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Field report from the journey to North-East Greenland 2021

Hoelsbu – Upright once again !

This year neither the COVID-19 pandemic did not stop Nanok from completing its planned field season activities. We have had two Nanok-teams in the field, as usual sponsored by Aage V. Jensens Fonde, as well as a research team from Arctic Research Centre with close affiliation to Nanok. For the first time in nearly half a century, the walls are horizontal and the floor vertical in the old Hoelsbu house. Read more about this and much else in this report.

31st field season

Introduction

This year Nordøstgrønlandsk Kompagni Nanok has completed its 31st field season.

During the summer, two field teams have been in North-East Greenland in addition to a research team with close affiliation to Nanok. One Nanok-team first opened Nanok's base on Ella Ø and then continued to Daneborg to complete tasks there. Simultaneously with the team's departure from Ella Ø, the other Nanok-team arrived, who then completed their planned tasks, primarily the levelling of the Hoelsbu house, which had become more and more slanted over the last many years.

Like in 2020, the COVID 19-pandemic entailed a range of challenges and restrictions. In advance, several other organisations gave up completing a field season in Greenland this year. That thought never occurred to us in Nanok. We have journeyed up there each summer since 1991, and it takes more than a pandemic to stop us. However, until the very last hour it was unclear which restrictions would apply to Iceland and Greenland respectively on the day of travel. In practice, the journey went quite smoothly once it had begun.

Like in 2020, physical contact with the personnel of our good collaborator Sirius Sledge Patrol was not allowed. Despite these restrictions the collaboration with Sirius went perfectly.

Weather and ice conditions were almost ideal this year. From our arrival in the beginning of August to the beginning of September we mostly experienced only sunshine every day – and no or only gentle wind.

Along the coast there was no drift ice, so the sailing conditions were also optimal. The lack of drift ice, however, created another challenge, as it forced many polar bears to go ashore. Unluckily, three of them had chosen to settle more or less permanently near the old Zackenberg Base. Unfortunately, this hindered us from completing one of our planned tasks. Read more about this later in this report.

Collaboration with the units of the Danish Defence, which through the years has been extremely good, reached a new level: With kind help from the Sirius Sledge Patrol, the inspection ship "Triton", as well as a Seahawk helicopter from Squadron 723, we managed to transport approximately ten tons of renovation materials out to the two remote locations: Kulhus and Kap Philip Broke. An operation carried out with high efficiency over three hectic and long workdays. It was exceptionally inspiring to be part of and to witness.

AAGE V. JENSENS FONDE

Nanok first and foremost owes an immense thanks to our main sponsor, Aage V. Jensens Fonde, for never-failing trust and support. Without such continuous support, Nanok would not be able to see through its work, which oftentimes is costly, logistically challenging, and demands years of preparation. This year we even had the prospect of meeting the members of the board in North-East Greenland, however, weather conditions hindered this in the very last moment.

We also owe a very special thanks to a wide range of the Danish Defence's units and individuals for extraordinary collaboration as well as ready and quick assistance to overcome different logistical challenges. Several units of the Danish Defence have participated this year, including Arctic Command, 1. Squadron, the Sirius Sledge Patrol, Station and Patrol Service Greenland, and Defence Guard Mestersvig.

Also, a great thanks to logistics personnel and scientists at Daneborg and Zackenberg research stations for kind assistance, co-operation, and good neighbourliness.

Furthermore, a warm and well-deserved thank you for the great support that family and friends show our dispatched Nanok'ers, who spend an entire summer holiday working for Nanok. Such support and understanding from home mean the world to the individual Nanok'er.

Moreover, many thanks to the large circle of individuals who continue to support and show positive interest in our work.

Finally, a warm thank you to all other good collaborators as well as private and public authorities which in different ways have contributed to making our work possible.

On behalf of Nanok

Peter Schmidt Mikkelsen

This field report is available in English and Danish at: www.xsirius.dk/nanok.html

Field report for "team Sandodden" 2021

Task

Team Sandodden had the following tasks:

a) complete clearing of visible waste (oil drums, etc.) near the old Zackenberg Base [438-3]
b) assist Arctic Research Centre / Aarhus University in establishing measuring / relay stations in relation to huts in the Young Sund area, a. o.
c) organise Nanok's area on Ella Ø
d) inspect huts and houses in the Daneborg region
e) inspect, count, and maintain Nanok equipment and depot at Daneborg
f) receive goods for Nanok at Daneborg
g) prepare for Nanok expedition Daneborg 2022

Participants

Peter Schmidt Mikkelsen (Sirius '77)
Jesper Mølbæk Stentoft (Sirius '97)
Erik Jochumsen (Sirius '00)

Phase 1 – Journey to North-East Greenland

Like 2020 the preparations this year were substantially more extensive than normal due to the COVID 19-situation. Until the very last hour, there was considerable uncertainty whether it would even be possible to complete this year's field season. However, after miscellaneous applications, changes, approvals, and tests, in the end we were able to depart as planned from Denmark Monday 2 August, 2021, where the team gathered in Copenhagen Airport. From here everything went surprisingly smooth. First with plane to Keflavik, where a rental car was waiting for us. From here we drove directly the 450 km to Akureyri in the evening – a nice trip of 6 hours. In Akureyri we stayed in a "quarantine annex" at Hotel Nordurland. After a good night's sleep and a morning stroll in Akureyri, we left for the airport past midday. Here we met the Norwegian biologist Lars Øivind Knutsen. He had arrived in Akureyri from North-East Greenland, where he the day before had been attacked by a polar bear. It happened early in the morning at Research Station Daneborg, where he wakes up from a polar bear popping its head in through the window in the room, where he is sleeping. He jumps out of bed, but the bear lashes at him, first with its claws and then it bites on to his thumb. Fortunately, it has no better hold than that he can twist loose, call for help, and run out of the room. His two buddies have now woken up and come to the rescue. In the meantime, the bear has withdrawn, only to return a few times before the three men finally manage to scare it away.
A shocking experience for Lars Øivind, who, to begin with, had had his hand stitched by a serving member of Sirius, who happened to be a doctor by profession. Then he was transported to Akureyri for further examination. Nothing was broken. He had been incredibly lucky. Had the bear had a better grip on his hand, there is no saying what the outcome might have been. We met him as he was travelling back to Greenland and Daneborg on the same plane as us. That he was a bit uncomfortable having to sleep in the same room again was evident. And very understandable!
As it happens, the bears at Young Sund would later cause other trouble for us, too.


From left: Team Sandodden 2021: Erik Jochumsen, Peter Schmidt Mikkelsen, Jesper Mølbæk Stentoft. Right: Biologist Lars Øyvind Knutsen showing his thumb, after its encounter with the bear's teeth.

Ella Ø Station 2021.

The journey over Danmarkstrædet to Constable Pynt was made in a King Air from Norlandair.

In Constable Pynt there was a few hours pause, before a Twin Otter arrived to take us the last

Left: Arrival on Ella Ø with Norlandair's Twin Otter TF-NLD. Right: Ella Ø Station 2021.

Left: The Nanok houses: Fjøset and Tolvmandsbarakken. Right: Kitchen and living area in Tolvmandsbarakken.


T.v.: Erik working on sliding cover and cabin top of "Agsut". Right: Jesper repairing the rubber dinghy.


Left: "Agsut" has been launched – ready for a new season. Right: Planning for the two new Nanok-containers.

stretch to Ella Ø, where we arrived about 21.00 on 4th August in wonderful sunshine and temperatures almost resembling Danish summer-temperatures. Tolvmandsbarakken was in good condition. There were nine Sirius-men and their four dogs at the station. As always, the welcome was very warm, no shaking hands, though. The "ten-meter" distance rule to Sirius was effective again this year.

The Greenland Government has allocated an area (marked red) to Nanok on Ella Ø Station containing Ørnereden, Tolvmandsbarakken, Fjøset, a.o. The surrounding area is utilised by the Danish Defence / Sirius.

