

Expedition Log

Expedition cruise to the Weddell Sea

13th – 23rd November 2006

M/V Grigoriy Mikheev

ГРИГОРИЙ МИХЕЕВ



The *Grigoriy Mikheev* was built in 1990 in Finland and was designed as an ice strengthened oceanographic research vessel. Of steel construction, measuring 66m (210 ft) long, 12.8m (42 ft) wide, with a displacement of 2,000 tons, she is ideal for the Antarctic region. This former research vessel of the Hydrometeorological Institute in St. Petersburg is manned by an enthusiastic Russian crew so we know that we are in extremely capable hands. During the northern summer she cruises the water of the Arctic Ocean.

With

Captain – Alexey Zakalashnyuk and his Russian Crew of 18

and

Expedition Leader – Monika Schillat (Germany/Argentina)
Hotel Manager – Natascha Wisse (The Netherlands)
Head Chef – Benjamin Vdmar (United States of America)
Sous Chef – Richard Arokiasamy (Malaysia)
Guide/Lecturer – Paolo Bernat (Italy)
Guide/Lecturer – Marcelo Zárate (Argentina)
Ship's Physician – Jenny Kissler (Germany)

13th of November 2006 – Ushuaia / Tierra del Fuego, Argentina Position 54°45' S / 68°30'W

We had finally landed in Ushuaia, the place which called itself "El fin del mundo" (the end of the world). The rugged spine of the Andes mountains stretches the entire length of the South American continent, coming right down to meet the sea here at the southern tip of Chile and Argentina. The four-hour flight from Buenos Aires over the flat, dry Argentine Pampas and Patagonia was highlighted by the plane's steep descent over the snow and glacier-capped peaks to the airstrip which projects straight out into the Beagle Channel. The scenery includes many extensive fjords somewhat reminiscent of parts of Norway.

At four in the afternoon the ship and the crew were ready to welcome us on board., where we got with a rapidly growing population of 55,000 people some time to find our cabins and to unpack

and rest a little.

With a rapidly growing population of 55,000 people, **Ushuaia** is a flourishing duty free port with a fishing industry particularly famous for its crabs. There are other new industries as well, notably electronics. The new buildings and roads give the appearance of a latter day "frontier town" and one of the few remnants of the last century is a beautiful Victorian timber building right on the harbor. Its first owner purchased the so-called Casa Beban building through a catalogue over a hundred years ago. The museum in the former prison had a fascinating and well-arranged series of displays.

At 5.30 p.m. we met in the dining room for the first time to be introduced by our Expedition Leader Monika Schillat to the staff and the ship.

The polar bug had long ago bit all members of the expedition staff. Monika lives actually in Ushuaia and had been working in Antarctica, mostly for *Oceanwide Expeditions* since 1991! Since then, she had

done countless voyages in both the Arctic and Antarctic. Also Marcelo Zárate from Argentina and Paolo Bernat from Italy had a lot of experience in the area.

The hotel department on board the *Grigoriy Mikheev* was run by the always smiling Natascha Wisse from the Netherlands. The chefs came from the United States of America and Malaysia and would take excellent care of our wellbeing during the voyage. Jenny Kissler from Germany brought a wealth of medial skills.

Also Captain Alexey Zakalashnyuk, the most important man on board with countless seasons in Arctic and Antarctic waters under his belt, came to welcome us on board. He had an experienced crew of 18 Russian officers, sailers, engineers and service personnel on board.

In the meantime, the *Grigoriy Mikheev* had already prepared to leave the pier in Ushuaia. At 18:30 we were sailing through the scenic Beagle Channel, heading for the open south Atlantic Ocean. After a short break, Monika called us to the meeting room again for an important briefing on safety and lifeboat drill. This was duly explained by our first mate Oleg Klaptenko. Shortly after, the ship's alarm sounded a signal to practice this emergency evacuation drill. Moving to our cabins, we equipped ourselves with the warmest clothes we could find as well as our life jackets and then headed to the lifeboats to meet our life boat driver and complete the exercise.

By the time we reached open ocean, most people were asleep after a busy day with many new impressions. The morning would show what the Drake would be like. Most people were hoping for a so-called 'Lake Drake' There was no way of telling though, so we'd just wait and see.

Our Antarctic adventure was about to start!



