

# A VISIT TO HAUDEGEN STATION ON NORDAUSTLANDET

## The Weather War in Svalbard

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When we think about the Arctic regions, pristine landscapes come to mind, areas that are often barren, windswept or ice-covered. Large areas of the High Arctic are indeed permanently glaciated. However, man's adaptation to harsh environments knows no bounds, and the Arctic has been visited by humans for a long time. Hunters, whalers, scientists and explorers have left behind structures and sites which contribute to the cultural heritage of the region.

These places provide us with a glimpse of human activity in these extreme latitudes. In the case of Svalbard they open a window into the past of human presence over the past 400 years. In fact the recently-agreed definition of wilderness as it relates to the Norwegian High Arctic archipelago of Svalbard (74°-81°N) incorporates the acknowledgement that monuments and sites are an integral part of the „pristine“ wilderness. Svalbard's wilderness is defined as:

“Large, continuous natural areas which to an insignificant degree are affected by human activity, which are free of heavier, technical intervention and damage to nature in the form of local pollution, where the biological diversity is intact and where animals and plants are regulated by natural, ecological processes, and where cultural monuments and sites are secured as important witnesses to historical exploitation” (01)

One of the most fascinating historic sites we've visited during the last season( 02) was the abandoned weather station codenamed Haudegen, hidden away in Wordiebukta, a small bay on the eastern side of Wordieodden in the inner part of Rijpfjorden, Nordaustlandet (80°00' N 22°20' E). The rocky bay is named after Sir James Mann Wordie, an English geologist and explorer. He was a Fellow of St. John's College in Cambridge and famous for participating in the Imperial Trans-Antarctic Expedition under the command of Sir Ernest Shackleton, 1914-16. But Wordie had also visited the North. In 1919 he went to Spitsbergen as a geologist with the Scottish Spitsbergen Syndicate and again in 1920 as second-in-command Leader of East Greenland expeditions 1923, 1926, 1927 and 1929, to the Canadian Arctic 1934 and 1937. Wordie's life-story alone would have made this landing an event, but the truth is, that we got carried away with our visit of the remains of an old World War II weather station nestled under basaltic rocks.

We found the buildings rather deteriorated, the contents of drawers and desks had been plundered, books and papers lay scattered over the floors, moving in the light breeze as we opened the door. Music books and novels told the story of the men behind the soldiers, who had been stationed here from 1944 to 1945. Surviving two full winters, working hard to ensure, that the news about the weather could be delivered, even under harsh circumstances, they had also found time to play their instruments and to study under their commander Dr. Dege, German Literature, Mathematics, History and Polar Exploration. More than once they got their share of close encounters with polar bears and dangerous storms as well but somehow had managed to keep their spirits high, far away from their country and, due to the secrecy of their mission, with only little radio contact and information. The Haudegen-crew was the last group of German soldiers to surrender at the end of World War II and this was not until August 1945. When they finally did so, they were picked up by a sealing vessel, the Norwegian ship Blåsel and were transferred to Tromsø.

As we roamed around the site, careful not to destroy the little evidence left behind, we were wondering how life must have unfolded inside the little hut, especially how these men had managed to keep their senses during the long winter

nights. We also realized how little thought we had given to the battles fought in the Arctic, when we had been discussing World War II. There had been fights about the weather stations, right. But why would one unleash a war about the weather?

## THE WEATHER WAR

The growing importance of airpower in World War II, combined with its sensitivity to weather, led to an ever greater military reliance on accurate forecasts. Knowing if and when your airfields, your enemy's airfields, or the target area would be "socked in" by bad weather was of vital concern to the combat commanders of that war.

