



# **EXPEDITION LOG**

## **THE ANTARCTIC ADVENTURE EXPEDITION**

**ABOARD M.V. POLAR STAR**



**February 15th - 28th 2010**

**Images courtesy of the digital expedition team!**

# WE SAILED WITH .....

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<b>Chief Officer</b>	Piotr Zengota
<b>Chief Engineer</b>	Zenon Berger
<b>Second Officer</b>	Jerry Malapad
<b>Third Officer</b>	Mark Deposoy
<b>Bosun</b>	Bernardo Gonzales
<b>Head Chef</b>	Robert Ward
<b>Hotel Managers</b>	Janet Aurelio
<b>Doctor</b>	Amama Thornley

<b>Expedition Leader</b>	'Mighty' Megan Tierney
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<b>Expedition Staffing</b>	Anver Antria
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<b>Ice Pilot</b>	Little Mo
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## **Day 1: Monday, 15th February - Ushuaia and the Beagle Channel**

*'I now belong to a higher cult of mortals, for I have seen the albatross.'*

*Robert Cushman Murphy*

**Latitude:** 54° 48.6' S

**Wind:** breezy

**Air Temperature:** 12° C

**Longitude:** 068° 17.8' W

**Sea Conditions:** calm

**Ship Speed:** 11 knots (kts)

Renowned for its changeable weather, Ushuaia can provide rain, wind and sunshine all at the same time. The town is situated in a very dramatic position on the Beagle Channel. Facing Chilean territory to the south, it is backed by lofty, snowy peaks, which are the southern end of the mighty Andes. In the late afternoon we made our way along the bustling dock, passing various ships that were welcoming their own passengers, until we arrived at the *MV Polar Star*. Interestingly, while most of us used things called legs to move along the pier to the ship, the group from Walking Adventures International used a great big thing called a bus..... Our home-from-home awaited us and it was a much more robust vessel in comparison to the other expedition ships and the big cruise ship opposite us. It was clear that we were not boarding just any cruise vessel; this was a

unique expedition vessel, with a long history of adventure in the harshest of environments. An air of excitement and anticipation surrounded us as we climbed aboard.

Once everyone was aboard with their luggage, Megan, our expedition leader met us in the observation lounge for an initial briefing. She introduced us to Captain Leszek who welcomed us aboard and raised a toast to the voyage. The expedition staff then introduced themselves and described their specialist interests and experience. Our Chief and Safety Officer, Piotr, followed with a safety briefing, highlighting a few important rules which would help ensure a safe trip for all. As we left the dock the sun came out, and the wind picked up a little.

## USHUAIA

Ushuaia lies at the extreme tip of South America, on the island of Tierra del Fuego, the land of fire. Its name is derived from a Yaghan word (the language of the nomadic Yámana canoe Indians) meaning 'inner harbour to the westward.' In 1906 the Argentine state founded a penal institution in Ushuaia largely for hardened criminals. The prisoners were responsible for most of the pre-1940 construction of the town. The prison ceased operation and was incorporated into the Naval Base in 1940. Ushuaia now has a population of about 60,000 permanent residents. They are descendants of English missionaries who stayed on as farmers, of Yugoslavians and Romanian miners, of sailors from Spain and Italy, who signed off or jumped ship here, of Chileans who came looking for work, of a few Germans, and just a handful of people bearing some blood from the veins of the native Indian population.

This is the southernmost city in the world, and it boasts graceful frame houses, self-made cabins and modern concrete buildings, all with the same roofs. There are no tiles here, only metal sheeting that is bolted down. The slopes are now being developed with smart hotels and ski facilities.

A spectacular chain of mountains, the Cerro Martial, rises behind the town, to the north. The ruined forest behind the town was caused by a terrible fire in 1918. The fire began to the west and raged eastward, so intense that the townspeople thought they might have to take to the sea in boats. Doused by torrential rain, the fire, which had lasted three months, was so bad that everything, even the seeds, was destroyed and the ground was left open to erosion.

The general alarm on the ship sounded at 18:30. The Captain announced that this was a mandatory lifeboat drill and that we should take our bright orange lifejackets and assemble at our muster points on deck 4 under the lifeboats. Portside cabins to the port side and starboard to the starboard side - simple really, that is if you have figured out

which end of the ship is which yet! After being accounted for by the officers it was time to find the dining room and enjoy our first meal on board. Shortly after dinner we passed the southernmost town in the world, Puerto Williams, on the southern (Chilean) side of the Beagle Channel. Ushuaia, with its 60,000 inhabitants, on the north side of the Beagle, claims to be the southernmost city in the world. Puerto Williams was originally a naval base founded in 1952; the settlement now has a population of 2,000 people including one of the last fluent speakers of the language spoken by the Yámana canoe Indians. This tribal group was encountered by Charles Darwin during his time in the Beagle Channel.

The last hours of the day were spent navigating the Beagle Channel, which was named after the ship which circumnavigated the world between 1831 and 1836 with Charles Darwin on board. The Ushuaia port authority had provided a pilot to navigate us safely through the channel whilst the expedition staff helped to spot wildlife from the bridge. Magellanic Penguins were seen swimming around the ship and on the beach at their nearby colony whilst Imperial Shags flew low across the glassy channel, occasionally passing flocks of South American Terns. We were also lucky enough to see our first few Black-browed Albatrosses. A slightly larger cruise ship then overtook us, it was the German *Bremen*. Shortly afterwards, after it got dark, a small boat collected the pilot and from then on we were on our own - en route to Antarctica and many exciting adventures!

## **Day 2: Tuesday, 16th February - at sea, northern Drake Lake**

*Beyond this flood a frozen Continent  
Lies dark and wilde, beat with perpetual storms  
Of Whirlwind and dire Hail, which on firm land  
Thaws not, but gathers heap, and ruin seems  
Of ancient pile; all else deep snow and ice.'*

*John Milton (1608-1674)*

### **Noon report**

**Latitude:** 56° 46' South

**Longitude:** 065° 30' West

**Wind:** 9 kts, southerly

**Sea Conditions:** rolling swell

**Air Temperature:** 8° C

**Ship Speed:** 9 kts

**Distance sailed from Ushuaia:** 175 nautical miles (nm)

This morning at 07.00 we were 45 nm east of infamous Cape Horn and at 08.00 we were 100 nm east of the southernmost point in South America - the Diego Ramirez Islands. Almost uncountable numbers of seabirds nest here and today the pre-breakfast hours were the best for birds, with three species of albatross spotted. If we were pondering their meanderings or wondering about their wanderings, we got the chance to see some of these great albatrosses at very close range. The Wandering Albatross has a wingspan of up to 3.5m/12', which is the greatest wingspan of any bird in the world. They certainly looked very much at home in what for us is a hostile, alien environment. At times they came very close to the ship but the lack of anything to provide a sense of scale meant that gauging size was extremely difficult. Other interesting species included Southern Giant-Petrels, White-chinned and Soft-plumaged Petrels and several tiny storm-petrels.



The wind and waves that caused us so many difficulties this morning didn't affect the birds at all! Luckily, as the day progressed, the sea got calmer and calmer and we were blessed with bright but not quite sunny conditions.

After breakfast we were able to learn a great deal more about the seabirds of this region when John spoke elegantly, eloquently and excitedly on the subject during a lecture in the lounge. As we got to know the ship and our travelling companions better, more activities unfolded - an exciting jacket exchange, a fascinating lecture by Lori about marine mammals, a lecture by Hannah about history and a chance to watch a documentary from the BBC television series 'Pole to Pole'. Another documentary featured yachtswoman Dame Ellen McArthur and her visit to the albatrosses on South Georgia. After an exhausting day, bed came as a welcome relief.

