

In July, 1981, a team of six investigators went to the northern tip of Labrador, and there found the remains of a wartime weather station installed by the Germans in 1943. Pinpointing the site was made possible by photos, such as this, taken by men of the U-boat which had carried the weather station across the Atlantic.

The Nazi weather station in Labrador

Alec Douglas

Weather forecasting is not only a regular feature of our daily lives, it is vital to military operations. Just how vital it was in World War II is well known, but only this past summer did we learn that in 1943 the Germans actually placed their own weather recording instruments in North America. It was done in a daring exploit by a German U-boat on the remote coast of northern Labrador.

Geography favoured the Allies in obtaining weather information, and the Germans had to exercise great ingenuity to overcome this disadvantage. Their ingenuity manifested itself in several ways.

First, they were prepared to take exceptional risks to set up weather stations on remote territory, even when it was in enemy hands. Then, German scientists developed some

sophisticated systems of automatically obtaining and transmitting the temperature, barometric pressure, wind force and direction.

Once set up, these unmanned stations would be activated by a timing device which would switch on a radio transmitter every three hours for about three minutes: one minute for warming, and two minutes for transmission of coded weather information. The data would be picked up by receiving stations in northern Europe. This was possible because although the battery-powered transmitter only had an output of 150 watts, it broadcast on the high frequency band, between 3,000 and 12,000 kilohertz.

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The story of the recent discovery began to unfold about five years ago when Franz Selinger, a retired engineer living in Ulm, West Germany, started to compile information for a book on German weather reconnaissance in the Arctic. Although the Austrian-born Selinger has the old-world charm one associates with that country, he also demonstrates bulldog persistence and meticulous thoroughness in his research. Without his efforts this story would probably never have been told, because the U-boat concerned was sunk with all hands before the war was over.

In the course of his research he came across a reference to an automatic land weather station in Labrador. Of 21 stations built, 14 were established in Arctic or sub-arctic regions, but all except this one went to sites in the Barents Sea above Norway.

Selinger wrote to me in 1980 asking

whether there was anything in our Canadian military archives about the Labrador station. I was intrigued but sceptical.

Even if a U-boat had slipped into Labrador coastal waters undetected (not too difficult on that lonely and unpatrolled shore), radio transmissions from the region would surely have resulted in a search and an intelligence report. Yet Canadian military archives are silent on the subject.

Unfortunately, the records of the Operations Intelligence Centre at naval headquarters in Ottawa were disposed of after the war. Files from the Flag Officer Newfoundland, from the Commander-in-Chief Canadian Northwest Atlantic and from Eastern Air Command of the RCAF made frequent references to U-boat sightings, but none on the Labrador coast that had been accepted as authentic.

German records were more revealing. While investigating documents now in the possession of the son of a German scientist who had participated in the automatic weather station program, Selinger found one series of photographs which showed a different class of submarine (type IXC) and a different kind of terrain from the rest. Also, there was something peculiar about the U-boat in these old pictures: it did not have the usual quadruple anti-aircraft gun fitted on these craft.

Here were three important clues. First, the pictures evidently were not of Spitzbergen, or Bear Island, or other places where unmanned German weather stations had previously been identified. Second, the type IXC U-boat suggested a distant operation, for these were usually chosen for such tasks. And third, the submarine's distinctive armament was so obviously missing.