14th November 2006 – Drake Passage

Today we found ourselves en route to the Antarctic Peninsula somewhere on the Drake Passage. The Drake fortunately did not really show why it is one of the most notorious seas. Although some of us were fully entitled to have a different opinion, the sea was actually quite calm with the exception of a light swell. This was the day to find out whether or not one was prone to seasickness. By the end of this day everyone had found out what helps and what not. The *Grigoriy Mikheev* was making good speed, around 12 knots most of the time. There was not too much wildlife around, but a few Cape Petrel, Giant Storm Petrels and some Albatrosses such as Black-browed and Grey-headed Albatross came along every now and then.

After breakfast, the *Mikheev*-university opened and we met in the dining room to attend the first of a series of lectures. Monika started with a talk on the early exploration of Antarctica, from the concepts of the Greek philosophers to the classical voyages of e.g. Magellan to the actual discovery of the continent. Marcelo than took over with geology and explained the geological history of the Southern Ocean and all the implications its formation had such as the position of the various islands (Falklands (now part of South America's continental shelf), South Georgia (microcontinent), South Sandwich (volcanic), South Orkney (microcontinent), South Shetlands (mostly microcontinent, separated from the Antarctic peninsula by the Bransfield Strait, a young

and slowly growing volcanic, such cooling of global scale. Paolo gave a Italian about during our passage Most of us kept calm Drake Passage the afternoon on the A calm and relaxed off in the Mikheev-



ocean; some islands are Deception Island) and climate on a large fascinating talk in wildlife to be expected through the Drake. enjoying an unusually even with sunshine in outside decks.

day at sea was rounded cinema, where part one

and two of David Attenborough's famous documentary about Antarctica, *Life in the freezer*, were screened to get in the mood for the deep south.

15th November 2006 – Drake Passage

The weather had at first remained unususally good for the area, but did steadily grow worse. The

wind would pick up considerably towards the late evening, making a landing in the South Shetland Islands impossible. Some time in the early morning we had crossed the 60° parallel – thus entering the region bounded by the Antarctic Treaty.

This morning found us far to the south of the Polar Front

The Drake Passage

The Drake Passage geologically opened about 22 to 30 million years ago, and connects the Atlantic with the Pacific Oceans south of Tierra del Fuego. To the south, the South Shetland Islands bound this waterway which is here about 800-900 km wide. The Drake played an important part in the trade of the 19th and early 20th centuries before the opening of the Panama Canal in 1914. The stormy seas and icy conditions made the rounding of Cape Horn through the Drake Passage a rigorous test for ships and crews alike, especially for the sailing vessels of the day. Though bearing the name of the famous 16th-century English seaman and explorer, the Drake Passage was, in fact, first traversed in 1616 by a Flemish expedition led by Willem Schouten. Sir Francis Drake did not sail through the passage but passed instead through the Straits of Magellan to the north of Tierra del Fuego, although he was blown south into the more extreme latitudes of the passage by a Pacific storm.

The passage has an average depth of 3400 m (11,000 feet), with deeper regions of up to 4800 m (15,600 feet) near the northern and southern boundaries.

The winds through the Drake Passage are predominantly from the west and are most intense in the northern half. The mean annual air temperature ranges from 5°C in the north to -3°C in the south. Cyclones (atmospheric low-pressure systems with winds that blow clockwise in the Southern Hemisphere) formed in the Pacific Ocean traverse the passage towards the southern end. Surface water temperature varies from near 6°C in the north to -1°C in the south, with the temperature altering sharply in a zone near 60°S. This transitional zone is know as the Antarctic Convergence, or Polar Front. It separates the sub-Antarctic surface water from the colder and fresher Antarctic surface water. At depths of between approximately 500 to 3000 m there occurs a layer of relatively warm and salty deep water.

The maximum sea ice cover occurs in September; 25% to a full cover of 100% extends to 60°S, with occasional ice flows reaching Cape Horn.

The water within the passage flows from the Pacific into the Atlantic, except for a small amount of water in the south that comes from the Scotia Sea. The general movement, know as the Antarctic Circumpolar Current, is the most voluminous in the world, with an estimated rate of flow between 950 Mio to 1500 cubic kilometers per second.