### **Day 3: Wednesday, 17th February - at sea, southern Drake Lake**

*'There must be a beginning of any great matter, but the continuing to the end until it be thoroughly finished yields the true glory'*

*Sir Francis Drake*

#### **Noon report**

**Latitude:** 60° 53' S

**Wind:** 15 kts, west-northwest

**Air Temperature:** 5° C

**Distance sailed from Ushuaia:** 437 nm

**Longitude:** 063° 10' W

**Sea Conditions:** calm with swell

**Ship Speed:** 11.6 kts

This morning we were all pleased to find that the sea was much, much calmer than yesterday so we finally had a chance to unwind a little and begin to enjoy our passage to Antarctica. Sometime during the day there was a noticeable bump but it was only the ship crossing the Antarctic Convergence.

### **THE ANTARCTIC CONVERGENCE**

The Antarctic Convergence, or Polar Front, is a narrow zone (up to around 30 kms wide) undulating between 50 and 60 degrees south. It encircles the continent and is best defined by continuous water temperature readings. The mixing zone is sometimes marked by a belt of fog or mist where warm, more saline currents coming south from the tropics meet cold, denser, less saline currents moving north from Antarctica. These conflicting currents converge, mix and sink. The mixing waters provide a sympathetic environment for abundant plankton that nourishes huge numbers of sea birds and mammals. However few planktonic organisms can cross this biological boundary, so the convergence delineates Antarctica from an ecological point of view. The political boundary is 60° South.

Once again, there was plenty going on inside the ship. Activities included: 'Can't run, fly even worse' (penguins, John), 'Ice versus Rock' with Kerstin and an expedition and zodiac briefing with Megan. The 'Rubber Boot Challenge' was a fabulous, interactive game but 'The Great Vacuum Party' sucked.

Today there were not so many birds around the ship but a lucky few saw a Sei Whale surface in front of the bow. Several Soft-plumaged Petrels, which nest to the north around Tristan da Cunha, came close to the ship and during the morning the first penguins (Chinstraps) were seen. Other visitors included the delightful Cape Petrels, with their black-and-white dappled upperwings. The ship continued on its way south, heading towards unseen but much anticipated Antarctica. Towards the end of dinner there was a cry on the p.a. of whales ahead. Sure enough, there they were - Fin Whales! This was a very exciting encounter because the Captain slowed and turned the ship to maximise the opportunity for us. The Fin Whale is the second largest whale species, only the Blue Whale is bigger. 'Our' whales put on a marvellous performance and we were close enough to see their backs and dorsal fins. At one point there seemed to be spouts all around us - what a way to end the day!



**Day 4: Thursday, 18th February - Telefon & Whaler's Bays, Deception Island (62° 59' S, 060° 34' W) & Hannah Point, Livingston Island (62° 39' S, 060° 37' W)**

*'What is travelling? Changing your place? By no means!  
Travelling is changing your opinions and your prejudices.'*

*Anatole France*

**Noon report**

**Latitude:** 62° 59' S

**Wind:** 4 kts, northerly

**Air Temperature:** 4° C

**Distance sailed from Ushuaia:** 1,351 nm

**Longitude:** 060° 34' W

**Sea Conditions:** flat calm

**Ship Speed:** weighing anchor

At some unreal and unearthly hour this morning three violent shocks greeted us: 1) we were woken up, 2) we found ourselves whisked across the sea in cold, open zodiacs and 3) we had to follow a crazed mountain goat up a steep volcano! Although the hotel department had put early morning coffee and muffins in the observation lounge instead of at the summit, the climb was well worth the effort. After scrambling up in our layers of clothes and rubber boots we had a good idea of what the penguins go through when they

scale the heights to reach their colonies. Despite the low cloud, the views over Port Foster were breathtaking and, looking down, we could see both the Spanish and Argentinian stations on the shoreline. Off in the distance was the entrance to the flooded caldera, Neptune's Bellows, which some of us were up to see earlier on. The ship looked tiny from the rim of the crater and many pictures were taken. Breakfast was well-earned but it didn't last long, for Whaler's Bay and our next stop was just around the corner.



Turning hard left, the ship was soon at anchor in the bay and most of us were quickly zipping over the water to explore the area. There was a choice of the old, derelict aircraft hangar, the old, derelict British Antarctic Survey huts or the old, derelict, whaling station. Alternatively, there was an option to walk along the beach and up to Neptune's Window, a gap in the caldera wall. On the way a couple of plump Weddell Seals were seen and around the station were some moulting Gentoo Penguins. Despite the fact that there was no hot water at the beach a number of us took the plunge, literally, into the icy waters of the bay. Even Dr. Amama joined in the "fun". It might not have been a pleasurable experience but it was a memorable one!

### **THE GEOLOGY OF DECEPTION ISLAND**

Deception Island is the sub-aerial remains of a previously much larger shield volcano that is 80% submerged. Port Foster (max. depth 190 m) is a breached caldera that formed when the centre of the volcano collapsed below sea level after a huge prehistoric explosive eruption ejected lava from the magma chamber below the surface. Smaller eruptions have continued at irregular intervals for at least several thousand years, the first historically recorded by Wilkes in 1842, who saw 'the entire south rim of the crater on fire;' the latest episodes occurring in 1967, 1969, and 1970. The 1967 eruption destroyed a Chilean scientific station at Pendulum Cove and a British station at Whalers Bay and required evacuation of the bases under emergency conditions. The five British scientists returned only to be evacuated again the following year when an eruption destroyed both the Chilean and British bases, and the whaling station. No permanent occupants live on the island, but both Argentina and Spain have summer stations there. The volcano is still active and steam can be seen from fumaroles around the caldera rim. The emergent flanks of the volcano exhibit examples of basaltic lava flows, ejected scoria and broken lava from cinder cones, and bedded ash-fall deposits.

Once we were all back aboard the anchor was weighed and we made our second passage through the very narrow and dramatic Neptune's Bellows. On the starboard side could be seen many Antarctic Fur Seals and giant-petrels on the beach, the remains of an old, wrecked whale-catcher and a small colony of Chinstrap Penguins. Not long afterwards we passed the much larger colony at Baily Head, which we got a distant view of. Much closer views were obtained of icebergs and whales. There were a lot of very large bergs out in the Bransfield Strait and some smaller but no less impressive ones very close to us. The most startling thing about them was the intensity of the blue; either in deep cracks and fissures or in layer after layer.

The whales were very obliging too and several Humpback Whales were seen close to the ship. Every now and then one would lift its tail flukes up into the air. The whales and icebergs held our attention right up to lunchtime. Then, after most of us had gone to eat, distant spouts revealed to Hannah the presence of several, huge Fin Whales. Good views were had of these too then Simon spotted some very distant Killer Whales. When they were announced on the p.a. there was a mad scramble for hats, coats, gloves, cameras etcetera! There was a very large male and several other animals in the area and although they didn't approach the ship we got very good views of them. At one point one of the whales leapt out of the water - upside down! Not long after we had left them behind three more were spotted in front of us. There was a large one (presumably an adult female) a smaller one and a tiny calf. The baby emulated the surfacing behaviour of the other two and stayed very close to them. After a very thrilling series of whale and iceberg encounters we were finally able to continue towards Hannah Point, the site of our afternoon landing.

When we landed we could see that a relatively small area was full of wildlife. Birds included Gentoo and Chinstrap Penguins, Cape Petrels, Southern Giant-Petrels, Kelp Gulls, Brown Skuas, Antarctic Shags and Pale-faced Sheathbills (the all-white, chicken-like birds). There were several species of seals too - Southern Elephant, Antarctic Fur, Crabeater and Leopard. Many of the adult penguins were moulting and, in places, the ground was carpeted with dropped feathers. When they were blown by the wind it was like a mini blizzard. Many chicks were gathered together in crèches and some of them were seen chasing after one of their parents, in order to get fed. Some of the adults regurgitated considerable quantities of nice, warm, mushy, part-digested krill.



