

Spitsbergen

21-28 September 2008

on board

S/V Noorderlicht



The *Noorderlicht* was originally built in 1910, in Flensburg. For most of her life she served as a light vessel on the Baltic. Then, in 1991 the present owners purchased the ship and re-rigged and re-fitted her thoroughly, according to the rules of 'Register Holland'. *Noorderlicht* is 46 metres long and 6.5 metres breadth, a well-balanced, two-masted schooner rig that is able to sail all seas.

With:

Captain: Gert Ritzema (Netherlands)
First mate: Dickie Koolwijk (Netherlands)
Second mate: Elisabeth Ritzema (Netherlands)

Chef: Anna Kors (Niederlande)
Expedition leader: Rolf Stange (Germany)

And 19 brave polar explorers from Germany, Italy, The Netherlands, Spain, The United Kingdom and The United States of America

21. September 2008 – Longyearbyen

Position at 1700: 78°14'N/15°37'E. Calm, 6°C, cloudy, rain.

The landed on the runway of the little airport near Longyearbyen even a little bit ahead of time and where met by our fearless leader, Rolf Stange from Germany, who was easily identified thanks to a *Noorderlicht* life belt. Some missing luggage needed to be sorted out, but soon we were on a bus on the way to the high arctic metropolis of Longyearbyen, where we still had some hours time to explore the settlement with its various excitements such as museum, supermarket and cafes and restaursants.

Around 1700, we boarded the *Noorderlicht* which was alongside in the harbour of Longyearbyen. Even in the grey and rainy weather that we had today, she was a beautiful view with her red hull and her two masts that were proudly pointing towards the sky. We moved into our cabins, stored our luggage away and then met the friendly crew for the first time. Captain Gert and expedition leader Rolf welcomed us once again, introduced the ship and her crew, gave us some information about life on board and about some important safety issues. We had a good look around – everything on board the *Noorderlicht* seemed to breathe a certain spirit of adventure and tradition, but was very purpose-serving at the same time.

Soon, the firealarm was sounded – neither the engine room nor our dinner were going up in flames and smoke, it was only an exercise, and someone was heard whistling "smoke on the water" while moving out on deck with the lifejacket, where we were met by our first mate Dickie who gave us some more instructions and information about the ship.





The one and only fire alarm of our voyage – more fun than drama.

Clearing the last bits of our first dinner.

Finally it was time to try what our chef Anna had prepared in her little gally. We realised soon that the mealtimes were really something to look forward to, three times every day. In the meantime, we sailed out into Isfjord. Our high-arctic adventure was about to begin!

A heavy swell and strong westerly winds led Gert and Rolf to decide that it was wise to set course northwards, towards Billefjord, a branch of Isfjord that could be expected to be relatively well protected in the given conditions. The gentle movement of the ship made most of us go to bed quite early, but enjoyed a good and calm night's sleep, as after a few hours only we were anchored in Skansbukta and the *Noorderlicht* was lying on the water like a stone on solid ground.

22 September 2008 – Isfjord. Billefjord: Skansbukta, Gipshuken

Position at 0830: 78°31' N /16°1' E. Partly cloudy, occasional raindrops, calm, ca.5°C

fter a good night's sleep, we awoke to the appealing smell of a *Noorderlicht*-style breakfast. Once we had finished this, we discussed our plans for the morning with Rolf and then boarded the little Zodiac for our first excursion. It was a short ride ashore on calm, protected waters in this scenic bay, which was surrounced by high mountain cliffs towering over narrow beaches. The rock formations were indeed impressive, and as soon as we had all assembled near on old shipwreck ashore, Rolf gave us a short introduction into the area's earth history. Hard to believe that this was all once a shallow, warm, tropical shelf sea area where coral

reefs were growing in abundance! We went for a short walk to find some fossilized remains of the organisms that inhabitated those seas more than 250 million years ago. Even before that, large volumes of water had been evaporating from lagoons for a long time, leaving large quantities of minerals such as gypsym behind. This had been mined in Skansbukta in 1918 by the Portland Cement Fabric, but the operation turned out to be unsuccessful as the gypsym was found be not gypsym but anhydrite, a chemically very similar, but worthless mineral. Mining was revived once again in the 1930s by a Norwegian company, but without more success.