(=Antarctic Convergence) already, and the much lower temperatures of air and water indicated that we were in the Antarctic realm. A look outside confirmed that: snowfall reduced the visibility to almost zero for most of the day. Many Cape Petrels kept flying around and around the Grigoriy Mikheev, keeping some keen wildlife watchers and photographers busy on the back deck.

In separate sessions we gathered in the dining hall and in the bar. Monika and Paolo called together for mandatory briefing about good behaviour in penguin country. They also explained some essential



safety rules in the Antarctic wilderness and during use of the Zodiacs.

As we could expect to see our first icebergs today, Marcelo gave an introductory talk about ice to clear the difference between all sorts of ice, of which there were surprisingly many such as sea ice, pack ice, glacier ice, icebergs, pancake ice (sounds tasty, doesn't it!?), chocolate ice (even better!!!) and so on. Around dinner time we reached the South Shetland Islands, but a landing was unfortunately not possible due to the

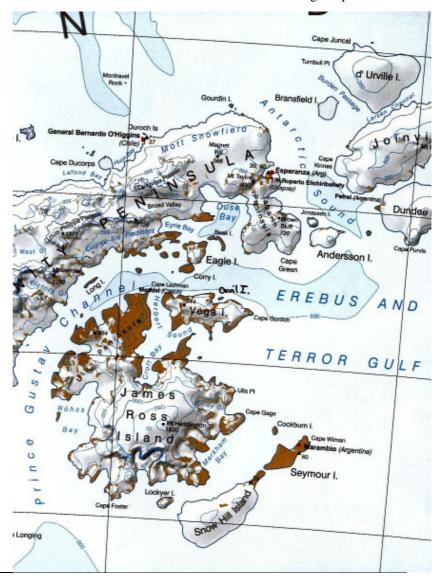
extrem high winds. So we sailed on, crossing the Bransfield Strait and entering the Antarctic Sound in the very early morning hours. We hoped, that the next morning would find us already in the Weddell Sea and with suitable conditions to go ashore.

16th November 2006

Paulet Island 63° 35' S 55° 47'W – Pack-ice navigation in search of Emperor Penguins

The morning showed itself from the best possible side as we approached the east side of Paulet Island on the NW of the Weddell Sea. Bright sunshine and no wind! Paulet Island is famous for its more than 100.000 pairs of Adelie penguins. The landing went very well and everybody got almost three hours pondering the beach in a slow pace between the smaller and larger penguin highways that criss-crossed the beach. In fact, the pathways were even tramped down as happens with other much larger animals such as sheep and cows... and people. These pathways have been made over numerous years and endless numbers of small Adelie feet. The higher part of the

central beach was one elongated rookery and on the far right hand side a larger rookery could be approached to within the limited 5 meters without any problems. One striking feature of these rookeries was the eternal pebble collecting of the nesting birds. It was like the entire rookery suffered from a compulsive urge to collect and steal pebbles from other birds. On the beach we found two Weddell Seals nursing their pubs in the sunshine. Other seals were just lazing in the smooth Marcelo air. explained some of the geological interesting features to us. Paulet is in fact a circular volcanic cone acwith an altitude of around 350 meters above sea level and a diameter of 1.6 located at the northeast end of the Antarctic peninsula, 3 miles SE of Dundee island. It was discovered by the British expedition commanded by James



Clark Ross, who named it for a captain of the Royal Navy.

We landed on a narrow beach made up of rounded pebbles mainly composed of volcanic rocks. Northeast of the landing place is a distinct stack of basaltic rocks formed by marine erosion; this is the nesting site of some shags and sheathbills. Just in front of it, a colony of shags is nesting on the steep slope of basaltic rocks.

Going inland from the beach there were two distinct topographic features consisting of relatively flat surfaces situated about 3 and 6 meters above sea level respectively. These tabular topographic

features extending rounded pebbles. other words old during high stands another flat composed of the 3 m high terrace nesting on these steep slopes of the members of the



along 400 meters were also made up of They are likely representing marine terraces, in beaches formed in the recent geological past of sea-level. Eastward from the stack, there is surface, about 3 meter above sea level and pebbles likely representing the continuation of of the landing beach. The Adelie penguins are surfaces as well as along some of the lateral volcanic cone. Close to the hut built by Swedish Norwegian Expedition under Otto von