The elephant seal wallow was a fascinating place to sit and watch what was going on, if we could stand the smell! Beyond the seals we went, passing nesting giant-petrels and a Crabeater Seal on the way. These seals are rarely seen on land, preferring to haul-out on ice floes or icebergs. A little further on were the whale bones and then we came to Kerstin and her rock collection. This was the end of the walk and she gave

us some fascinating insights into the geology of both Antarctica and Hannah Point. From here we returned to the landing beach, where most of us took the chance to go back to the ship to warm up, have a happy hour drink or simply to reflect on the sights, sounds and experiences of our first day in Antarctica.

**Day 5: Friday, 19th February – Gourdin Island (63° 12' S, 057° 18' W) & (continental) Antarctic Sound (63° 32' S, 056° 55' W)**

*'As a novice, there are five key things to remember about zodiac driving. The first is to fall into your zodiac, rather than out of your zodiac, the second is to get into your zodiac before you unclip it from another one at anchor, the third is not to load your zodiac until it is on the water and the fourth is to secure your anchor line to your zodiac before actually dropping your anchor over the side.'*

*Commodore Phil Wash*

**Noon report**

**Latitude:** 63° 11' S

**Wind:** flat calm

**Air Temperature:** 3° C

**Distance sailed from Ushuaia:** 745 nm

**Longitude:** 057° 17' W

**Sea Conditions:** flat calm

**Ship Speed:** at anchor

Walls of ice and rivers of guano - what better way to start the day! The walls of ice surrounded the ship as she anchored at Gourdin Island. Numerous huge and impressive tabular icebergs littered the sea. The rivers of guano were self explanatory, given the masses of penguins! They were very messy and smelly but we didn't really mind. The island is unusual because all three species of 'brushtail' penguin are found here - Chinstrap, Gentoo and Adélie. Many of the adults were moulting and many of the young were at the waters edge, ready for their first immersion. Waiting for them in the shallows were some Leopard Seals, which some of us saw chasing the newly-fledged chicks. There were also quite a lot of fur seals around and just offshore, on the snowy rocks, were some portly Weddell Seals.

Our Swiss mountain goat (Ursula) was up at the top of the hill in the blink of an eye and many of us followed but at a slightly more sedate pace. It was hot and hard work, what with the heat and the loose stones but the effort was worth it. Ursula apologised for only being able to offer a 360° view but it was more than adequate. Close by was the ice-covered Antarctic Peninsula whilst down below us lay the ship, giving some scale to the huge icebergs beyond. Also way down below us were many more fur seals plus a couple of unidentified seals on ice floes. For a short time it even snowed! There was plenty of time here so we were able to do a little cruise around the bay on the way back to the ship.



After going east we turned more or less due south, into the iceberg-filled Antarctic Sound. By now the sun was out, the sea was glassy and the icebergs had become much more frequent. The Captain manoeuvred the ship in between them and we got very close views of the majestic objects. There was a cry of "Emperor Penguin!" but, unfortunately, the bird disappeared completely; it had been seen in the water, swimming and diving. After a while the ship stopped and the boats were lowered into the water. Complete with drivers and passengers, they set off to see if a landing on the continent was possible. It was for at least two of the boats but when a third tried to land at the same place the poor driver was shooed away...oh dear!

Shortly before turning and leaving, the ship was buzzed by a helicopter from the nearby Russian ice-breaking cargo ship. The helicopter was said to be transferring beer and girls in a cargo net to the lonely Argentinian guys on the nearby base. The chopper was a funny thing, with twin tail fins and contra-rotating rotor blades. During the course of the evening we cruised back up the Antarctic Sound. After dinner Lori and Simon once more failed to "Photo-Synthesise" together in the observation lounge, even though we had had hours of strong sunshine today. This was a bit of a puzzle but was, in fact, due to the 'Incredible Jumping Penguins' and the 'Remarkable Lunging Whales'.

The Captain announced penguins on an iceberg and the ship went around it several times so that we could see the hundreds of Chinstrap Penguins already 'aboard'. There were also at least six Gentoo Penguins among them. Their resting place was a medium-sized tabular berg that was tilted



over so that one section of the top was only just above sea level. Many more penguins were in the water and were jumping up and bouncing off the ice or not even hitting the ice at all. It was difficult not to be amused by their antics but their need to get out of the water was imperative, as there was a Leopard Seal lurking nearby. When we finally turned away we went towards a large iceberg with many large caves in it. However, just then two Humpback Whales were spotted and we circled slowly for a long time as we watched them. It was an incredible performance; co-operative feeding. They would dive together, often throwing their tail flukes up into the air and then surface together with their mouths wide open. Frequently, they would roll at the surface and their long, pectoral fins and parts of their tail flukes would go up in the air. In the end it got too dark to see so we left the whales to their supper and continued on our way - wondering about tomorrow's adventures.

## **Day 5: Saturday, 20th February - Cierva Cove (64° 09' S, 060° 57' W) & Neko Harbour (64° 50' S, 062° 33' W)**

*'Imagine a place bigger than the U.S. or Europe, sunnier than California, yet colder than the freezing compartment of your fridge. Drier than Arabia, higher than mountainous Switzerland, emptier than the Sahara. Only one place in the world fits that description. It is Antarctica, the strange, but beautiful continent at the bottom of the Earth.'*

*This is Antarctica, Joseph M. Dubert*

### **Noon report**

**Latitude:** 64° 09.' S

**Wind:** 4 kts, west

**Air Temperature:** 5° C

**Distance sailed from Ushuaia:** 926 nm

**Longitude:** 060° 57' W

**Sea Conditions:** calm

**Ship Speed:** weighing anchor

Gathering her proverbial skirts for one final effort, the *Polar Star* exploded out of the freezing fog into brilliant sunshine, which rapidly melted the frosted ice on the decks. Cierva Cove looked stunning - brash ice and icebergs floating on a glassy sea, blue sky, rocky mountains and ice and glacier-covered peaks and slopes. There was a chance to go out in the boats again, most for two or more hours, some for a little less. There were a number of interesting icebergs to look at. One large one had a deep cave in it, another had numerous grottoes and, further away, there was even a blue berg to check out.



Despite the natural beauty of the land and icescapes, it was the Humpback Whales that stole the show. There were a number in the area that all seemed to be resting (it being the weekend) and they seemed almost oblivious to our presence. We were

able to get quite close to them by moving slowly and were rewarded with wonderful views. The group of four were travelling very slowly and, with the outboard engines turned off, their continuous exhalations were very loud. It was a privilege to be so close to these giants of the sea. Their breeding grounds are in equatorial waters, either off Brazil or Ecuador so they had come a long way to harvest the krill. There was also a group of Antarctic Minke Whales in the bay but they were intent on zipping this way and that. Tolerant of the zodiacs but not curious, it was sometimes possible to travel with them and have them surface close by.

Antarctic Fur Seals were seen both in the water and on the penguin island. The latter were chinstraps and we were able to get very close to the rock ramps that the birds used to get into and out of the sea. Just around on the other side of the island there was ice in

the water and around the ice was a good place to look for Leopard Seals. There were at least two curious individuals, which circled menacingly. In the clear, flat calm water they could be seen perfectly as they twisted and turned underwater. They would frequently surface right beside a zodiac and snort in the faces of the people next to them! Once their curiosity was satisfied they would move away. Our time went very quickly and even the 'short cruisers' were well over their allotted time. It was a terrific morning!

It was a long way to Neko Harbour but the sun was still shining, even if the wind was increasing. Many more Humpback Whales were spotted and, in the observation lounge, Lori was finally able to talk about photography in polar regions. Later on we passed two funny things - a moving iceberg and a giant, floating orange! The moving iceberg was the all-white, Russian *Akademik Ioffe*, built in 1989 together with a sister ship. The pair conducted hydro-acoustic research, that is finding out how sound travels through water at different depths. Both have a central well, through which various kinds of antenna can be lowered to a depth of 2,000 metres. The floating orange turned out to be an American icebreaker, the *Nathaniel B Palmer*. She is a National Science Foundation vessel and undertakes scientific work as well as transporting supplies and personnel to places like Palmer Station, on nearby Anvers Island.

