expedition's final plans included two crossings by sledge of the ice cap and one boat journey down the east coast to Julianehåb (Qaqortoq). Hampton and Rymill were to cross to Holsteinsborg (Sisimiut) on the west coast. This involved a dog sledge journey to the eastern border of the west coast mountains and a hundred-mile kayaking and walking trek to Holsteinsborg. Since kayaks were necessary for the completion of the journey, they had to be transported on the sledges on special frames that would put them out of reach of the dogs and their passion for anything suggestive of seal meat. Owing to an enforced late start, by the time they reached the mountains, wintry weather had set in, and fresh ice and new snow made walking and kayaking extremely arduous and very dangerous. At one stage their kayaks were both turned over and caught under the edge of an ice shelf. Occasions like this cemented the already strong friendship between Hampton and Rymill and led to Hampton agreeing to accompany Rymill as deputy leader on his Antarctic expedition three years later.

On the British Graham Land Expedition, Hampton was both deputy leader and chief pilot in charge of all flying and aircraft maintenance. On this occasion there was only one aircraft, a de Haviland Fox Moth. As one of the main aims of the expedition was to make a topographical survey of an unmapped part of Antarctica, the flying programme was of first importance. Much new land was seen first from the air and subsequently mapped on the ground, in the course of which it was proved that Graham Land was part of the main continent and not, as claimed by Sir Hubert Wilkins, an archipelago. Ham was entirely responsible for the flying programme — 150 hours were flown altogether, with the aircraft constantly needing attention to maintain its efficiency under difficult conditions. In addition to this, Hampton had the responsibility of deputy leadership, and one of his major non-flying tasks was to design and supervise the building of the new base hut for the second year of the expedition. The expedition had permission to use any of the timber stored at the old whaling station on Deception Island, and Hampton, on his way south, had made a note of what was available.

Specifications had been drawn up by the time Penola

returned to Deception Island in the second summer, and all the necessary timber was brought back to the first base. Here, under Hampton's supervision, the main beams were cut to length, mortices and tenons were cut and numbered, and everything was readied for assembly at the new base, which we hoped would be some 200 miles further south. The house, including the adjoining hangar and workshop, was completed in 19 days and was a complete success, thanks to the skill and supervision of Hampton and Jim Moore, another engineering graduate.

The final and very important sledging journey of this expedition was the crossing of Graham Land by Rymill and Ted Bingham. There had always been some doubt as to whether Bingham could manage such a journey because of an old rugby injury to his knee, which gave him considerable trouble. However, the journey was successfully completed, in part thanks to an ingenious splint and harness designed and made by Ham. He was indeed an excellent expedition man.

Prior to 1939 Hampton was a member of the RAF Reserve of Pilots, and when war commenced he joined the Department of Civil Aviation under the Air Ministry. He was concerned with the most profitable use of the various civil aircraft taken over in 1939 by the RAF when all independent civil aviation ceased, and with the possible use and extension of civil airfields.

Anxious to get back to active flying, he was seconded in 1942 to BOAC, where he was involved in the Leuchars to Stockholm clandestine night operations used to fetch urgently needed raw materials that were available in Sweden, such as ball-bearings and mica. Subsequently, he was posted to the Middle East, India, and Africa. After the war, he joined the Napier Aircraft Company.

Hampton was a Freeman of the Guild of Pilots and Air Navigators. In his later years, his great interest was sailing with his family from his home in Lymington. He also served a term as Vice Commodore of the Royal Lymington Yacht Club. He married Joan Fooks in 1945, and they had a daughter and a son. Hampton's widow and children survive him.

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The disappearance of Hans Krüger Randall J. Osczevski

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William Barr's excellent review of the career and disappearance of Dr H.K.E. Krüger (*Polar Record* 29 (171): 277–304) opens the door to further speculation on the fate of the lost German Arctic Expedition. Among other things, it suggests that Krüger had a contingency plan to

winter in the Canadian Arctic islands. His cryptic remark that any search for him would be 'totally pointless' (Barr 1993: 289) makes perfect sense in this light. Because he failed to achieve his primary goal after so many years of planning, it is possible that he decided not to return to Greenland in 1930.