Predicting the weather is dependent on the accurate tracking of weather phenomena, particularly fronts, from the areas where they originate. In the North Atlantic and Transalpine Europe, that means gathering weather data in Greenland, the Norwegian Sea, and the arctic regions of Norway itself. Though meteorologists of the 1940s had none of the weather tracking satellites which make that job so much simpler today, they were still able to generate useably accurate forecasts for northern Europe as much as 72 hours in advance - as long as they could get the data they needed from those regions. The need for that data gave birth to one of the most interesting and unique campaigns of the Second World War, the so-called "Weather War." Although it was not a war of major commands and large numbers of troops, ships, or aircraft, it had an important impact on the fighting in the Atlantic and European Theaters. It was the weather data secured by this campaign which enabled the planning and execution of such critical operations as the Germans' "Channel Dash," the Battle of the Bulge, the Allied landings at Dieppe and Normandy, and the entire strategic bombing campaign against the Third Reich.

The Weather War began with the German invasion of Denmark and Norway in April 1940. Prior to that, those nations allowed their arctic weather stations to report the weather in clear (not coded) so that all countries could copy and use the information. Germany's occupation of much of Scandinavia gave Berlin a monopoly over arctic weather data - a development the Allies could not allow. A scheme of attacks and counter-attacks started. Weather stations were built, occupied, attacked, destroyed and alter rebuilt. (03)

In the beginning, Germany relied on weather reports based on flights made by Wetterstaffeln V (Weather Squadron 5), operating out of Trondheim and Banak, Norway. Using specially configured Heinkel-111 and Junker-88 aircrafts, the squadron made twice-daily flights across the Norwegian and Greenland Seas, often reaching out as far west as Greenland, north to Spitsbergen, and east to Novaya Zemlya. The reporting was not as reliable as that from permanent stations however, since the bad weather often precluded flight activity.

The horrific northern winter of 1940-41 forced a nearly complete three-month hiatus on both sides' arctic activities. British and German were forced to rely on sporadic aerial weather flights, which the Germans also supplemented by having U-boats conduct weather reporting once they had run out of torpedoes.

One of the most significant Allied military operation in the Weather War was code named "Operation Gauntlet." This was the seizure, evacuation and destruction of facilities on Spitsbergen Island. Led by Admiral Sir Phillip Vian, aboard the cruiser HMS Nigeria, the move was conducted by a five-ship British task group. Vian and his warships escorted the passenger liner Empress Canada to the island, where they were to embark and evacuate its entire population of 3,200 Norwegian and Soviet coal miners and officials. And people in Barentsburg were preparing them-selves for World War II as well. On the 22nd of June 1941, Barentsburg radio station had received the message, that Germany had invaded the Soviet Union. For quite a while afterwards there was no communication between the coal mining settlement and the mainland. An attack was expected at any time now. In case of imminent danger the population was expected to flee into the mountains. Everybody was given an emergency food package to last for at least 20 days. But the allies had other plans.

Arriving on 25 August 1941, the British task group under command of Admiral Sir Vian proceeded quickly with their mission, despite the Soviet Consul's reluctance to leave without specific orders from Moscow. The weather station was also taken without resistance (its Norwegian staff welcomed the Allies). Then, in a successful ploy to deter the Germans from flying over the island, they began transmitting fake weather reports indicating low cloud cover and fog hung over Spitzbergen. The last civilians were evacuated by nightfall, and British demolition teams went to work.

Over the next six days, they systematically destroyed all facilities that might be of use to the Germans. The coal mine entrances were blocked, coal stocks set ablaze, and as a final act, the weather, radio and power stations were demolished as the ships withdrew southward. As an added bonus, three German coal ships were captured as they approached the island that evening. The operation was concluded by 2 September, and the Soviet citizens were repatriated at Archangelsk three days later.

It took the Germans three more days to discover what had happened on Spitsbergen. They reacted by landing a ten-man Luftwaffe meteorological team on the island's northeastern face. Despite the bad weather and periodic Royal Navy patrols around the island, the Germans were able to expand the runway and fly in nearly four tons of supplies over the next month. By 11 November, they had two remote stations and a primary site operating.