Neko Harbour was reached after we sailed through the spectacular Errera Channel, past Cuverville, Danco and Ronge Islands. After dinner we set off in the zodiacs for the beach and the penguins and the climb up the hill. This was the first time for most of us on the continent itself and there were some celebrations later in the bar! The landscape was awe-inspiring and the snow and ice on the mountains changed colour as the sun set. It went from cream to yellow to orange to pink and finally, long after the sun had disappeared, pale lavender. There were none of the calvings that Megs had warned us about but it was easy to imagine one happening. The view from the top of the hill was breathtaking, especially as the evening was free of wind. Way down below, the ship bobbed at anchor and the masses of ice in Andvoord Bay flowed around in the strong currents. The ship stayed here until the early morning and it was strange to go to bed without either engine noise or vibrations!



**Day 7: Sunday, 21st February - Port Lockroy (64° 49' S, 063° 30' W), Lemaire Channel (65° 04' S, 063° 57' W) & Petermann Island (65° 10' S, 064° 10' W)**

*'Who would have ever believed in penguins unless he had seen them'*  
Connor O'Brien

**Noon report**

**Latitude:** 64° 25' S

**Wind:** 5 kts, northeast

**Air Temperature:** 5.5° C

**Distance sailed from Ushuaia:** 1,028 nm

**Longitude:** 063° 30' W

**Sea Conditions:** calm

**Ship Speed:** at anchor

Port Lockroy was established in 1944, abandoned in the 1960's and restored in 1996. It is now the second most visited place in Antarctica, after Deception Island. We arrived here after sailing down the scenic Neumeyer Channel, which Megan woke us up early for! The morning dawned bright and clear but there was high cloud above us. After a very informative talk by the station personnel we were off in the boats to see the place for ourselves. We were split 50/50 between the museum/gift shop/post office and nearby Jougla Point, where there was the opportunity to climb up a hill for an overview. The penguins made us very welcome, there were a few shags in among them too and the whale bones were very impressive. The Gift Shop Girls also made us very welcome and were more than happy to take our funny little pieces of plastic and coloured paper in exchange for wonderful mementoes of our visit. The museum was a fascinating place to visit and the fellows outside were hard at work on the new accommodation building.



There was very little wind and the sun slowly came out, revealing the mountains around us. The nearby Seven Sisters stood out and, like the other peaks, were covered with fresh snow. The penguins completely ignored us and at Jougla Point quite a few of them were entering the water for the first time. They were relatively safe, splashing around in the shallow water but Leopard Seals are often seen in the vicinity. In the sheltered bay behind the point were two yachts, the larger of which was going to overwinter here. Much of the water around it was already frozen, due to the low temperature of the previous

night. Soon our time at this outpost was up so we returned to the ship, which had been joined by a small Chilean naval vessel. Once everyone was back aboard, the *Polar Star* weighed anchor and we set off for the famous Lemaire Channel.

This well-known stretch of water is about seven miles long and was discovered by a German expedition under Dallman in 1873-74. It was traversed in December 1898 by the Belgian Antarctic Expedition under Gerlache and was named by him for Charles Lemaire, a Belgian explorer of the Congo. Back in the old days, when film was king, it was known as "Kodak Crack" or "Kodak Alley", due to the large number of pictures taken of it. We too found the channel to be very dramatic as well as being very narrow in places. Lots of ice in the water was complemented by ice all over the towering mountains and all the ice in the numerous glaciers. A few Antarctic Minke Whales were spotted but they were not very close to us. After our exciting transit of the channel it was only a short distance along the Penola Strait to Petermann Island.



Gentoo Penguins greeted us at the shore, where we got out onto wave-smoothed rocks. There were some good options available. One was a walk to the northern end of the island for stunning views and Antarctic Shags and both Adélie & Gentoo Penguins. The chicks were starting to move around and looked very comical. They were also very curious, as we found out. Several of us had our legs pecked by the young gentoos but when people sat down several chicks at once came to have a closer look. The other option for us was a walk in the opposite direction to a high

point, from which the views of both the Antarctic Peninsula and the grounded icebergs at the southern end of the island were magnificent. Way off to the south we could see huge, snowy mountains bathed in sunlight. They were calling to us and the Antarctic Circle was beckoning too so we weighed anchor and departed. Megan spoke of her time working in Antarctica, the sun was still shining, the sea was flat calm and many huge icebergs littered the sea ahead.



**Day 8: Monday, 22nd February - South of the Antarctic Circle: The Gullet (67° 10' S, 067° 38' W), & Pourquoi Pas Island, Marguerite Bay (67° 35' S, 067° 25' W)**

*'Penguins are beautiful, interesting and funny. They are a pleasure to watch even though they do smell and their voices are not melodious.'*

*George Gaylord Simpson*

**Noon report**

**Latitude:** 67° 14' S

**Longitude:** 067° 48' W

**Wind:** 12 kts, northeast

**Sea Conditions:** calm

**Air Temperature:** 4° C

**Ship Speed:** 11.8 kts

**Distance sailed from Ushuaia:** 1,226 nm

At 05.55 this morning the horn was sounded to indicate that we had crossed the Antarctic Circle. Outside it was cold and grey and the decks had a sprinkling of snow on them. After breakfast we were in Hanusse Bay and Killer Whales were spotted ahead of us. This caused a rush to the outside and the whales were seen very well ahead of the ship. They then turned and went down the port side (some way off) and disappeared behind us. In all there were about 20 in the group, which also (surprisingly) included a few fur seals. Shortly afterwards the Captain guided the ship through the narrow Gunnel Channel, dodging bergy bits and icebergs along the way. This was the approach to the area called The Gullet.

It was here that the ship stopped for a zodiac cruise, although the low temperature, snow, wind and choppy sea put a few of us off. Due to the conditions around the ship most boats didn't stay out for the allotted time. However, one boat found shelter from the wind at the northern end of Hicks Channel. Continuing east, a small island was spotted, which proved to be very interesting. There were Weddell Seals on the beach and in the water and groups of Kelp Gulls hovered overhead. An impromptu landing was made before exploring the rest of the island. Around the corner some interesting icebergs had Crabeater Seals around them and a colony of Antarctic Shags was close by. On the way back to the ship there was a calving from an ice wall but, unexpectedly, the break-off had occurred underwater.



Continuing through The Gullet a large pod of 20-30 Killer Whales was spotted. Again, there was a rush to the decks and the ship was slowed and turned. There were several impressive males as well as females and calves. The animals had an orange colouration,

due to microscopic diatoms on the skin. In amongst the whales were more fur seals, which at times porpoised right next to the whales. There was nothing to indicate that the whales were after the seals though. Anyway, we were lucky to see these whales at much closer range than the earlier ones. Resuming our southward course we headed into the northernmost part of Marguerite Bay. In this area there were lots of Wilson's Storm-petrels and Southern Fulmars. Off in the distance it was just possible to see the British station on Rothera Point.

Later in the afternoon the ship sailed into Bigourdan Fjord. To the north was the Antarctic Peninsula and to the south lay mountainous and glaciated Pourquoi Pas Island. A snap decision was made by Her Excellence, The Expedition Leader so the zodiacs were lowered and we were off on another exciting outing. Most went towards icebergs and the mainland before turning south for a rendezvous in the middle of the fjord. Here a little blue iceberg was used as a backdrop for a group (of zodiacs and passengers) photo. Through the brash ice we went until a suitable landing spot was found on the island - why not? we thought. The beach was very rocky and behind it was quite a steep slope, which some of us climbed part-way up. The rock itself (a type of granite) was split and fractured into pieces by repeated frost action. The views from the slope were panoramic and the red coats down below looked like little penguins. There *were* one or two Adelies on the beach, in addition to a single Weddell Seal and a very photogenic fur seal, which perched and posed on top of a rock for us.