Starting on Ella Ø Station

The first task on Ella Ø [235] was to prepare our cutter "Agsut". The boat was generally in good condition, with a few things needing to be mended. Jesper, who is a machine engineer, repaired the boat's outboard motor, and Erik, who is a boat builder by education, began sealing the galley hatch, which through many years has let spray from the waves and rain right in. Meanwhile, Peter took care of miscellaneous to-do's and marked off the area where Nanok's two new equipment containers were to be put. Moreover, field equipment was packed for our upcoming trip to Mestersvig, where we were going to pick up goods stranded there in 2020. Next morning about 10, we launched "Agsut" and continued to work on it. Later that day, as agreed with Arctic Command (AKO), we had help from Sirius and their Hydrema to level the marked area for the two new containers. When the site was ready, we received more help from the Hydrema digging out for a new concrete foundation, on which the new winch for "Agsut" was to be mounted.

Here it is worth mentioning that AKO/Sirius and Nanok recently have made an agreement about a clearer division of the Ella Ø station. The division means that Sirius in the future has disposal of the area south of "the dog chain", while Nanok has disposal of a northfacing area, containing the historical buildings Ørnereden, Tolvmandsbarakken, Fjøset, a.o. Moreover, Nanok has received an official area allocation of this area by the Greenland Government.

Coffee, smoking and petting break! Erik, Jesper and one of the Sirius dogs.


Going across Kong Oscar Fjord to pick up goods in Nyhavn. Erik studies local history while off duty.

The polar bear is a phenomenal swimmer. Mother bear and cub swimming across Kong Oscar Fjord.


Left: The two Kongeborg huts below the mountain Kongeborg.
Right: Interior in the newest hut. Simple, yet functional.

Picking up Nanok's goods in Mestersvig

Ella Ø was swimming in sunshine, and the fjord lay mirror-like, as we started "Agsut" on 6 August at 06.30, setting out towards Nyhavn [209-2] at Mestersvig. A fantastic beginning of a new season. In the middle of Kong Oscar Fjord, we met a swimming polar bear with her cub. An amazing sight. We stopped for a short break at Kongeborgen [224-2]. The hut being in good condition, we continued our journey and arrived at Nyhavn about 18.30. We were ashore only briefly. Our goods would be transported to Nyhavn from Mestersvig Airport the next morning, so we continued to Hamna [208-2], where we anchored for the night. Hamna was also in extremely good condition and nicely refurbished by a Nanok team last field season. Going ashore there were some swells; but everything went well. All in all, a good day. The following morning about 8.00, we wayed anchor and sailed back to Nyhavn. At 9.00 "tower owl" Frederik arrived with our goods from Mestersvig, and as soon as we had loaded everything, we wayed anchor and set course for Kap Peterséns [218] in a dead-calm sea and another day of baking hot sunshine. Kap Peterséns was also in good condition, and we stayed only for a short hour, before setting out for Ella Ø, where we arrived about 21.00.


The Hamna house outside and inside. Nicely refurbished by the Nanok team in 2020.


Kap Peterséns station from a distance and inside. Erik studies 'the hut book'.


"Agsut" gets a new winter site on Nanok's area. The cast for the foundation for the winch is being arranged.

Maintenance at the station.
Left: Erik at the planer bench. Right: Jesper improves the drain from Tolvmandsbarakken.

Finishing on Ella Ø

The next two days were spent preparing the forementionend future relocation of Sirius' and Nanok's equipment on Ella Ø, preparing the arrival of Royal Arctic Lines (RAL) supply ship, and collecting the equipment which in a few days' time was going to Daneborg. The weather was still at its best. Sunny and calm – and no mosquitos!
We prepared the cast for the new winch and packed down various equipment that was to be sent back to Daneborg, i.e. assorted old and disposed materials. We also prepared for the arrival of the next Nanok team, team Hoelsbu.

First morning at Daneborg. Another polar bear comes by.


Sandodden. Nanok's base in the Daneborg-region, 98 years old - but still going strong.

Further on to Sandodden/Daneborg

In the morning 10 August we were ready for being picked up on Ella Ø and receiving ship. First report was that Norlandair would pick us up in the late evening and that RAL would arrive about 15.00. The ship "Malik Arctica" was in sight 14.30, however, instead of anchoring, they continued past the station and made a round trip around all of Ella Ø. The reason was the brisk wind from a direction that prevented them from anchoring safely. Three hours later they returned, only to go for another tour around Ella Ø. Just as they were returning from their second tour, the Twin Otter arrived with team Hoelsbu (Kristian, Claus, and Asger). This meant that we had to hutty packing our last gear and only had time for a quick chat with team Hoelsbu before boarding the Twin Otter with course set for Daneborg, where we arrived after an hour's flight. Jonas from the ZERO-logistics carried our gear down to Sandodden, where everything was as we remembered it. We had time to say hello to this year's MarinBasis team (Egon, Mie, Karl, and Michael).

Change of plans

One of our most important tasks this summer was to clear all visible waste (oil drums, etc.) around the old Zackenberg Base [438-3]. Upon our arrival, however, Jonas gave us the news that there had been many polar bears in the Young

Two of the bears who had made the old Zackenberg Base their permanent summer residence.


Left: Photo from 2020 of a selection of the old oil drums at Zackenberg Base, which we had planned to remove this summer, however, the presence of the polar bears prevented this.
Right: Search for stranded oil drums along the shore of Clavering Ø, 2021.

Sund area this summer, and that three of them, approx. one week before our arrival, had chosen to settle right here – unfortunately on a permanent basis, it turned out. We probably would have been able to scare away the bears, but the people at the Zackenberg research station (ZERO) were worried that the bears then would head for the other side of the Zackenberg river to the ZERO area. Naturally, we had to take this into account and therefore agreed to await the development of the situation and hope that the bears at some point would leave the site at their own initiative. Regrettably, the initial effect of this meant changing plans. As we were now unable to work at Zackenberg, we decided instead to verify if old empty oil drums from Zackenberg Base with time might have rolled into the fjord and scattered out further in Young Sund and Clavering Ø-area.

Test sail with RIB

The following day, 11 August, began around 6.30 with a bear visiting our neighbours at MarinBasis. The bear was soon scared away with shots, though, and it disappeared towards


Ship-mik '21. Left:"Malik Arctica" at Daneborg. Right: Containers with goods brought ashore.


Left: Preparation of the rubber dinghies. Right: Nanok has become rather "self-propelled".

Vandsøen. After breakfast we began preparing our RIB (Rigid Inflatable Boat) and collecting gear for a test sail, which took place after midday to Djævlekløften. There we visited the hut [427], and then started our search for stranded oil drums; a search that quickly appeared to be relevant, as we observed 17 drums on the beach on the stretch between Djævlekløften and Dolomitterne alone. We did GPS-positions but left the drums for the moment. From Dolomitterne we navigated across Young Sund to Pashuset [433] and then along the shore back to Daneborg. On that stretch we observed no drums. Our RIM sailed like a dream, by the way, with the new Honda 50 hp motor.

Ship mik 2021 at Daneborg

In the morning 12 August, "Malik Arctica" arrived at Daneborg. The ship mik started at 8.00 and lasted the entire day. With the ship also arrived our new RIB, on which we over the course of the day mounted a new Honda 50 hp motor. Furthermore, we did various improvements on the RIBs.
The next day the ship mik continued, and we onloaded the rest of our equipment. In the late afternoon we made a trip to Zackenberg to have a look at the famous polar bears and to try out our new RIB. It sailed perfectly. We followed Wollaston Forland to Zackenberg Base, observing no oil drums on this stretch. From a distance we could see that the three bears were still residing there. Next, we navigated to ZERO and went ashore to visit the people at the research station [428-5].

Registration of old oil drums

The next day, 14 August, we continued our project registering oil drums. Our plan was to look through all the Young Sund and Gael Hamke Bugt area to assess whether it was a general problem or mainly limited to Young Sund. We carried on where we had left off 11 August at Dolomitterne and sailed from here further into Young Sund, staying near the beach, to Revet. We observed 20 oil drums on this stretch. We arrived at Moskusheimen [429] at Revet 18.30 at low tide. Our timing was not spot on, and we had to postpone our trip to the following afternoon due to the tide in the shallow passage and a strong wind from south. From Revet we continued along the coast of Clavering to Eskimonæs [405], where we stayed

On our registration trip. Left: Jesper at the helm. Right: Erik in living room of Moskusheimen.


Left: Eskimonæs station. Right: Knudshoved station has undoubtedly seen better days.


Dødemandsbugten. A historical place, refurbished by Nanok into an interesting and popular visitor centre.

for the night. On this stretch we saw only five oil drums.