Those stations, combined with the reporting by the weather ship Sachsen, in Greenland waters, provided Berlin with the accurate data needed to plan submarine "Wolfpack" operations and the audacious "Channel Dash" of the battle cruisers Scharnhorst and Gneisenau. Uncertain of the new German locations on Spitsbergen and around Greenland, the Allies conducted aggressive aerial and sea patrols throughout those areas. A company of Free Norwegian ski troops was landed on Spitsbergen in May 1942. Caught by German FW-200 Condors while unloading, the Norwegians lost both their transports; their commander, a Capt. Sverdrup, was killed and several other men were wounded. But most significantly, the unit's only radio was destroyed. What followed on Spitsbergen was a game of cat and mouse, as the Norwegian patrols searched for the German weathermen, while Luftwaffe bombers sought out and attacked the patrollers.

The Allies landed more supplies and meteorological equipment in June, but were still unable to find and destroy the German weather party. On 15 July, they returned with a full battalion of troops, supported by two cruisers and four destroyers. The Germans spotted that landing force, however, and managed to evacuate before being located. Germany still continued to receive weather data throughout that

summer; its team had left an automated weather station hidden on the island. The German navy returned to Spitsbergen in the autumn and secretly landed a six-man party on the island's northeast corner on 25 October. The Allies were never able to track down that party, and their station remained in operation through the spring of 1943. Another ten Germans and a ton of equipment were brought in by U-boat in November. Additional supplies and logistics support came via other submarines or were dropped by parachute. (04)

In mid-1943, Hitler himself began to take an interest in the Weather War. Frustrated by the inactivity of his navy's major surface ships, he asked if they could not be used to do something about the Allied presence on Spitsbergen. The result was "Operation Zitronella," an amphibious raid on that island.

Supported by the battleship Tirpitz, the battle cruiser Scharnhorst, and nine destroyers, the plan called for landing an entire infantry battalion. They approached the main settlement at dawn on 7 September, quickly suppressed the Free Norwegian battery of 3-inch guns there, and began to land troops at the main pier. The entire operation was completed in four hours. All the facilities, including the weather stations, were destroyed.

Still the Germans had to withdraw almost immediately. For Adm. Dönitz, head of the German navy, knew, even if Hitler did not, the island could not be held in the face of overall Allied maritime supremacy. The task force returned to occupied Norway on 8 September, and the Allies were back on Spitsbergen, with a new weather station and garrison, one month after that. But Germany also managed to land several of her own weather parties that month as well. The Luftwaffe used Zitronella as cover, allowing them to land a team unseen on nearby Hope Island. The trawler Kehrdingen also delivered a team to Franz Josef Land on 15 September, and the trawler Cobura did the same, under the codename "Bassgeiger," in northern Greenland. All of those groups remained on station until mid-1944.

The Allies remained ignorant of the German weather station on Hope Island until winter had set in. By then the weather had become so uniformly bad it precluded their doing anything about it. The same was true about the new stations in Greenland.

Spring eventually comes, though, even in the arctic, and by mid-June 1944, the Allies had again forced the Germans out of Greenland and the U.S. Coast Guard intercepted their replacements. But the "Bassgeiger" group was able to hide an automated station on Greenland before departing, and the meteorologists on Franz Josef Land did the same there.