Nordenskjöld, there was a volcanic rock outcrop intensely weathered by frost action. This physical process of alteration broke the rock apart into numerous slabs of angular edges being the raw material used by the overwintering party of the expedition to build the hut. Nearly 400 meters beyond the hut, a frozen lake is located in a subcircular depression rimmed by volcanic rocks which may represent the crater of the volcano. Monika told us the amazing story of the Swedish survivors. Here a part of the Swedish Antarctic Expedition with Captain Larsen was forced to over winter in 1902/03. Their ship the "Antarctic" was crashed by ice only 25 miles from Paulet and they took their belongings and some provisions in the lifeboats with them. Dragging and rowing the boats where possible they finally made it to the shore and built themselves a small hut of rocks for shelter. Belt buckles turned into fishing hooks, but penguins were as well on the menu. All men but one survived.

Later that evening Monika gave us a lecture on the topic, so that we got a better understanding of what life was all about in those days of despair.

After a refreshing meal on board, it was time to go on deck. Our bridge-crew was navigating through loose pack ice and around huge tabular icebergs en route to the South-Eastern edge of Snow Hill Island in the southern Weddell Sea. Navigation at times got tricky and the *Grigoriy Mikheev* had to push many ice-floes to get further. Finally the captain started zigzagging through

the few leads, which allowed us to go scraping of ice on our ship's hall made Our expectation grew from hour to hour South. We were searching for Emperor towards the open Sea. Only six years scientists had discovered a new colony on the pack-ice south of Snow Hill we couldn't reach the colony itself, as it 10km from the ice-edge inland, but had of these beautiful animals their own search for food. At around obvious, that the ice would soon stop us hurried our meal and soon all eyes were as we were scanning the ice-floes for we did succeed and spotted the pack ice. We were all very excited



further South. some of us nervous. as we got further Penguins on their way Argentinean of Emperor Penguins Island. We knew, that located some was high hopes to approaching us dinner time it became completely. glued to the binoculars wildlife. And finally emperor penguins in when our Expedition

Leader announced that we would take the boats out and actually land ourselves on the packe-ice. That was a bit scary but also very exciting. We felt like Shackleton's men as we carefully set one foot in front of another. Soon we realised, that the ice was holding and got more comfortable. As we approached the majestic birds the sun was sinking and bathed the icy landscape in beautiful soft colors. They seemed to rest next to a little iceberg. Undisturbed one hang his head for comfort and the other one waddled a little closer to him. Penguins love company. From the top deck, our keen birders soon spotted even more emperor penguins in the distance.

17th November 2006

En route to Snow Hill Island – Devil Island 63° 48' S 57°17' W

Initially we had planned to visit Snow Hill Island from the North-Western side, where we wanted to have a look at the fully restored historic hut, which also formed part of the Swedish Antarctic Expedition. That however turned out to be impossible. A steady southern wind had filled the surrounding sea with a heavy pack-ice layer. At six in the morning our bridge crew encountered impenetrable pack-ice coverage, so that we couldn't even dream of getting close to the island. Our captain and Expeditionleader quickly decided to change plans and reposition the ship with course to Devil Island instead. Luckily enough this plan turned out that great, that we could even go ashore at 9:30 and didn't loose much time over this alteration. Devil Island is located in the central part of a small bay, around 1.6 km South East of Vega island and south of the North East

end of the km long and same 1901-in whose over the last Adelie northeastern composed of millions pyroclastic slopes. The peaks which a



Antarctic peninsula. It is only 1.6 was discovered and named by the 1903 Swedish Antarctic Expedition, footsteps we had followed already days. The island is home of an colony which extends along the side close to the beach. It is volcanic rocks no older than 6 year including basalts and deposits which crop out on its steep island relief is dominated by two separated by an u-shaped pass along meltwater stream flows towards the

penguins rockery. On both sides of the stream, boulders and pebbles of granites, metamorphic and some sedimentary rocks are deposited suggesting that they were likely deposited by glaciers in the past when glaciation was much more extensive than today. Patches of lichens covered the rock outcrops and made this a colourful stop.

Some of us walked along the meltwater stream and climbed up to the top giving us the chance of getting a magnificent panoramic view of the surrounding area. Icebergs, ice floes and small tabular ice fragments were drifting nearby. In between the island and the Vega island coast, the sea was all covered by pack ice.