The next morning, 16 August, we crossed over from Eskimonæs past Lille Finsch Ø – where we saw a swimming polar bear – and Stille Ø over to Home Forland, from here continuing along the shore down to Knudshoved [355]. Here we turned around and navigated via Jackson Ø [371] and Store Finsch Ø back to Eskimonæs. On this entire stretch we only saw two oil drums, both on the north coast of Home Forland.

On the fourth and last day of the trip, we made a stop at Dødemandsbugten [408] and went along the coast of Clavering Ø back to Djævlekløften; thus, closing the circle around Clavering Ø. During the day we observed 18 oil drums, of these only one on the south side of Clavering Ø, the rest along the coast in Young Sund. Arriving back at Sandodden, we confirmed that the three bears were still dwelling near the Zackenberg base.


The "roofing felt terrasse" needed a special treatment. The roof received new roofing felt, and the walls had a fresh layer of paint.


Materials for the future renovation of Kap Philip Broke (left) and Kulhus (right) packed and ready. We are dealing with considerable amounts; approx. 2,000 kg for Kap Philip Broke and 7,000 kg for Kulhus!

Left: The red line on the map indicates the route we took to register the old oil drums. The blue points mark the places where oil drums were observed and removed; red points where the drums have not yet been removed. Right: Collecting oil drums at Young Sund in collaboration with MarinBasis and the ZERO-logistics; Jesper and Erik rolling drums.


Left: Erik digging out a drum. Right: Mie from MarinBasis and Jonas with ZERO's boat.

Back at Sandodden

The next two days were spent doing various chores and packing the materials needed for 2022 in Kulhus [511] and Kap Philip Broke [470]. We decided to discard our old RIB, which is completely worn out in the bottom. It will be sent home next year.

On 19 August we went into Zackenberg Base to have another look at the bears. We did not go ashore this time either, but we did go a little closer. From the RIB we observed only one bear who appeared emaciated and probably ill. Four or five ravens had gathered around it, waiting. It was a sad sight. From Zackenberg we continued via Basalt Ø to Daneborg and from there further close to land out through Young Sund over Wollaston Forland to Kap Herschell [417]. On this stretch we observed no oil drums and therefore returned to Sandodden.

The following day we prepared one of our RIBs for winter and parked it in the boat house, and we started renovation (painting and new roofing felt) of "Tagpapterrassen", i.e., "*the Roofing Felt Terrasse*" (Building 8), where we keep, well, our roofing felt.

Collecting old oil drums

The previous reconnaissance had disclosed that a vast majority of the old oil drums were located


Left: Oil drums are loaded onto "Aage V. Jensen", working as a transport vessel. On board are Egon from MarinBasis and Erik. Right: "Aage V. Jensen" with a full load of drums heading for Daneborg.


Left: Collecting the last three drums at Grønnedal. Right: All collected drums, approx. 60, were temporarily gathered next to approx. 200 other drums on the disused Daneborg Vejrstation.

along the coast of Clavering Ø between Kap Breusing and Revet. Our immediate conclusion was that, even though the drums were of different origin, they probably travelled from the old Zackenberg Base.
Next step was now to gather these drums. As our own rubber dinghy can only transport three-four drums at a time, we suggested to the people from MarinBasis and the ZERO-logistics, who disposes of larger boats, that we could carry out the gathering of drums in Young Sund in collaboration. They thought it was a good idea. A whole day, 21 August, was set aside for this, and we helped each other clear the coast of Clavering Ø of old oil drums and transport them to Daneborg. On the journey back from Revet in our RIB we went along the north coast of Young Sund to Zackenberg but found no drums on this stretch.

Closing Phase 1

24 August we made a final trip in the RIB to Grønnedal to collect three oil drums, which we had not been able to reach on 21 August due to big swells from the sea. Hereby the total of collected oil drums reached approx. 60 pieces, which we have placed temporarily next to the old "dump" from the disused Daneborg


Left: Jesper and Erik cleaning Nanok's RIB and preparing it for winter storage. Right: The Twin Otter at Daneborg 25 August. Closing Phase 1. Time for departure for Jesper and Erik.

Team Sandodden 2021. From the left: Peter, Erik and Jesper.

Vejrstation with approx. 200 other drums, which were already at the site.
The remaining of the day was spent on cleaning and stripping our RIB, which was parked in the garage for the winter.
It had been three weeks since our arrival. Thus, it was time for Jesper and Erik to return to Denmark. Unfortunately, due to unforeseen circumstances, we had not been able to complete all the planned tasks, but instead we had carried out other important tasks, and we had had three good weeks there together.
The Twin Otter landed at Daneborg past noon om 25 August, and Jesper and Erik could depart in quiet, warm, and sunny weather, just as the weather had been for the most part this summer.
Peter stayed behind at Sandodden to spend another three weeks in North-East Greenland, primarily to prepare for the work of the field teams in 2022.

Start Phase 2

During the week following the departure of Jesper and Erik, Peter continued his stay with base in Sandodden to await the arrival of inspection vessel "Triton". The wait was spent on some remaining work, i.e. completing the painting of Tagpapterrassen, counting Nanok equipment, writing field report and – together with Egon from MarinBasis – a thorough clearing around the Research Station and the old Daneborg weather station. During this task, we collected 1½ wagonloads of combustible waste and removed miscellaneous waste, such as old iron pipes and oil drums containing different scrap waste.

Left: Inspection vessel "Triton" arrived in Daneborg. Right: The Seahawk helicopter is prepared for the day's operation on the platform of the ship.


Left: Preparing et helicopter sling at Daneborg. Right: The Seahawk helicopter delivering one out of four slings of equipment to the Kap Philip Broke house, which is to be refurbished in 2022.

Equipment lay out with helicopter at Kulhus and Kap Philip Broke

At noon on 2 September the inspection vessel "Triton" arrived at Daneborg, and already 14.30 we flew out with the ship's Seahawk-helicopter and the first load of equipment for Kulhus. On board the helicopter were also Lucas from Sirius and Mikkel from "Triton", who were going to help handling the goods on our destination. It went well. The flight each way was approx. 45 minutes. The sky was clear and perfect for flying. We carried on like this the entire day, and we manage to transport four slings up there on the first day. Between each flight there was time to move the equipment to the house and secure it. The next day the flying continued transporting equipment to Kulhus. Peter went along on the first sling with Jais from Sirius and Jakob from "Triton". On the second sling Inge Bisgaard from the Greenland National Museum came along to measure the ruins at Jonsbu. Peter assisted as bear guard. As the day came to an end, all Nanok equipment had been transported to Kulhus. In total were made eight large sling transportations to Kulhus. After this, Peter moved aboard "Triton" to go with it on its further voyage.

On day three, we had all equipment laid out through four sling transportations to Kap Philip Broke on Shannon Ø. Here Lucas from Sirius, and Jeppe and Peter from "Triton" helped carrying the equipment to the hut. Another long day of work of more than 10 hours. All in all, the three days of equipment transportation turned out to be a quiet extensive operation, flying 12

The Seahawk helicopter arrives with a sling for Kulhus. In total eight slings were flown to Kulhus over the course of two active days.


Villaen (left) and Hvalrosodden, both in the first snow of the year and in good condition.

sling transportations with approx. ten tons equipment in total. The operation went very efficiently with help from the crew of "Triton", the helicopter, and Sirius. It was a great pleasure to witness and be part of.
Next day, 5 September, we flew equipment to the ZERO research station at Zackenberg, and when this was done past midday, "Triton" wayed anchor at 14.00 to continue northwards.

