

Project Cornerstone

Newsletter #18:

10 April, 2009 (Friday evening)

Yesterday we flew all the way south from Alert to Trenton, Ontario. We did refuel at Thule, Greenland, but we didn't stay overnight as was originally planned. Our flight was pleasantly uneventful, and the scenery between Alert and Thule was spectacular, with the cliffs beside Nares Strait rising starkly out of the sea.

South of Thule, by contrast, the sky was completely overcast, and we lost all interest in looking out of the portholes.

The aircraft was very hot, as Hercules are wont to be, but after several hours we came to our senses and asked the crew to turn it down, which they did. After that, the flight was much more pleasurable, except, of course, that the noise and vibration were intense enough that we couldn't talk to our neighbours. People endured the nine hours with plugs inserted their ears or with ear protectors clamped on tightly. Some used both.



Picture taken from the aircraft's side of the airport offices and passenger lounge at Thule Greenland.



Inside the Hercules. Picture was taken from the aft end looking forward. People are stretched out all over the freight trying to make themselves comfortable. Ron Lewis in foreground.

We had to go through Customs in Trenton even though we had spent only an hour in a foreign country – and in a passenger lounge the whole time. In fairness, the Customs officer was probably interested mostly in the Hercules crew, who had stayed the previous night in Thule.

After we got our great pile of baggage we checked into a hotel and had a relaxing beer or two. We discussed the trip: the things we learned and the things that were still to learn. We discussed possibilities for next year, and we speculated as to the probability of success. Finally, before going to bed, we said goodbye to the Newfoundland crew, Ron, Peter and Darrell. They had a later flight the next day, and they fully intended to sleep in.

The rest of us caught an early (0750) bus for the Toronto airport where, again, we rehashed the past trip and discussed future work. Eventually, I caught a plane for Vancouver and Victoria. Chris Kaminski and Alex Forrest (I think) took a later plane for Vancouver, and the rest went home to Nova Scotia.

I think it was a very useful field trial. We tested-out and confirmed a number of ideas and pre-conceptions. Most of the things we tried with the vehicle worked as we had anticipated. Garry's work with acoustic guidance and acoustic beacons will help us predict how well these items will work in the deep water of next year. A big worry is that there are a lot of things we were not able to try out – such as releasing the vehicle and doing a short rehearsal of an actual launch and recovery.

There are still many risks and uncertainties associated with this project, but those in charge seem quite ready to accept them. There is, after all, the precedent of the successful Spinnaker Project. In 1996 we launched an underwater vehicle (Theseus) that laid 180 km of 2-mm-diameter fibre-optic cable on the bottom in ice-covered waters. It delivered the cable to an ice camp, where the cable was spliced onto an array of sensors. Theseus then returned to the shore and parked itself on the bottom right under its launch hole. This new son-of-Theseus project is different in many details, but it has many similarities, and we do have a fund of experience under our collective belts.

This year we had quite a number of people who were new to the Arctic, and this trip was a good one to give them some experience. The next field trial will be more remote and harder – not a trip in which to initiate complete novices.

This will be the last Newsletter for Cornerstone 2009. I would like to thank all the people who emailed us with good wishes. I hope you enjoyed hearing about our daily adventures and our small successes. Thanks, also, for the suggestions for vehicle names. I thought that that exercise was fun.

Best Wishes, Ron Verrall.

We'd still like to hear from you. (ronverrall@gmail.com)

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http://a76.dk/expeditions_uk/spring_2009/index.html#cornerstone