



**NOAA Teacher at Sea**  
**Stacey Klimkosky**  
**Onboard NOAA Ship *Rainier***  
**July 6 – July 24, 2009**

**NOAA Teacher at Sea: Stacey Klimkosky**

NOAA Ship *Rainier*

Mission: Hydrographic survey off Pavlof Islands, AK for the purpose of nautical charting

Geographical area of cruise: Transiting, Shelikof Strait to Pavlof Islands

Date: July 7, 2009

**Weather Data from the Bridge**

Position: 57°36'9"N, 154°41.154'W

Weather: Overcast, Foggy

Visibility: 10 nautical miles (nm)

Wind: North 17 knots

Swells: 2-3'

Waves: 1-2'

Barometric pressure: 1021.4 mb

Air temperature: Wet bulb=10.6°C; Dry bulb=10.6°C

**Science and Technology Log**

Finally we are underway, having pushed off of the dock in Seward around 1500 on Monday, July 6. The cruise time to the area where RAINIER and her crew will be conducting hydrographic surveys is approximately 40 hours. The distance is 519 nautical miles. (One mile on land = 0.869 nautical miles, so 1 nautical mile = 1.15 statute miles). Thus far, we have traveled approximately 240 nautical miles in a time of 19 hours—just about ready to finish passing Kodiak Island to the port (left) side.

In the meantime, there is plenty to do aboard—learning about the many aspects of safety aboard a working vessel being the most important. NOAA personnel new to the ship and guests watched a variety of safety videos as well as received our safety gear. My closet, which was fairly empty yesterday morning, is now stuffed with a survival suit (a.k.a. The Gumby Suit); a Float Coat (a warm orange coat that provides both buoyancy and warmth if you “go into the drink”, or fall overboard) and an inflatable safety vest that I will wear whenever I am working inside the cabin on one of the launches once the surveys begin. We also had our abandon ship



**The *Rainier's* a heavy ship!**

and fire drills. It's very similar to the fire and safety drills we do in school. Everyone has a specific place to meet (muster) and some have specific jobs to do or items to bring. Like the sign on the fantail of the ship says: TEAMWORK SAFETY FIRST!

I've also had time to begin speaking to different members of the crew—their responsibilities, how they arrived on RAINIER, and what the hydrographic surveys will be like. One of the most interesting conversations was with Steve Foye, a Seaman Surveyor. Steve told me that RAINIER is scheduled for a complete mid-life repair after this year's survey season is completed in September. RAINIER will then go into dry dock and the repairs and changes will begin. The entire inside of the ship will be gutted and remodeled. While all of that is going on, a decision has to be made—where will RAINIER's homeport be? Steve brought up quite an interesting point: a port that has brackish (part salt/part fresh) water is better for the ship. Why? When a ship is at sea for long periods of time, creatures such as barnacles cement themselves to the hull. It's essential to remove them; however, the process is costly—both in time and money. Having moving fresh water along the ship's hull while docked for the “off season” will eliminate the barnacles. But there's another problem—after a winter docked in fresher water, algae and plant material starts to grow where the barnacles once were. Solution? Begin a new survey season and sail the ship in salt water. The plant material is then eliminated, but guess what starts to come back? An interesting example of a cycle.

### **Personal Log**

It's great to finally be a Teacher at Sea! Not a Teacher on a Plane, or Teacher on a Train, or Teacher at Port. I've been waiting a long time for this to get underway. Thus far, the entire experience has been new. I've had the opportunity to see some amazing scenery—the landscape



**Alaska has many jagged volcanic mountains.**

is so different from that of Cape Cod, Massachusetts! Jagged volcanic mountains literally rise up from the water. I've also seen some wildlife including bald eagles, otter, Dahl sheep, Arctic terns and a moose on the Alaska Railroad train that I took from Anchorage to Seward. We also passed three glaciers. The glacial melt off causes nearby lakes and streams to take on a milky light green color.

As far as being on the ship, this is my first at sea experience. I'm finding that it really reminds of my first days of college—living in close quarters; trying to get into a

routine with a roommate; learning where things are and how schedules operate; figuring out the hierarchy of individuals. The constant movement is also something new. I actually had a couple of fun rides in my bunk during the night! I wonder if that's what a Nantucket sleigh ride felt

like. (A Nantucket sleigh ride, for those who don't know, is a term from whaling days. After a whale was harpooned, it would often take off, pulling the small boat of men behind it until the whale tired.)

### **Did You Know?**

- The NOAA ship RAINIER is 231 feet overall. Her cruising speed is 12.5 knots and she can travel a range of 7000 nautical miles! Medium sized survey ships are customarily named for a prominent geographic feature in the ship's area. RAINIER's namesake is Mount Rainier, a volcanic cone that rises 14, 410 feet above sea level in Washington State's Cascade Range.
- Today, sunrise was approximately 0520 and sunset will be at 2314 (that's 5:20am and 11:14 pm—plus the light lingers for awhile) Imagine falling asleep at 10:00pm when the sun is still shining!
- You can follow the ship's course by taking a look at the NOAA Ship Tracker <http://shiptracker.noaa.gov>. Click on RAINIER (RA).

### **Alaska Fun Facts**

- Seward, AK is located on Resurrection Bay, the northern-most ice-free bay in the US. It was founded in 1902 by the surveyors of the Alaska Railroad as the ocean terminus of the railroad. Originally a gold rush encampment, the famous Iditarod Trail that miners took into the mountains began here. To the east, Mount Marathon rises up 3,022 feet. Every 4<sup>th</sup> of July, hundreds of runners scurry up and down Marathon to see who can claim bragging rights for a year.
- This year, Alaska celebrates its 50<sup>th</sup> birthday. One of its original names was Alyeska (Al-YES-ka), an Aleut word that means "great land".