On the way back to the ship we walked along the cobble beach full of brash ice, which had drifted onshore by the tide. We enjoyed the crackling sound it made while melting away. Our new best friends the Adelie penguins were struggling through the moving ice-soup to get back to their nesting site. Others tried to jump from ice-cube to ice-cube and we wondered how they managed not to break their delicate legs.

The sun was shining bright and none of us really wanted to go back to the ship for lunch. But all this changed, when we saw the wonderful meal our cooks had prepared for us. Once more they had outdone themselves to spoil us.

For a while the sky clouded up, but soon it cleared up again and we were invited to a zodiac cruise around the ice-bergs in the bay. Some of these frozen wonders had probably broken up from iceshelfs and therefore looked more tabular, others, smaller ones were more likely pieces that had calved from much smaller glaciers in the area. We enjoyed their variety in colour, different shades of blue and their interesting shapes: blocky, drydocked, pinnacled, castellated and tabular. Some resembled sculptures showing intriguing shapes which result from the erosive action of the waves and the melting water. There was one particularly outstanding with a long hollow that resembled a short tunnel carved in the ice with intense blue color. We may wonder why the ice looks blue. The reason is of course to be found in fisical laws. When sunlight which consists of all the colors of the rainbow, penetrate the ice crystals, part of this light (the red and yellow color) are absorbed while the blue is reflected. Hence we see the ice blue. We enjoyed watching penguins jumping from the sea right up to the icebergs for shelter and found some seals lazing on the ice as well. As we approached them carefully they didn't even wake up. What a peaceful sight this was, we became still ourselves.

Before Dinner Monika invited us for a briefing about the ongoing voyage and the changes, we would make in our itinerary. Given the difficult ice situation in this part of the Weddell Sea and us not being able to approach Snow Hill or Seymour Island as planned for today, she had moved on in our program, which now would give us the possibility to see even more parts of the Antarctic Peninsula then originally planned. We also realised now, how lucky we had really been the previous day, getting as far south as we did on the South-Eastern side of Snow



Hill to see the Emperor Penguins at the ice edge. Timing is everything in this harsh environment. Just one day later and we would not have made it at all. So now, Monika was offering us an extra landing at Brown Bluff for the next morning and at an Argentinean Station in the afternoon, which were both located on the Antarctic Continent but still in the Weddell Sea area, and a visit to the South Shetland Islands for the following day. On top of that she promised, that she would also take us down to the Gerlache Strait for our very last day in Antarctica, so that we couls appreciate the differences in landscape and wildlife around the Peninsula. That was a deal and we were looking forward to the rest of our journey.

But the day was not over than. Our cooks along with Natascha had been very busy producing a great BBQ on deck. Wine was flowing and sausages and ribs were passed from the grill to ever hungry expeditioners. During the evening the clouds had lifted ever more and the evening hours offered a spectacular light on the surrounding mountains and icebergs. Among all the partying there was still time for a photograph or two. For the sturdy few the party went on till the small hours of the morning. Not everybody had taken Monika's warning of a very busy following day too seriously

18th November 2006

Brown Bluff $63^{\circ} 32' \text{ S} 56^{\circ} 55' \text{W}$ and Hope Bay $63^{\circ} 23' \text{ S} 57^{\circ} 00' \text{ W}$

This morning we approached Brown Bluff. The 745 m high flat-topped rock outcrop situated on the east side of Tabarin Peninsula, is part of the main Antarctic Peninsula, meaning that this morning we would in fact step onto the continent!!

The outcrop consists of an outstanding cliff made up of reddish brown stratified pyroclastic deposits with well-developed horizontal stratification in its uppermost section. These rocks were

formed by the same volcanic cycle that gave birth to Devil Island. Fragmentary deposits coming off from the active erosion of the exposures are deposited at the foot of the cliff giving way to the formation of an irregular topography of small hills on which adelie penguins are nesting. Southward of the landing place, a relatively flat surface composed of pebbles was chosen by a small colony of gentoo penguins to build their nests. Southwards, several big boulders of volcanic breccias were scattered along with large fragments of pillow lavas which are usually formed by underwater eruptions.. Also, large and rounded boulders of granitic rocks resulting from the past action of glaciers were found along the beach. Further away, the rock outcrops disappear under a thick glacial cover forming a high ice wall.