Just after the landing, we found ourselves in the middle of a little rainshower, very much to our annoyance to begin with but then we realised that at the same time the rain was producing an incredibly beautiful rainbow that came down towards the water close to the *Noorderlicht* – what a view!

Noorderlicht in Skansbukta.





Exploring Skansbukta.

Slowly, we strolled around between all the old remains and found a surprising number of nice photogenic objects amongst them. The mine entrance was just under the slope, and nicely twisted remains of a railway track led from the mine to the coast. A bit further towards the open coast was a hut which is now property of a club in Longyearbyen and used by its members for freetime purposes. Suddenly, we spotted to foxes running down the steep scree slopes not too far from us. On the way back, we spent some more time enjoying and fotographing the stunning scenery and the old remains, which served nicely as a piece of art that combined nature and human history. After lunch, we repositioned just across Billefjord to a beach under the impressive mountain of Gipshuken ("gypsym corner"). The wind had picked up considerably, but with a little help of our Captain Gert and first mate/Zodiac drive Dickie, we made it all safely ashore. The mountain slopes behind the beach were just as impressive as those around Skansbukta. We followed the beach southwards and came across some large bones, that turned out to be subfossil whalebones. The secret of their position far inland away from the present-day shoreline was soon revealed when Rolf explained the phenomenon of the raised beaches, a result of land-uplift that followed after the end of the ice age as a consequence of deglaciation. We found different bones scattered here and there of interesting shapes and amazing sizes.

A flat part of tundra turned out to be the grazing area of two lonesome reindeer that were not too much bothered by our presence. We approached slowly and came within an amazingly short distance.





Reindeer and evening light at Gipshuken.

A rocky slope took us up to a ridge that provided a fine view over most of the central and outer parts of the mighty Isfjord. We dropped down to the other side of the peninsula, where we found an old trapper's hut near the shore. Rolf knew some stories of those days when men used to live in total remoteness in the arctic wilderness.

A last ascent brought us up to another ridge, from where we had nice views into the large valley Gipsdalen and Tempelfjord, before we went down to a rocky shore where Dickie came to pick us up.

A final highlight of the day was still waiting for us, when the sun came



Under sail into the sunset, out in Isfjord.

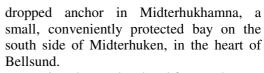
down between the clouds and the horizon and it cast its orange-red light over the whole scenery. At the same time, the sails went up and the fresh breeze that still blew out of Billefjord soon pushed us with a good 8 knots towards the west.

23. September 2008 – Bellsund: Midterhukhamna, Ahlstrandhalvøya

Position at 0830: 77°38'N/14°46'E. Fresh westerly breeze, partly sunny, 0°C.

In the later evening, we had left Isfjord and followed the west coast further south, towards Bellsund. The day had actually begun at 0230, when Gert rang the bell to drag us out of bed—there were northern lights to be seen! The famous, mysterious glow of the high-arctic night sky was absolutely fascinating, and it was easy to forget about the freezingly cold temperatures. Later, we woke up once again at a more civilized time. Many of us were nevertheless quite tired, as the night at open see had been a bit of a roller-coaster ride, so many had difficulties to fall asleep, whilst other ones were sacrifing to King Neptune. In the early morning, the crew had

Arctic fox and old trapper hut at Midterhukhamna, Bellsund.



