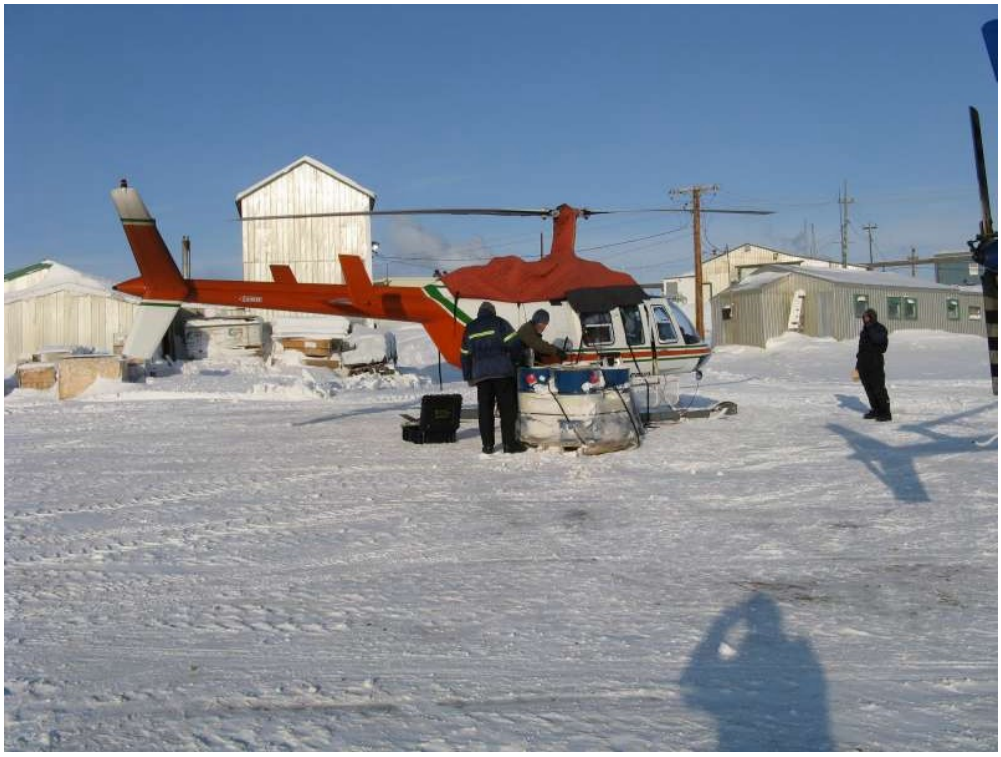
Alpha Ridge Test of Appurtenance (ARTA)