On board "Triton" to 79-fjorden

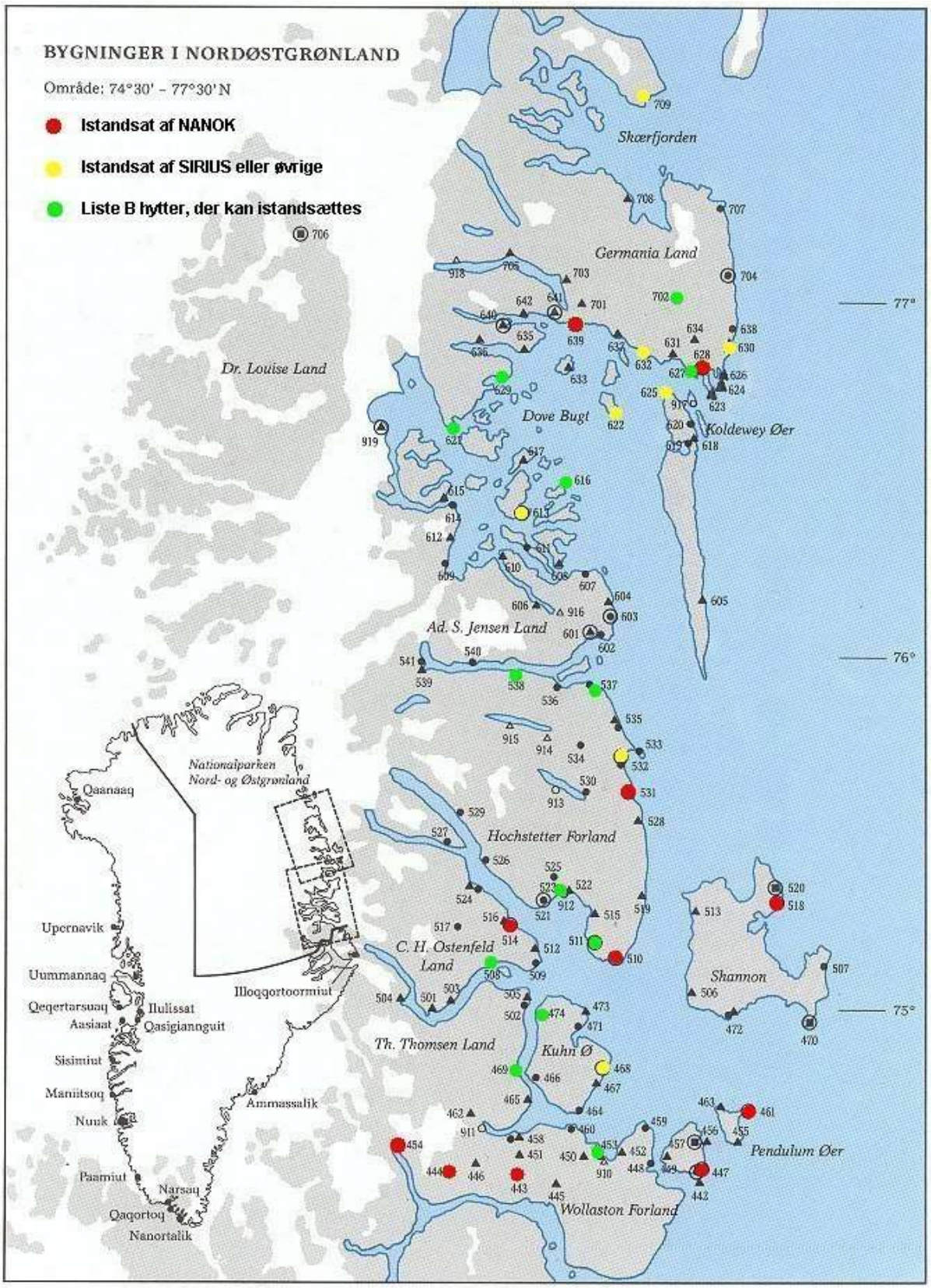
In the period 6-15 September, Peter went along with "Triton" on a cruise from Daneborg and all the way up to 79-fjorden. The tasks of the ship were partly to support Sirius with depot lay out and partly to support civilian projects that in advance had been approved via the Isaaffik website (www.isaaffik.org), i.e. the collaboration platform which was initiated and developed to facilitate logistical collaboration between the Danish Defence and the research sector in the Arctic. Thus, the Alfred Wegener Institute (AWI) had been granted support for retrieving two measuring buoys previously put out in the 79-Fjorden. After successfully retrieving the AWI's instruments, "Triton" returned to Daneborg, along the way visiting / laying out depots / staying the night at: Laegervallen, Hammeren, Kap Amélie, Villaen / Danmarkshavn, Hvalrosodden, Aalborghus, Soranerdepotet, Påskenæsset, Mønstedhus, Ottostrand, Alabamahuset, Germaniahavn. Peter had a particular interest in five of the huts, which had previously been refurbished by Nanok. Each of these were in good condition.

Completing the work

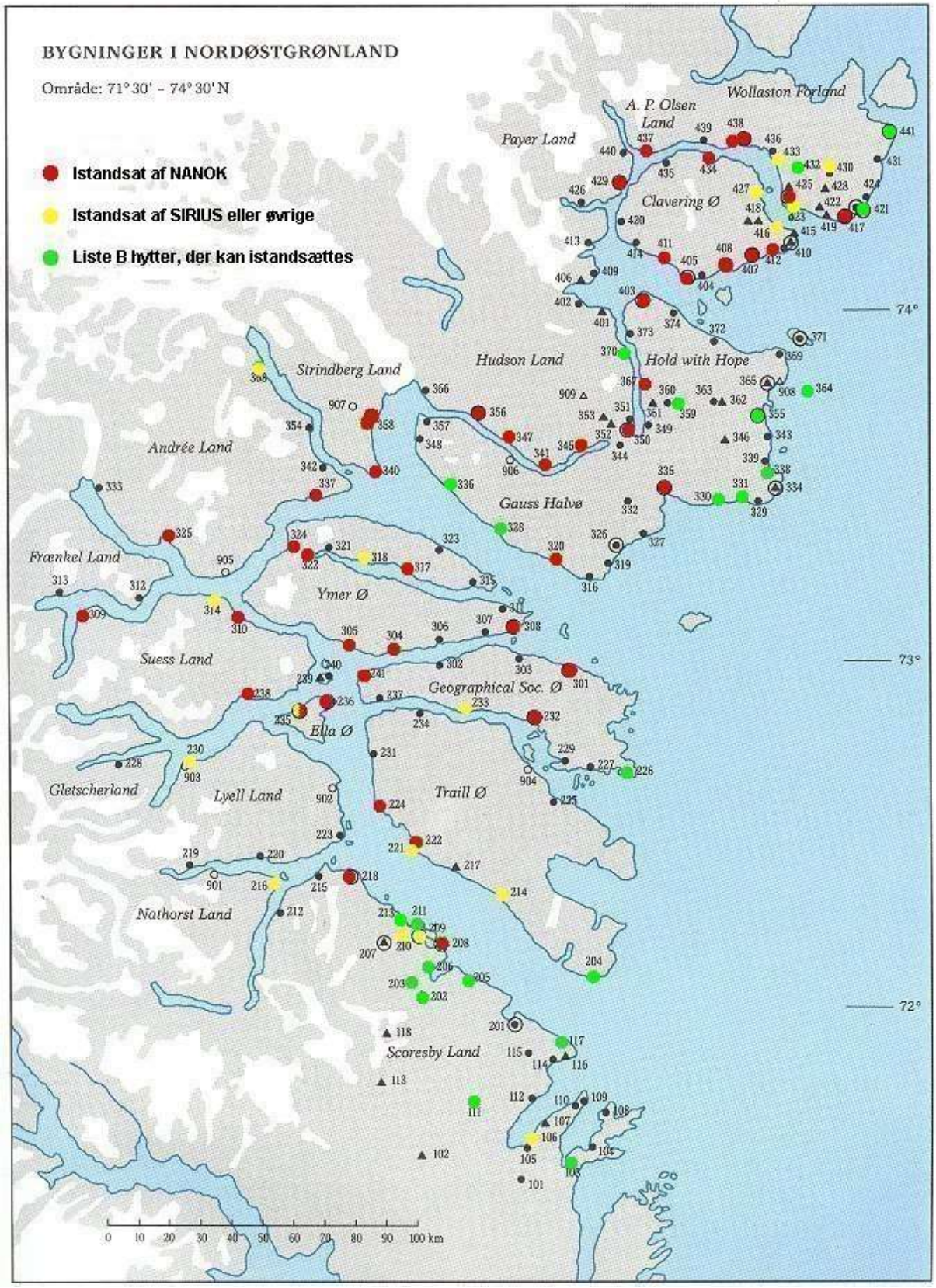
In the morning of 15 September Peter signed off "Triton" at Daneborg. The day was spent preparing Nanok's base at Sandodden for the winter. In the late afternoon ZERO-logistician Jørgen Skafte arrived in RIB to give Peter a lift to Zackenberg, which was point of departure for the journey home. The following afternoon the Twin Otter landed and, with company of personnel from ZERO, we set course to Akureyri via Constable Pynt. From Akureyri the following day to Denmark via Reykjavik and Keflavik.