We enjoyed a calm breakfast and went ashore in Midterhukhamna, an easy

operation thanks to the short distance to the well-protected beach. Once we were all ashore, we had a look at the remains of an old hunting station, a small wooden house cabin that was standing in the shelter of some rocks. It was a secondary station, used ocasionally during travelling rather than for living, and built in 1898, which made it one of the oldest of its kind in Spitsbergen. Next to it, there were remains of constructions that were even far older: houses and foundations of blubber ovens made it evident that this nice natural harbour had been used by whalers. Those in Bellsund were likely to be English ones, and the relevant historical period was the early and mid-17th century.

We then started a little stroll along the beach, and soon we discovered a little fox that was looking for something to eat near some rock stacks on the far end of the bay. We approached slowly and carefully, but the courious little fox could hardly have cared less and came even closer, allowing for very nice observation and photography. Finally, the fox went away, and we went further out to the point to investigate the impressive coastal landscape, an abrasion platform created by heavy surf, on which some rock stacks that had survived marine erosion until today were still standing. Both the landscape and the mighty surf were impressive.

A little walk took us to the outer point on the western side of Midterhuken. The sun that broke through the clouds made the tundra glow in all shades of green and brown, and the dark sky even amplified the colour spectacle. From an elevated ridge, we enjoyed a nice view over the larger surroundings, including the island Akseløya, and rainshowers being driven by the wind across Bellsund, creating occasional rainbows.

Finally, it was lunchtime and we made it back to the *Noorderlicht* in time for this event which all of us were looking forward to with an anticipation that was not to be disappointed.

During lunch, we repositioned deeper into Van Keulenfjord, seeking shelter from the strong westerly winds in a natural harbour called Fleur-de-Lyshamna, called after a sailing boat. The remaining winds could not keep us from going ashore, where we found the spinal column of a Sperm whale that was stranded there in July this year. A short walk took us to a rather spacious and solid hut that was built by hunters a long time ago. Behind the hut where we had some shelter from the ice-cold wind, Rolf told some rather incredible polar bear stories that he had experienced in this area – sure enough, from now on we would not go anywhere without a rifle!

On the beach near the hut, several large piles of White whale (beluga) bones were bleaching in the sun, being an almost eerie testimony to the activities of Norwegian hunters who caught White whales in nets in the early 1920s.

We continued along the beach past the landing site and walked up some ridges for the view. The weather turned into a really high arctic mode, with a strong breeze blowing snowshowers in our faces.





Vertebrae of a Sperm whale (dead) and a Polar bear (complete and very much alive). Fleur-de-Lyshamna, Van Keulenfjord, Bellsund.

Suddenly Rolf stopped as soon as he got the view over one of the ridges, as sleeping in the wind shadow of the next ridge was none less than the king of the Arctic himself: a polar bear! The first bear of our voyage, it turned out to be a queen rather than king, as Rolf told us, according to the head proportions (those of the bear, not of our fearless leader). We kept a watchful eye on the mighty for a few moments, when it lifted its head and watched us – an intense moment, eye-to-eye with the biggest bear species on earth. We decided it was wise to gain some distance and made our way back to the boat. When we soon left on board the Noorderlicht, the bear could be seen once again at a distance – lying and sleeping again, but in another place. Obviously it had moved. Good that we were far enough away!

The later afternoon saw some amazing demonstration of what capable seamen can do with a relatively small ship, when Gert and Dickie maneouvred the *Noorderlicht* through several channels between the mainland and smaller islands, namely Eholmen (south of Midterhuken) and Akseløya. Especially Rolf, who had eight years experience of sailing in polar waters, was visibly amazed to see the ship sailing through these difficult, narrow channels with rocky shallows and strong tidal currents.

We followed the eastern side of Akseløya northwards and dropped anchor in Fridtjovhamna, where we enjoyed a calm night.

24. September 2008 – Van Mijenfjord: Fridtjovbreen, Akseløya

Position at 0830: 77°45'N /14°36'E. Calm, mostly sunny, fresh snow, -2°C.