Brown Bluff is a fantastic place with myriads of adelie penguins along with a small rookery of gentoos. The adelies came in a continuous flow along the beach towards there respective nests on the far right hand side of the beach. Constantly they popped out of the water looking perplexed to see strange two-legged creatures on their beach. After a little bit of quarrelling, a bit of wing beating followed by a very curious look and a bit of preening, they seemed to realize that we meant no harm to them and continued their long road to the rookery. Occasionally, penguins came rushing out of the sea almost on top of us. And that with a good reason; just amidst the ice floes on the coast were two leopard seals lurking, waiting for their next meal. We had no such luck as to see that, but the result of leopard seals could be seen on several penguins on the beach. Severe wounds were evidence of the danger in which penguins all over the region live in.

Back on board we had to hurry with our meal, as we were invited to visit an Antarctic Station this afternoon. As we enjoyed lunch, the captain repositioned our ship towards Hope Bay. This bay had also been discovered by the Swedish Antarctic Expedition and the remains of the hut built by some of their members reminds us still today of the heartships they endured here. Today a permanent base is operated here by the Argentineans: Base Esperanza. Around 60 people live here, including 18 children and we were curious to meet them.

Some of us took their passports to get an Antarctic stamp, others had prepared postcards, which they planned to mail from here and all of us wanted to do some shopping as well. The friendly base personnel gave us a tour around their facilities. They had even prepared tea and coffee for us and we felt very welcome inmidst this spectacular panoramic surroundings. Meanwhile the kids living the station were curious about our ship and Monika invited them along to have cokes and cookies on board. Not long after we were on our way through the Antarctic Sound en route to Deception Island, our next days destination.

19th November 2006

Deception Island: Whalers Bay / ship's cruise inside the caldera of Deception $62^{\circ}~56$ 'S $60^{\circ}~36$ 'W

After we had got ready for the day, at 08.30 our captain guided the *Grigoriy Mikheev* safely through Neptune's Bellows and, despite of showers of snow and a fully grown storm, many of us stood on deck to watch our passage through the narrow neck of Deception Island's flooded caldera, with cliffs looming down from either side.

The name Deception Island, which has been in use since 1821, derives from the old English term 'deceipt' which means secluded or sheltered. The remains of *Southern Hunter*, wrecked in 1956, presented a cautionary tale of the necessity for careful navigation through Neptune's Bellows.

Once we had passed Neptune's Bellows, we found ourselves in Port Foster, the history of which went back to the days of the American sealer Nathaniel Palmer, when he entered the caldera in 1820, shortly after the island had been discovered.

To our right was Whalers Bay, where the remains of a former Norwegian whaling station could still be seen on the shore. The landing beach was composed of black volcanic sand mixed with small bits of lava rock. The limited size of Port Foster prevented large waves from building up, but even here the storm was wild, and a fully grown blizzard reminded us soon of where we were.

We dug our shoes down into the sand, feeling the heat of the geothermal activity underneath. To begin with, most of us headed toward the whaling station and the British Antarctic Survey (BAS)

hangar – the only buildings left unharmed after the volcanic eruptions in 1970. Large, rusting constructions from the days of whaling made us feel as if we were walking on another planet. The largest oil tanks, however, were set up here by the British during WWII in case of any military operations in the area. This did, thank God, not happen; the war did not come any further south than the Falkland Islands.

Many of us hiked up to Neptune's Window as Nathaniel Palmer is said to have done in 1820, and looked to see if we could discover the Antarctic Continent for ourselves. This was, however, not the case due to today's limited visibility.



Being a still-active volcano, Deception Island is a unique landscape experience, which cannot be compared to anything else in Antarctica, as we were to see during the next days when we had got some impressions from areas more typical for the Antarctic Peninsula.

During lunch, we repositioned deeper into the caldera called Port Foster. The original plan was to offer a hike at Telefon Bay, but as the site was exposed to quite strong winds, Monika had asked the captain if he could give us a ship's cruise inside the Caldera instead.

At around 17:00 hours we left the crescent shaped island again. Tomorrow was to be a very busy day with an early start, and we had 12 hours of navigation ahead of us en route to the Gerlache Strait. The captain maneuvered the ship once more safely through Neptune's Bellows out into the open waters of the Bransfield Strait. Whereas strong winds were still sweeping over the caldera and Port Foster and low clouds were still hiding the mountains of the surrounding rim, outside the wind was blowing North-easterly and pushed us down South.

