



**NOAA Teacher at Sea  
Patricia Donahue  
Onboard NOAA Ship *Rainier*  
August 18 – 23, 2008**

**NOAA Teacher at Sea: Patricia Donahue**  
NOAA Ship *Rainier*  
Mission: Hydropalooza Open House  
Geographical Area: Deep Water Port,  
Homer, Alaska, 59.36.39 N, 157.24.87 W  
Date: August 23, 2008



**NOAA Ship *Fairweather***

**Weather on the Bridge at 14:00**

Overcast (8/8)  
Visibility 11 to 27 nautical miles  
Winds light and variable  
Seas calm at 10°C  
Air pressure 1000.5 millibars and rising slightly  
Dry Bulb 14.4°C, Wet Bulb 11.1°C

International Code of Signals		U.S. Navy	
A	R	1	SQ
B	S	2	FL
C	T	3	SU
D	U	4	DI
E	V	5	
F	W	6	SP
G	X	7	ST
H	Y	8	TU
I	Z	9	CO
J		0	FO
K	1R	CA	PR
L	2R	IN	
M	3R	NE	
N	4R	EM	PO
O		SB	
P			
Q			

**International code signals for ships**

**Science and Technology Log**

Getting a ship ready for inspection or for showing it off to the public is a busy process. All day seamen and women have been scrubbing – sometimes literally on their hands and knees – decorating, and setting up displays to make *Rainier* look her best. Their pride in the ship and in their work shows. The *Fairweather*, pictured above, is also here. She pulled in this morning along the same dock. It was amazing to watch her move toward the dock sideways! Once docked stern to stern, both ships were decorated with bunting made from signal flags. There is a flag for each letter of the alphabet and for numbers as well. A ship can identify itself by showing the signal flags for its call sign. *Rainier's* call sign is WTEF. You can use this chart to draw *Rainier's* call sign.

Every member of the crew was on hand for the open house. The *Fairweather* crew signed people in and checked their identification. Altogether, nearly 90 people toured the ships during the 2 hour open house. There were similar stations on each ship's tour. As visitors arrived, they were taken in small groups to the bridge. After learning about

the navigation and communication systems, they moved on to the Plot Room where many

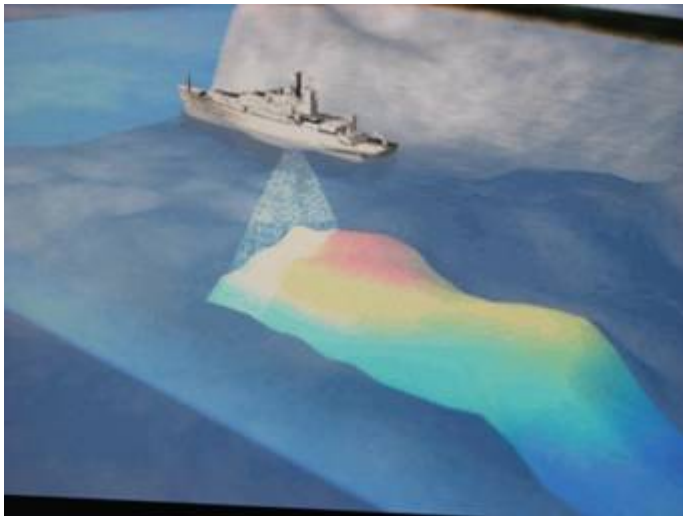
displays had been set up, including some marvelous computer graphics. The next tour stop was the fantail to see the small boats, then on to the diving lockers. Everyone had a chance to see a state room and finally the ward room where many brochures, books, and pamphlets were available for taking. NOAA's Teacher At Sea book was a very popular choice! One of the visitors was a home school teacher from Texas. I think she took 2 copies! Even seasoned seamen on the tour each took a copy of the book.



*Rainier* crewmembers get ready for the tours.



Visitors began the tour by walking up the ship's gangway.



Computer graphics like this were displayed in the Plot Room.



A crewmember of the *Rainier* gives children a tour of the ship.

By taking the tour, I learned a few more things about the *Rainier*. The bridge is equipped with an infrared camera for night vision. When running at night, all of the portholes must be closed so that crewmembers on the bridge can see into the dark without light interference. Only a few “running lights” are kept on so that other vessels can see the *Rainier*. Another thing I learned has to do with the windows on the bridge. All but one has ordinary windshield wipers but one pane is also equipped with a clear view screen that provides a field of vision in case of heavy rain, seas, or snow. The center of the window spins very quickly like a centrifuge to dislodge water, snow, or ice. This allows the helmsman to see outside into a storm. Our guide told us that if this feature is in use, you know the weather is very bad! Lastly, I learned that the surveyors sometimes take samples of the ocean floor. They collect a small amount of material from the sea floor surface only. I was reminded of another ship called the JOIDES Resolution that drills deep into the Earth’s crust and brings up complete cores of subsurface sediment and rock. For more information about his ship, visit <http://www-odp.tamu.edu/resolutn.html>.



**At the end of the tour, visitors were able to take home books, brochures, and pamphlets.**

### **Personal Log**

There are two aspects of life aboard the *Rainier* that I was impressed by. One is the conscientiousness of the crew regarding recycling. Labeled containers are available to separate the various waste streams and everyone complies. When in port, the separated recyclables are put ashore for pick up. While this may seem a small matter, it accentuates NOAA’s commitment to stewardship of the natural environment.



**The Seafarer’s Memorial at Homer Spit**

The other item I noticed was the frequent hand washing or use of antibacterial hand cleaners. With so many people in such close quarters, stopping the spread of diseases is important. Every crewmember did their part to keep their germs to themselves. I wish my students would do the same!

I had a little extra time today so I took a walk along the famous Homer Spit and stopped at the Seafarer’s Memorial. People had brought shells, driftwood and kelp to decorate the statue. The stones of the floor were engraved with the names of

sailors lost at sea. People had taped flowers to certain stones. The place had a quiet dignity.

### **Animals Seen Today**

There were fewer gulls at the dock than when the ship was last here. The nesting season is nearly over. Almost all of the young have fledged. The few that remain are grown, and able but unwilling to fly. An exasperated parent stood over each of these few, guarding but refusing to feed their recalcitrant offspring. Having a son that age, I understood how these birds felt!

### **Making Connections**

Representatives of the Kasitsna Bay Laboratory of the Center for Coastal Fisheries and Habitat Research were on hand for the open house. They and other interested parties, such as the University of Alaska and the state's fisheries and wildlife management authorities, are very excited about NOAA's survey work. The data NOAA collects will be beneficial for identifying crab habitat and managing these and other resources to ensure their sustainability.



**A NOAA employee from Kasitsna Bay Laboratory**