On the way back to the ship there was plenty of time to go cruising. There was a lot of brash ice near the beach, which made a satisfying crunching noise as the boats passed through it. On ice floes here and there rested seals. Most were Crabeater (13 on one floe) but one or two Weddells were seen too. Two young Adelies entertained some of us by doing the iceberg equivalent of walking on a rolling log. Over at the huge glacier there were one or two big calvings that added even more ice to that already in the water. Dinner was very welcome, once we were back aboard to enjoy it. During recap an Antarctic Minke Whale was spotted and Ursula confidently announced that it was approximately 143.5 metres from the ship. This evening, at recap, we had a toast to our crossing of the Antarctic Circle. As we did so the ship travelled even further to the south.

**Day 9: Tuesday, 23rd February - Marguerite Bay: Stonington Island (68° 11' S, 067° 00' W) & Horseshoe Island (67° 49' S, 067° 18' W)**

*'Women will not be allowed in the Antarctic until we can provide one woman for every man.'*

*Rear-Admiral George Dufek, USN, 1957*

**Noon report**

**Latitude:** 68° 13' S

**Wind:** flat calm

**Air Temperature:** 4° C

**Distance sailed from Ushuaia:** 1,317 nm

**Longitude:** 066° 59' W

**Sea Conditions:** flat calm

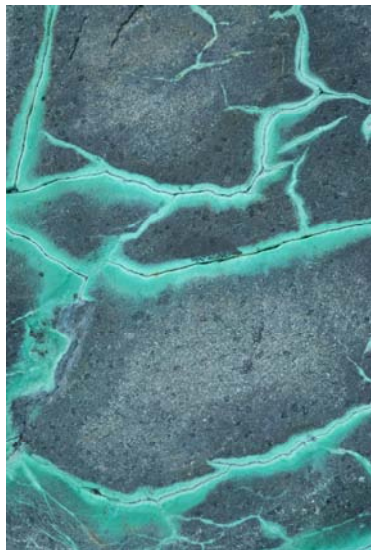
**Ship Speed:** 9.7 kts

After breakfast the scouts went ahead of us to check out the landing site on Stonington Island and before long we joined them on the stony beach. In between the ship and the shore there was a lot of brash ice to work through and there were some interesting icebergs too. The island was quite small so there was plenty of time to look at the two old bases, one British and the other from the USA. Since most buildings were off-limits we were restricted regarding entry but it was very interesting trying to imagine what life was like here 70 years ago. From the high points there were very good views of the surrounding land and seascape. The lack of wind and balmy temperature made things very pleasant; it was a shame that John's high stratus cloud was so grey! Between the island and the glacier there was quite a wide stretch of water where the glacier had retreated. This island was chosen as a base because of the former (glacial) connection to the mainland, which offered direct air access plus the ability for sledge parties to leave from here.



People who were back at the landing site early had the chance to go cruising. They were lucky and got an extra and unexpected landing on the continent. Then, once all the camera-toting guests had left the beach for the return journey to the ship, some of the young, lithe and lissom staff members (so that immediately eliminates John, Simon, Phil and Gilly!) stripped off and plunged into the icy water. Realising that they weren't quite as well adapted as penguins to the cold, they quickly reappeared on the beach! Just before the ship left the anchorage an Antarctic Minke Whale paid us a brief visit and then we were off. The nearby mountains had a dusting of fresh snow and we sailed close to an iceberg on the starboard side. Before we turned to the west and then to the north we reached the southernmost point of our voyage: 68° 15.1' South.

Our journey to Horseshoe Island took us past many more icebergs but the wind slowly started to build in strength. However, by the time we arrived it had abated so, in the late afternoon, we headed by zodiac towards the historic British hut. The landing on the stony beach was a very easy one and waiting for us was a very friendly fur seal. There were some skuas and a few Adélie Penguins in the vicinity but little else in the way of wildlife was seen. At the hut some of the window shutters had been removed so that the interior was lit. Once inside we found a series of connected rooms which, when the place was occupied, must have been very snug. Headlines in a 1957 newspaper reminded us that nothing much changes: train fares to rise, strike action threatened, Asian flu spreads, dangerous armed rabbit hunted by police, murders, stars to divorce etc. etc.



The hut and its contents was a bit like a time capsule so it was good to see that protective renewal work has recently taken place on the roof. Around the hut there were many rocks with a peculiar and distinctive green tint in the fractures, "Copper", said a non-geological staff member, knowledgeably. Walking opportunities were limited but it was possible to clamber around and up the nearby hill before Megan called 'time' on the landing. Although we had started to head north at lunchtime we were now doing so in earnest. Our route took us back through The Gullet and we were due to re-cross the Antarctic Circle during the night. After dinner there was very great disappointment when Megan announced that instead of Lori's much-anticipated 'get down and slimy' "Squidectomy", there would be a film instead. It turned out to be an excellent one about the Humpback Whale.

### **Day 10: Wednesday, 24th February - (continental) Prospect Point with the Fish Islands (66° 01' S, 065° 23' W) & Mutton Cove (66° 01' S, 065° 38' W)**

*'It falls to the lot of few men to view land not previously seen by human eyes.'*

*Ernest Shackleton, 26th November, 1908*

#### **Noon report**

**Latitude:** 66° 00' S

**Wind:** 15 kts, southerly

**Air Temperature:** 4° C

**Distance sailed from Ushuaia:** 1,517 nm

**Longitude:** 065° 21' W

**Sea Conditions:** ripples

**Ship Speed:** at anchor

At wake-up time this morning the world outside consisted of only two things and they were both grey. The sky and the sleety fog were medium grey, whilst the sea was marginally darker. The monotonies were only broken every now and then when we sailed past an iceberg. One had a Humpback Whale next to it but it wasn't a safe place to be. Two huge chunks of ice fell off the berg with the result that the iceberg see-sawed up and down. After breakfast we found ourselves safely at anchor close to Prospect Point, the

former site of a British hut. Antarctica has reserves of both titanium and uranium but Phil astutely reminded us that the Brits were here prospecting for an even scarcer element called unobtainium.

The mainland was very close to the ship and the sea was full of ice, from large bergs to plentiful brash ice. Not far away to the south was a group of small islands called The Minnows. The zodiacs set off and did their own thing, with a landing on the continent itself being a high priority for everyone. Luckily the waters edge was ice-free so getting ashore was very easy for us. Most of us made our way over to the remains (the foundation blocks) of the British hut, which was removed a few years ago. There were also lots of seal bones and some skins too, left over from the days when the sled dogs were fed seal meat.



It was also possible to drive along the face of the nearby glaciers and right up to the Minnows too. Here we got close to numerous small groups of Adélie Penguins. On one island there was also quite a large colony of Antarctic Shags and they too had large, dirty-looking chicks. In addition to the landing and birding we also spent a long time cruising through and around the ice - the blue

icebergs were particularly attractive. Being completely silent for a minute or two revealed that our surroundings were full of different sounds, such as the popping of ice in the water. There were also a few Crabeater Seals on ice in the area too. Several boats were visited by a very large and very curious/feisty Leopard Seal, which seemed intent on chewing the rubber! After a while the wind started to pick up so we returned to the ship for a warming and hearty lunch.

