



**NOAA Teacher at Sea
Kimberly Wolke
Onboard NOAA ship RAINIER
July 24-August 11, 2006**

Mission: Hydrographic Surveys of the Shumagin Islands, Alaska

Day: Saturday, July 29, 2006

Weather from the bridge at 1800:

Skies: Partly Cloudy (PC)

Visibility: 10 nautical miles (nm)

Wind Direction: Wes/southwest (WSW)

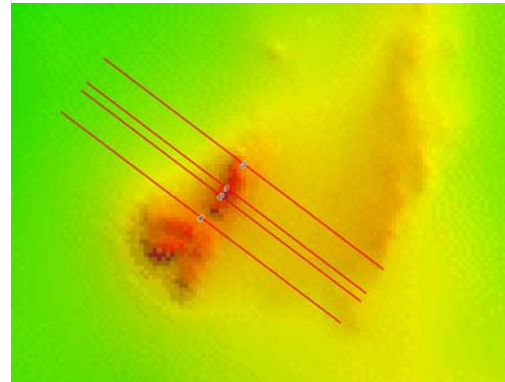
Wind Speed: 20 knots

Waves: 1 foot

Sea Water Temp.: 9.4°C

Sea Level Pressure: 1023.9 millibars (mb)

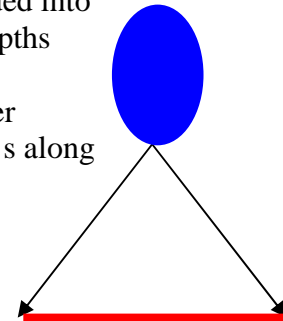
Temp. (°C): 13.3 (air temperature)



A partial line plan for an area surveyed by the NOAA ship

Science and Technology

Another survey launch went out again today to do survey lines in Porpoise Harbor, which is where the RAINIER is still anchored. A survey area is divided into sections by parallel lines. Depending on the already known depths of an area (based on existing navigational charts), the distance between each line varies. Shallower areas will have lines closer together, whereas deeper areas will have lines further apart. It's along these lines that the ship or the launch boat travels to acquire readings of depth as well as images of what lies beneath the water. The transducer, which is mounted on the bottom of the vessel, sends out a beam from the bottom of the vessel that forms a triangular shape. The distance along the sea floor covered by this beam is called a swath. Underwater, these swaths overlap so that the area between all of the lines is actually covered, although the vessel only moves along the planned survey lines. All of the data received is ultimately compiled and creates a visual image of the sea floor (bathymetry). Tomorrow I'll be joining a survey launch that will be out from 0800 until 1630. I'm sure I'll learn a lot more about data acquisition and how it's processed once I'm actually doing it. 😊



The red line shows the swath, which is the area the sonar beam covers as it leaves the transducer on the bottom of the vessel and goes outward in a triangular path.

Aboard the ship, a schedule is posted each day called the POD or Plan of the Day. The POD can be found all over the ship so that everyone knows what his or her job will be for the next day. In addition to identifying who will be doing what, the POD also shows the ship's position, who the Officer on Deck (OOD) is, when sunrise and sunset will be for

the following day, what time the high and low tides will be, the forecasted weather for that day, as well as any additional notes. It is absolutely imperative and expected that everyone knows what they're supposed to be doing AND that they're on time for it.

NOAA SHIP RAINIER PLAN OF THE DAY
 OPR-118-04-06, Shumagin Islands
 Date: July 23, 2020
 Ship's Position: Porpoise Harbor Anchorage
 Vessel: RA
 Night Processing: PS Ullmann, JST Watson

Vessel
 1016 (RA-4)
 Aluzky
 Campbell
 McGovern

Vessel
 1026 (RA-1)
 Greenway
 ST
 ENS

Notes:
 0900 Deck Training
 (Dawkins, Klyydzky, A. VanDyke, Horn, Wulke, Foster, Brown, T. Smith)
 1700 Patrol Cookout (Weather Permitting)

Anchor Watch
 08:00-17:00: Steve Burt
 14:00-16:00: Al Anderson
 16:12-20:00: ENS Watson/ENS Smith

Weather
 07:23
 4
 Low 30's

USCGC Rainier
 6105 Ray (200600)
 Kodiak (200600)

A POD for today

said and done at specific times, not to mention that the metal hook was extremely heavy and I was partially responsible for keeping it from swaying when it was dangling above my head. Because of the hazards involved in moving things overhead on the ship, it is absolutely mandatory that everyone wear a hardhat as well as their float jacket. Safety is definitely emphasized.

Like almost everything on the ship, there is tremendous teamwork and communication involved in making sure the launches are moved safely and properly. For moving a survey launch I'd have to estimate that there are at least 9 people involved. Everyone works together like a very well oiled machine. It seems that there are *always* people like Steve Foye (Boatswain Group Leader) or Jim Kruger (Chief Boatswain) watching to make sure all of the deckhands and others involved are doing their jobs correctly. Since so many jobs aboard the ship do depend on a team of people, it is critical that everyone is on time. People get awfully upset if you're late or not where you're supposed to be.

Personal Log

The weather has been very favorable the past few days. It was partly cloudy and sunny most of the day. Since Mother Nature has been cooperative, we were able to have a

The POD for today had me scheduled for Deck Training. I, along with the new people aboard the ship, spent the better part of the day learning how to handle the lines (ropes) that secure things, tying knots, and becoming familiar with the interior of the launch boats and their safety features. The part of the training that I enjoyed the most was learning how to raise and lower the launch boats from the ship. I had to stand on the back (aft) of the launch and make sure that the large metal hook that

lifted and lowered the launch was removed and put back on properly. This was not as easy as it originally appeared since there are specific things that need to be



Lowering a survey launch.... teamwork!

cookout on the fantail of the ship for dinner tonight. The cooks definitely put out a spread for us. It was great sitting outside on the fantail, in the sun, enjoying the good food and company.

It's been challenging going to bed at night since it's so light out so late, especially the past few days with the clear skies. Last night at 10pm it felt more like late afternoon.

Kim Wolke
Teacher at Sea