

NAZI automatic station intrigues AES

Its main interest is historical, rather than technical, so AES did not play a major role in helping to locate a Nazi automatic weather station found last summer in northern Labrador. Principally involved were the Department of National Defence, the Canadian Coast Guard and a retired German engineer who had carefully studied U-boat diaries and spoken to crews taking part in grim wartime operations.

Despite its arm's length view of a unique second world war phenomenon, AES interest in this early remote transmitter has been intense, among both present and past personnel.

The story is that German U-boat 537, prowling the vital Atlantic supply lanes during a crucial phase of the War, penetrated the rocky inlet of Martin Bay, only 50 kilometres from Labrador's northern tip and on October 22, 1943 achieved the almost impossible task of loading nearly half a ton of radio and battery equipment on to dinghies, floating them ashore and dragging them half a kilometre inland up a 50 metre hill. For nearly three months the unmanned station radioed vital weather information, powered by its heavy cadmium batteries. There were other Nazi weather stations in Greenland, but the Labrador one was believed to be the first fully operational robot station to function in North America.

Since the German station was a remote one and soon stopped working due to run-down batteries, no attempt was made by the Allies to intercept or capture it. In fact records of the transmitter all but vanished.

It was mainly through the intervention of Franz Selinger, a retired West German engineer that the long forgotten station was rediscovered. At first he corresponded with Dr. Alec Douglas, DND director of history and indirectly with Morley Thomas, director general of the Canadian Climate Centre (AES), but he was unable to obtain any firm information about the Labrador station. Then, searching German Federal archives in Freiburg, he came across a photo of the actual site and other proof positive of the station's existence. He wrote back to Dr. Douglas, asking if he could sail on a Canadian ship to northern Labrador and see for himself.



German automatic weather station WFL 26 as installed in Labrador, October 23, 1943. (Photo: courtesy Franz Selinger).

The DND history director called Jim Clarke, the Canadian Coast Guard's director of Fleet Systems (well known to many AES personnel because he was a former director general of the Transport Canada Training Institute in Cornwall, Ont.) and convinced him of the validity of the story. A short time later Douglas, Selinger and Clarke were all aboard the ice breaker *Louis St. Laurent*, leaving Dartmouth, N.S. for Martin Bay. When the ship reached the site on July 21, 1981, the explorers flew in by helicopter.

They soon discovered the Nazi station, but unfortunately it had been damaged and partly dismantled during a previous landing there. The remaining equipment, including several heavy battery canisters was loaded first aboard the helicopter, then on the ice breaker for its long journey south. It ended up at the Museum of Science and Technology in Ottawa, where it will eventually form part of a working display.

Although DND and Dr. Douglas must get most of the credit for breaking this remarkable story, AES interest in the

topic has been considerable. Patrick McTaggart-Cowan, now retired, who was director of the Meteorological Service of Canada 1959-1964, says he knew about the Labrador weather station way back in 1943. This was because at that time he was serving as chief Meteorological Officer, Western Atlantic Region, RAF Ferry Command. In fact he was able to pick up signals from the German station during its entire period of operation. "We had some incredibly good radio officers in Newfoundland at that time," he added.

Despite knowledge of the Nazi station, Dr. McTaggart-Cowan said it was decided to do nothing. "There were more important priorities. It was a momentous year in the Battle of the Atlantic. It was not worth going out of our way to destroy one small German transmitter. We knew its broadcasts would not last that long."

The former weather service director added that unfortunately records of the station were destroyed after the war and that he had neglected to tell his weather service colleagues about "a fairly minor wartime episode."

“I was the only Canadian with Ferry Command, so it was unlikely anyone else in Canada got to know about it,” he said.

Dr. McTaggart-Cowan’s overall comment on the Nazi station was that its technology was “pretty elementary” and understood in several countries since the thirties. “If we want to remember war operations in the North Atlantic, why not recall the building of Goose Bay airport? It was a feat something all Canadians should be proud of.”

Jay Dickson, former head of automatic instrumentation for AES, now retired, agrees that the United States, Soviet Union and several other countries had the technology to build automatic weather stations in the thirties – and even earlier.

Mr. Dickson says Canada’s efforts in this area lagged behind by as much as five to ten years. For example the early ARDS development models made their appearance in the mid to late fifties and were similar in

type to the 1943 German model.

He recalls that Canada first achieved some international prominence in the automatic station field when a MARS I model was installed, not in the remote Arctic, but at Expo 67 in Montreal. Weather measurements were fed several times daily to the meteorological office at Dorval).

In Mr. Dickson’s opinion the German Labrador station stood out, not because of its design, but because of its longevity. “Those batteries were remarkable,” he comments. “It was only after MARS II in the late sixties that Canada had anything comparable. Its solar panels allowed long term transmissions, so automatic stations could be left unmanned in the remote Arctic.”

AES may eventually get involved in the Labrador saga in an unexpected way. The Museum of Science and Technology which received the Nazi weather station from

DND as a donation, intends to mount a fully working exhibit to illustrate meteorological technology in that era.

In order to demonstrate progress in the field, it is rumored the museum may ask AES to donate one of its own automatic stations as an accompanying exhibit.

Commenting on the episode, Morley Thomas adds, “The discovery indicates the high value based on basic meteorological information in wartime. Such data can also be very important in peacetime, as illustrated by the approval and funding we received for the expansion of our observing networks in the years after the war and currently for the development of our satellite program.”

Whatever the final destiny of the captured weather station, it will always be an outstanding illustration of how far a country involved in total war can mount a daring and lonely mission deep into enemy territory for the sole purpose of obtaining accurate weather information. □