## Antarctic Expedition

MISSION: BUILD THE BEST SNOWMAN

There are few and yet an uncounted multitude of words to describe the wondrous place that is the Antarctic. It has captured the imagination of countless generations, from the early explorers who braved the extreme climate of the driest, highest, most remote and coldest continent to us today – the 'explorers' who venture South in our thermals, engineered all-weather gear and personal 'taxis' in the form of helicopters and ships. But regardless of how you end up there – as a tourist visiting for a day or two, as maintenance crew to ensure the myriad bases don't fall in on the scientists and then of course the scientists that attempt to answer the questions, myths, problems and mysteries about the continent – the continent will no doubt capture your imagination. I was lucky enough to get the

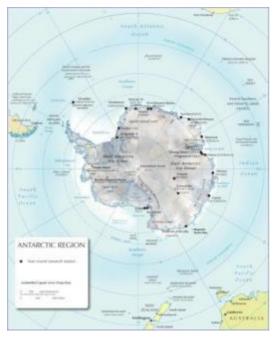


Figure 1: The Antarctic.

opportunity to visit the South African base in the Antarctic in January 2011. Now don't be fooled, it's not a simple hop-and-skip away. The month I spent at SANAE IV (the South African Antarctic Expedition base at Vesleskarvet in Dronning Maude Land at *app.* 72° South and 0° West) required a total travel time of almost 3 months: 6 weeks spent on the SA Agulhas getting to the ice shelf and back to Cape Town and roundabout 4 weeks at the base. And before that of course there are the many hours trying on issued clothing (To get the best fit – unfortunately South Africa does not have sufficient funds to give everyone their own set of clothing to keep. Instead everything that does not directly touch your skin *i.e.* everything

apart from gloves, balaclavas and thermal underwear is returned to the Department of Environmental Affairs in Cape Town upon returning from your trip. Economically that makes sense – for the people going down it means a few hours standing in line and trying on a bunch of clothing.), filling in forms for the various Departments and travelling to and from Cape Town. The departure from Cape Town on the 8<sup>th</sup> of December went off with a lot of fanfare and pomp. After all, 2010 marked the year the 50<sup>th</sup> South African team would venture to the Antarctic for a year. To get a better understanding of this it is perhaps good to know that of the *app*. 80 people that go to the Antarctic every year only a few remain to man the base throughout the long winter and into the next

year until the Take-Over happens again and the hordes descend on the quiet of SANAE IV in December/January of the following year. For 2010/11 the SANAE team comprised 11 members. The other members of the Take-Over team are made up of the Department of Public Works (for maintenance purposes), the Department of Environmental Affairs (providing leadership and environmental officers) and the scientists from the various institutions, notably the Hermanus

Magnetic Observatory, now part of SANSA (who mans the RADAR experiments at SANAE IV), Stellenbosch (who this year sent a historian working on the Antarctic Legacy Program as well as a number of engineers to erect wind turbines) and a number of geomorphologists from the Universities of Fort Hare, Pretoria and Grahamstown. Added to this was the Titan helicopter crew whose job it was to fly everyone around when so required and the bulldozer and caterpillar crew that would ensure all luggage, food and other essentials got carted over the ice to SANAE IV safely while also grading and removing all excess snow from the area around the base. And then of course there was the



Figure 2: The S.A. Agulhas docked in Cape Town.

crew of the SA Agulhas: Captain Freddy Lighthelm, Bernie the purser, Ed the 2<sup>nd</sup> Officer and all the other stewards, cooks, chefs, officers and many more. So there we were, most of us strangers to each other and now forced to spend 3 weeks together cooped up in a ship with no escape route possible if you didn't happen to like someone. **O the horror!** But luckily these fears proved unfounded – both the SA Agulhas and SANAP crew proved to be a weird and wonderful bunch: geeks, nerds and weirdoes in general but the best bunch of weirdoes on the planet!







Figure 3-5: Antarctic landscapes.

The trip down to the ice shelf on the SA Agulhas was uneventful and quiet. The 'Roaring Forties' showed themselves to be the 'Boring Forties' with the largest swell measuring only 4m and seasickness tablets not being required (although these proved to be a magnificent hang-over cure,

but with restricted bar hours those were not really a problem.). Life on the Agulhas is generally quiet, relaxed and laid-back. She is still a ship of the older traditions where the crew of *app*. 40 waits on the passengers (almost) hand and foot. Stewards were always there to solve your every problem and Bernie ensured that every passenger was happy. Bar hours stood (for the entire duration of the voyage) from 5-6pm and 8-10pm per day. This, of course, resulted in the majority of people to be found in the fairly small bar during those three hours. Now, this does not mean that South Africa sends a band of alcoholics to the Antarctic but rather it is a testament to the boredom that one can experience on such a journey. Also, due to the fact that the journey takes place in (mostly) international waters there is no tax on drink or cigarettes. So all of a sudden the meager budget of a few hundred Rands taken down didn't seem so bad anymore.

