



**NOAA Teacher at Sea
Dan Steelquist
Onboard NOAA Ship *Rainier*
July 6 – July 24, 2009**

NOAA Teacher at Sea: Dan Steelquist

NOAA Ship *Rainier*

Mission: Hydrographic Survey

Geographical area of cruise: Pavlov Islands, Gulf of Alaska

Date: Sunday, July 12, 2009

Weather Data from the Bridge

Latitude: 55° 13.541' N

Longitude: 161° 22.332' W

Visibility: 6 Nautical Miles

Wind Direction: Variable

Wind Speed: Light

Sea Wave Height: 0-1ft.

Swell Waves: 1-2ft.

Water Temperature: 8.3° C

Dry Bulb: 10.6° C

Wet Bulb: 10.6° C

Sea Level Pressure: 1020.3 mb

Science and Technology Log

In order for a ship like *Rainier* to complete her work, many different people and departments must work in a coordinated fashion to accomplish the goals of the mission. Unlike many types of science field study, the work of a hydrographic survey ship requires that she goes out as a self contained work platform. All of the needs of crew and equipment must be able to be met with whatever is on board the ship.



Here I am finding my name on the POD—Plan of the Day.

A very important part of the coordination of *Rainier's* mission is called the Plan of the Day, or POD. The POD is developed by the Field Operations

Officer, or FOO, the day before it is to be implemented. The POD is posted throughout the ship, in 16 different locations. Every person on the ship needs to be aware of what is happening and what their role in the day's plan is.

General information included in the POD would be the date, the ship's position, times of sunrise and sunset, times of high and low tides, weather and sea state forecast, and which US Coast Guard global positioning system (GPS) beacons are to be used for more accurate position location.

Specific information on the POD includes whether or not *Rainier* is at anchor or moving, which survey launches are going out for the day and where they will be working, who is on each of the survey launches and what their specific role is to be, what sort of survey work is being done on *Rainier* and who is involved with that, who is responsible to process data collected during the day, and who is on watch on the bridge and when they are scheduled to be there.

In order for any important scientific work to be completed, everyone involved in the process must work together. The POD is the tool used on board *Rainier* to make that happen.

Personal Log

This is my eighth day aboard *Rainier* and I continue to learn new things. I have been out in the survey launches a number of times and I have been able to participate in many of the tasks involved in the ship's mission. The technology involved is complex and the steps involved in the work of charting are many, but everyone on board works together very well. I feel very fortunate to be able to get a glimpse of the work these people do. Now that I know my way around the ship, what each department does, and the way that work all fits together, I am understanding how underwater feature locations and water depth information get from the real world into the hands of scientists and mariners.

Something to Think About

If you made a POD for your day what sorts of information might you include? Would a POD make working with others more productive?