

2016 I08S Weekly Report 1

From

Alison Macdonald (chief scientist) and Viviane Menezes (co-chief scientist)

Feb 4 – 8 MOB,

Feb 8 – Feb 16 at sea

Current position: 55.24°S, 87.14°E

Winds: from the SW at 29 knots

We are coming up on day 9 of our steam south toward Antarctica making this weekly report overdue. We spent four hot, hotter and most hot days (104°F) in Fremantle loading the ship, but in spite of the heat the load went smoothly. With the air conditioning inside the ship working, unpacking was a welcome relief from moving containers onto the ship. Everyone was generous with their time and energy making bring on board and securing the drifters, floats, 60 odd containers of empty bottles for non-sailing participants and the ship stores relatively simple tasks. On the last day in port there was plenty of time for last minutes dips, trips to the supermarket and Target across the way and of course Super Bowl watching.



Now where to put these?

Liquid nitrogen anyone?

Bather's Beach, Fremantle

On the morning of departure, Rick Rupan gave us a tutorial on the SOCCOM Floats after which we had a sorting and securing extravaganza in the science hold. We managed to use just about every ratchet strap on the ship, which is a good thing because wasn't long after waving good bye to friends and family onshore that all those straps were put to the test.



Our first full day underway was a busy one with the CTD-watch students getting lessons on the CTD-watch and on the rosette with all its various components, and drills occurring after lunch. The following day, our test cast, went well with the Cast6 system deploying and recovering the rosette as advertised, the instruments performing as expected and all the

students getting a chance to fire bottles and sample. One misfire reminded everyone to keep the mouse away from the button when not firing a bottle.

We steam and we stay busy. Underway pCO₂ is being measured and every 4 hours underway sampling for oxygen, pH, DIC, Temp, Salts and nutrients occurs. Once a day an XBT is deployed to calibrate the multi-beam bathymetry. Anyone who hasn't done it before can sign up to be the XBT deployer of the day. We have been receiving ice reports from both SIO and the RSV Aurora Australis, which is occupying stations to the east of us. We have determined a track to the west of the 2007 line, which will bring us to the 500 m isobath while avoiding ice. However, wind and waves have slowed us. We do not yet know whether it will be possible to perform the shelf stations without going to longer station spacing on the return journey. So we steam on making best possible time.

We are mostly recovered from the cold that came onboard with us back in Fremantle and mostly recovered from the seasickness that comes with the rocking and rolling of the Southern Ocean. A cribbage tournament is underway. Spirits are high as we look forward to our first station. We continue southward.



Three necessary skill sets: CTD-console operations, cocking the rosette and cribbage. (Courtesy of E. Wilson)