Newsletter #4

26 March 2008,

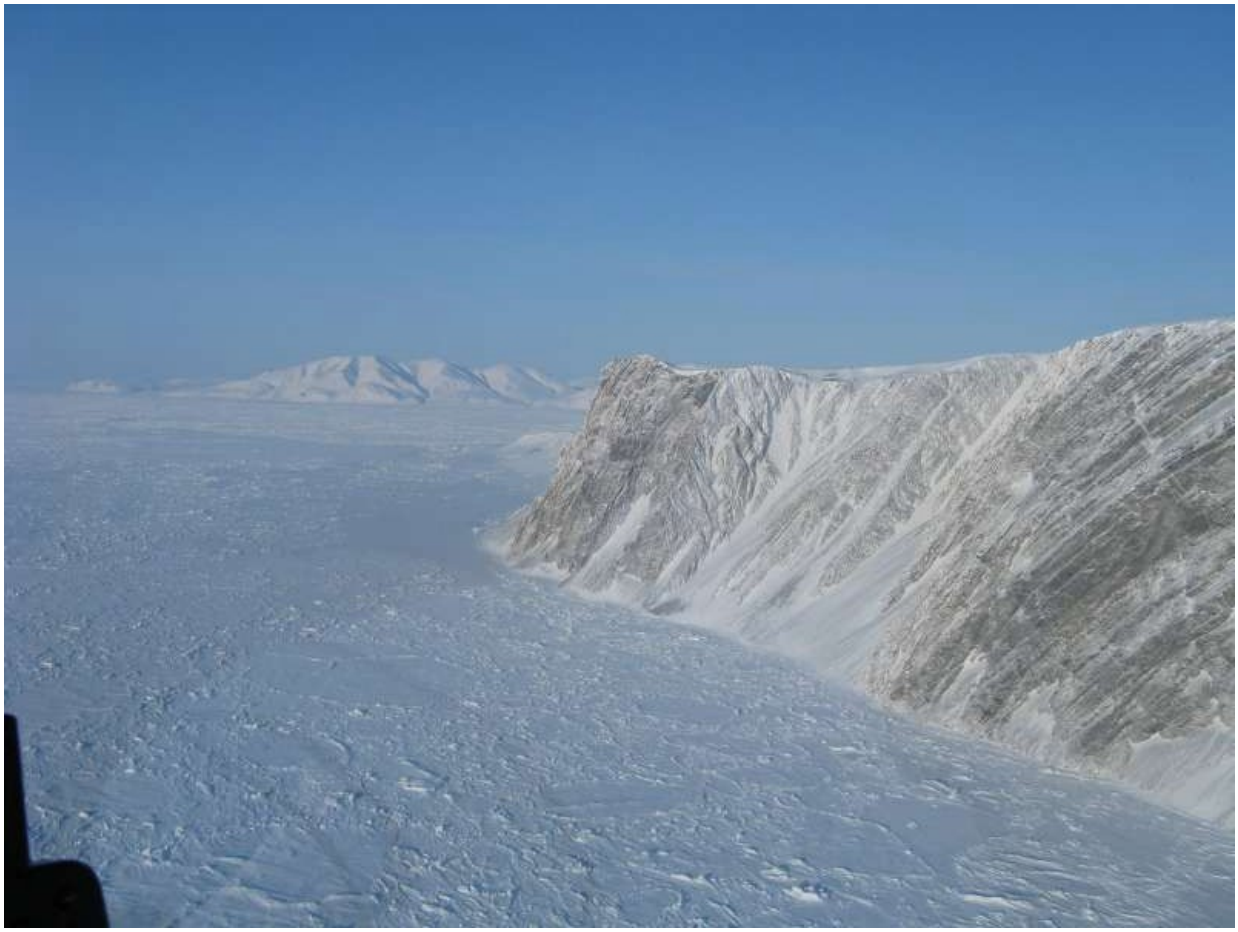
Today was a great day – for me, at least. I actually did something that could be called useful – as opposed to writing Newsletters. Mingzhou Li and I took a seismometer and installed it roughly halfway between Eureka and the Arctic coast. It is one of three 3-component seismometers that will be located on land; all the others will be set on the ocean. These three are equipped with enough batteries and memory for them to work for the entire time we are up here. They will act as a southern extension to the line of seismometers that we will set on the ocean ice. And, since they are on land, they will be able to detect shear waves. (This isn't possible with seismometers sitting – essentially – on water. Water doesn't support shear.) When we are completely done with the explosive runs, we'll pick up all three seismometers.

It was a gorgeous day for what we were doing. It was about 18 below, which perhaps doesn't sound very warm, but when compared with the 37 below at Eureka, it was very pleasant. The difference in temperature is caused by a strong inversion, which has been in existence for several days. The aircraft all report much warmer temperatures at 2000 ft, or so, than we experience on the ground. Not only was it reasonably warm, but there was no wind, so we were quite comfortable – even with our gloves off. The scenery was lovely and the company was good, so we quite enjoyed our outing. This was Mingzhou's first helicopter ride, and he loved it. The first picture shows the 206 Long-Ranger (CFPHO) being fuelled for the trip.



However, not everything was perfect; we did have some problems with the installation. (The first installation of anything always has problems.) So we had a meeting with all the principals when we got back to Eureka and made plans for a few changes. The other two seismometers and their recording boxes, which will go in tomorrow, will be installed with a few changes, the principal one being an improved method for holding everything from being blown away by the wind.

The next picture show some of the cliffs that were so pleasurable to watch as we flew north along Nansen Sound.



The cliffs at Cape St. Andrews.

There is good news from the hydrographic camp. The runway has been improved to the point that the Skyvan was able to get in. It was carrying a mini-Bobcat, which they doubtless will run day and night to extend the runway for the Buffalo. Stay tuned.

Isa, too, has good news. His seismic recording boxes are warming up. Even the row of boxes that are quite close to the ground are reporting temperatures in the teens. So, Jim, I guess hot air **does** fall down. He has tested out thirty boxes for a short seismic run that is being planned for the day after tomorrow (the 28th). This run will involve only three explosives and thirty recording boxes. Although it will, indeed, yield important data, the run is also important because it will train new people and it will ensure that everyone is on track. Also, it's a good chance to find any bugs in the procedures.

