

Beaufort Gyre Exploration Project: Dispatch 27: Mooring Ops - View from the Bridge

Sarah Zimmermann, IOS
August 31, 2006

Two weeks after recovering BGOS mooring A (Dispatch 13) we have arrived on mooring site B. All the action with the mooring gear, winches, cables under high tension, cranes and blocks is taking place on the deck, but what's happening on the bridge goes hand in hand with the successful deck operation. Arriving on site, the first order of business is for the WHOI mooring group (Rick Krishfield, Will Ostrom, and Kris Newhall) to 'talk' (acoustically) to the mooring and confirm its position. After the bridge is given this information, the suspense builds as they progress through the pre-release steps. The bridge assesses the ice and weather conditions, determines the set and drift of the ship, and watches how long holes in the ice stay open after sweeping an area clean. Everything looks pretty good up to this point. Visibility on this day isn't great and its below freezing on deck but there is almost no wind and very little drift. The area is almost all ice covered, but we can see from the open ship track behind us that there is not much pressure on the ice. If the ice is under pressure, the ship track closes up immediately, barely showing the ship was just there. With these good conditions, it definitely makes sense to go ahead with the recovery and spend the next hour or two breaking up the ice in the work area.

Ready, Set, Go. With only a minute to work with, the Captain times the sweep of the ship with his message to Rick to release the mooring. He factors in the 20 second delay it will take for the signal Rick sends through the deck unit to reach the mooring release and for it to respond by letting go of the anchor. Then he adds an additional 20 second delay for the mooring to come to the surface. Rick, who is sitting in the science lab below doesn't have the same view from the bridge and has to trust the Captain's message that the timing is right.

On the bridge, they are constantly adjusting the ship's position and using the 'bubbler' to keep the ice off the instruments and wire during the four hours it takes to bring everything out of the water. They also need to keep the ship clear of the bottom set of floats that rise to the surface 30 minutes after the top float. The bridge's job is easier today because the ship isn't being pushed around by the wind. Captain McNeill stands where he has a good view of the deck and the equipment in the water. To maneuver the ship, he calls out directions to the officer at the controls (telegraphs) for the three propellers and to the quartermaster at the wheel.

Everything goes well! The buoy comes up in the ice free area, the instruments are brought on board undamaged and the perfect reward for being finished by coffee break is Catherine Munroe's fresh made donuts.

Last updated: September 29, 2014



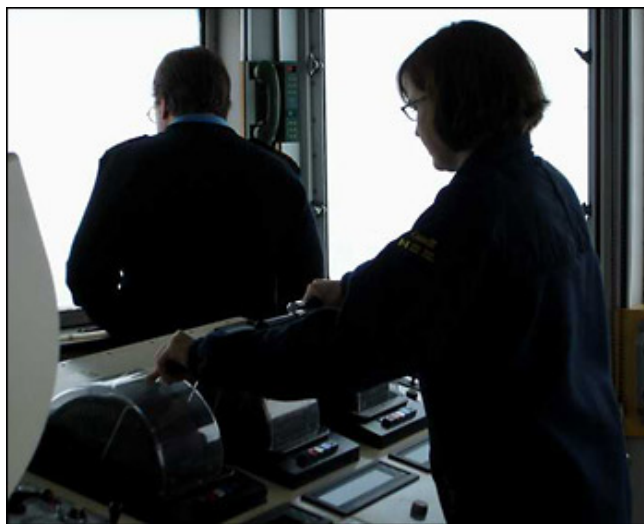
The open ship track in the wake of the *Louis* while clearing ice for the mooring recovery. *Photo by Sarah Zimmermann, IOS.*



The top sphere of the mooring appears in the ice free region exactly where Captain McNeill intended. *Photo by Sarah Zimmermann, IOS.*



On deck, the mooring recovery is routine. Everyone has a particular job to do to ensure a safe and successful operation. *Photo by Sarah Zimmermann, IOS.*



Captain Andrew McNeill keeps his eyes on the operation while Second Officer Marian Punch is at the telegraphs. *Photo by Sarah Zimmermann, IOS.*

Copyright ©2007 Woods Hole Oceanographic Institution, All Rights Reserved.

Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.

E-Contact: info@whoi.edu; press relations: media@whoi.edu, tel. (508) 457-2000

Problems or questions about the site, please contact webdev@whoi.edu