Because no trace of the German Arctic Expedition was found when Cape Sverre was searched in 1957, it has since been assumed that Krüger and his colleagues died before reaching Amund Ringnes Island. However, Krüger did not leave a message on landing on Meighen Island; he

waited until reaching Stefansson's cairn on its western coast. He might have done the same on Amund Ringnes Island if he had known of a signpost left by Stefansson's party a few miles south of Cape Sverre, on Hassel Sound. Stefansson (1921) did not mention it in his narrative.

Cape Southwest is high and was used by travellers to examine the sea ice before travelling east or west. It had several cairns on its summit. Because no messages were found from Krüger on Cape Southwest, it must be assumed that his party either perished between Meighen Island and Cape Southwest or did not go east of Cape Sverre. The RCMP must have been convinced of this for they did not search the south coast of Axel Heiberg Island very carefully. This was evidenced by the fact that neither patrol noticed the large fiord that had not been mapped. Surprise Fiord was not discovered until 1937.

The cairn on Departure Point of Meighen Island contained no message, for Stefansson had not left one when he built it. That there was no message from Krüger confirms that he crossed the ice directly from Andersen Point towards Cape Sverre, despite his previous plans. Krüger's decision not to cross to the middle of the east coast indicates that he had made up his mind not to go farther east, at least not before going south through Hassel Sound, and maybe not before the next spring.

Krüger had been advised that he could easily winter on Lougheed Island or possibly Axel Heiberg Island (Barr 1993). The latter might have been too close to Greenland. If they reached Axel Heiberg too early in the season, they might have been tempted to continue, at least to the Bache Peninsula RCMP detachment. There is still ice in Eureka Sound and Bay Fiord in June and much of July. If Krüger wanted to have another try at finding the edge of the continental shelf the next spring, Lougheed Island might well have been his destination.

Stefansson (1921: 620) called Lougheed Island an Arctic paradise and an ideal place for a small expedition to spend the winter. He also proved that it was possible to travel from Cape Sverre to Lougheed Island in July and early August. As it would have been only mid-May when Krüger's party reached Hassel Sound, timing would not have prevented them from reaching Lougheed Island. Krüger would probably have crossed Hassel Sound before travelling south, because Stefansson had already explored and charted the eastern shore.

Because Krüger had a penchant for collecting the notes of previous explorers and leaving his own in their cairns, it would be interesting to learn whether the MacMillan cairns on the south end of Ellef Ringnes Island and on King Christian Island have been examined since 1930. It would also be interesting to learn whether the cairns left by Castel and Stefansson on Lougheed Island have been examined since that time.

If the German Arctic Expedition attempted to winter on

Lougheed Island, its members would surely have camped close to the 'hill of coal' (Stefansson 1921: 620). This was located a few hundred meters from Coal Hill, marked on the topographic maps near the southeast corner of the island. Coal Hill was visited by a geological party in the 1980s, but the members of it do not appear to have seen the 'hill of coal,' or any trace of previous visitors.

The consensus of opinion gathered by Professor Barr seems to be that carbon monoxide poisoning was a more likely cause of death than starvation or drowning (Barr 1993: 300–301). A carbon monoxide leak from an improvised coal-burning stove might easily have resulted in the loss of the party.

Barr hopes that the unnamed island south of the Fay Islands might hold a clue to the fate of the expedition (Barr 1993: 301). Several years ago, I examined the air photographs (A13861-1, A13861-2) of that island with the same thought in mind. I thought I detected a small area in a hollow on the top of the island that appeared peculiar, conceivably marking a grave. However, because the map shows that there is a benchmark very close to that spot, the disturbance of the ground might have nothing to do with Krüger. A cairn or grave on the heights probably would have been noticed by the party that left the benchmark, but a camp on its lower west end might easily have been missed. Satellite images sometimes show a polynya south of the island, which might have presented some hazard, or an opportunity for hunting.

Krüger was probably running a straight line of soundings between the larger islands and would not have welcomed a diversion, particularly eastwards. As he had agreed not to claim any new islands for Germany as a condition to his explorer's licence, there would have been little reason to visit the island. Although it now seems to me that it is unlikely that Krüger's party would have visited this spot, it cannot be ruled out. Incidentally, the island was seen by Stefansson's party in 1916, according to the journal of Harold Noice (1916), but it somehow escaped being charted.

In the year that Krüger, Bjare, and Akqioq disappeared, the last camp of the Andrée North Pole expedition was discovered on a desolate Arctic shoreline. The journals and photographs were found intact after more than three decades. Perhaps it is still not too late to learn the complete story of the lost German Arctic Expedition.

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