Journal #8

1. 162200Z January 05
2. Position: Lat: 27-48.0S, LONG: 150-00.0W
3. Course: 180T
4. Speed: 11.6 kts
5. Distance: 108.1 NM
6. Steaming Time: 09H 18M
7. Station Time: 14H 42M
8. Fuel: 2,030 gals
9. Sky: Cu, Ac, As 4
10. Wind: 330-T, 6 Kts.
11. Sea: 330-T, 0-1 Ft
12. Swell: 190-T, 5-6 Ft
13. Barometer: 1018.2 Mb
14. Temperature: Air: 27.0 C, Sea: 26.7 C
15. Equipment Status: Normal
16. Comments: U/W to Station #25

MASTER, R/V ROGER REVELLE

Its Sunday, but the only reason we all know that is because today we have our weekly fire and abandon ship drill and it's BBQ night! We all look forward to BBQ night when the chief engineer BBQ's steak on the outdoor grill. If they catch any fish sometimes we have some of that barbequed, last cruise we had some very nice tuna steaks.

The weather has changed, it a little colder, in the 70's and not the 80's now and the water temp has dropped by about 10'F also. The skies are gray and we did not see the sun all day. I guess the beautiful sunsets won't be happening for a while. I asked the captain and he said that might be it for the sunny weather until we get to NZ. I asked how the weather is down south and he said "bad", but is always bad down there. Wonder how soon we will see ice?

Today we did 3 more stations, but tomorrow we will be doing more stations and closer together.

Tomorrow we will be doing our 3rd live broadcast. I hope to be doing it a bit earlier, maybe 8:30 or so PST. We are going to broadcast from the deck just outside the main lab so that my students can watch the launching of a CTD rosette.

I want them to have some questions ready and be ready to take notes on the

answers as well as look for additional information on the web for their questions.

Some questions to ask:

What are the parts of a CTD?

How deep will this cast go?

How many sample bottles are on the CTD rosette?

How much water can be taken in each bottle?

What is the purpose of the Styrofoam cups, what will happen to them?

What things are you sampling for in the rosette?

Can you send us a sample of what the data profile for this cast looks like?

How long does it take the CTD to go to the bottom and come back up?

How many CTD casts will you do in total on this cruise?

Students should take notes on the answers to these question and use them in this weeks journal. I will also send photos that they can use in their journals from the cast.

We decorated Styrofoam cups and Styrofoam wigheads in our classes to send down on some of the CTD casts. These were chosen as a way of demonstrating the effects of pressure. Keep in mind that a solid cannot be compressed very much and liquid is not compressable, but gas is very compressible. So what we doing is letting the water pressure squeeze the air out of the Styrofoam cups.

In your journal answer this question as well as you can:

Will the Styrofoam cups that go deeper get smaller than the ones that we take down to a shallower depth? Example: take down one group of cups to 4000 m and one group to 5000m. Why or why not and explain why they would be
smaller or the same size? We will see what will happen as we will be sending down several different groups to various depths.

During the broadcast we will be talking to Dr. Jim Swift, co-chief scientist of P16s about his research and many expeditions as well as what he hopes to learn from the data being collected on this cruise.

For the Friday broadcast we will be on the bridge with Captain Dave Murline. I want you to again have your questions written out BEFORE the broadcast and be prepared to take notes during the broadcast.

In class my students are doing lessons on seawater chemistry: what are the dissolved salts and metals in seawater and several density experiments.