



**NOAA Teacher at Sea
Charles "Chuck" Gregory
Onboard NOAA Ship THOMAS JEFFERSON
August 12 – 24, 2007**

NOAA Teacher at Sea: Charles "Chuck" Gregory
NOAA Ship: THOMAS JEFFERSON
Mission: Hydrographic Surveys of New York Harbor
August 14, 2007 – Day 3 – 0600h

"For here we are not afraid to follow truth wherever it may lead." ~Thomas Jefferson

Happy Birthday, Dad!

Here's the Plan of the Day (POD):

Sunrise = 0605h Sunset = 1956h

0000h Ship at Sandy Hook, NJ anchorage

0700h Took first Dramamine

0745h Launch safety brief (Survey)

0800h Deploy Launches (3101 & 3102) – I'll be on the 3102

0830h At first station of the day (somewhere between Coney Island, NY and Sandy Hook, NJ). Boot up computer systems and deploy multibeam.

0930h Debug computer systems and we're ready to track.

1210h Lunch and second Dramamine

1745h Retrieve launches

Tides for Sandy Hook

Low @ 0339h (-0.2 ft.) & 1543h (0.2 ft.); High @ 0938h (5.1 ft.) & 2145h (5.4 ft.)

Currents in Sandy Hook Channel

Ebb: 0041h (1.7 kts.), 1257h (1.6 kts.); Flood: 0640h (2.0 kts.) & 1851h (2.2 kts.)

Weather from Sandy Hook to Fire Island

AM: N winds 10-15 kts., seas 2-3 ft.; PM: S winds 5-10 kts., seas 2-3 ft.

Today was a full day. After going to bed early (2030h) and rising early (0530h), I continued to bang away at my e-mails. The internet connection on the ship is dial up and quite slow. Or is it my understanding of computers that's slow?!?! Probably the latter. Either way, I'm finding it frustrating to communicate with the ship's computers. I'll work on this tomorrow when I have the time.

Breakfast was cereal and an English muffin. Then I got ready for the 0745h safety briefing and launch deployment. All went quite smoothly as I did my best to stay out of the way. Teamwork is huge on a vessel like the THOMAS JEFFERSON, and I was impressed by the teamwork effort to deploy and retrieve both launches.

After the launch we were on our first station within 30 minutes. We had to deal with the customary computer snafu, but it was quickly fixed and we were soon doing our tracklines. Back and forth, east and west, forth and back, and west and east. Bill was at the wheel, Taylor was at the computers, Megan G. assisted with both, and I just watched, asked questions, learned, and helped out wherever possible.

To help matters, the day was beautiful: warm, light breeze, and subsiding seas. I couldn't have asked for better weather.

Three times during our day we stopped to do a CTD cast. They use a SBE 19Plus Seacat with a stainless cage and tethered to a line. After two minutes of acclimating at the surface, Taylor would lower the CTD to the bottom and lift it back onto the boat. Then a computer cable was attached to the CTD, the CTD software booted up, and the data downloaded.



One of the two 31 foot launches aboard the NOAA Ship THOMAS JEFFERSON. These launches are used to do the hydrographic survey work - side scan sonar and multibeam echo sounder - in coastal areas.

Taylor and Megan taught me a lot about the launch computers and even let me attend to them for about an hour. Setting up the computer programs for the SSS Fish and the MultiBeam Echo Sounder (MBES) was complicated to this novice, thus the initial delay. There are screens to view the data as it is coming in from the side scan and another for the multibeam. There are screens to view the files as they are filling with data, screens to view the launch's tracks, and screens to measure heave, pitch, and roll. And it was all fed into an on-board memory. Wow!

The 3102 was strong, but cramped for four adults. There were two comfortable seats on the boat – one for the coxswain and one for the survey tech - but we made the most out of every available space. Lunch was last night's chicken made into sandwiches (not bad!), chips, chili, fruit, water, and cookies. There was other food to munch on and I found it hard not to eat with the sea air and full sun beaming down upon us. So much for my "food plan".



Chuck studying some of the side-scan sonar (SSS) data as it is relayed from the SSS 'towfish' to the launch's computer.

Today I learned the importance of understanding computers, well planned navigation, and teamwork. The tracklines were well laid out and followed. Bill and Megan did a good job of maneuvering us around lower New York Harbor, as there were several recreational and commercial craft moving across the water. At no time were we in any danger. The day went smoothly and there was even a time of boredom after lunch when the launch was on course, the data was streaming in, and the weather was hot and sunny. Life was good!

We returned to the THOMAS JEFFERSON at 1745h tired and starved! After a full day at sea that was one of the best meatloaf dinners I've ever had!!!

After dinner I returned to the ship's computers, but continue to be frustrated as I try to get to my e-mails. Tomorrow my sole mission is to meet with engineer Eric and tap his computer expertise. For now I think I'll call Roxann and go to bed early and do a little 'Cannery Row' reading.