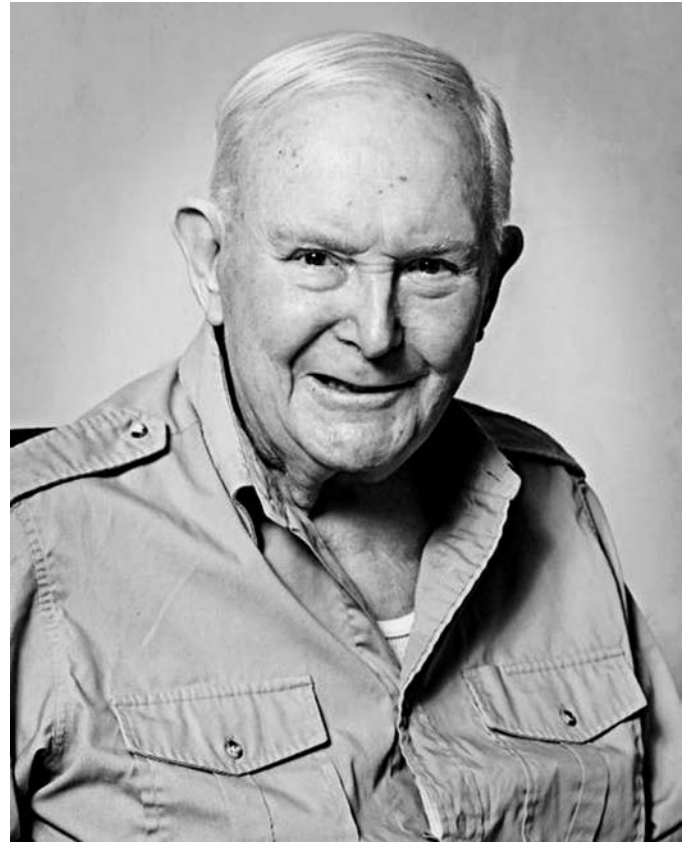
The following year the Arnolds immigrated to Canada, where Keith began a 28-year career in the Canadian public service, first with the Geographical Branch of the Department of Mines and Technical Surveys and from 1967 on, with Environment Canada. Keith’s early work consisted of surveying and mapping support for scientific expeditions of agencies such as the Defence Research Board (DRB) and the Polar Continental Shelf Project (now Program) (PCSP).

In 1957 and 1958, Keith participated in a glaciological expedition to the Lake Hazen area of northern Ellesmere Island, led by Geoffrey Hattersley-Smith of the DRB. Operation “Hazen” was one of Canada’s contributions to the International Geophysical Year. The summer program in both years involved a glaciological and geophysical study of the Gilman Glacier, north of Lake Hazen. Keith was charged with running a 180 km, subtense-bar level traverse from Chandler Fiord, southwest of Lake Hazen, to Clements Markham Inlet on the north coast. The traverse took both summers to complete, with dog teams, snowmobiles, and pack-dogs used for transport (Hattersley-Smith, 1974).

Immediately after finishing work on Ellesmere Island in August 1958, Keith served as Canadian liaison officer on Operation “Groundhog,” a U.S. military exercise investigating ice-free sites for landing large aircraft in North Greenland.

From 1959 to 1962, under the auspices of PCSP, Keith made meteorological observations and measurements of mass balance and flow of the Meighen Ice Cap on Meighen Island.

Keith returned to northern Ellesmere Island in 1965 for the first of four consecutive summer seasons attached to the DRB’s Operation “Tanquary,” also led by Hattersley-Smith.



Keith Arnold, aged 81 (Photo: François Brunelle).

In 1967, after completing glaciological work on Gilman Glacier, Keith surveyed some of the high nunataks on the ice cap to the southwest. He, along with four members of a British Royal Air Force expedition that was traveling in the area, made the first ascent of Barbeau Peak, at 2616 m the highest point in eastern North America, on 7 June 1967 (Hattersley-Smith, 1970).

The glaciology group in the Geographical Branch, of which Keith was a member, was transferred to the Inland Waters Branch of Environment Canada in 1967.

Keith’s determination of the changes to the Gilman Glacier over the period 1957–67 formed the basis of an MSc thesis presented to McGill University in 1968. His glaciological work became increasingly research-oriented and centered on developing terrestrial photogrammetric methods for measuring changes to glacier volume. In 1969 and 1970, Keith applied these methods to study terminus fluctuations of the White Glacier on Axel Heiberg Island, under the general supervision of Fritz Müller, head of the Axel Heiberg research program at McGill University. For his work on the White Glacier, McGill awarded Keith a PhD in 1978.

Keith retired in 1983, continuing to live in Ottawa. The early retirement years were busy ones, and Keith maintained his long-standing interests. He was an enthusiastic



Keith at work at Gilman Glacier, May 1967.

choral singer and was a member, at one time or another, of the McGill University, Ottawa Welsh, and Ottawa Unitarian Church choirs, among others. He was a founding member of the Nakkertok Ski Club and a keen supporter of the Canadian Ski Marathon, Rideau Trail, and TransCanada Trail. Until his later years, Keith was an active member of the Canadian Nordic Society and The Arctic Circle. During the 1960s, when the annual dinners of The Arctic Circle were held at the Eastview Hotel in Ottawa, the traditional summons to dinner was the blowing of a narwhal tusk with a broken-off tip. The hornblower was Keith Arnold.

Keith suffered from bipolar mental illness, inherited from his father, but in no way did this affliction seriously affect the quality of his work, the acuity of his mind, or his highly developed sense of humour and penchant for storytelling.

Keith and Gunvor divorced in 2002, but Keith remained close to their three children and their families until the end of his life. A few years before his death, Keith developed symptoms of progressive supranuclear palsy, an uncommon brain disorder that affects movement and balance. Keith's condition gradually worsened until he became confined to a wheelchair. Keith died on 21 July 2014.

Keith is survived by his former wife Gunvor, their children Elisabeth (Raymond Guardia), Anne-Kristina (Raymond Massey), and Sylvia (Alastair McColl), five grandchildren, and his sisters Judith Inge and Rosemary Barton.

ACKNOWLEDGEMENTS

I am indebted to Elisabeth Arnold for details of her father's life. I learned of Keith's participation in Operation "Groundhog" from Peter R. Dawes.

REFERENCES

- Hattersley-Smith, G. 1970. Barbeau Peak. *Canadian Geographical Journal* 80(3):86–91.
- . 1974. North of latitude eighty: The Defence Research Board in Ellesmere Island. Ottawa: Defence Research Board.
- Simpson, C.J.W. 1957. *North ice: The British North Greenland Expedition*. London: Hodder and Stoughton.

Thomas Frisch
545 Piccadilly Avenue
Ottawa, Ontario K1Y 0H9, Canada
tfrisch@sympatico.ca