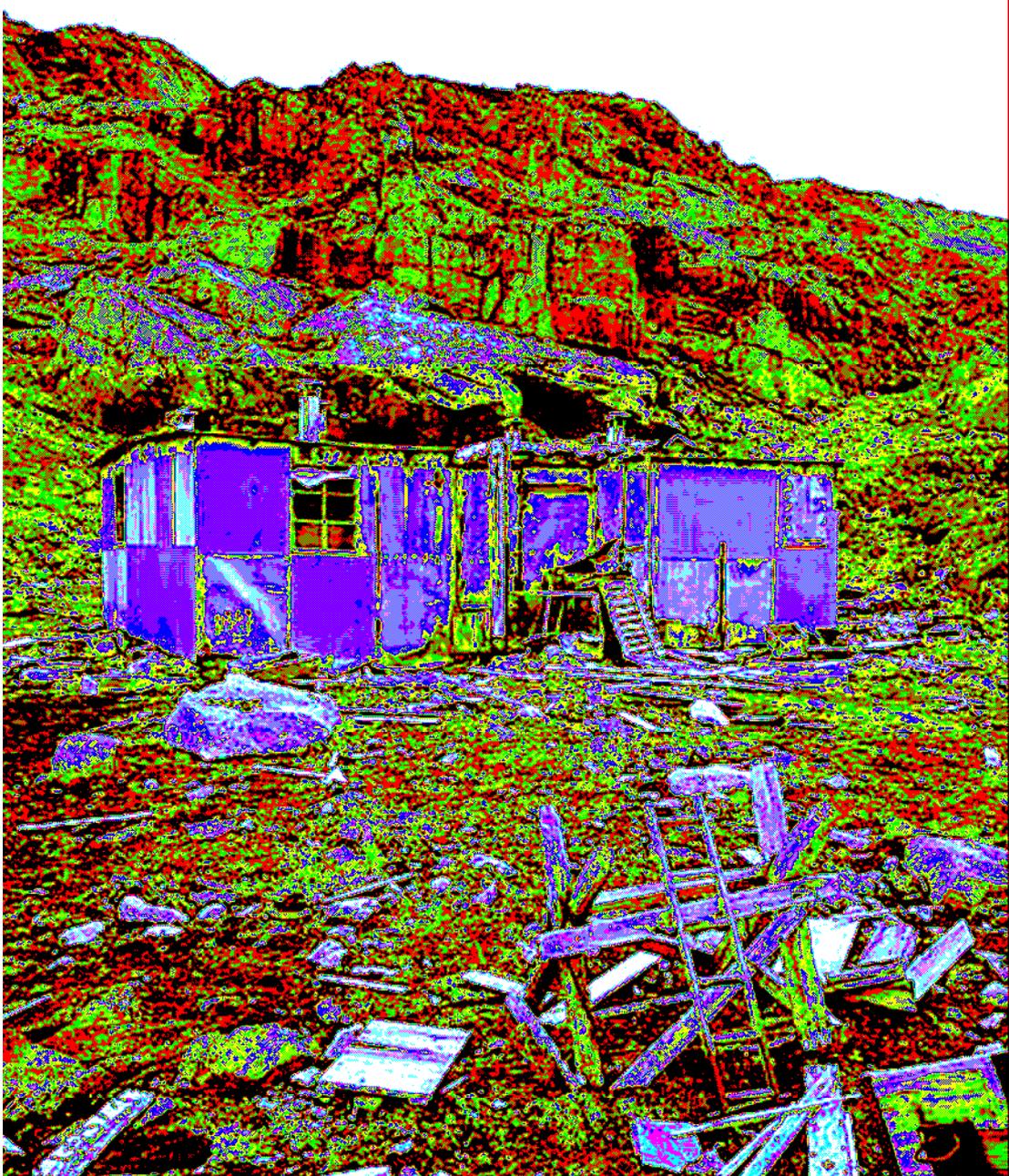
Those stations were deficient, however, in that they couldn't report "ballistic" (high altitude) winds - a vital kind of data for air strike (and air defense) planners. Moreover, Germany's weather planes could not reach Greenland's northeastern corner. Berlin therefore exercised its only remaining option, and dispatched a weather ship into those waters. The icebreaker Wuppertal was chosen, and she left Tromsø in August 1944, with a 12-man weather party on board. The ship moved west of Spitsbergen in September, sending twice-daily reports as it passed by. A U-boat then landed still another party on northeastern Spitsbergen, giving Germany its best observations from the region since 1940.