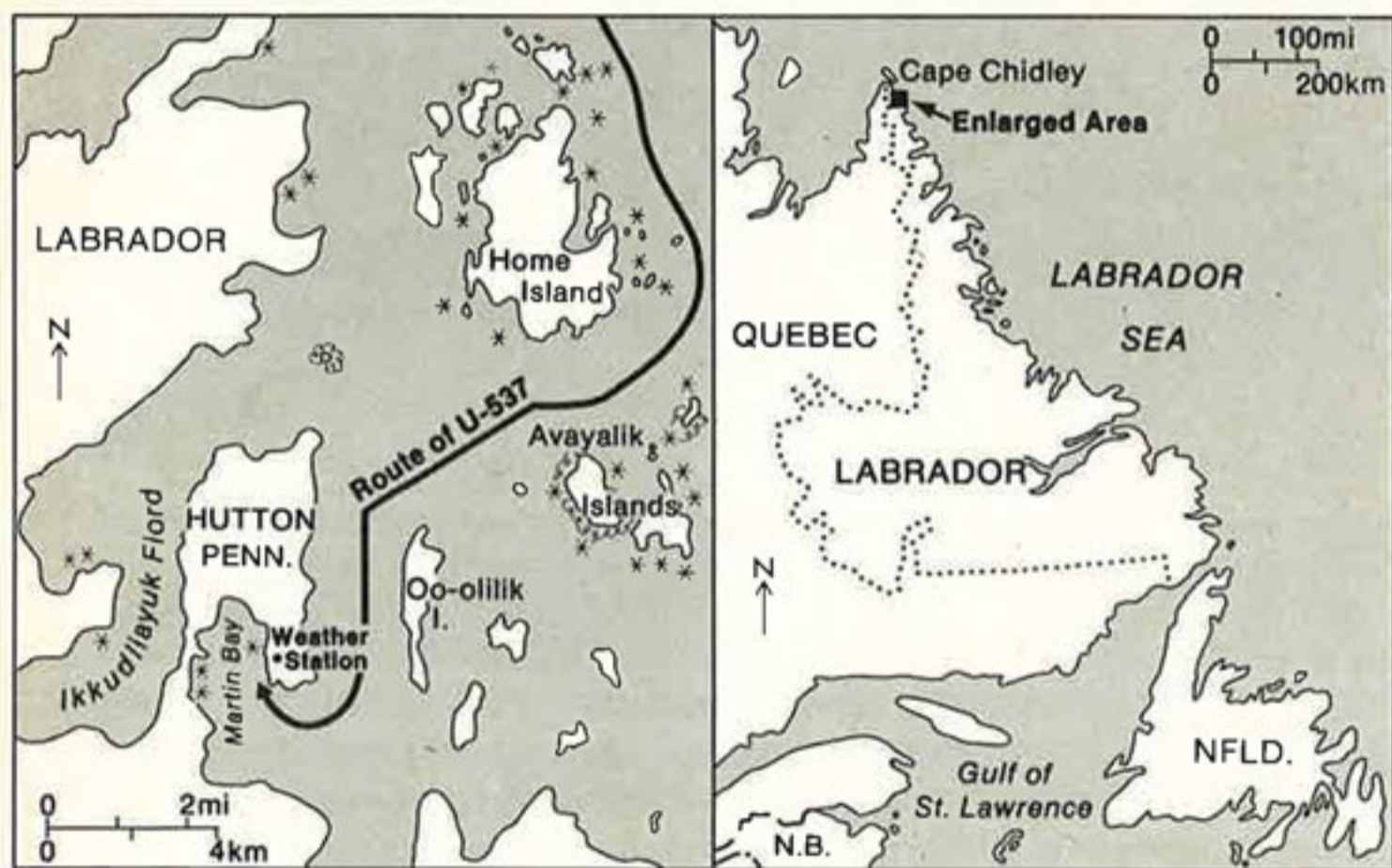
Selinger discussed the problem with the German naval historian, Jürgen Rohwer, and conducted intensive research into the U-boat logs at the German military archives at Freiburg.

At length he found what he was looking for — the log of the *U-537*. Launched in 1942, this submarine



Above: the distinctive weathered rocks on the west side of Martin Bay shown in the photo opposite, were photographed again from the site of the weather station nearly 38 years later. Centre: the icebreaker LOUIS S. ST. LAURENT off the coast of Labrador, photographed from the ship's helicopter. Bottom: the author walks away from the helicopter after returning to the LOUIS S. ST. LAURENT with a load of canisters from the dismantled weather station.





