



**NOAA Teacher at Sea  
Christy Garvin  
Onboard NOAA Ship RAINIER  
June 1 - 8, 2005**

**Log 7**

Day 7: Tuesday, June 7, 2005  
Latitude: 56 deg 48 min N  
Longitude: 135 deg 37 min W  
Visibility: 10 nautical miles  
Wind Direction: 185 deg  
Wind Speed: 8 kts  
Sea Wave Height: 2 ft  
Swell Wave Height: 3-4 ft  
Sea Water Temperature: 52deg F  
Sea Level Pressure: 1013.9 mb

**Science and Technology Log**

Although we have been parked in protected Aleutkina Bay for most of the leg, yesterday afternoon we pulled anchor and the ship was underway. Because of weather conditions, it was determined that the ship would run hydro in deep water, while the launches continued protected shoreline work.

The ship is equipped with a Seabeam 1050 MKII; it is a dual frequency echosounder with 50KHz and 180KHz operating frequency. When operating at the 180 KHz frequency a maximum depth of 620 meters can be surveyed. This depth can be increased by switching to the 50 KHz frequency, which can reach depths of 3,100 meters. The Seabeam 1050 has a wide horizontal scan area that is covered by 126 adjacent beams and a 150-degree swath width; it has high resolution due to the narrow beams it uses.

While the ship is doing hydro, the crew transitions into 24-7 watches. The ship runs survey lines all night, so people are needed to steer the ship, serve as lookouts, and run the survey equipment. The watches are four hours each, and crewmembers work two watches a day. The three shifts are 12:00-4:00, 4:00-8:00, and 8:00-12:00; people are sleeping at different times, so everyone makes an effort to be quiet during the day.

One of the highlights of today was an in-depth tour of the ship by the CO, John Humphrey. I was able to see the engine room with the two main engines, the after steerage (where the rudder and emergency steering are located), and the evaporator unit that processes salt water into potable fresh water. We also went into the large refrigerators and freezers that hold the ship's stores and climbed down into the bowels of the ship to see the fire prevention carbon dioxide system.

## **Personal Log**

It is interesting trying to sleep while the ship is underway. Although the seas aren't very rough, the ship still moves quite a bit. I haven't been seasick (I'm very thankful for that), but I rolled all over my bunk last night. It felt like I was trying to hold myself in the bed as I slept.

Until tomorrow,

Christy