

**Subject: Fw: Scholes Cabin 5: The bay ice cracks**

**3 January 2010 19:34 UTM Still at Atka Bukta**

Dear Stirling,

We had some excitement yesterday, when the bay ice in Atka Bukta suddenly started to crack up. We were close to finished with a day of unloading cargo, which was all standing in a depot a few hundred metres from the ship, when suddenly deep, wide cracks began to appear in the ice. Remember that most of the ice is over 2 m thick, so when a crack several kilometres long suddenly rips through it, there is a rumble a bit like an earthquake. One of the cracks opened up between the depot and the spot where the heavy snow tractors (called 'Challengers') were parked, waiting to haul the stores off to Neumayer. So there was a mad rush to get everyone off the ice, drag the loaded sleds across the crack using the lighter 'Piston Bully' tractors that the Germans have, helicopter the Challenger drivers to their vehicles and get the stores 15 kilometres across the bay to safety. Evidently it was a tense trip, with cracks opening up all the time, and the floes sagging and tilting under the weight of the tractors and sleds. Everyone made it off safely, but we won't be doing any more unloading here.

Then the whole ship had to make a dash for freedom as a big iceberg came up from behind. First we tried around the one side of it, but that was blocked, and then the other side. We spent most of the evening playing dodgem in the pack-ice. The satellite images in the morning confirm that the whole area between Atka and Penguin Buktas is clogged with ice, so we have no choice but to wait here for a gap to open up. Today was snowy and windy, so the helicopters could not operate either. The forecast for tomorrow looks a bit better.

Coincidentally, I had just been reading about how Scott's party was nearly swept out to sea when the bay ice broke up on them, a hundred years ago. The surprising thing is how fast it happens. I suppose the ice is under all kinds of stresses and strains due to currents and tides, and gradually melting as summer progresses. It then just takes a little crack somewhere to start a collapse everywhere.

But we did get to try out our CTD bottle sampler, which we will be using on the oceanography cruise to South Georgia. I will tell you about that tomorrow!

Love,

Dad