Wartime photos of (L) scientific officer Dr. Sommermeyer listening to transmissions from weather station WFL26 while aboard the U-boat off the Labrador coast, October, 1943; and (R) Capt. Peter Schrewe, commander of the U-537. The photos were provided by Dr. Sommermeyer's son.

sailed on its first operational mission on September 30, 1943. Its task was to set up an automatic weather reporting station on the Labrador coast. En route, in a storm south of Greenland, heavy seas washed the U-boat's gun mounting over the side.

The captain decided to choose a site as far north in Labrador as possible, partly to reduce the chances of detection, but principally — according to his log — because he thought there would be fewer Eskimos there.

Starting from a bearing off Cape Chidley at the northern tip of Labrador, he ran slowly down the coast. Taking depth soundings continuously in this poorly charted region — even today it is full of uncharted ledges and reefs — he crept in between Home and Avayalik islands, turned south to the entrance of Martin Bay, and on October 22, 1943, anchored just inside the southeast tip of land.

At this point, the timing was crucial. He had to open up all hatches to

unload the equipment, place it in rubber dinghies and land it on the beach. He could neither submerge, run for it, nor defend himself if attacked. Working through the night, the crew manhandled 10 heavy canisters containing nickel-cadmium and dry-cell batteries, transmitter and weather measuring devices, as well as the tripod and mast, over the beach, and 170 ft. up a hill about a quarter-of-a-mile inland.

The U-boat stayed long enough to verify that the station was functioning properly on its frequency of 3940 kilohertz and then slipped out to sea. The operation had taken about 28 hours.

This story from the log of U-537 convinced me, and I set about verifying the facts.

The Canadian Coast Guard was the logical agency to turn to. The CGS's director of fleet systems, Captain J.Y. Clarke, was quick to see the significance of the evidence, and invited



