P02/Leg 1 Weekly Report 2

End of Quarantine & Time in Port
April 15-21, 2022

This is second of the two P02/Leg 1 weekly reports sent out prior to the R/V Revelle's planned departure from Guam. Over the past week most of us, including our four visitors to the ship, finished our time in quarantine, took and passed our PCR tests, were given a virtual orientation to ship by our tech before arriving at vessel docked at the Navy Base, and began setting up the instrumentation for the voyage.

We had some difficulty getting through security at the Base. The 4 vans carrying 28 science party members took between a couple of hours and four hours to be checked through. This was partly due to our drivers not realizing that we had to go to the Visitor Control Center first, partly due to some car trouble, which meant our sponsor didn't show up, and partly due to a basic lack of communication. That said, with some long-distance help from UCSD and local assistance from the Ship's Agent, we all made it through – the last van getting a police escort, negating the need for passes all together. After rapid-tests at the gangway in the rain, we made it onboard in time for an extremely welcome lunch.

While our time in port has been mainly spent setting up, training new analysts, and sorting out logistics, particularly with the knowledgeable personnel who will not be sailing with us, we have been dealing with smaller and larger challenges.

First, is that while we have all been focused on staying safe from Covid, we have had various other ailments amongst the science party (stomach bugs, possible food poisoning, a twisted knee and more than one with a sore back). We have been taking these seriously and so far everyone has recovered or is recovering. We're good to go.

Second, a new bracket was needed for the rosette as it was not realized prior to arrival that the CAST-6 would not connect to the top of the frame without crushing the upward-looking LADCP. With design by the Revelle's Chief Engineer, approval from shore-side UCSD engineers and some long-hours of effort put in by both engineers and techs, design, fabrication, installation and testing has now been successfully completed (Fig. 1).

Figure 1: Before (upper right) and after (upper left) views of the rosette illustrating the newly designed bracket (lower left panel) and it position protecting the rosette instrumentation as it docks with CAST-6 (lower right panel).

The third challenge has been orchestrating the tracer ($CFC/SF_6/N_2O$) shipment of instrumentation and gas standards. In spite of careful and pre-flight approved packing, the shipment was stalled and separated in LAX. We finally received the equipment on the afternoon of April 21 (Fig. 2, lower right), and after herculean efforts the gas standard is now in Narita and booked on a flight arriving in Guam at 9:55 pm on April 22. This predicted arrival after our planned departure time of 16:00.

. Photo Credit: A. Macdonald

Figure 2: Arrival of Tracer team instrumentation onboard the Revelle.

Therefore, after agreement by UCSD Marine Operations, the captain, and the US GO-SHIP Executive council (thank you everyone for your quick and detailed discussions in spite of the 14-17 hour time difference) it has been decided that we will leave the dock on time; anchor in the harbor outside the Navy Base; retrieve our last two science party members via launch as planned; wait for the gas standard shipment to arrive; retrieve that via launch and then depart. This will put us anywhere between 16 and 24 hours behind schedule. While numerous other contingencies were considered, it has been deemed by everyone concerned worth the loss of time to get the best possible quality tracer (level 1) data set. This was paragraph was written the evening of April 21st. It was a good plan, but it is now a thing of the past. Due to this morning loss of a crew member, we will remain at the dock until a replacement can be found. Our co-chief and bio-analyst have extended their quarantine in the hotel and we wait in anticipation of a confirmed hire for the ship. The silver lining to this is that we will still be here when the CFC-standards arrive at A.B. Won Pat airport.

Along with the hard work everyone has been putting in, we have been getting to know the ship and crew, enjoying wonderful meals, and generally keeping ourselves entertained when not working with music and reading on the deck and games in the main lab and library. Every day we have had an all-hands science meeting with our co-chief and biology analyst joining in virtually from their hotel rooms. On Wednesday, the CTD-watch took them on a virtual tour of the ship. On Thursday evening we had a float decorating party to which everyone onboard was invited. Despite the stiff breeze blowing our stencils every which way, with multiple people simultaneously wielding permanent markers, we managed to decorate 4 of the GO-BGC floats with images and words associated with the schools and the chosen names (Fig. 3). Prizes were awarded and good time was had by one and all. Along with all this activity, one of our CTD-watch has gone above and beyond creating a magnificent mobile of laminated science-party photos with job descriptions and fun facts. It will be hung in pride of place near the white board in the passage so science and crew can all learn a little more about each other. Thank you, Vic.

So today, two weeks after our arrival in Guam, we are moving forward even as we sit still at the dock (Fig. 4) and looking forward to the news that we will be able to leave - soon.

With greetings from both the Guam Navy Base in Apra and hotel in Tamuning,
Alison Macdonald and Shuwen Tan
2022 P02/Leg 1 Chief and co-Chief Scientists

If you are interested in reading and seeing more about our days in port, please turn to our blog which has been growing every few days (https://www.go-bgc.org/expedition/north-pacific-2022/p02-introduction).

Figure 3: Decorating GO-BGC floats for outreach to K-12 schools. Photo credit: Alison Macdonald

Figure 4: CTD-watch learning about the rosette from ODF guru John Calderwood, in the midst of replacing 108 O-rings. Photo credit: Alison Macdonald