



**NOAA Teacher at Sea
Candice Autry
Onboard NOAA Ship THOMAS JEFFERSON
August 7 – 18, 2006**

NOAA Teacher at Sea: Candice L. Autry
NOAA Ship THOMAS JEFFERSON
Mission: Atlantic Hydrography Survey
Days 1-6, August 7-11, 2006

“Ships have many pieces of complicated equipment!”

Personal Log

Hello, greetings from Teacher at Sea Candice Autry. I teach science to middle school students at a wonderful school called Sheridan School in Washington, DC. I have been given the great opportunity to sail with the crew on the NOAA Ship THOMAS JEFFERSON. Our cruise has been delayed several days due to unforeseen problems with some of the complex and necessary equipment on the ship. It is important to be flexible with any kind of change, so these past few days have given me the opportunity to explore the ship as we wait for final repairs.

The objectives of this particular ship primarily involve hydrographic surveys. Hydrography is the science that has to do with measuring and describing physical characteristics of bodies of water and the shore areas close to land. Thanks to hydrographic surveys, ships, ferries, pleasure boats, and other vessels can safely navigate in busy waters without hitting any obstructions on the bottom of a harbor. Hydrographic surveys can also locate submerged wrecks in deep waters; examples include unfortunate events such as shipwrecks out at sea as well as plane crashes over the ocean. These surveys are done by using technology that involves side scan sonar and multi-beam sonar technology. The combination of these two types of technologies can create a clear picture of a barrier on the ocean floor and the depth of the obstruction.

The THOMAS JEFFERSON holds several smaller boats including two launches (one launch is visible in the picture, it is the gray boat) that have this sonar technology located underneath the vessel. The instrument that collects data is often called a “fish.” The data can be seen on a computer screen so that the surveyors can view the data being collected. Once we reach our destination, we will use these launches, one equipped with a fish that uses multi-beam sonar technology and the other with a fish that uses side scan sonar to create a chart of what is on the bottom of a very busy harbor!

RIGHT: The NOAA Ship THOMAS JEFFERSON awaits a necessary part for the crane that aids in lifting the fast rescue boat, then we set



LEFT: A functioning crane on the NOAA Ship THOMAS JEFFERSON lifts the necessary fast rescue boat (FRB) aboard.

RIGHT: Seaman Surveyor Doug Wood and Senior Seaman Surveyor Peter Lewit interpret hydrographic data in the survey room of the NOAA Ship THOMAS JEFFERSON.





LEFT: Staterooms on the NOAA Ship THOMAS JEFFERSON are comfortable and cozy!

RIGHT: One of the workrooms aboard the NOAA Ship THOMAS JEFFERSON.



LEFT: A closer look at the navigational equipment on the bridge of the THOMAS JEFFERSON