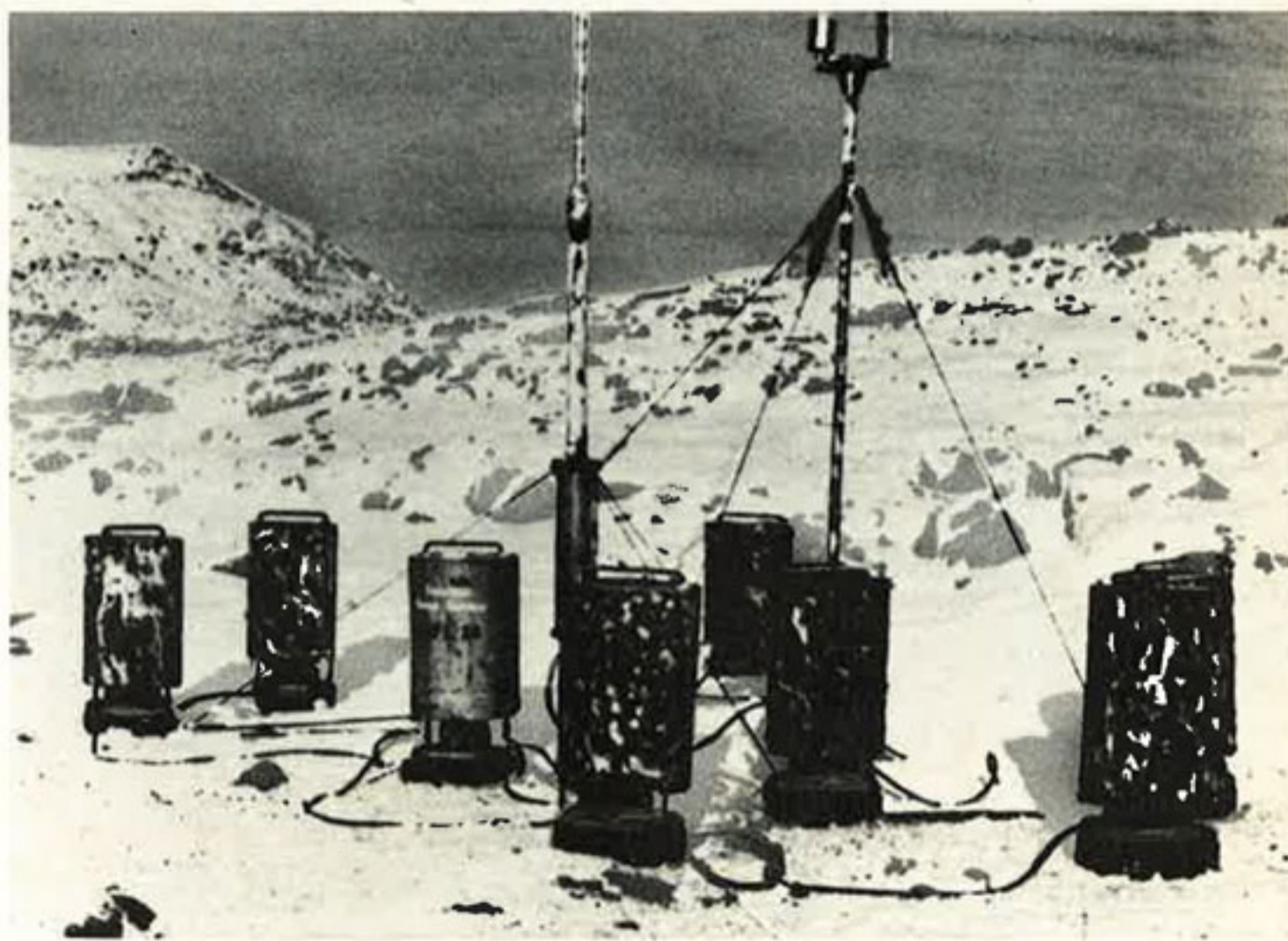
Above: the investigating team reassembled the components of the weather station by referring to the German photo (R) to show how it would have looked. Then they dismantled it for transport to Halifax.

Selinger and me to accompany the icebreaker *Louis S. St. Laurent*, commanded by Captain M.S. Tanner, on its summer passage from Halifax to Baffin Island. Here were the makings of a small expedition.

So it was that on July 21, Captain Tanner manoeuvred his vessel as close to Martin Bay as prudence allowed, and then sent us in by ship's helicopter.

Referring to wartime photographs in Selinger's possession, we easily recognized prominent land features and the helicopter pilot had no difficulty locating the bay. The question was, in what state would we find the site?