Te woke up to a beautiful morning in the calm, protected bay of Fridtjovhamna, the mighty calving cliff of Fridtjovbreen (-glacier) not far to the north, surrounded by some splendid mountain scenery. After breakfast, the anchor went up and the *Noorderlicht* moved towards the broken ice cliff of the glacier, which had filled the bay almost completely during a rapid advance ('surge') in 1996, but had retreated since then. This advance had certainly



Fridtjovbreen.

changed the bottom topography of Fridtjovhamna, making the depth information on the old chart useless, but again Gert demonstrated a fine piece of seamanship by steering the vessel carefully around a small island not too far (but safely) from the glacier front, stopping the engine occasionally to give us enough time to enjoy the scenery in silence.

Soon the anchor went down again on the eastern side of the bay, where we went ashore to get a different perspective on the



Enjoying life in the Arctic!



glacier. We ascended a relatively steep moraine ridge and walked up a hill to a height of 1880 decimeters, from which we had a breathtaking view to Fridtjovbreen and some wild mountains surrounding it to the west and the wide, open valley of Berzeliusdalen to the east. A low autumn sun cast its warm rays beautifully over the scene.

We made it back on board just in time for a slightly delayed lunch and then moved a few miles to near-by Akseløya. Having seen the island already several times from a distance yesterday and today, we were looking forward to some first-hand impressions. The island was highly interesting from a natural history point of view, as ist consisted of Permian and Triassic sediment layers that had been tilted to a more or less vertical position, thus creating the long, narrow island. The eastern part (Triassic) consisted of flat, low-lying tundra with a relatively rich vegetation cover on which a surprisingly large number of reindeer were grazing, whereas the larger, western part was made up of harder Permian carbonate and flintstone, forming an elevated, rocky ridge that was almost devoid of vegeation.

We went for the Triassic first – well, it was rather the reindeer that caught our attention, and we got within about 100 metres from the animals that were grazing peacefully. Then, we ventured







Wildlife, scenery and polar explorers on Akseløya.

into even older parts of earth history, moving into Permian layers as we ascended the highest mountain of the islands, which brought us to an altitude of 600 decimetres above sea level – where were the oxygen masks? The landscape was amazing, with the layers forming elegant curves and bends to both directions and the island being framed by the magnificent mountains of

Ingeborgfjellet to the north and Midterhukfjellet to the south, both containing incredibly beautiful folds of the late-Palaezoic and early Mesozoic layers.

We followed the ridge for some kilometres to the south, walking up and down rocky hills, until several houses on the southern end of Akseløya came into view. We were amazed to hear that one of these houses was actually inhabited by a Norwegian trapper who collects down from Common eider nests in the area, but the man was probably in mainland Norway as the breeding season for these birds had finished quite some time ago already. The place had a long tradition as a hunting territory, going as far back as 1898, when the very first Norwegian trappers of the modern period of hunting came up to the area.

We went back to the Triassic part of the island, the eastern shore in other words, were we waited some minutes until Dickie came with the Zodiac to pick us up.

The day had been beautiful and more than rich enough in arctic experiences, but there was more to come. Just as we had settled down in the cosy salon to enjoy a cup of tea or coffee, Gert rang the bell and announced the sighting of two polar bears on Akseløya – no more than about two kilometers south of where we had just been picked up! The two animals must be a mother together an almost fully grown cub. They walked up and down the shore, seemingly undecided about where to go, and had a little rest on the beach. Gert took the *Noorderlicht* as close to the rocky shoreline as safety allowed, and we watched the two bears for a long time until we finally turned the bow south again.

We sailed further south, towards Recherchefjord, rounding Midterhuken once again. During this passage, the swell that came in from the open ocean reminded many of us that we were still on a relatively small ship, and demand for food decreased with increasing movement of the ship, but most of us made it to the open deck when Gert announced the sighting of an Orca – a rare sighting in Spitsbergen waters. Later in the evening, the anchor went down in Recherchefjord and we could happily enjoy another calm night's sleep.