Mutton Cove was fairly windy but once we were out in the boats the wind dropped and the sun came out. By now the mountains and glaciers on the nearby mainland could be seen clearly for the first time today. The zodiac cruise around the small, rocky islands was full of interest. In numerous places small groups of Adélie Penguins had gathered, presumably to moult and there were lots of Crabeater Seals on the nearby grounded icebergs. Fur seals were everywhere and they particularly liked to climb up to the highest point on their chosen islet. The sun on the ice looked wonderful, as did the turquoise ice below the water. Some impromptu landings were made and the time flew by. The final touch (for the zodiac drivers) was being greeted by Bob, who provided a welcome tot of brandy for our frozen heroes (and heroines too!).

The *Polar Star* remained at anchor because it was here that we had our 'Mediterranean Barbecue'. Tables and chairs had been set up for us out on the sunny deck behind the observation lounge. For the Brits it was almost as warm as a summer barby back home, the only thing missing was the rain! The hotel department and the chefs did a tremendous job for us and it was much appreciated. The show wasn't over though. At the end of the day the sun produced a very dramatic and colourful sunset, which had us running for our cameras. The sun also went down on some of the last vestiges of the British empire, when John and his Union Jack shorts and socks finally withdrew from sight for the night.

## **Day 11: Thursday, 25th February - Pleneau Island (65° 06' S, 064° 04' W) and the open sea**

*'An Antarctic expedition is the worst way to have the best time of your life.'*

*Apsley Cherry-Garrard*

### **Noon report**

**Latitude:** 64° 54' S

**Wind:** 7 kts, westerly

**Air Temperature:** 3° C

**Distance sailed from Ushuaia:** 1,076 nm

**Longitude:** 064° 21' W

**Sea Conditions:** gentle swell

**Ship Speed:** 10.2 kts

Having been awoken at a very early hour, Pleneau Island provided plenty of interest in the grey but improving conditions. By the time we ended the excursion there were patches of sunshine and some blue sky too. The Gentoo nesting areas were not far from the landing site and from a distance we could see that the birds had put down what looked like a red carpet for us, on our last landing of the expedition. Closer inspection though revealed that although it was indeed red it certainly wasn't a carpet - it was sticky, smelly, wall-to-wall guano! The penguins mostly had quite large chicks, which were constantly amusing us with their antics. However, there were at least two nests where the chicks were still too small to be left unattended, due to the ever-present skuas. It is unlikely that these very late chicks will be reared successfully; the chicks further north at Port Lockroy were much more advanced than these. In amongst the penguins were six sleepy but cuddlesome elephant seals and like the penguins, they too were rather smelly. Another option was to get away from the noxious vapours by walking up to a couple of vantage points for an overview of Booth Island, the Penola Strait and all the grounded icebergs nearby.



In addition to the island visit, we went out in the boats for a short cruise. The nearby icebergs were very impressive and there were several very curious and almost playful Leopard Seals in the area. Many of us got very good looks when they came repeatedly very close to the boats. They constantly twisted and turned next to and under us and looked up at us as we looked down on them. At times these huge, reptilian beasts were only 12"/30cm away from us! Other marine mammals were in the area too - Antarctic Minke Whales. They were feeding so were not interested in the boats and most of us only got distant views. When it was our turn to feed, the hot coffee and breakfast was very

welcome. Once we were under way we sailed up through the Lemaire Channel. At the northern end we turned to port into the Nimrod Channel, on our way to the open sea.

Just before lunch we saw some Humpback Whales (some tail-slapping ones interrupted Ursula later) and our first Black-browed Albatross for some time. Antarctica finally disappeared from sight when the snow closed in around us. This was just prior to Ursula's talk about the feeding techniques of cetaceans. Her first visit to Antarctica has been so successful and has been such a revelation (especially in the dining room) that she is now planning a ground-breaking, new research project - the feeding strategies, foraging behaviour and selection processes of Antarctic cruise ship passengers. During the course of the evening the sea got rougher and rougher but we were still treated to Ursula's three short Minke Whale films after dinner. At 20.52 our last iceberg was seen, close to the port side at 63° 26.4' South, 064° 56.3' West. One part of it was shaped just like the giant top half of a wine bottle. Then it got dark so we went to bed.



## **Day 12: Friday, 26th February - at sea, southern Drake Passage**

*'On the open, limitless ocean, where time is meaningless and the horizon is always out of reach, there is nothing to mark one's progress save the occasional and unexpected cry of a bird, splash of a dolphin or spout of a whale.'*

*Simon Cook*

### **Noon report**

**Latitude:** 60° 50' S

**Wind:** 26 kts, westerly

**Air Temperature:** 4° C

**Distance sailed from Ushuaia:** 1,872 nm

**Longitude:** 065° 22' W

**Sea Conditions:** 2-3 m waves

**Ship Speed:** 10.9 kts

It seems hard to believe that our time in Antarctica is over but it is true, we are on our way back to Ushuaia and "civilisation". On the outside the weather was very grey to begin with but as the day progressed there was more and more sunshine. The wind was quite strong and the waves, coming from our port side, made the ship pitch and roll quite a lot at times. Not very many birds were seen but those recorded included Wandering, Black-browed and Grey-headed Albatross, Northern Giant-Petrel and both Wilson's and Black-bellied Storm-petrel.

Inside the ship today there was plenty going on in the observation lounge - in the form of lectures (John's 'Dreaded Drake', Megan's 'Project Penguin and Kerstin's '500 Million Years of Antarctica') and films ('The End of the Line' and the remarkable 'Around Cape Horn'. The latter is available from Mystic Seaport Film & Video Archives, Mystic, CT 06355, USA, 'phone +860-572-0711, [www.mysticseaport.org](http://www.mysticseaport.org)). Another item on the agenda was to remove our belongings from the wet gear room. After days of hectic landings and zodiac cruises it was also time to catch up on some sleep, think about

packing, eat some more, review photographs and video footage, nap in the captain's chair on the bridge (Simon, supposedly on 'wildlife watch'), catch up on our journals and wonder what kind of weather tomorrow would bring.

## **Day 13: Saturday, 27th February - at sea, northern Drake Passage**

*'I am the albatross that awaits you at the end of the earth. I am the forgotten soul of the dead sailors from all the seas of the earth who rounded Cape Horn, they did not die in the fury of the waves, but fly today on my wings towards eternity in the cry of the Antarctic winds'*

*Sara Vial (quotation from the Albatross Monument, Cape Horn)*

### **Noon report**

**Latitude:** 56° 44' S

**Longitude:** 066° 28' W

**Position:** 54 nm SSE of Cape Horn

**Wind:** 27 kts, northwest

**Sea Conditions:** 5-6m swell

**Air Temperature:** 8° C

**Ship Speed:** 8.9 kts

**Distance sailed from Ushuaia:** 2,124 nm

*'A journey is a person in itself, no two are alike. And all plans, safeguards, policies and coercion are fruitless. We find after years of struggle that we do not take a trip; a trip takes us.'*

*John Steinbeck (1902-1968)*

For almost the last time we were woken by Megan's dulcet tone over the public address system. Although, having said that, many of us were probably already awake, due to the strong rolling of the ship. It didn't take us long to wonder what the weather was like! In the early hours of the morning both the wind and the waves had increased. A look at the colourful weather chart on the bridge (purple equalled big waves, not high temperatures!) showed that a storm was coming our way. Some of us waited by the library windows with cameras ready; waiting for the spray to whip across the bow of the ship. To reduce the rolling of the ship we changed course, onto a heading that would take us closer to Cape Horn. By now the visibility was poor and there was driving rain - good Cape Horn weather! As time went by though, we got closer and closer to the shelter of the islands east of the infamous cape. Even in the murky conditions we were found and accompanied by giant-petrels and one or two Wandering and Black-browed Albatrosses.



During the day our focus was also on the inside of the ship - listening to Ursula (minke whale id), Hannah (The Heroic Age) and, much to everyone's delight, Lori (Everything You Always Wanted to Know About Squid but were Afraid to Ask). In the morning came yet another voyage highlight - account settlement. Later on the Captain was our host for a toast to our trip and as we sailed along the coast we could most certainly boast of our achievement. All the crew and staff were on hand to celebrate. This was followed by a superb photographic review of our highly successful voyage. All that remained was to eat our last dinner on board, pick up our pilot and sail back along the Beagle Channel to our berth on the dock in Ushuaia - journey's end!

