Alpha Ridge Test of Appurtenance (ARTA)

Newsletter #12

On 6 April, three helicopters set out seismometers and recording boxes. They got 58 done, I believe – about half of them – before they had to quit for the day. The 407 helicopter CFARE, developed an oil leak toward the end of the day (spotted by Kirby), so it will be out of service until they get a spare part sent up from the south. The engineers are estimating two or three days for this.

There was more wind than usual on the 6th, as the blowing flags indicate, and this made working outside not quite as pleasant. For those who aren't familiar with it, the lower flag is the Nunavut flag.

The forecast for the 7th was for 30 mph winds, and so the helicopters delayed their early departure and waited for a more up-to-date forecast. In the event, the



high winds did not materialize, so three helicopters again went out to set boxes. (The 407 was, indeed, out of service, but we got the use of one of Jon Biggar's machines to bring the helicopter count up to three.) The crews were Thomas Funck and Robert Olsen, John Shimeld and Kirby Kleiter, and Tim Cartwright and Patrick Potter.

They put in a long day, first putting out the other 60 (or so) boxes and then firing all the charges. They had some trouble finding some of the shot sites because the ice had moved almost a mile to the south since the shots were set out on the 6th. Once they figured that out, however, they were able to find all the sites. Although the wind was not strong, it was still about 10 mph, enough to make the day unpleasant.

The boxes still need to be picked up, but this can be done at our leisure – more or less – since the data has all been recorded. If the boxes all drift a few miles – it doesn't matter. This outer leg was the most important of the three seismic deployments. I suspect that Ruth, back in Eureka, is wearing a big smile. So, now that the southern and the northern legs are essentially done, the next job is the cross leg.

Jon Biggar's group worked with one helicopter today, making depth measurements and gravity readings. They put in a good day. Interestingly, the guys out making readings said that they could tell when a charge had gone off; their gravity meter was unstable for (perhaps) a couple of minutes. Tomorrow, the 8th, they will have two helicopters back again, and we, the seismic group, will pick up boxes with two helicopters.

I've noticed in our flights north of Ellesmere Island that there is no multi-year ice in the ocean this year. Almost all the ice I've seen is annual ice (ice that formed earlier this season). There is a small amount of what looks like second year ice, but no really old stuff. And remember, too, that all the plug ice in Nansen Sound has disappeared. It's almost enough to make you believe in global warming. Now, however, the pendulum seems to be swinging back: ice-age doom-and-gloomers are competing with the global-warming doom-and-gloomers. This is the kind of stuff you can read:

"The ice is back.

"Gilles Langis, a senior forecaster with the Canadian Ice Service in Ottawa, says the Arctic winter has been so severe the ice has not only recovered, it is actually 10 to 20 cm thicker in many places than at this time last year.

"Kenneth Tapping of our own National Research Council, who oversees a giant radio telescope focused on the sun, is convinced we are in for a long period of severely cold weather if sunspot activity does not pick up soon.

"The last time the sun was this inactive, Earth suffered the Little Ice Age that lasted about five centuries and ended in 1850. Crops failed through killer frosts and drought. Famine, plague and war were widespread. Harbours froze, so did rivers, and trade ceased."

It's enough to make you ignore the news completely.

In the meantime, however, we will appreciate the colder weather and the good flying conditions. The temperature is rising – slowly but steadily – so you can stop feeling sorry for us (if you ever were :-). The sun is up – albeit not very high – all day long, and its heat is making a difference. In a week's time it will be up even at midnight.

I understand that Ruth is getting these Newsletters disseminated through the good offices of Darryl Gittins. He's an ex Arctic type who now works for Microsoft. I'm sure that these stories bring back memories, but I suspect that he's just as happy to enjoy them from afar – in his warm office in Victoria. Thanks very much, Darryl.

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

If you have been writing and I haven't been replying – that's because I'm out at the Icecamp, and I don't have access to my email. I'll try to catch up when I next get back to Eureka.