



**NOAA Teacher at Sea  
Stephanie Wally  
Onboard NOAA Ship RAINIER  
August 28 – September 10, 2005**

**Log 4**

**NOAA Teacher at Sea: Stephanie Wally**

NOAA Ship RAINIER

Mission: Eastern Prince William Sound Hydrographic Survey

Day 8: Monday, September 5, 2005

**Weather Data from Bridge**

Time: 1800

Cloud Cover: Low Clouds

Visibility: 5 nm (nautical miles)

Wind: Light Airs

Sea Wave Height: 0'

Swell Wave Height: 0'

Sea Water Temperature: 12.2°C

Sea Level Pressure: 1006.5 mb (millibars)

Temperature: 12.8°C

**Science and Technology Log**

It's always exciting to consult the Plan of the Day and find out you're assigned to go out on a launch from 0800-1630! Here on the RAINIER, boats are deployed daily from the ship to collect seafloor data. The picture below shows how a *cast* is taken to measure the conductivity, temperature, and depth of the water column. The CTD sensor is lowered to the bottom for two minutes. Once it is recovered using an electronic winch, data is uploaded into the launch computers.

Today we had some minor problems due to moisture seeping in through the launch windows and affecting the computer hardware. Fortunately, we were not far from the ship, and the Electrician Technician, Gary Streeter, was able to fix the problem. With two hours left of our workday on the water, we headed back out to complete more *lines*. The multi-beam sonar we used collects a "footprint" of the seafloor. Each beam is composed of pings emitted from the sounder that records information below the launch as we transit over a specific imaginary line. Sets of lines are preplanned in advance for the crew of the launch to follow. The data collection process runs smoothly since everything is organized prior to going out on the water.

The emphasis on safety here aboard RAINIER is always apparent. We conduct weekly fire drills and abandon ship drills. My first day on the ship I was issued a Mustang

Survival Suit that I donned during the abandon ship drill. Like earthquake and fire drills we conduct in school, these drills are taken seriously and people move quickly to their assigned stations.

After drills, everyone gets right back to work. I am continually impressed how the NOAA crew is able to stay on task throughout the entire leg of the project, without a single day off! Here, it is business as usual for the officers, deckhands, engineers, cooks, and surveyors. For me, I am continually distracted by the scenic beauty, bountiful wildlife, various hydrographic data projects being conducted, and the interesting conversation from others aboard RAINIER. While we don't have entire days off, there are times in the day where you can go fishing, kayaking, or get together for a weekend beach party. Since the daylight lasts until approximately 9 p.m., there's lots of time for outdoor recreation and relaxation after dinner.

***Answer to previous day's question:*** A glaciologist studies glaciers and their movement. Some glaciologists believe that the Columbia Glacier is making its first retreat in 3,000 years!

***Question of the Day:*** What significant geological event took place in Alaska in 1964 that created changes in the crust, topography, and hydrography of the region?



**TAS Wally pulling up the SEACAT CTD**