Many of us have waited years for this voyage of discovery whilst some of us have had only a very short time to prepare for it. Whatever the case, it is an adventure that we will never forget and one that we will carry with us wherever we go in the future.

**And finally,**

*'Virtually every visitor to the ice returns to "civilisation" converted into a passionate, life-long South Polar Ambassador. The enriched lives of these privileged few will never again be the same for they have truly experienced paradise on earth. That such a wondrous, unspoiled place still exists on this beleaguered planet is one of the real miracles of the 20th century. The indescribable splendour of the magnificent final frontier and its remarkable wildlife must be forever regarded as an irreplaceable international treasure that justly deserves to be protected indefinitely for future generations.'*

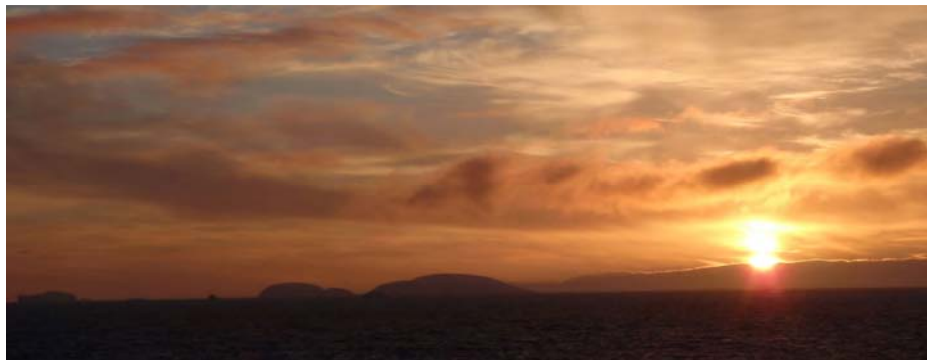
*Frank Todd, 1988*

**Together we have sailed 2,290 nautical miles or 2,633 statute miles or 4,214 km**

**We look forward to sailing with you again!**

Nationalities aboard Polar Star during your journey:

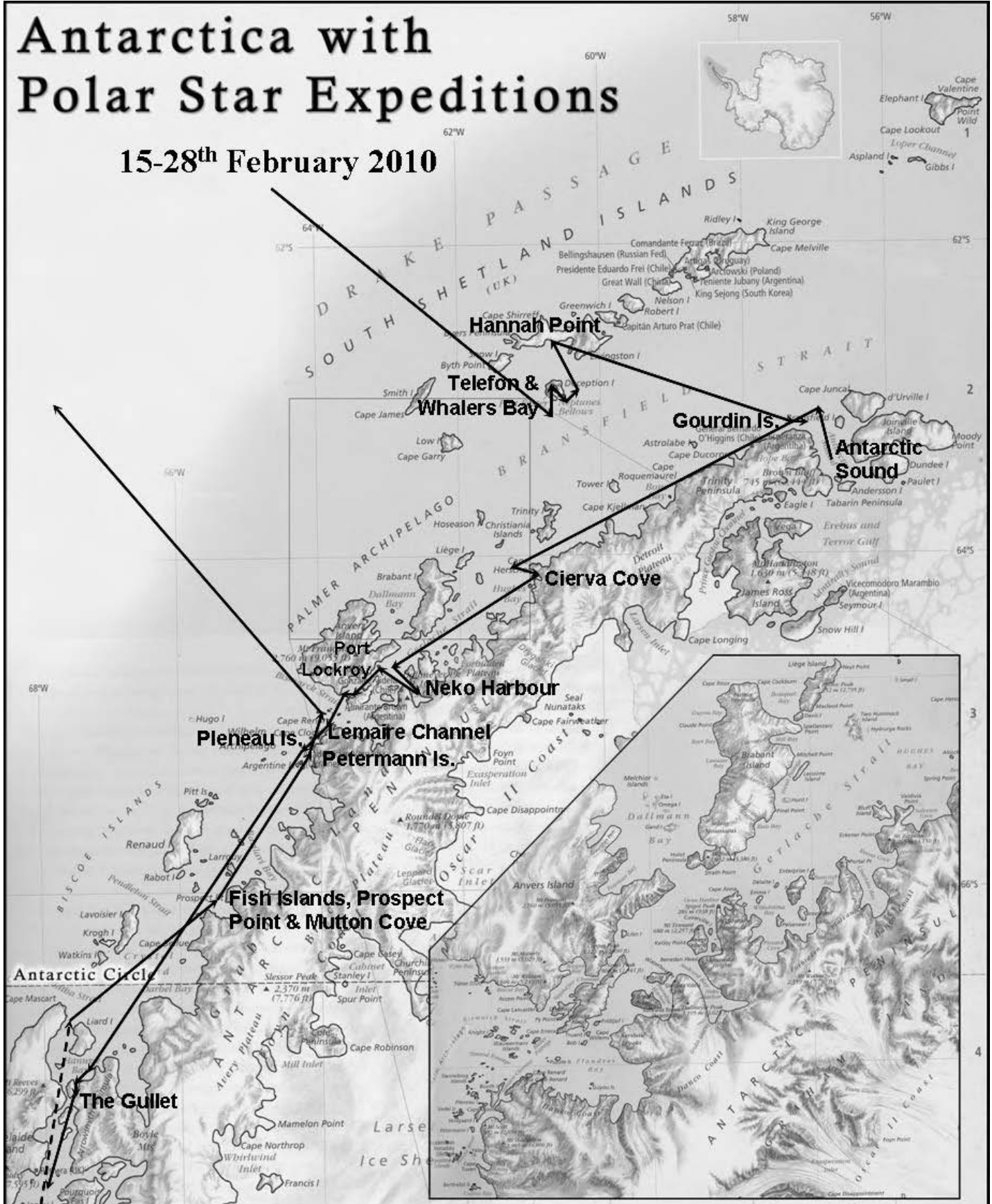
Australia: 1 staff ; Austria: 1 passenger, 1 staff; Canada: 6 passengers, 2 staff; China: 3 passengers; Germany: 8 passengers; Hungary: 1 passenger; Netherlands: 5 passengers; New Zealand: 1 staff; Philippines: 27 crew; Poland: 6 crew; South Africa: 1 passenger; Switzerland: 1 staff; United Kingdom: 3 passengers, 3 staff; United States: 45 passengers, 1 staff, 2 crew.