Starboard or Steerboard, is a composite of two Anglo Saxon words. Steer meaning helm or rudder, and board meaning side. In early ships the rudder, which was a kind of large oar, was slung from the right hand side of the ship (looking forward), as it was more convenient for the helmsman to steer with his right hand. Eventually starboard came to mean the right hand of the ship. As the rudder was on the right hand side of the ship, it was natural to go alongside the pier for cargo loading with the left side, which was always clear. Larboard from lade (load) and board (side), was therefore the side on which the loading of cargo took place, or the side where the harbor or port was. The British Admiralty, in order to avoid the helmsman becoming confused with the similar commands starboard and larboard decided to use the word port to signify the left-hand side of the ship.

 20^{th} November 2006 Orne Island $~64^\circ~40S~62~40W$ - Danco Island $~64^\circ~44'S~62^\circ~37'W$ - Melchior Island Group $64^\circ~19'S~62^\circ~57'W$

During the night, we had been cruising through the very scenic Gerlache Strait, named after Adrien de Gerlache, a Belgian explorer who discovered the area during an expedition which lasted from late 1897 to 1899 on board the ship *Belgica*. On board was a who is who of the later crème of polar explorers: the Polish geologist Henryk Arctowski, the American Frederick Cook who later claimed the North Pole, and no less than Roald Amundsen, who later was to conquer the South Pole, was the first mate of the *Belgica*. They explored and mapped the area around the Gerlache Strait and then sailed further south, crossing the South Polar Circle, where they were forced to winter – the first expedition ever to do so in those latitudes. Not without some luck and quite a bit of effort, they managed to get out of the ice after more than a year!



Many of the islands around us were named by de Gerlache, but not so Orne Island, where we were about to go ashore before breakfast – yes, before. Well, we had only a handfull of precious days down here in the most beautiful part of the Antarctic Peninsula, so we had to make the most of it. Monika's dulce voice got us out of bed at 0530, and not much more than half an hour later we were ready at the gangway to land on the northern side of rocky Orne Island, a small group of islands directly at the northern tip of Rongé Island.

There was a bit of wind blowing and some waves came in from the wide Gerlache Strait, but we would not let this discourage us. The great advantage was that those of us who had not yet taken the time to take a shower this morning could make up for this, especially our brave expedition staff who helped us to disembark on the rocky shore.

We went up a snow-covered slope to visit the main inhabitants of

Orne Island, Chinstrap Penguins who had established several colonies on the snow-free rocky hilltops. They still seemed to be a bit sleepy, as activity in the colonies was somewhat limited, but it was not too much different from us at the moment. Nevertheless, quite a few of us made a little stroll up to the highest part of the island at a



breathtaking altitude of 700 decimetres to enjoy the view. Brabant and Anvers Islands were in sight on the other, western side of Gerlache Strait, Rongé Island near and the Antarctic Peninsula a bit further away.

Then, it was indeed time for a hearty and well-deserved breakfast. Meanwhile we sailed into the Errera Channel, as the scenic strait between Rongé Island and the Antartic Peninsula is called. It's famous senery remained at first largely hidden.

But there was not too much time to relax. Soon we were off again for a landing on Danco Island, not too far from Orne Island The sportive ones – needless to say there were quite of lof of them amongst our lot – had the opportunity to climb on top of Danco Island! Walking through deep snow, we went up a rather steep slope. We were amazed by the altitude of the colonies, the Gentoos were breeding on the highest parts of the island! After a bit of a natural selection process, some hardy mountaineers did indeed make it up to the summit, which was located at a mind-blowing altitude of 1600 decimetres (530 feet) – where were the oxygen bottles?!

From here, despite of the initially poor visibility we could see the steep ice-cliffs forming the coastline of the Antarctic Peninsula. Soon the sky cleared, the sun came out and the landscape became miraculous around us. But the main attraction were Gentoo Penguins, which were at

home here in quite large numbers. These cute little creatures, which are so typical for this part of the Antarctic Peninsula, are the penguins which are least afraid of human presence. A good thing to do was just to sit down silently somewhere and leave everything else up to the penguins. After a while, they would just pass by or even come closeWe enjoyed the views of the calm Errera Channel in front of us.



Finally we proceeded to our next and last Antarctic destination, the Melchior Islands. We boarded our full fleet of five Zodiacs and went to the beautiful little archipelago with its confusing number of little islets, most of them almost completely covered with firn fields.