This morning everyone who will be riding in helicopters was taken out and given a thorough briefing on safety and on general behaviour around the helicopters. Safety, of course, involved such things as maintaining a healthy fear of the two rotors. We also learned where the emergency gear (sleeping bags, ELT, etc.) was stowed. Under the heading of 'general behaviour', we learned, for example, not to close the doors by pushing on the plastic windows; at these temperatures the window could pop out or break. Most of us had done this little tour many times, but it doesn't hurt to get a refresher; we do forget, and some things change. Also, there were a couple of people for which this was entirely new.

As well as the helicopter briefing, those people involved with the seismic experiment were given a run-down on how to handle the seismometers and their boxes and how to install GPS beacons. This is in preparation for the seismic run on the 28th.

There have been a couple of requests for the names of the people working on the project. I

hope the following list is complete.

People at Eureka:

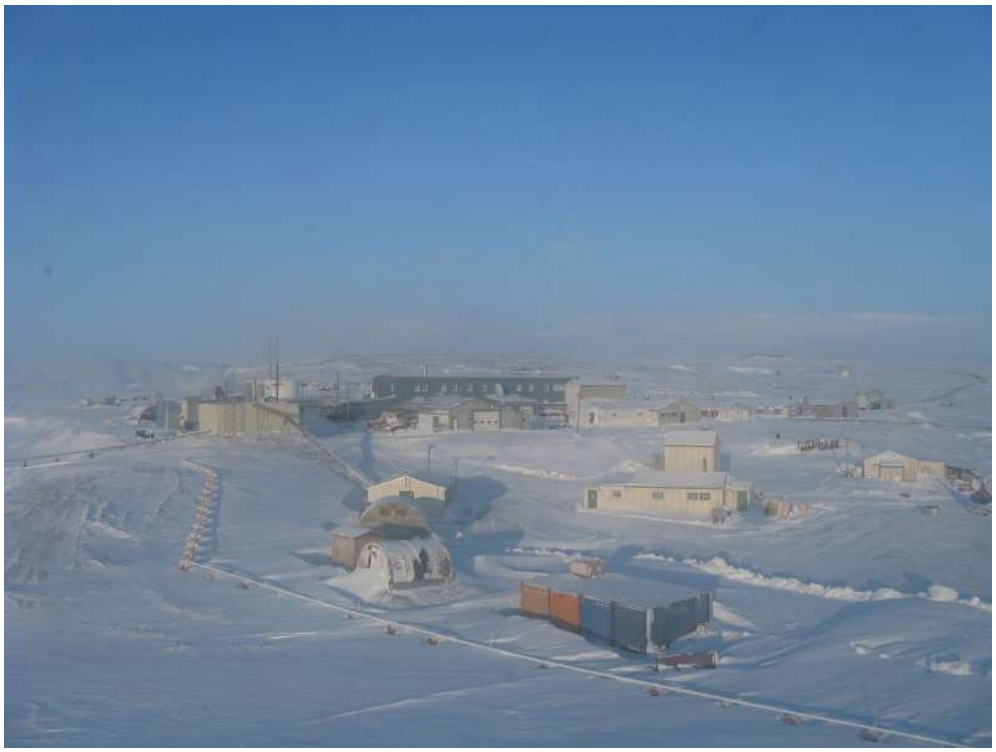
Ruth Jackson Chief Scientist
Alain Belzile
Cassandra Bluhm
Dave Maloley
Doug Briscoe
Isa Asudeh
Joanna Edwards
John Shimeld
Ken Asmus Left Eureka late today.
Lloyd Litwin
Mingzhou Li
Patrick Potter
Ron Verrall
Shaun Swire
Tammy Stinson
Thomas Funck
Tim Cartwright

People at Hydrographic Camp

Jon Biggar Chief hydrographer
Aaron Carpenter
Bob Olsen
John Mercuri
Kirby Klieter
Knut Lyngberg
Mike Black
Rob Morrison
Rudy Cutillo

People at Reflection Camp

Jorgen Skafte Camp boss
Mike Gorveatt
Greg Middleton



The last picture shows Eureka from the air. The picture was taken as we returned from our seismic installation. Looks cold, doesn't it? Three helicopters are being kept down here by the weather station since there aren't enough power outlets at the airstrip for all the aircraft.

Best wishes, Ron Verrall
We'd like to hear from you. Send your comments to:
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Address: gmaildotcom