



**NOAA Teacher at Sea
Karen Meyers & Alexa Carey
Onboard NOAA Ship ALBATROSS IV
August 14 – September 1, 2006**

NOAA Teacher at Sea: Karen Meyers

NOAA Ship ALBATROSS IV

Mission: Ecosystems Monitoring

Day 5: Friday, August 18, 2006

Science and Technology Log

I visited the bridge this morning and plan to go back again for another visit because there's so much to learn there. There's an amazing amount of equipment up there and Captain Steve Wagner made an attempt to explain some of it to me. There are two radar units of different frequencies. The higher frequency unit is a 3 cm unit (I assume 3 cm is the wavelength) and has greater resolution so it can be used when entering harbors, for instance. The other is a 10 cm unit that can cover a larger area. They have to have two of every instrument in case one malfunctions. They have the same program – NobelTec – as Jerry uses. It shows the charts for all the areas we are cruising through. On the chart, our course is plotted and every station is marked with a square that becomes a star when you click on it. The ship appears as a little green, boat-shaped figure that the program calls the SS Minnow (after the boat in Gilligan's Island). The program can tell you the distance to the next station and the ETA (estimated time of arrival) as well as the time to reach the station. You can zoom in or out and scroll around. It shows depths in fathoms. The program works with a GPS unit to monitor position. On another monitor, they get online weather information. The site on the screen had a graphic which shows the area we're heading into marked all over with the little icons used in weather maps to show wind speed and direction. It was easy to see the low-pressure system which I'd heard was weakening off the coast of South Carolina. They also get weather data through a little machine called a NAVTEX (Navigational Telex), similar to a FAX, that prints out a continuous strip of paper about 4 inches wide and gives weather data for various segments of the coast, e.g., Fenwick Island to Cape Hatteras or Cape Hatteras to Murrells Inlet. The information comes from stations at several points along the coast. The machine checks the accuracy as it prints out and gives an error rate at the top right. If it's too high, it stops and starts over. I can sympathize with Captain Wagner when he talks about how difficult it is to keep up with the new technology. I feel the same way as a teacher. The big difference is that he has lives in his hands. At the same time, he adds that the technology available makes his job much easier.

Personal Log – Alexa Carey

Dolphins...enough said. The most amazing thing is seeing a massive pod of dolphins riding the wake less than 25 feet directly below you. Tamara, Karen, Barbara, Jerry and I all clambered around the bow of the deck desperately snapping photos and avoiding wet paint as we safely peered over the edge. ENS Chris Daniels spied several areas with

dolphins and flying fish and quickly pointed every spot out as he tried many different ways to get our attention.

We did another EPA station, which we do every five stations. A great many of the crew joined us after our shift to play a game of 'Set'; there were about 8 people pulling, pushing, and looking either dazed or confused at the visual card game. I've been learning a lot about life on the East Coast and oceanography from Carly Blair, URI graduate student, while she sunbathed outside on the Hurricane deck. Many activities occur out on the Hurricane deck like exercising on several of the available machines, sunbathing, whale watching, etc. It's good to know that we still have our fun after working shift.

The two people that I admire extremely at this point are Don Cobb and Jon Hare, both East Coast natives. They are so knowledgeable on every subject that arises and work probably more than 18 hours a day. Don came out to teach Barbara and me the procedures for each test and he spent an extra shift answering all questions and supervising our actions. Jerry taught me most of the computer and paperwork, and I was pretty confused for a while. Later that night, I sat in with Jon as he ran everything. Every step of the way, he'd pause and explain how the system works and how to operate it. It's something I appreciate beyond words.

I can't believe how many great people are concentrated into such a small area. I just don't want to head home soon.

Personal Log – Karen Meyers

I agree with Alexa – the dolphins were inspiring! It's amazing that they can swim faster than the ship – twice as fast, according to Jon. I feel like I'm getting to know the people on the ship better and they're an entertaining bunch. They work so hard – Tim Monaghan just told us that someone figured out that a mariner works 7 years longer in a lifetime than an onshore worker because they work round the clock 7 days a week. It makes my life seem awfully easy by comparison!