25. September 2008 – Recherchefjord: Recherchebreen, Snatcherpynten

Position at 0830: 77°30'N /14°34'E. No wind, decreasing cloud cover, fresh snow, -3°C.

resh and full of energy, we were amazed to discover that fresh snow covered the mountains around Recherchefjord. We lifted the anchor after breakfast to sail a mile until we were in position near a beach north of Recherchebreen, the glacier in the innermost part of the fjord that bears the same name. The glacier does not reach the sea anymore, but terminates into a lagoon and has thus still a calving front. The landing turned out to be another easy one – almost boring, as we were well-trained polar explorers by now, out for some challenge and adventure!

A short walk took us across a meltwater plain towards some cones, remains of the former



Iceberg drifting in the lagoon of Recherchebreen.

terminal moraine ridge of the glacier, which we ascended for the view, which turned out to be mindblowing: The little hills were located directly on the shore of the lagoon, which separated the beach from the glacier. Not the least breath disturbed the surface of the water, which reflected perfect mirror images of the glacier and the surrounding mountains. Many small icebergs were drifting in the calm water, displaying incredible colours and countless shapes. We stopped for a long time to gaze at the incredibly beautiful scenery and to document it on film and memory card, before we went on, slowly following the coast of the lagoon, walking past countless small pieces of ice that covered the shoreline.

Suddenly sharp eyes discovered a polar bear on the other side of the lagoon. Indeed, it was the fourth bear of our voyage that was walking towards us, calm and in a relaxed way, but covering an amazing distance in no time. As the

High arctic wildlife at Recherchebreen.

bear

was no further away than a few hundred metres, there was no way of quickly retreating to the ship, so Rolf decided to walk up to a small hilltop to keep an eye on the bear (after all that is known, polar bears are less likely to attack upslopes than on level ground). Luckily, it turned out that all preparations for further defence were unnecessary, as the bear decided to take a bath and started to swim across the lagoon, towards the far end of the glacier. As if this was not enough, suddenly an Arctic fox appeared, ran happily along the edge of the hill in front of us and then just sat down, yawned, scratched itself and walked on. Incredible! With the bear swimming further towards the glacier and the fox walking its way, we went on to the outlet of the lagoon, where the current had assembled an amazing number of smaller icebergs that were slowly drifting out into the fjord.

It was as if everything that could have attracted us to Spitsbergen was concentred within a few kilometres around us, and for many, this morning had been the highlight of the voyage. Nevertheless, eventually it was time to repair to the ship, and we were certainly hungry and, some at least, cold enough to enjoy a little rest on board the *Noorderlicht*.

A few miles sailing after lunch took us to Snatcherpynten on the western side of Recherchefjord, where we went ashore at about 1500. The fresh snow had marked some old raised beaches beautifully that were normally difficult to see and almost impossible to fotograph. Not far from the landing, a pile of mine carts was rusting on the beach, left behind in the years around the First World War by an English company for no obvious reason, as the area had no minerals or other occurrences of economic interest (opposed to other parts of Recherchefjord, where attempts to mine Asbestos/iron/coal had been made in those years). A good 100 metres inland stood a relatively large house, built in 1904 and now called Gjævervilla after the man who once stood behind the construction. We could only guess what the motivation for the costly erection of the house might have been: being too large for a private pleasure hut, it is commonly believed that Gjæver, a consul and a clever business man, had plans to bring rich tourists to the rich hunting grounds of Recherchefjord. This had never happened, and the hut was already standing at quite an angle, being repaired to some degree by the administration of Spitsbergen but nevertheless facing a 'death in beauty' sooner or later.

We continued further inland, approaching a moraine ridge, and experienced mountain goats that we were, nothing could keep us from hiking up the rocky terrain until we had got the full view over Renardbreen, as the glacier that had created the ridge in the 19th century was called. Unfortunately, it had probably eradicated the remains of the very first wintering site ever in Spitsbergen, when 8 English whalers who were left behind by accident managed to survive a year until they were rescued. This did not keep us from enjoying the view over the glacier and its moraine landscape.