Jesper – Erik - Peter

Sandodden upon departure 15 September. The shift from summer to autumn happens swiftly. Winter is on its way.



The map shows the maintenance status for the old huts, houses, and stations in North-East Greenland. The sites marked red or yellow can be expected to be in reasonably usable condition. Other sites, however, cannot be expected to be usable. Sites marked green are other huts with the classification B, which Nanok may renovate and maintain in the coming years.



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Field report for “team Hoelsbu” 2021

Tasks

Team Hoelsbu had the following tasks:

a) complete levelling, renovation, and culture historical preservation of Hoelsbu [356]
b) inspect huts and houses in the Ella Ø region
c) inspect, count, and maintain Nanok’s equipment in depot Ella Ø
d) receive equipment for Nanok on Ella Ø
e) prepare for Nanok expedition Ella Ø 2022

Participants

Kristian Nevers (Sirius '95)
Asger Fredslund Pedersen (Sirius '94)
Claus Kolbe Nielsen (Sirius '94)

Ella Ø, arrival, ship mik, and preparing sail with “Agsut”

We arrived as planned at Ella Ø via Iceland on 10 August and made it just in time to meet the other Nanok team - Peter, Jesper and Erik - for a swift briefing before they had to fly to Daneborg. “Agsut” was already swinging in the bay in front of the station. We were warmly received by the Sirius men on Ella Ø. Naturally, we were careful to abide by the Covid-19 restrictions.

Casting the foundation for the new winch for “Agsut”.

Arriving, it was almost already time for ship mik. The supply ship had difficulties anchoring due to the wind, and work was delayed a bit. Finally, the “hook” was thrown, and the ship mik started 11 August 05.00 and continued for approx. 8 hours. We received equipment for Arctic Research Centre (ARC) and Nanok. Two new Nanok containers were placed as planned and in one of them was a new mini loader, which was put to use the same moment it came out into the bright morning light.
The following day we casted the foundation for the new winch and prepared for the sail. “Agsut”

Hoelsbu upon arrival and with a 5-degree list before levelling.


The crooked house.


The crooked common room.

was loaded with everything we needed for the expedition, including 3 iron rods, wood, and roofing felt.

Sailing out …

We departed from Ella Ø 14 August at 01.00 in a fresh wind. We went 14 km/h up through Antarctic Sund with wind and waves astern. After approx. 11 hours sail, we went ashore on Kap Ovibos [340] to inspect the hut. We were able to confirm that the stovepipe feedthrough had become leaky and would have to be repaired later. We continued towards Strindberg, where we went ashore and caught three fish in the river. Had a bite in Nordfjordhuset [358-2] and inspected Strindberghuset [358-3], which appeared great. In the late evening we set course toward Hoelsbu in a nice and quiet weather.

Hoelsbu [356]

Arrival at Hoelsbu at 01.00. This previous,


Levelling of Hoelsbu in full swing.
Strong steel I-profiles being wedged under the house to create a solid foundation.

Norweigian trappers' station was named after Adolf Hoel, who had been one of the leading forces in the Noweigian occupation of "Erik Raudes Land". The station was built in 1930 by the trappers John Giæver and Otto Johnson, along with a range of smaller trappers' huts in relation to the station to make it possible to travel far out into the terrain. In many ways

levelling Hoelsbu, which was the point of departure for our project.
The station was pretty much as expected: crooked, moist, and with rotten woodwork. The work entailed a lot of digging, as all the banks of earth around the house had to be removed to access the sad remains of the original joists, which once were the "foundation". During the






The house has now been levelled. The living room floor is replaced, as the old floor is rotten.

Hoelsbu is iconic, not least because there have been overwinterings throughout time with the prettier sex, as two trappers have been living here with their better halves. For many years, Kristian and others have been thinking about

following days, we supported the building with timber and carefully elevated the building in many places to be able to wedge in three brought-along steel I- profiles below the building. Then the house was elevated using a

10-tons coffee mill-jack and three hydraulic jacks. After a few days work and entrepreneur work, the main building was raised about 50 cm in the south-eastern corner, which had been the lowest point. The house was now levelled to such a degree that it again stands fully functional. The floor in the living room has been replaced completely, as the old floor was rotten.

A few usable pieces of the old 5/4" floorboards have been reused in the floor of the workshop. It was also necessary to repair and lift parts of the annexes, as the main house had been elevated to an extent, where the passage tilted dramatically. To get out the lazy sweat from the body, we planned to turn on the small sauna one evening, but we found out that the stovepipe was






The lower part of the house is repaired and stiffened using new timber covered by roofing felt, before the foundation is covered by large rocks and earth. Inside the house the living room floor is being painted; and then Hoelsbu is ready to be redecorated with the original furniture and inventory.

completely blocked by the ravens' collection of bones, sticks, and metal scraps. When all of this had been removed, it was almost as if the little stove was jumping excitedly in the corner. It was extremely good to have the sore back muscles be warmed and relaxed.
Actually, on Ella Ø, completely new stove pipes for the Hoelsbu-stove had been put out, ready to be loaded onto "Agsut". Alas, they were still lying ready there, on Ella Ø. So, we had to find another solution. With a good result we remounted the old cast iron stove pipes, which in practice were as good as new; immediately after installation we put them to the test baking bread. All three stove pipes were fixed with strong steel bands over the roof, so the wind won't blow them off easily in the future.
Asger was swinging the paintbrushes for a few days; the floor in the living room became grey and all wood outside was painted white.

Stove, workshop, kitchen and living room after levelling and redecoration.

Right as rain once again!

Furthermore, the text on the fine old sign was revived with paint, so it again appears clear who built the station and how the ownership had been back then.
To lead away water from the station area, we dug ditches for several days behind the station. On the south- and west-facing sides of the building, more or less all wood has been replaced on the lower half metre, while on the north-facing side, the wood had been rotten a metre up. The new wood was covered with roofing felt, and Claus relocated several wheelbarrows full of large rocks for around the walls of the house. Finally, we could put peat and earth on the top layer of rocks, so the building appears as before the digging, only in a re-erected state. Lastly, the fixtures and inventory of the building were inspected and cleaned. Asger measured each window for a future possibility of manufacturing and install new ones.

Sail "home"

After finishing the Hoelsbu project, we visited Halle Hytten [341] further in Moskusoksefjorden and it was in very good condition – dry and steady. One could clearly see that the drain excavation, done in 2011, had benefitted the hut and dried up the entire area around it. So, we turned the ship around and sailed towards Nordfjord, where it started blowing and the Waltershausen glacier released vast amounts of ice, which crackled loudly around the boat.
We went ashore at Kap Ovibos hytten. Installation of the stove pipe was repaired with a new/used tinplate, so it now closes tightly, and the hut is ready for use.
Arrived on Ella Ø next day 28 August 03.00. DMU/Aarhus Uni's Søren, Sine and Peter had in the meantime arrived and installed themselves in 12-mandsbarakken/Fjøset, so we snook in and easily found accommodation for the night.

Winter preparation

A short rest and then unpacking and cleaning after the sail and hut reparations. The following days we did inventory in a frenzy. The Bellevue building had been disused by Sirius, while we had been away. Nanok's gear from Bellevue had been moved to a pallet and placed in front of Fjøset, all in relation to the new division of Ella Ø. We put all the gear in Fjøset.


Left: The new winch for "Agsut" works perfectly. Right: Reparation on Kap Ovibos.

Mission "Hoelsbu" accomplished. From the left: Asger, Kristian and Claus.

Everything from "Agsut's" old winch, such as slipway and the old cradle, has been moved to Nanok's area below Fjøset.
Roofing felt counted and now physically divided between Nanok and Sirius.
New winch mounted on foundation. Levelling below the new winch by means of mini loader and shovel. "Agsut" was pulled ashore using the new winch which works perfectly.
The daily collaboration in Tolvmandsbarakken with Søren, Signe and Peter from ARC/Aarhus University went very well. One night we went for a hike together to the other side of the riverbed. After Nanok's equipment and buildings had been prepared for winter, Claus and Asger went for a walk on Bastionen with a Sirius man, while Kristian went for a sail with ARC.
Due to logistical challenges, the journey home to Denmark was advanced to 1 September. As usual, the flight home with Norlandair went smoothly.
We have had a fantastic trip from start to finish with kind help and goodwill from all parts.