We went through narrow channels with steep walls of snow and ice on both sides. Dolphin Gulls were breeding on many of the small rock skerries, every here and there a few lonely Chinstrap and Gentoo Penguins were sitting on the ice, and terns came occasionally passing by. On several places, icebergs were stranded. A none active Argentine station, *Base Melchior* was left on one of the islands. The islands were also interesting for their geology. The islands consist of outcrops of granitoid rocks formed by the crystallization of molten material (magma) in the interior of the crust. Approaching to the exposures, they were characterized by grayish colors and very smooth surfaces as a result of past glacial erosion. Several intrusions of basaltic dykes were cutting through the outcrops. The ice wall of the glaciers permitted us to recognize a horizontal banding, probably representing the original snowfalls events as well as fractures of different orientation and folded structures. These are the result of ice deformation while the glacier is flowing. And the wildlife of course was great too. We saw some lazy Weddell seals and thought, that this was a brilliant way to say 'goodbye' to Antarctica!

Then it was time to go back to the *Grigoriy Mikheev*, where Natascha waited for us with a hot chocolate on the foredeck. We then set course for the open sea. The weather could hardly be better, the sea surface was almost as flat as a mirror – this was what you call 'Lake Drake', as opposed to a 'Drake Shake' which we would hopefully not experience in the last days to come.



21st November 2006 – Drake Passage

A calm day at sea. The Drake Passage was very friendly, hardly any wind and just a gentle swell reminded us that we were still on board a ship on the open ocean.

We spent the day completing our knowledge of various aspects of Antarctica during a series of lectures offered by our staff. Monika started off after breakfast with the *History of Commercial Whaling*. Soon she was interrupted by the captain. He announced that there were humpback whales in the vecinity.

Once he had spotted them, our bridge crew manoeuvered the ship in a wide circle around the whales and then lowered the speed. This caught the attention of the huge animals and they came right at us, checking out the ship's hall, spying at us from underneath the water, diving under the ship several time and just taking their time to do some "tourist-watching" in the middle of the Drake Passage. We wondered what they might think about us and at the same time couldn't believe how lucky we were.

At this time of year the humpbackwhales are making their way slowly down to Antarctica, where they will spend the whole summer feeding on massive amounts of krill and resting, before they will have to go up again to warmer latitudes to raise their calves and find a partner.





In the evening,

we rounded the day off with more interesting lectures about *Global Warming* and Climate Changes.

22nd November 2006 – Drake Passage

The swell had been a little bit more pronounced again during the night, but still very gentle considering that we were still in

the Drake Passage. After lunch, the southernmost parts of South America with the islands including Cape Horn were already visible on the horizon. Soon we would be in protected waters again!

After breakfast, Paolo grabbed the opportunity of one of the last remaining 'time slots' to complete his Italian lecture about Antarctica and the changes it is undergoing. Then, Monika called us together to explain details of disembarkation and to give us some hints on how to behave at the airport of Ushuaia tomorrow. She also took the opportunity to show us some pictures about other voyages Oceanwide Expeditions is organizing, such as trips to South Georgia and the remote Svalbard Archipelago in the Arctic.

During the afternoon, we moved slowly into the protected waters east of Cape Horn, where we had to wait another while during the late afternoon until the obligatory pilot for the Beagle Channel came on board. We had had a quick passage across the Drake, but our staff knew from experience that, time wise, some safety margin was very important – who could really predict wind and waves for two days in these seas?!

Our wonderful chefs had prepared a delicious farewell dinner for us tonight.

23rd November 2006 – Ushuaia Position 54°45' S / 68°30'W

Today was disembarkation day. Through the night we had cruised slowly through the Beagle Channel until Ushuaia was in sight. Docking around 7 a.m., there was just time for one more tasty *Grigoriy Mikheev* breakfast. Suitcases lined corridors. After a quick walk down the gangway we had to say farewell to those who had been our fellow travelers during this incredible voyage. It was hard to believe the journey was over but we knew that Antarctica would remain with us, a strong dream. We could only hope we would return some day.

Total length of this trip: 1685 nm / 3120 km

It was a great pleasure to have you with us! We hope to see you again on one of Oceanwide's Expedition Cruises in the Arctic or the Antarctic!



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