The sun slowly disappeared behind the mountains and there was a clear indication of the beginning of winter in the air, but instead of taking the shortest way back to the ship, we chose to make another loop deeper into the southwestern part of Recherchefjord, following the snow-covered tundra slope to enjoy the light that changed from minute to minute, until we reached another historical site at Tomtodden, where a Russian North Pole expedition had wintered in the





Silent witnesses of adventures of the past in arctic winter atmosphere.

18th century. The light was amazing, and the mountains displayed delicate colours in all possible and impossible shades of blue and orange.

The temperature could well be called fresh, and some first ice crystals had started to form on the water surface. As we were not keen to spend the winter, we made our way back to the landing site and were soon back on board, looking forward to another good *Noorderlicht*-style dinner prepared by Anna. At the same time, both anchor and sails went up and we left Recherchefjord and Bellsund, heading for more northerly destinations and hoping for not too much wind, as we would spend most of the night at open sea, sailing up the outer west coast of Spitsbergen.

26. September 2008 – Farmhamna

Position at 0830: 78°20'N /12°50'E. Overcast, southeasterly breeze, -2°C.

The original idea had been to sail up north to Prins Karls Forland to visit a Walrus colony, but it was evident that the strong easterly breeze that came up during the night would make any landings on the eastern side of that island impossible. Instead, we found us at anchor in Farmhamna, a relatively well sheltered bay on the west coast of Spitsbergen, surrounded by small islets and rocky reefs. After breakfast, Rolf called us briefly together for a briefing to inform us about the plan, and it did not take long until we jumped into the Zodiac. The ride was a bit choppy, but some minutes later we stepped onto a gravel beach covered with seaweed.



The hunting station at Farmhamna: Life at the end of the world.

Much to our surprise we found out that the place was actually inhabited: Near the landing site, protected by a rock from wind and weather, stood a large, solid hut, surrounded by several smaller buildings. A number of sledge dogs were chained up nearby and sang their typical welcome song. The owners of the hut were a Norwegian couple who had been living there for many years as trappers, hunting mainly reindeer, ptarmigan, seals and foxes. The two had visitors at the moment, so we left them in peace. Walking past the hut, we took some pictures – what a place to spend a life! Most of us were happy to escape such a fate, while a few ones felt a certain





The west coast of Spitsbergen: A harsh, but beautiful place.

longing as they tried to imagine life at such a remote, yet beautiful place, far away from traffic and the everyday stress and hectic of zivilisation.

We walked inland to explore the wide coastal plain, a strange landscape feature that is so typical for the west coast of Spitsbergen. Farmhamna was actually located on a peninsula that was so narrow that it was almost an island. Passing some low rocky hills with deserted fox dens and some frozen lakes, we came to the beach on the far side where we found another hut – not much more than a large wooden box that would hardly give any shelter from the wind. Incredible that people had spent time in such an abode in the arctic winter! Well, any hut was better than no hut. We continued towards the outer point, which was fringed was rocky reefs. The waves were breaking on the rocks, and the surf was just amazing. Almost frightening as we still had to get back on board the *Noorderlicht*, but the bay on the other side was certainly better protected, and otherwise, the choice of huts in this particular area was not too bad at all, compared to regional standards.

We found Purple sandpipers on the beach in surprisingly large numbers, and even some Arctic terns flew around our heads. It had obviously not yet crossed their minds that summer was over and for them it was really time to leave.

A short walk brought us back to the landing beach near the hut. The wind had picked up, but

Dickie brought us all safely back on board, where Anna welcomed us with a hearty lunch of pancakes.