Asger, Claus and Kristian

Field report for Ella Ø scientist team 2021

Tasks

The Ella Ø scientist team had following tasks:

a) Running in new motorboat and transport equipment from Mestersvig to Ella Ø
b) Running in new barge on Ella Ø
c) Measure oceanographic conditions, test new instruments and put out measuring instruments in the fjord
d) Inspect and install new automatic cameras for monitoring fauna and flora on land
e) Communication of research and collaboration with Nanok
f) Counting stock

Participants

Søren Rysgaard (Arctic Research Centre, Aarhus University & Nanok)
Egon Frandsen (Arctic Research Centre, Aarhus University)
Peter Bondo Christensen (Arctic Research Centre, Aarhus University)
Signe Høgslund (Arctic Research Centre, Aarhus University)
Simon Kortegaard (Mopa Både, Vilsund, Thy)
Toke Høye (Arctic Research Centre, Aarhus University)
Jeff Kerby (Arctic Research Centre, Aarhus University)
Lucas Sandby (Arctic Research Centre, Aarhus University)

Journey up to Ella Ø

This year the scientist group arrived on Ella Ø in various ways. Some with Twin Otter via Daneborg, where they had been establishing new autonomous measuring equipment in the air, on land and at sea through the Greenland Gradient project (find more information on this project on www.isaaffik.org). Others came sailing with the inspection vessel "Knud Rasmussen" from Nuuk, where they had been collecting oceanographic, chemical and biological measurements along the way. This work was completed with lots of measurements in Kejser Franz Joseph Fjord, Isfjord and Kong Oscar Fjord. These will complement the data material from Ella Ø, which has been collected since 2016 by Nanok and the ARC scientist team on Ella Ø. One team member came directly in with Twin Otter via Island and Constable Pynt. Upon arrival at Tolvmandsbarakken on 24 August, Nanok had made the house ready for us to use and taken off with "Agsut" to the Hoelsbu station, which was to be re-erected and receive some positive attention.

Starting up

The Weidemann mini loader was put to work digging a passage in the pile of gravel, which was lying like a wall along the water's edge. This cleared the way for our Mopa-boat to pass and be launched. The boat was taken out of the container, and the Weidemann could easily tow the boat trailer. The motors were checked, and the oil filter was replaced. The spare motor had starting difficulties, but after cleaning the carburettor, it was purring delightfully. The Mopas were anchored so they were easy to pull ashore and anchor again when arriving home. Using the Weidemann, we could cover the hole in the cliff quickly and efficiently to prevent the ground from being flooded at high tide.

Running-in new motorboat and transport equipment from Mestersvig to Ella Ø

Søren and Simon sailed to Mestersvig to pick up the equipment that stranded there last year due to poor weather and ice conditions. Here were two new Mopas, gas, gasoline, measuring


Left: "Agsut" and the Mopa-boat at Ella Ø. Right: Søren and Kolbe preparing a reserve motor.


Right: Putting out a measuring buoy below Tolvmandsbarakken. Right: Autumn is coming. The nights in North-East Greenland are getting dark again.

instruments, and food – waiting to be sailed to Ella Ø. After mounting motor and hydraulic system and filling all empty fuel tanks, we left one Mopa in the container in Mestersvig. The plan is to transport the other Mopa to the Strindberg area to store it in a new boathouse, which is to be built next year. Then there will be a Mopa in Mestersvig, one on Ella Ø, and one in the Strindberg area. This will significantly help connecting the area and serve as an extra precaution when sailing, as it will be possible to sail several boats together and come to each other's assistance in the large fjord area, should an accident occur.

Running in new barge on Ella Ø

We have purchased a barge for Ella Ø, which can be used for transporting equipment those years when transport to the station with Royal Arctic Line is not possible. The barge is made from aluminium and transports 6 tons goods. It can be used for transporting equipment from ships that are without barge or helicopter. Additionally, it can be used for sailing building materials for Nanok around the fjord system.

Measure oceanographic conditions, test new instruments, and put out measuring instruments in the fjord

The measuring buoy that was placed last year in 11 metres depth next to Tolvmandsbarakken was recovered. The retrieval was easy, as a couple of crew members from "Knud Rasmussen" had mounted a marker buoy during a visit to Ella Ø, when the researchers had been dropped off. Data was collected, and a new buoy was put out. The buoy registers oceanographic conditions such as tide, salt, temperature, light and chlorophyl.
We looked thoroughly for buoys in Röhss Fjord and near Kap Humboldt. The buoys were put out two years ago but were unfortunately irretrievable. Most likely the ice has taken them. We have put out a new buoy further in Röhss Fjord, behind the stream. We are confident that the icebergs cannot reach the underwater buoy in this location. We tried to find a new safe locality for the outer coast buoy in Vega Sund, where there are fewer icebergs. Unfortunately, the


Søren and Lucas preparing a measuring buoy.


Lucas with the ARC-COP measuring buoy. It dives up and down by itself in water column.

attempt was unsuccessful due to tricky weather conditions. More time is needed to find a suitable location, where sea ice and icebergs won't interfere with the instrument.

One of ARC's student projects (ARC-COP) was launched for the second year in a row: An autonomous measuring buoy that profiles salt, temperature and depth at specific times. It dives up and down automatically in the water column the first few hundred metres. This year the ARC-COP had improved energy efficiency and higher accuracy of measurement. First attempt resulted in a leakage due to a defect temperature sensor along with grey hairs and s a few days' work for Lucas. The following tests, however, proved that the combination of silicone grease and linseed oil kit from Nanok, electrical tape, and strips can do wonders. It was out a longer while than last year and performed well. It will now return to Denmark to be long-term tested on the basis of the new tests at low temperatures (below 0 degrees) and high pressure, which are found in the deep Greenlandic fjords. Next year, the plan is to put out a system able to measure all year round at Ella Ø.

Other of our inventions were also put into the water and have collected water samples to be analysed in the laboratories at home. An intelligent water sampler for sampling at different water depths automatises the hands-on approach that we have practiced before when sampling water samples from several depths down to 300 m. The sampler worked perfectly all the way from Nuuk to the Ella Ø fjord system on the "Knud Rasmussen" cruise. Another invention, a larger water sampler, was launched right outside the station in shelter behind the skerries at 10 metres depth. Every week for the next year it will take a water sample. Thus, next year we will be able to link these samples with data collected from our other instruments around the station. The idea is to assess if we can use


Left: Cameras have been handled by bears again this year. Right: Toke preparing a measuring probe.


Camera equipment at the Ella Ø station for monitoring of fauna and flora on land.

water isotopes (18O & 2H) as markers for the melting of the ice sheet, and whether the melt water is mixed in the fjords before leaving the fjord systems. The answer will help us understand the global occurrence of rising water levels as well as sea currents locally as well as regionally.
The weather was generally beautiful during our time here, allowing for sailing and oceanographic measurements in Kempe Fjord, Röhss Fjord, Sofia Sund, Kap Humboldt, Vega Sund, Antarctic Sund and Narhvalsund. The measurements supplement those that were done from the inspection vessel "Knud Rasmussen" in Kong Oscar Fjord, Kejser Franz Joseph Fjord and Isfjord prior to our stay at Ella Ø. Now all oceanographic data will be compared. So far it looks very interesting, especially the temperature profiles are noteworthy: small fluctuations in 70-90 metres depth suggest that something, which we have not earlier been aware of, is going on. Maybe this is connected to the melting of the ice sheet. We hope to get our answer when all our water samples have been analysed.

Inspect and put up new automatic cameras for monitoring fauna and flora on land

The camera systems that were put up two years ago on Ella Ø and in Röhss Fjord were inspected. The systems take a photo every minute during the summer period, in total approx. 100.000 frames per camera per year, documenting the flowering period and the presence of insects, among other things. Each location is equipped with a weather station and monitoring cameras, exposing snowfall and ice conditions. This way, vegetation conditions and zoological observations can be linked with climatic parameters. Again this year, the bears had been handling our equipment roughly, however, in spite of this, there was data on approx. half the cameras on Ella Ø. It was worse in Röhss Fjord, where battery and control box had been ripped apart and dragged to the beach. The systems in Röhss Fjord were repaired, and a new group of cameras were put up. The systems on Ella Ø were repaired and data downloaded. The overview photos of the system were very revealing. In one of the photos a great bear was having a good time, maybe after having chewed on one of the many foil trays protecting the camera against moist. The weather was still good for sailing, and we established another photo location on land on the southside of Vega Sund; our expectation is that the climate here is different than in Röhss Fjord further in the fjord system. Lastly, despite of bad weather, we established an outer coast station with two camera groups in Vega Sund.