The operation ended in tragedy for the Wuppertal and her crew; they were operating too far north too late in the year. The ship became ice bound 120 nautical miles south of the North Pole during the first week of October. Its weather reports ceased a month later, and neither the ship nor the crew has ever been found. (05)

The loss of the Wuppertal left Germany with only one manned weather station active - Group Haudegen, another naval unit off Spitsbergen's northeast. This forced Berlin to rely more and more on the inadequate remote stations. The last version consisted of submerged buoys laid by U-boats. The buoys surfaced twice each day to record data and transmit for about an hour before submerging again. Advertised to have a nine-month life, those buoys were testimony to the technological prowess of the Germans; several were still operating in 1946.

#### HAUDEGEN STATION

Haudegen was in fact the most successful of the land based stations during World War II. Tasks were carried out regularly since the 1st of December 1944.



Two radio officers transmitted the data, another one was in charge of listening to incoming messages. Twice a week a man had to produce the hydrogen-gas for the weather balloons. Two men took care of the kitchen, all of them were busy

mending and refurbishing the main building. For magnetic observations a tent was put up. Soon the head of the operation, Dr. Wilhelm Dege, ordered them to start working outside, such as building additional observatories, and a another hut for provisions, as well as a workshop for smiting and carpentry. Dr. Dege was convinced that outdoor activities would help to keep his team healthy. Just to fetch driftwood from the shores, they had to cover huge distances sometimes, to hack it into suitable pieces took some more energy. It seemed that excursions of this type, as well as planned geographical expeditions into neighboring valleys, kept their spirits high. (06)

When light was fading the base commander reorganized their schedule of activities, in order to assure that the men would be awake at the same time for at least a couple of hours and the radio officers would get more sleep. This way the wake-up call sounded only at 12:30. Lunch was served at the peculiar time of 17:00 and before dinner, which was only dished up at 23:30, there was plenty of time for education. Dr. Dege summoned his men together to teach them about German Language and Grammar, Literature, Geography and Mathematics. They discussed Polar Research and learned about the History of Polar Exploration. After dinner they would sit together around the radio and tried to find out, how the war in the rest of the world had evolved. Information was scarce and encoded. But they knew that the Allies were looking for them and tried to prepare for the worst case scenario. Regularly some of the men were patrolling the area. Assessing not only possible enemy movements, but the ice-situation as well. They noticed that the Rijpfjord and Wordibukta only started to freeze over at the end of January and opened up again in March 1945. Hunting trips formed part of their daily life as well. Six short legged reindeer engrossed their provisions that year. Occasionally the men had to fight back polar bears on their excursions. Once, unfortunately, the station dogs had disturbed a female bear with cubs, the bear attacked the men and had to be put down. The Haudegen crew took the two youngsters to their station, and for a while it looked as if the young bears would make for an excellent distraction from their hardships. But being as clumsy as strong, the cubs were very destructive and when they finally broke out of the snow cave the men had shoveled for them and escaped into the white wilderness, everybody felt relieved. (07)



When the sea-ice broke, Dr. Dege started to worry again about possible enemy attacks in the fjord and ordered to prepare for unexpected visitors. With temperatures down to minus 30° Celsius and winds force 8, the men built several snow shelters in the area and a second station on top of the rocks in the backdrop of the main building. It was called Postenfelsen, and contained provisions and an additional radio transmitter. The hut was actually built out of sliced open cookie jars, and was only meant to be manned in case of emergency. And for just that case it included ammunition and weapons. Around the station they lay a girdle of mines, to be ignited by an electrical mechanism. And they even organised depots a retreat southwards. By April the incoming news was more disturbing then ever. On 24 April 1945, Dr. Dege was asked to refrain from staying for another winter and give possible landing sites for an aircraft. (08) He assumed therefore, that they would be picked up soon, but this was not going to happen.