As lovely as the SA Agulhas is she can be a bit claustrophobic. Passengers can do very little but watch movies (on the extensive intranet), drink (for the 3 hours a day), go to the gym (if you can handle exercise in the swell, which even if it was not high still affects you when you're trying to cycle or run on a treadmill) and eat. And, goodness gracious do the people eat! There are three main meals a day: breakfast at 7:30, lunch at 12:30 and dinner at 18:30. In between there is also tea served at 10:00 and 16:00. And I'm not talking about simple meals. **NO!** We're talking about 4 or 5 course meals, served to you by stewards in crisp white uniforms. The meals were what dreams are made of: smoked salmon, roast beef done to perfection, pork, chicken or lamb, desserts, pastries, potatoes in all forms of preparation, cheeses (the good stuff), crackers, sauces, soups and so much more. The only thing that was noticeable absent were the fresh veggies. And all credit here goes to Bernie and his organizational skills in somehow managing that the ship only ran out of fresh veggies on the return journey. Apparently, if you want to ensure lettuce stays fresh for more than a month you must take a piece of charcoal and put it in a bucket of water for an hour. After the hour take the charcoal out and put the entire head of lettuce into the bucket, leaving it there SUBMERGED until you've eaten the whole thing. Seriously, this works. But of course the Agulhas also has CO2 filters in her fridges to ensure the food stays fresh – so maybe Bernie was cheating...



Figure 6: The view of the ocean on Boxing Day.



Figure 7: The author standing on Figure 8: The Monkey Deck. the Monkey Deck.

Figure 9: The 'Polar Stern' near Neumayer.

When we passed the Antarctic circle at 66° South the Captain sounded the ship's horn, which when you just happened to be standing on the Monkey Deck at that time served to deafen you for the next half an hour. And no, the Captain was not playing around or attempting to frighten the passengers up on the Monkey Deck, rather he was announcing the arrival of King Neptune. The time had arrived for initiation, a 50-year-old tradition that every person that crosses the Antarctic Circle goes through. It involves being sprayed by freezing sea water, made to kneel in the cold up on the heli-pad, ceremonially dunked and 'christened' in a tub of water, made to kneel (again!) in front of King Neptune, smeared with a gooey yeasty smelly mess, have an egg smashed on your head, forced to drink some Worcestershire-Tabasco-vinegar concoction and then hosed off AGAIN by freezing cold water. It was **FUN!!!!!!** And each successful participant then got indoctrinated as a member of OAF – the 'Order of Antarctic Fellows'.



Figure 10-12: Chilling on the Monkey Deck, the B212 and the Kamov in action.

So the days went by: the oceanographers on board took their hourly samples of oxygen, chlorophyll, temperature, salinity and all kinds of weird and wonderful measurements; the helicopter pilots looked after their babies (the B-212 and Kamov) whilst playing table tennis in the hangar, the scientists started setting up a LAN to while away the hours playing *World of Warcraft*, the stewards saw to the passengers every need, everyone got progressively heavier, life-boat drills were held,

friendships were struck up and the Monkey Deck became the meeting place. This deck, the highest on the ship, is located above the bridge and offers the best views of the ocean. From up here the vastness of the Southern Ocean can be truly appreciated, it is here that one first notices the snow and giant petrels, skuas and that wonderful example of natural engineering – the albatross, the Wanderer, the master of the ocean skies. There is little to compare the majestic soaring of his flight to. An albatross effortlessly uses the ocean winds to go where he wishes. It is a wonder and pleasure to see them in action. And then of course there were the whales! People became as children when one was spotted and hurried to whichever side (port or starboard) the whale was spotted at. But finally there are the icebergs and the sea ice.







Figure 13-15: Examples of South Ocean animal life.

The first time the ship crossed a patch of sea ice it was *app.* 1 o'clock in the morning, the entire ship shook as she passed through the ice, it was snowing, cold and dark and pretty much every single person on board was to be found up on deck, building snow men and taking (bad) pictures of the ice in the darkness. However, this novelty quickly wore off, as that was the constant feature of our journey from then on: icebergs and sea ice. So the night shortened and disappeared entirely, it became progressively colder, jackets and scarves were dug out. Eventually Christmas showed its head and (again) the Agulhas crew impressed us with outstanding service and a 7 course meal. And then the day we had been waiting for arrived: the ice shelf was in sight! **WE HAD ARRIVED!!!!!** And so the next part of our journey commenced as we eagerly awaited our trip to the base at SANAE IV.

TO BE CONTINUED...