NOAA Teacher at Sea
Scott Donnelly
Onboard NOAA Ship McARTHUR II
April 20 – 27, 2008

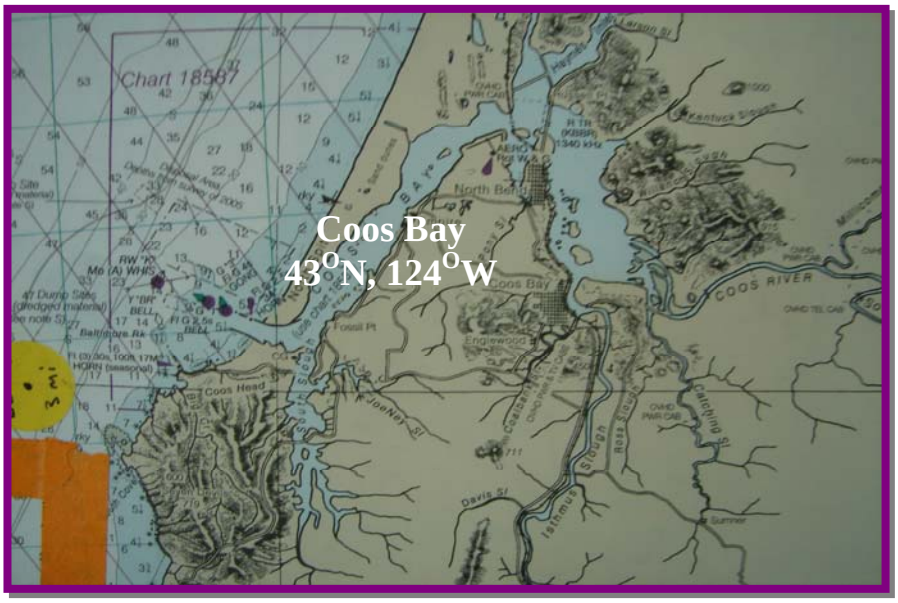
NOAA Teacher At Sea: Scott Donnelly
NOAA Ship McARTHUR II
Mission: Longitudinal Biological and Chemical Characterization of Deep Ocean and Nearshore Waters along the Coos Bay Line
Date: Friday, April 25, 2008

Weather Data from the Bridge
Sunrise: 0622 Sunset: 2015

	WIND	SEAS	PRECIPITATION
AM	SW 10-20 kts, becoming 10-15 kts	Waves 2ft, becoming 3-5ft W Swell 4ft @ 10 seconds	Rain likely
PM	S 15-25 kts,	Waves 4-7ft, SW Swell 5ft	Chance of rain

Legend: kts = knots

Science and Technology Log
Longitudinal sampling continues along the Coos Bay Line. Coordinates for all measurements (twelve sampling stations total) along Coos Bay are 43^{O}20'N, 124^{O}27'W to 125^{O}27' extending 3 to 55 miles from shore and from depths of 50m (165ft) to 2,800m (9,200ft). Today was my seventh (morning) and (afternoon) eighth 4-hour shift. All went well.



A nautical chart of the Coos Bay area

Personal Log
After the morning shift I asked my shift mate and veteran sailboat skipper Bob Sleeth to give me some pointers on how to set a nautical heading using parallel rulers. I know all about latitude and longitude but have never sat down with a nautical chart and looked at all the interesting information found on them. As a kid I watched a lot of old World War II naval films like

Midway and *Iwo Jima* and I remember the scenes where the captain and senior officers are studying a nautical chart of the western Pacific with obvious intensity in order to plot a heading to cut off supplies for the Japanese navy or whatever. I always thought those scenes cool. So here I am thirty years or so later, a happily married father of two and professor of chemistry, in my mind pretending the role of ship's navigator on the famous WWII battleship USS *Missouri* as I consult with Capt. Stuart Murray in setting a heading to Tokyo Harbor with General of the Army Douglas MacArthur on board, making last-minute preparations for the surrender of the Empire of Japan ending World War II. I guess I can blame all the fresh ocean air I've taken in the past week for such a fantasy.

NOAA TAS Scott Donnelly charting a marine navigational heading

About mid-morning after a deep sleep I went to the flying bridge (observation deck) located above the ship's operations bridge to watch the true masters of the sky- the albatross- glide effortlessly just inches above the glassy, mirrored ocean surface. The albatross rarely flaps its wings when flying. Rather, the albatross conserves its energy for its long distance oceanic travels by using the uplift from the wind deflected off ocean waves. Their long, slender, aerodynamically efficient wing structure allows the albatross to stay aloft for hours at a time. They soar in long looping arcs. They indeed are a grand spectacle to observe.

View from the McARTHUR II flying bridge