On May 2nd, the Haudegen crew received news of Hitler's death. This was followed on the 7th of May by a message that Germany had surrendered. The capitulation was without conditions. From now on, the crew knew, that they would be



picked up soon, either by the British or the Norwegians, or worse, would have to make their own way towards the west, towards the main island of Svalbard during the following spring. But the next day brought further information. Dr. Dege received orders from Tromsø, to go on reporting the weather, but this time in the clear and following a predetermined time-schedule. The base commander was informed as well, that from this point on, he should consider his men and himself prisoners of war. (09)

Hastily the Haudegen-crew disposed now of the mines, blowing them up together with 75 grenades, which they had previously prepared. In his diary he would write: Now we are only armed for protection against the bears. Other than that we are a peaceful lot. (10)

They kept busy exploring the area around Kap Loven and even made it to the Wahlenbergfjord. Geographical, geological and topographic studies were carried out. And although Dr. Dege did not know if he would be able to consider the results

of these findings his personal data, the temptation of learning more about the region was strong.

Then of course, they had to start cleaning up the station as well, as the date of the pick-up approached. On 3 September 1945, the Norwegian seal catcher Blåsel entered the bay and Dr. Dege surrendered officially to the Norwegian Captain Ludwig Albertsen. For all we know, this first contact had been carried out in a very friendly atmosphere. Once on board the sailors of the Blåsel even offered their quarters to the weather men. Dr. Dege handed over all the official papers, reports and log-books and it would take him another ten years, before they were released by the Norwegian government and he could finally publish his findings.

But his diary, he had hidden away in a metal box close to the old station. It was only found 1985 by his son Prof. Dr. Eckart Dege, together with Franz Selinger during an expedition organized by the Norwegian Forsvarsmuseet.

Today we can still see some of the remains. But the question is, how much longer they will linger? It is not only the visitors' impact, causing the deterioration of the historic site. As Susan Barr, President of the International Polar Heritage Committee points out: "Polar areas are markers for increasing climate change, which already is seriously affecting a large number of monuments and sites. In large areas of the Arctic, natural visitor impact was concentrated along the shores and bays where access was possible and over-wintering relatively bearable. Warmer temperatures mean more annual freezing and thawing of the upper surface layers, disturbing the ground and thereafter structures in and on the ground. Less sea ice leads to more wave effects and coastal erosion, and climate changes will also affect the preservation advantages that many associate with polar areas – freeze drying and the absence of rot, bacteria and fungal growth." (11) Therefore it would be desirable if part of the Station could be preserved in the future.

## **NOTES**

(01) Susan Barr (2004), "Polar Monuments and Sites – an introduction" in: ICOMOS, Cultural Heritage in the Arctic and Antarctic Regions, p. 18.

(02) Expedition voyage on board the „Aleksy Maryshev“, Oceanwide Expeditions,

August 2005.

(03) A detailed report about the activities of Allies and Germans during the Weather War has been elaborated by Cdr. Carl O. Schuster, USN (Aberdeen Test Center-Meteorology Team) and can be consulted under the following web-site:

<http://www.srh.noaa.gov/ohx/educate/atc/ww1.htm>

(04) Ibidem.

(05) Selinger, Franz (2001), Von „Nanok“ bis „Eismitte“. Meteorologische Unternehmungen in der Arktis 1940-1945, Convent, Hamburg, p.322.

(06) Dege, Wilhelm (1954), Wettertrupp Haudegen. Eine deutsche Arktisexpedition 1944/45. Wiesbaden, Brockhaus.

(07) Stationstagebuch „Haudegen“ (Reg.-Rat Dr. W. Dege) 2.8.44-30.7.45 mit drei Fahrten Notizbüchern und Beobachtungsprotokollen (Original found in Wordibukta on 10.08.1985, Transcription F. Selinger) Today available in the Svalbard Museum, Longyearbyen.

(08) F. Selinger, F., op.cit., p. 327

(09) Dege, Stationstagebuch, op.cit.

(10) Ibidem.

(11) Susan Barr (2004), “Polar Monuments and Sites – an introduction” in: ICOMOS, Cultural Heritage in the Arctic and Antarctic Regions, p. 18-23.

#### FOR FURTHER READING

• BARR, Susan (2004), “Polar Monuments and Sites – an introduction” in: ICOMOS, Cultural Heritage in the Arctic and Antarctic Regions, p. 18-23.

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