Communication of research and collaboration with Nanok

Throughout the stay, the scientists' work and the facilities on Ella Ø were documented on video. This material will be edited into short videos to be published on various media after returning home. We produced an article: "Ella Ø in Nord-East Greenland is the centre of new research efforts" about the research at Ella Ø and the collaboration with Nanok and Sirius, which enables the research work in the area. The article has been published in the Greenlandic newspaper Sermitsiaq 10 September. We also wrote about the scientists' work for Danish print media.
We had a good and constructive week in Tolvmandsbarakken with the three Nanok'ers (Kristian, Asger & Kolbe), enjoying an eminent catch of Arctic char, cooking, and storytelling. We also went for a nice hike in the mountain behind the station and a visit to an old Inuit settlement on the opposite side of the fjord, where we saw many musk oxen. We observed quite a few birds this year. Many glaucous gulls


Left: Søren downloads data from a measuring buoy.
Right: Asger and Kristian serving freshly caught, grilled Arctic char for dinner.

and skuas as well as some nests on the bird mountain in the very end of Kempe fjord, common loons with chicks, eiders, snowy owls, ravens, and a few geese. On land we saw lemmings and weasels. We saw harp seals daily and a few bearded seals.
A big thanks to Sirius for good neighbourliness and to Nanok for shelter, warm water, coal stove and cooker, fridge, freezer, and a very unique atmosphere leading ones thoughts back to the trapper era. Tolvmandsbarakken can keep your internal batteries charged for a whole year, but then you'll need to go back!

Visit from Aage V. Jensens Fonde (AVJF)

A visit from AVJF on Ella Ø as well as in Zackenberg and Daneborg had been planned. Unfortunately, the weather was challenging these plans with fog, rain, sleet, snow, and drenched runways on the coast, so the visit had to be cancelled. It is regrettable that we were not able to show any of the equipment, buildings, boats, and projects that AVJF has financed throughout the years. Especially considering that the little Twin Otter was right there, somewhere above the clouds. We hope the visit will be successful another time.

Packing and journey home

The final three days of the stay were spent pulling out the boat, changing oil, service, making inventory, and packing. Egon came by to make sure everything was recorded. We covered around 1,100 nautical miles in the new Mopas and spent around 550 litres of fuel. Charging batteries was done using two solar panels. They worked fine until mid-September; then a petrol generator was necessary to cover our consumption. Nanok's mini loader was of incredible assistance when launching and pulling up the boats. Packing went like a breeze this year. We were a bit delayed due to snow, sleet, and poor visibility on the journey home, but luckily we made it home in the end.

An unusual evening on Ella Ø

Finally, we wish to recount a very special evening on Ella Ø, Saturday 4 September:
The smell of lamb chops is spreading in and around Tolvmandsbarakken on Ella Ø. After a day with sampling in Narhvalsund and work putting up automatic camera equipment, we gather for dinner. Good day, nice weather for sailing, high spirits. Stories unfold over dinner. It is the end of the season, the dark creeps in, and the kerosene lamps are lit. The visible world becomes smaller, while the stories grow with larger and larger walruses, smarter and smarter bears, and more and more difficult research projects. Ultimately, people find their way to their sleeping bags. One is sleeping in neighbouring house Fjøset, another further up in Ørnereden, and the remaining six in Tolvmands-barakken. Everyone is fast asleep until midnight. "Bear, Bear!" Jeff is knocking on his colleagues' doors in Tolvmandsbarakken, and, honestly, have you ever seen such a sluggish reaction? His voice goes up an octave. "Bear!" – that does the trick.
Jeff and Toke are standing outside the door of their room. Jeff jerks open the door and shouts into the room in an English completely new to everyone in the barracks. Inside the room the head of a bear comes through the window, the polycarbonate window has been pressed in, and there is a sharp smell of fish.
The bear needs to leave now. The barracks are dark. Where is the flare gun A torchlight is lit. Where *IS* the flare gun It is hanging on the rack near the door, and there is a cartridge in the barrel, click, the barrel is shut, and the gun is loaded, and Søren takes a shot out the window of


Where did the bear go?
Scouting into the night, balls of light are fired at the intruder.


The next morning.
Left: Toke can verify that the bear has put its mark on the windows.

the living room. The bear has pulled its head back out; maybe it *does* have some respect for the English coming at it from the door of the room and out the gaping hole where there used to be a window, nevertheless, the blast of the flare gun does not scare it. We need more cartridges. More cartridges. Where are the bullets for the flare gun? Everyone is looking in the barracks, and the bear is not moving. Where *ARE* the cartridges? Resolutely, Simon grabs the rifle and leaves the barracks, making his way around the corner. The bear has pulled away from the building a few metres. Simon takes the rifle to his shoulder and makes a warning shot, the projectile hits in front of the bear, and pebbles come flying from the ground. The bear understands this language, it turns around but does not rush as it moves away from the barracks and up towards the ridge behind Ørnereden.

The first shot fired from the flare gun wakes up Signe, who is sleeping in Ørnereden. The next thing she hears is Jeff on the VHF radio. "Signe?" he asks. "Signe, this is just to tell you, that there is a bear". Signe jumps out of bed, considering her options. She can't see the bear out the window, it is pitch dark. She decides to sit down in the middle of the large living room with the rifle and the radio at hand and asks Jeff to keep her posted. At this moment they are unaware of the location of the bear.

Down in Tolvmandsbarakken they have lit the kerosene lamps. Where the heck are those cartridges? The bear must be scared off for good. Then, finally, the grey cardboard box with bullets appears. Now a warning shot must be made.

From Ørnereden Signe hears the shots and sees the fireballs against the dark Arctic sky, but still she cannot see the bear. Jeff's voice in the radio again: "We are just discussing the situation and want to be sure that you have a rifle up there". Signe confirms, she has a rifle and a flare gun, wondering what they might be discussing. Are they going after the bear despite the darkness? Are they deciding that everyone should stay where they are? It could turn into a long night alone with the rifle and the VHF, if they choose "the fortification strategy".

It is completely quiet in Ørnereden, no sound of rocks crunching nor claws scratching on the wall or on the window. It is as quiet as it gets only in North-East Greenland, with 100 km to the nearest neighbour. The soft light of the kerosene

Ella Ø scientist team 2021.
From the left: Jeffrey Taylor Kerby, Søren Rysgaard, Lucas Sandby, Signe Høgslund, Toke Høye, Egon Frandsen, Simon Kortegaard, Peter Bondo Christensen.

lamps lights up the windows down in Tolvmandsbarakken. Now and then the door opens, and people go in and out. Then a noise from the radio. "We are coming up to get you" Jeff says. Good! Signe takes her sleeping bag and the riffle, watching three dark silhouettes moving slowly uphill. Jeff opens the door of Ørnereden, and they go outside together to stand between Egon and Søren, who are standing with a ready rifle, scouting into the dark. The door of Ørnereden is bearproof and is carefully closed to prevent any bear from entering and ravaging the historic building. The small group slowly pulls back down the hill towards Tolvmandsbarakken. Here they have got hold of Peter from the neighbouring barracks; everyone is gathered now. The excitement calms, shoulders are lowered, and you can hear smile in the voices now, sharing observations of close encounters with the bear. "It was right outside the window, when Jeff pulled up the curtain", Toke says. "I think we left the room in less than five seconds, Jeff didn't even bring his pants with him; incredible, how it was able to just push in the window", "I had shot it with the rifle if it had come any closer, we didn't have the cartridges" Simon tells us. "There really was a bear here? I thought it was some kind of training drill?" Peter says with a sleepy voice, he had been sleeping heavily and well in Fjøset.

Shutters are installed on the windows on the side of Tolvmandsbarakken, where the windows are low. On the other side of the house, the windows are high above the ground, preventing a curious bear from looking in, and, at the same time, from here you can see if the bear should return, so here we leave the shutters open.
The polycarbonate window lies in one big piece in 'the bear room' and is removed while the kettle is put on for coffee. After coffee, green tea, and community singing: *the bear is sleeping* – a two-man watch install themselves in the living room, while the other six scientists crawl back into their sleeping bags. And soon the hum and snoring can be heard from all rooms – people have to get up and get to work in a few hours, so it's about getting some sleep.
In the morning Egon repairs the window with putty and high spirits. It is as new again. Toke and Jeff clear the room while quietly speaking about how come workmen leave so much mess and dust behind them. They leave the paw prints on the windows, so people are reminded that it is best to always be a little vigilant up here.