Given the current weather conditions with swell and a strong southeasterly breeze, there was not much else to do then to lift anchor after lunch and set course for Isfjord. Most of us enjoyed a lazy afternoon off, watching the *Noorderlicht* riding the waves under sail. Others went for a longish nap, while others were less amused by the movement of the ship, and some were even said to have sacrificed to King Neptune. In the early evening, we entered Grønfjord, where we went alongside at the Russian mining settlement of Barentsburg, where we enjoyed a good night's sleep.



"Back in the USSR": Barentsburg at night.

27. September 2008 – Barentsburg

Position at 0830: 78°03'N /14°12'E. Calm, high clouds, good visibility. Fresh snow, -2°C.

The found ourselves again in zivilisation, at least in a wider sense: the Russian coal mining settlement Barentsburg was the first thing we saw as we looked out in the morning. This was where we had planned our last excursion: A strong contrast to the previous days that had brought nothing but pure wilderness.

The area of Barentsburg had been claimed by a Norwegian company in 1912, when Spitsbergen was still No Man's Land, but was sold to a Dutch company already in 1920, that passed the mine on to a Russian company in 1932. Finally, it became property of the Russian state-owned mining company Trust Arktikugol. Barentsburg had obviously seen better days in the past, during the years of the Soviet Union. A fire in the mine in early 2008 had put a preliminary end to all mining activities, which were not expected to be continued before the summer of 2009. There were currently no more than about 300 persons living in Barentsburg, including several families with children. The architecture was deeply rooted in socialist building tradition. For photographers, Barentsburg was currently much more attractive than for miners: Interesting photographic objects



A piece of Russia in the Arctic.

and we then turned into Adventfjord.

In the late afternoon, many of us took the opportunity for a walk to Longyearbyen, before we enjoyed our last, good *Noorderlicht*-style dinner – this time, Anna had indeed prepared something special for us!

In the evening, it was time to pack, although rumour had it that some of us went on to explore Saturday night life in the high arctic metropolis of Longyearbyen.

28. September 2008 – Longyearbyen

Position at 0830: 78°14'N /15°37'E. Weather: arctic. Temperature: cold.

week, her crew and our fellow passengers when a bus was ready to take us to Longyearbyen at 0900. There, we had some hours to explore the various excitements including the museum and the cafe, before most of us boarded the airport bus at 1300. It was difficult to believe that within a few hours we should be back to the hazzle and dazzle of big city life in Oslo and soon elsewhere on earth, but most of us knew already now that this was possibly the first, but definitely not the last visit to the far north.

Thank you very much for travelling with us!

Best wishes

Er see you again, somewhere between the poles!



Fuglefjellet and finally Bjørndalen

before the airport came into view

Rolf made this triplog.

This triplog and the group photo can be downloaded from: www.Spitzbergen.de

For more information, please see www.oceanwide-expeditions.com www.noorderlicht.nu

Sunrise and sunset:

Datum	Position	Latitude	Longitude	Sunrise	Sunset
				(UTM-1	(UTM-1
				= local time)	= local time)
21.09.	Longyearbyen	78°14'	15°37'	06.14	19.27
22.09.	Skansbukta	78°31'	16°01'	06.19	19.18
23.09.	Midterhukhamna	77°38'	14°46'	06.33	19.13
24.09.	Fridtjovhamna	77°45'	14°36'	06.40	19.07
25.09	Recherchefjord	77°30'	14°34'	06.47	18.59
26.09.	Farmhamna	78°20'	12°50'	07.01	18.59
27.09.	Barentsburg	78°03'	12°50'	07.02	18.46
28.09.	Longyearbyen	78°14'	15°37'	07.04	18.32



Fridtjovbreen – 24 September 2008

- Skansbukta
 Gipshuken
 Midterhukhamna
 Fleur-de-Lyshamna
 Fridtjovbreen
 Akseløya
 Recherchebreen
 Snatcherpynten
 Farmhamna
 Barentsburg

- 10. Barentsburg