Only after several minutes of flying around the position did we realize



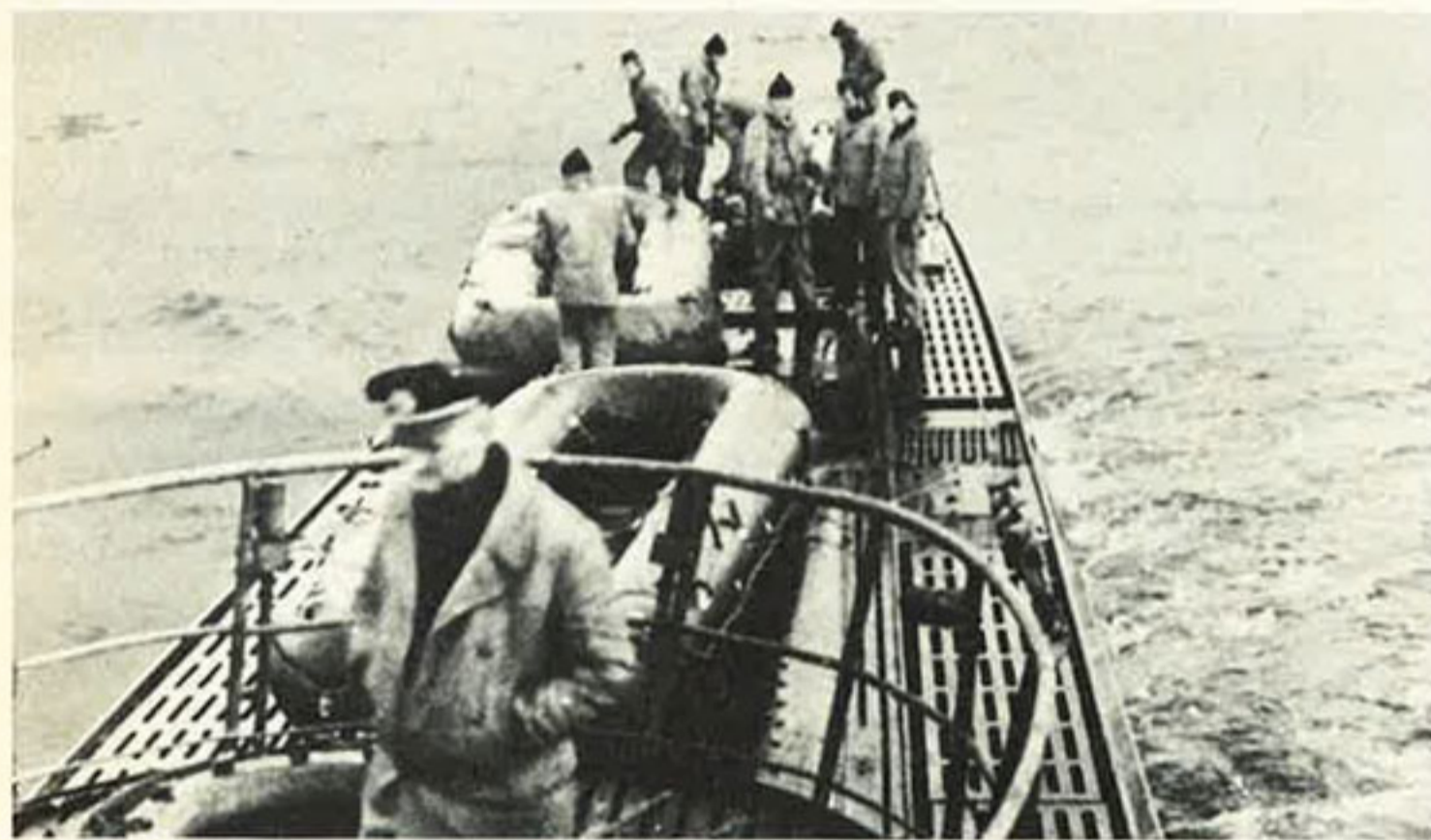
that we were indeed seeing the remains of *U-537's* automatic weather station. It was not exactly what we had expected. Someone had been

there before us.

Every canister had been opened, and the contents lay strewn about for a distance of 100 feet or so. Batteries



Above: the 1981 team found that someone had discovered the weather station ahead of them and had knocked over and dismantled the canisters. One remained standing, one that the Germans had marked with the words "Canadian Weather Service" (see third canister from left in German photo, p.45); there was no organization by that name. Below: U-boat seamen and the rubber dinghies used for landing the weather station components on October 22, 1943.



and radio parts seemed to have been systematically dismantled. Parts of the transmitter, name plates and trade marks of various pieces suggested that the equipment had been deliberately smashed.

Selinger identified parts of the coding device. Nearby we saw a circle of stones suggesting a camp. Underneath one canister was a clue: a single .303 rifle cartridge bearing the inscription "British Dominion."

Initially, we thought that Inuit hunters might have visited the area. When one of the canisters turned out to be

missing, we theorized that it might have been taken away for use as a stove, or to carry away parts of the station. But there was a flaw to that theory: the cables had all been cut cleanly and entirely removed, suggesting tools not usually carried by a hunting party.