Søren, Toke, Lucas, Simon, Egon, Signe, Peter, Jeff

About Nanok

Nordøstgrønlandsk Kompagni Nanok is a private, non-profit organisation founded in 1992 upon the former *Østgrønlandsk Fangstkompagni Nanok A/S*, founded in 1929.

Nanok's mission is to contribute *to disseminate knowledge of North-East Greenland and its cultural history and to contribute to securing the cultural monuments and buildings in the area*, a.o.

Nanok consists of a private band of six persons, the Board. These are Peter Schmidt Mikkelsen (managing director), Tommy Pedersen, Palle V. Norit, Søren Rysgaard, Fritz Ploug Nielsen and Jesper Mølbæk Stentoft (treasurer). Nanok's accountant is Aka Lynge. Torben E. Jeppesen assists with purchase of assets and equipment. In addition to the above-mentioned, a number of private individuals actively participate in Nanok's work. All work in Nanok is voluntary and unpaid.

Each summer Nanok dispatches a field team of typically 6-10 participants divided into 2-3 teams who work in North-East Greenland for 3-5 weeks. The results of this work are documented and published in a field report. The expedition participants are chosen by the Board. In the years 1991-2021, a total of 198 Nanok'ers – or more than 75 private individuals – have been dispatched to North-East Greenland.

To perform its tasks Nanok controls a considerable amount of expedition assets. However, Nanok possesses no property in Greenland.

Nanok's work is financed by the Aage V. Jensens Fonde.

Among Nanok's many good collaboration partners and supporters are: Norlandair, Arctic Research Centre, Arctic Science Partnership, Greenland Self Government, The Greenland National Museum & Archive, Greenland Institute of Natural Resources, Arctic Command, the Sirius Sledge Patrol, Defence Guard Mestersvig, Station and Patrol Service Greenland, Royal Arctic Line, and TELE Greenland.

Since 1991 Nanok has renovated and maintained more than 50 culture historical buildings. For this work Nanok has gained considerable recognition and support from the Greenland Self Government, a.o. Since 2010 Nanok has had a formal cooperative agreement with The Greenland National Museum & Archive in Nuuk.

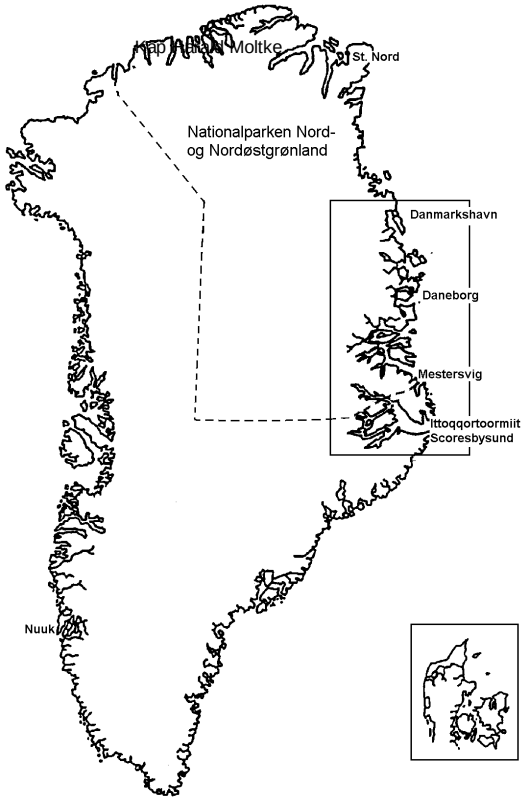
In the years 2003-2007, encouraged by the Greenland Self Government of the time, Nanok developed a new, unique structural survey of all culture historical huts and stations in North-East Greenland. Extensive data from these surveys, incl. photos and GPS positions, is published in "North-East Greenland 1908-60. The Trapper Era – and its traces today" (Mikkelsen 2019).

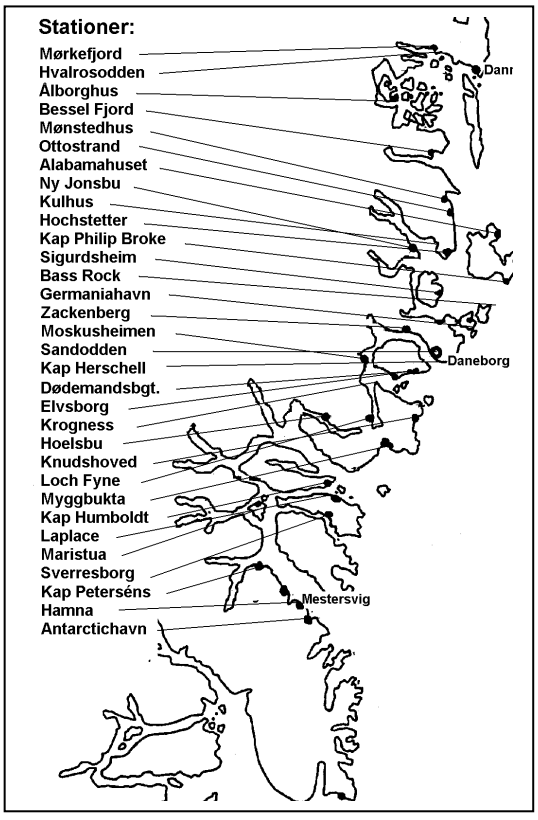
You can experience a range of the old North-East Greenlandic huts in Google Street View via a link from http://www.xsirius.dk/

List of North-East Greenlandic stations and huts renovated by Nanok 1991 - 2021:

No.	Name	Renovation year	No.	Name	Renovation year
201	Antarctichavn	2001 (crushed 2002)	356	Hoelsbu	1999, 2000, 2007, 2021
208-2	Hamna	2020	358-2	Nordfjordhuset	2019
209-2	Nyhavn	2007	358-3	Strindberghuset	2013
218	Kap Peterséns	1998	367-2	Mellemhuset	2010
224-2	Kongeborgen	2001	403	Krogness	2010
222	Holm Bugt hytten	2001	405	Eskimonæs	1998
232	Sverresborg	2014	407	Elvsborg	2007-2008
235	Ørnereden, Ella Ø	2015-2019	408	Dødemandsbugten	2013-2014
235	Tolvmandsbarakken	2015-2019	411-2	Norma hytta	2010
236	Maristua	2008	412	Dahl Skær hytten	2010
238	Mineralbukta	2010	417	Kap Herschell	2002
241	Svedenborg	2011	425	Sandodden/Karina	1994, 2007, 2009, 2020
301	Laplace	2009	429	Moskusheimen	1994
304	Arentz hytten	2008	434	Leirvågen	2008
305	Namdalshytten	2010	438-2	Zackenberg	1991-1992
308	Kap Humboldt	1997	438-4	Fiskerhytten	2008
309	Rendalshytten	2010	437	Bjørnnesstua	2008
310	Bjørnheimen	2008	443	Blæsenborghytten	2017
317	Brøggers hytte	2012	444	Antonsens hytte	2017
320	Smedal	2012	447	Germaniahavn	1999
322	Noa Sø hytten	2008	454	Fjordbotten	2013
324	Varghytten	2002, 2007	461	Bass Rock	2019
325	Renbugthytten	2010	510	Hochstetter	1996, 1998
335	Myggbukta	1999, 2002, 2011	514	Ny Jonsbu	1995
337	Ragnhilds-hytten	2008	518	Alabamahuset	2016
340	Kap Ovibos hytten	2000, 2007, 2012	531	Ottostrand	2009
341	Halle	2011	628-1	Villaen, Danmarkshavn	2017
345	Bråstad	2011	639-1	Hvalrosodden	2019
347	Petrahytten	2011	639-2	Alwin Pedersens hus	2019
350	Loch Fyne	1993, 2007	---	Kap Moltke /Brønlundhus	2001

Source of hut numbers and names: *North-East Greenland 1908-60. The Trapper Era – and its traces today* (Mikkelsen, P. S.; Xsirius Books, 2019).





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