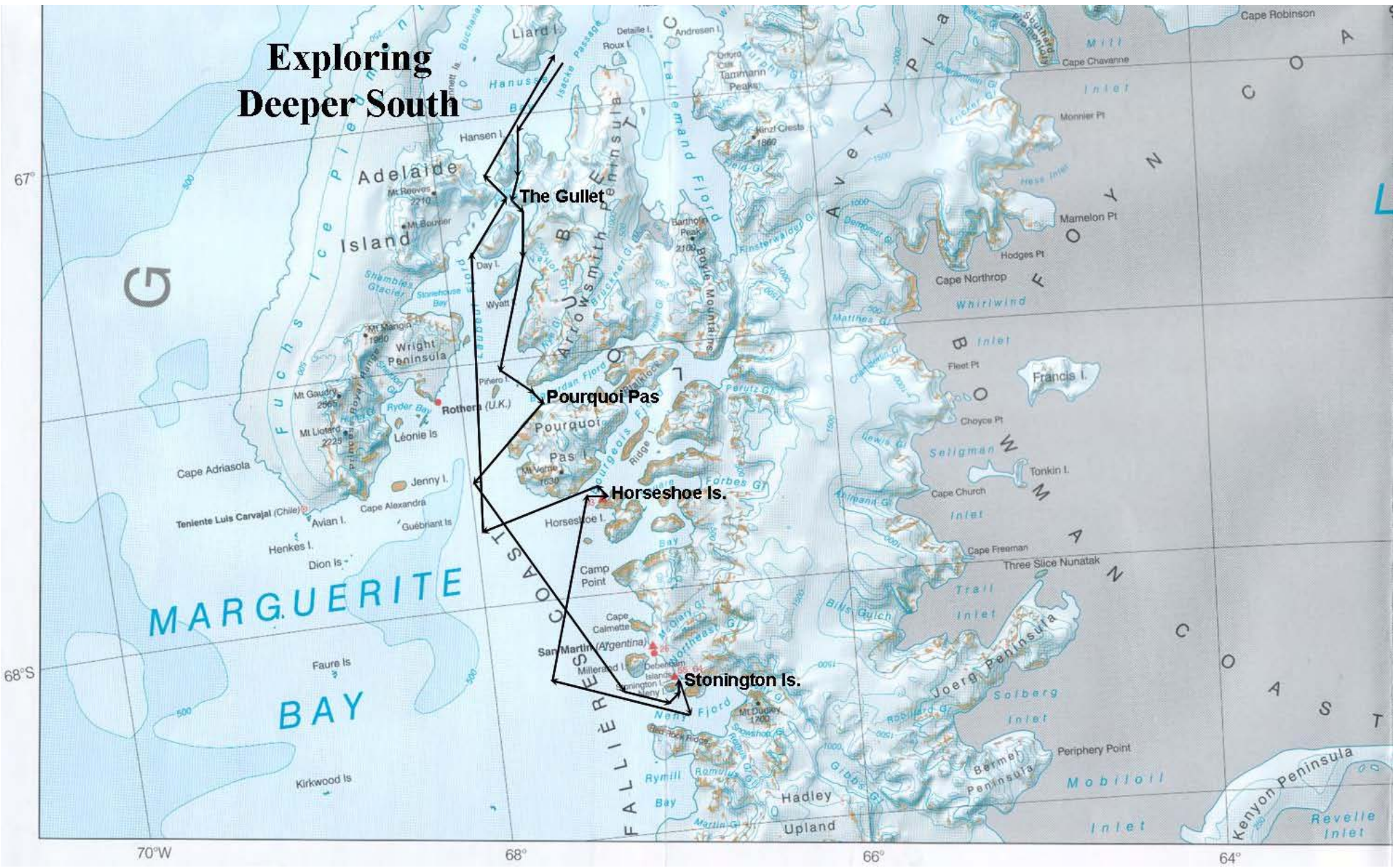
<b>WILDLIFE LIST</b>	15th	16th	17th	18th	19th	20th	21st	22nd	23rd	24th	25th	26th
	Beagle Channel	Drake Lake	Drake Lake	South Shetlands	Ant. Peninsula	Ant. Peninsula	Ant. Peninsula	Antarctic Circle	Marguerite Bay	Ant. Peninsula	Ant. Peninsula	Drake Passage
<b>BIRDS</b>												
Emperor Penguin, <i>Aptenodytes forsteri</i>					X							
Gentoo Penguin, <i>Pygoscelis papua</i>				X	X	X	X				X	
Adelie Penguin, <i>Pygoscelis adeliae</i>					X		X	X	X	X		
Chinstrap Penguin, <i>Pygoscelis antarctica</i>			X	X	X	X						
Magellanic Penguin, <i>Spheniscus magellanicus</i>	X											
Macaroni Penguin, <i>Eudyptes chrysolophus</i>												
Wandering Albatross, <i>Diomedea exulans</i>		X										X
Southern Royal Albatross, <i>Diomedea epomophora</i>												
Light-mantled Sooty Albatross, <i>Phoebastria palebrata</i>												
Grey-headed Albatross, <i>Thalassarche chrysostoma</i>		X	X									X
Black-browed Albatross, <i>Thalassarche melanophris</i>	X	X	X	X							X	X
Southern Giant-Petrel, <i>Macronectes giganteus</i>	X	X	X	X	X	X	X	X	X		X	
Northern Giant-Petrel, <i>Macronectes halli</i>		X										X
Southern Fulmar, <i>Fulmarus glacialis</i>			X					X			X	
Cape Petrel, <i>Daption capense</i>			X	X	X	X	X	X				
Antarctic Petrel, <i>Thalassoica antarctica</i>												
Snow Petrel, <i>Pagodroma nivea</i>					X			X				
Soft-plumaged Petrel, <i>Pterodroma mollis</i>		X	X									
White-chinned Petrel, <i>Procellaria aequinoctialis</i>		X	X									
Sooty Shearwater, <i>Puffinus griseus</i>												
Antarctic Prion, <i>Pachyptila desolata</i>												X
Slender-billed Prion, <i>Pachyptila belcheri</i>												
Blue Petrel <i>Halobaena caerulea</i>			X									
Wilson's Storm-petrel, <i>Oceanites oceanicus</i>		X	X	X	X	X	X	X	X	X	X	X
Black-bellied Storm-petrel, <i>Fregetta tropica</i>		X	X									X
Magellanic Diving-Petrel, <i>Pelecanoides magellani</i>	X	X										
Imperial Shag, <i>Phalacrocorax atriceps</i>	X											
Rock Shag, <i>Phalacrocorax magellanicus</i>	X											
Antarctic Shag, <i>Phalacrocorax bransfieldensis</i>				X	X	X	X	X	X	X	X	
Kelp Goose, <i>Chloephaga hybrida</i>	X											
Flightless Steamer Duck, <i>Tachyeres pteneres</i>	X											
Pale-faced Sheathbill, <i>Chionis alba</i>				X	X	X	X					
South Polar Skua, <i>Catharacta maccormicki</i>						X	X	X		X		
Chilean Skua, <i>Catharacta chilensis</i>	X	X										
Brown Skua, <i>Catharacta antarctica</i>				X	X	X	X	X	X	X	X	
Dolphin Gull, <i>Larus scoresbii</i>	X											
Kelp Gull, <i>Larus dominicanus</i>	X			X	X	X	X	X	X	X	X	
South American Tern, <i>Sterna hirundinacea</i>	X											
Antarctic Tern, <i>Sterna vittata</i>					X	X	X	X	X	X	X	
<b>MARINE MAMMALS</b>												
Humpback Whale, <i>Megaptera novaeangliae</i>				X	X	X	X		X	X	X	
Fin Whale, <i>Balaenoptera physalus</i>			X	X								
Sei Whale, <i>Balaenoptera borealis</i>			X									
Dwarf Minke Whale, <i>Balaenoptera species</i>												
Antarctic Minke Whale, <i>Balaenoptera bonaerensis</i>					X	X	X	X	X	X	X	
Killer Whale, <i>Orcinus Orca</i>				X				X				
Southern Bottlenose Whale, <i>Hyperoodon planifrons</i>												
Hourglass Dolphin, <i>Lagenorhynchus cruciger</i>		X	X									
Antarctic Fur Seal, <i>Actocephalus gazella</i>				X	X	X	X	X	X	X	X	
South American Sea Lion, <i>Otaria byronia</i>												
Southern Elephant Seal, <i>Mirounga leonina</i>				X							X	
Leopard Seal, <i>Hydrurga leptonyx</i>				X	X	X				X	X	
Crabeater Seal, <i>Lobodon carcinophaga</i>				X	X	X	X	X	X	X		
Weddell Seal, <i>Leptonychotes weddellii</i>				X	X	X	X	X				

# Antarctica with Polar Star Expeditions

15-28<sup>th</sup> February 2010



# Exploring Deeper South



The Gullet

Pourquoi Pas

Horseshoe Is.

Stonington Is.

70°W

68°W

66°W

64°W

67°S

68°S