



**NOAA Teacher at Sea
Robert Oddo
Onboard NOAA Ship *Ronald H. Brown*
July 11 – August 10, 2009**

NOAA Teacher at Sea: Robert Oddo

NOAA Ship Ronald H. Brown

Mission: PIRATA(Prediction and Research Moored Array in the Atlantic)

Geographic Area of Cruise: Tropical Atlantic

Date: July 15-20, 2009

Weather Data from the Bridge

Outside Temperature 24.19 °C

Relative Humidity 78.87

Sea Temperature 24.28 °C

Barometric Pressure 1016.0 inches

Latitude 00° 12.5 N

Longitude 23° 37.28W

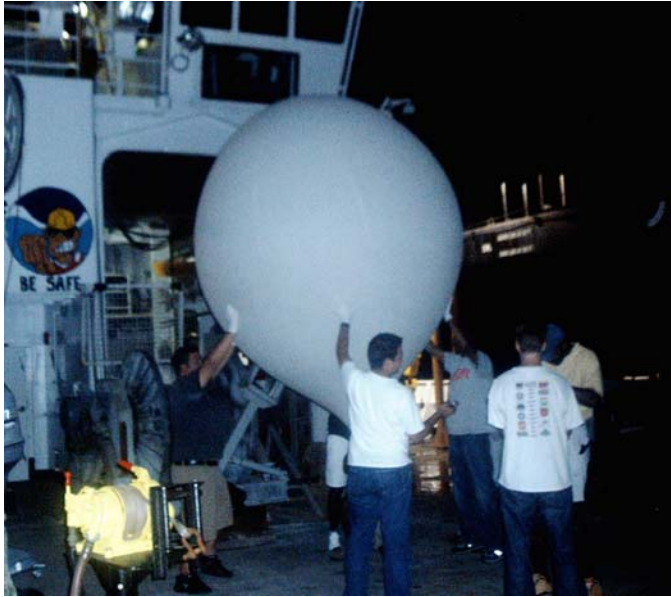
Science and Technology Log

We have been steaming at around 10 knots(approx 11.5 mph) 24 hours a day to our first buoy. The scientists on board are preparing equipment for the work that awaits them once we arrive at our first stop, 0 degrees 01.0 South latitude, 22 degrees 59.9 West. Replacement tubes for the buoys are being readied and the “CTD” is being prepared for deployment. The “CTD” is the name for a package of instruments that is lowered in the water that includes sensors that measure conductivity, temperature and the depth of the seawater. Conductivity and temperature are important since salinity can be derived from these values. The CTD is connected to the ship by means of a cable through which real-time data can be sent back to scientists on the ship as the winch lowers and raises the CTD through the water. The metal frame around the CTD has a number of bottles attached to it that collect seawater samples at various depths. This water then can be analyzed back in the laboratory when the CTD is brought back on board.



The CTD

We have deployed a number of drifters as we are making our way to the first stop.



Deployment of the ozonesonde

For the last couple of days, we have not been allowed to collect any data as we traveled through the territorial waters of Brazil. On the night of July 19th we launched an ozonesonde. An ozonesonde transmits information to a ground receiving station information on ozone and standard meteorological quantities such as pressure, temperature and humidity. The balloon ascends to altitudes of about 115,000 feet (35 km) before it bursts.

Personal Log

A few days ago, I toured the bridge of the ship. There is always one officer on the bridge and also a person on watch.

Unfortunately there is not a big wheel like I imagined up there to steer the ship (I always wanted my picture at one of those big wheels). But there are a number of

thrusters that you maneuver the ship with. There are also a number of radar screens that enable one to see surrounding objects and well as computers that allow the ship to run on different auto pilot modes. Before a radiosonde or a buoy is launched, one needs to inform the bridge and the operation is logged in. You really get a unique perspective of the ship from up on the bridge.

I have spent hours on deck watching for signs of life out in the ocean. We did have a pod of dolphins off our bow one day, flying fish seem to be out there all the time and one day we believe we saw a pod of false killer whales (maybe). I expected to see some birds, but so far not one.



Here I am at the helm of the *Brown*.



Course we have taken since we departed from Bridgetown. As you can see, we're right over the Equator. More information about our current location from <http://shiptracker.noaa.gov>