Project Cornerstone

Newsletter #5:

27 March, 2009.

So far the weather this year has been great. It is just like the March weather that was the norm 20 years ago. It has been clear and calm – idea working conditions. It is cold of course, but that is also to be expected. It was minus 35 this morning, and it was about the same when we came home for supper. There was a heat wave of about minus 30 during the afternoon. People are already starting to wonder whether we'll ever get a weather day – a day where we have to stay in and get caught up on laundry, emails and other important things, like movies. Obviously, these people weren't around in 2006 and 2007 when nearly

every day was a weather

day.

Garry's group is progressing well. They drilled eight holes in and around their pan and lowered eight modems. This went very quickly since the ice is only 80 cm thick, and they used a power auger (20-cm diameter). The picture on the right shows Sean and Warren using electric power to drill the hole. I know you can't see their faces, but I think the picture is supposed to be arty.



This picture shows Val Shepeta about to lower a sound-velocity profiler (an instrument that measures the velocity of sound in water.) Note the thick layer of snow. Also the Octagon tent in the background.

The crew is having trouble with their Geodimeter, which is a surveying device that they will use to measure the locations of all these modems. The geodimeter doesn't like the cold, and every time it gives problems people say, 'darned thing won't work when it's this cold'. However, it turns out today's troubles were just finger problems; somebody, who shall be forever nameless, was connecting up the power cable incorrectly.

I am told that Warren Connors redeemed himself today by making a really good cup of



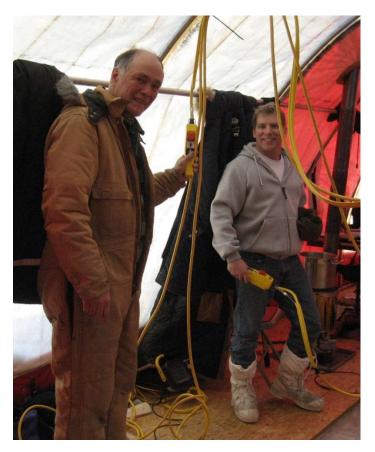
coffee. My source tells me that yesterday's coffee was terrible.

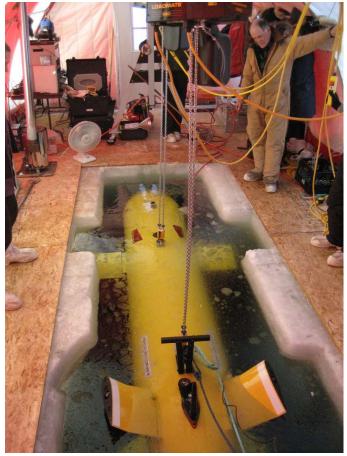
Don Mosher and Dave Wheaton worked the best part of the afternoon getting another Tundra Skidoo going. This cold weather is very hard on skidoo engines and drive belts.

At the AUV tent the ISE people and the MUN people are all quite happy with the progress they are making. Just to remind you, MUN owns the vehicle, and they are leasing it to the project for Arctic tests. ISE are making new ones especially for the UNCLOS project. Chris Kaminski, of ISE, will be the representative on site next year when the vehicles are sent out on their missions. He is here to learn as much as he can about techniques and possible problems. The picture shows Chris on the right and Ron Verrall on the left. (I give them a hand when I'm not writing Newsletters.)

Chris is already very experienced since he was a major player in the Spinnaker project. In 1996 we used an ISE-built submarine, the Theseus, to lay fibre-optic cable under the ice from Alert to an ice camp 180 km north. One of his great coups was finding Theseus under the ice when it got lost on its second mission.

Back to this year. Today they put the vehicle in the water and tested out their variable ballast system. Everything associated with the vehicle seemed to be working well, although we didn't get as much of a pitch forward as we had hoped. This was a fault of the chain hoists, which were binding and preventing all the chain from coming out of its box. This was annoying, and it will be serious if we can't fix it. It will also be amazing if we can't fix it. A modification will be made tomorrow. The picture shows the





AUV being lowered into the slush-filled hole.

I have a problem. The vehicle has no official name. In these letters I call it 'the AUV' or 'the vehicle'. I would much rather that it had a name of its own – like Theseus did. Any suggestions?

We have seen no bears this trip, and as far as I know, no-one has even seen any tracks. There are a lot of wolves around, but they don't pose any danger. I took a picture of this one the day we arrived.

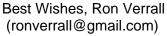
I'll finish off with a couple of pictures. The one on the left is of Ron Lewis (MUN) and Richard Pederson, the chief scientist for this year's trial. The goggles are the ones that his grandfather



used out on the ice floes of Newfoundland. He denies that he hopes to join Snoopy's squadron.

The one on the right is of Richard (Dick) MacDougall, one of the directors of this UNCLOS project. He has been coming to the Arctic forever, and he is very knowledgeable about the practicalities of the work as well as the associated money matters. Dick is retiring in a week or so, but we all hope he will return on contract so that we won't lose his experience.









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