UNLOADING AT BREID BAY



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The Princess Elisabeth team heads to Breid Bay to meet the Mary Arctica to unload its cargo and transport it back to the station. A rough sea complicated things, however ...

A change of plan

We set off from Princess Elisabeth station at 10 pm on Thursday January 22nd with four snow tractors pulling three or four ledges each. The Mary Arctica, the Danish ice-class ship that had our supplies loaded onto it in Zeebrugge back in December had been held up for several days off a ship mooring site known down here as “Five Degrees East” - the point on the coast of East Antarctica at 5°E longitude.

The ship was scheduled to drop off supplies and fuel at 5°E for the Norwegian Troll station first before meeting us. Unfortunately, access to the coast there had been blocked by a massive pile-up of sea ice, with no sign of ice conditions improving soon.

Meanwhile, Breid Bay was completely free of sea ice, and easily navigable. Alain Hubert had been down to the coast on skidoo to check on ice conditions more than a week ago. GG, at IPF headquarters in Brussels, had in the meantime sent detailed satellite pictures of the ice situation in our area to the captain of he Mary Arctica.

With ice conditions much more favourable at Breid Bay, and with the clock ticking, the captain eventually decided to come to Breid Bay and unload our supplies first, in the hopes that sea ice conditions at 5°E would improve by the time he'd finished with us.

We were told to expect the Mary Arctica at Breid Bay the evening of Friday, January 23rd.

We've got a great big convoy

What an impressive sight we were, a convoy thundering towards the coast at Breid Bay, 200 kilometres to the north of the station! I rode with Alain in the lead Prinoth snow tractor for the 20-hour drive.

At some point, I took over steering the tractor for a couple of hours to give Alain a chance to rest. The Prinoths are very powerful machines, but they must be steered very delicately with a small toy-like wheel. It seemed unfitting for such a large and powerful machine to have such a small steering device.

Since we were the lead tractor in the convoy, we had to navigate using only GPS. No old tracks to follow. The snowdrift had already covered Alain's skidoo tracks from more than a week ago.

Arriving at Breid Bay

The Mary Arctica had arrived shortly before us. Her bright, red hull was nestled close to the edge of the ice shelf.

The first first thing we did upon arrival was to meet with the Danish crew, who invited us on board for a welcoming meal. Alain chatted with the captain, and both agreed to start work immediately so as not to lose any more time.

The surface of the ice shelf was 17 metres above sea level - just the right height for the deck cranes on the Mary Arctica to unload cargo straight onto the ice shelf. It looked like this job was going to be a piece of cake.

Unfortunately, it turned out not to be the case.

Not a swell time

The crew of the Mary Arctic drove steel pins into the ice to secure the ship to the ice shelf. But as soon as the first cable was tightened, the mooring pin was ripped out of the ice. A second pin snapped in two. The reason soon became obvious: a big swell from the east was coming into Breid Bay, kicked up by some offshore storm. The ship bobbed up and down three or four meters with every swell that arrived.

The captain had to make a bold decision: he would try to keep the ship steady and in place without mooring lines, using just the ship's propeller and bow thrusters. It wasn't an ideal situation, but something had to be done.

And so the work began. First, our waste containers and the deep freezer containing the precious ice-core samples our glaciologist friends took a few short weeks ago were loaded into the cargo hold of the ship. It proved a hellish job for the crane operator, who had to find a way to drop the four pins of his spreader crane right onto the four corners of the containers as the ship bobbed and tossed about continuously.

By 10 pm, we had landed 10 containers on the ice shelf. We happily went to sleep in an empty container, while the Mary Arctica sailed off a little ways to spend a quiet night out in the open water. Work would start work again at 7 am.

“By noon we should be finished,” said Alain.

But in the morning the swell had become worse. The captain made two valiant attempts to position his ship alongside the edge of the ice shelf, but it proved to be too dangerous. We had to wait until early afternoon, when the tide brought in a large bank of broken sea ice, sufficient enough to dampen the amplitude of the swell somewhat.

Finally!

It was close to midnight by the time we had 27 containers unloaded onto the ice. We also had several sledge-loads of building timber, and two shiny brand new vehicles: the much anticipated modified Toyota Hiluxes with tracks instead of tyres. They are the pride and joy of our chief mechanic, Kristof Soete, who fitted snow tracks on this these powerful 4x4s himself!

The Toyota Hiluxes are a very welcome transportation alternative to the slow, fuel-guzzling Prinoths and the skidoos, with which you can’t transport very much. The modified Hiluxes can carry five passengers and one ton of equipment, and can go up to 50 kilometres an hour. Life will be a lot easier for scientists going on field expeditions in the future.

All of us are looking forward to seeing how they perform on the ice!