We then wondered whether the US Navy's hydrographic team, which had surveyed the area in 1952, might have dismantled the station. However, US Navy records of this survey — it was undertaken when Canada and the US were establishing early

warning radar stations in the Canadian North — make no mention of such an incident.

The more we thought about it, the more possible it seemed that the previous visitors had been personnel sent to discover and destroy the station during the war.

From the log of *U-537*, we know that the station transmitted weather data for at least two weeks. On November 4, however, the U-boat reported intensive jamming on the frequency. Was this by accident or design? One cannot tell from available evidence, but Canadian intercept stations could have heard the Martin Bay transmissions. Even though the transmissions lasted only three minutes, this would have provided a rough direction of where the station was located. Jamming the frequency would have been simple, but locating the station and getting to it, would have presented more difficulty. If this did occur, why is there no record of it in Canadian military documents?

A further entry in the submarine log may provide the answer. On November 18, the captain recorded: "Frequency of weather station is jammed by unknown own (i.e. German) radio station. Weather transmissions not received at scheduled times." The jamming of November 4 was likely from the same source. Canadian operators, after all, were listening for submarines, not shore-based transmitters.

Then came a surprising revelation. Soon after returning from Labrador I received a telephone call from Professor J. Peter Johnson, a geomorphologist at Carleton University in Ottawa. He had read about our discovery in the press and realized that he had himself stumbled across the site in 1977, without realizing what it was. He had been preoccupied at the time with shooting a traverse in the course of a geological survey, but formed the impression that the mast and canisters were the remains of some military relay station. At that time the cables, missing in 1981, had still been lying on the ground, although the rest of the

site had been in roughly the same state. Evidently, at least some of the damage has been done by recent visitors; but the station, we now know, was dismantled earlier.

So there are still many questions left unanswered. They may never be. Nevertheless, Selinger and I have discussed the significance of the find.

The timing of events coincides with a crucial phase of the U-boat war. In May 1943 Admiral Karl Doenitz, unable to accept the loss rate of his U-boat fleet, had withdrawn most of these forces from the northern convoy routes. In late summer he launched a new offensive with wolf packs of U-boats using a new weapon, the homing torpedo. The *U-537*, delayed by several setbacks, sailed just as this new stage of the war began. Doenitz evidently expected to be making good use of the information beamed from Labrador concerning weather conditions in the northwest Atlantic.

As it happened, the new offensive collapsed because although the homing torpedo achieved some early successes the Allies soon developed counter-measures.

It intrigues us that in spite of this development Doenitz sent out another submarine in the summer of 1944 to set up a second automatic weather station on the Labrador coast. This suggests he was planning further attacks on convoys in the north Atlantic, presumably with the new generation of snorkel-equipped submarines. The second U-boat was sunk en route, and no further attempt was made to erect a weather station in the western hemisphere.

The technological expertise demonstrated by this 1943 station found in Labrador is impressive. Its operation was described in German technical journals in 1953, but officials in Canada's atmospheric environment service concede that we did not set up similar systems ourselves until the early 1960s.

Granted, modern stations are more sophisticated, use solar power, and provide a much wider and more precise range of information. There are



Above: helicopter pilot Percy Gammon (L) and Franz Selinger stand beside a circle of rocks indicating that someone camped in the area in recent years. The full facts of this story may never be known. Below: although the lettering on the side of the one standing canister has weathered away, the top retains its "Canadian" marking which, although intended to deceive, would have been a giveaway to any knowledgeable finder.



64 automated weather stations in the Canadian north today. It is doubtful, however, if any of them could have been packaged into 10 cylinders weighing no more than 220 lbs. each and capable of being loaded into and unloaded from a conventional World War II submarine.

The need for accurate weather information drove the Germans to extraordinary efforts. We now know the extent of the risks they were prepared to take with precious U-boats to acquire this information from our northern regions. □