



NOAA Teacher at Sea
Noah Doughty
Onboard NOAA Ship WESTERN FLYER
September 18 – 22, 2006

NOAA Teacher at Sea: Noah Doughty

NOAA Ship: WESTERN FLYER

Mission: USS MACON Archeological Expedition

Day 2: Tuesday, September 19, 2006

Noon Weather Report from the Bridge

Visibility: Poor

Wind direction: Variable from the northwest

Wind speed: Light airs

Sea wave height: 3-5'

Seawater temperature: 56.1° F

Sea level pressure: 1022 millibars

Cloud cover: 7/8

Science and Technology Log

Today the photomosaic team from Stanford University, Dr. Steve Rock and Ph.D. student Kristof Richmond, stepped up to direct underwater operations.

Currently there are two known debris fields. The larger field contains the Curtiss F9C-2 Sparrowhawk airplanes, five of the eight Maybach Engines and remnants of the galley. The second debris field contains the bow end of the MACON with identifiable artifacts from the officer's quarters and the mooring mast receptacle. A third debris field, containing the tail section, is speculated to exist but has never been found. In spite of some challenges we managed to mosaic both of the known fields.



The photo-mosaic team: Dr. Steve Rock (left) and Ph.D student Kristof Richmond (Right), from Stanford University.

The photo-mosaic will be created using a control system designed by the Stanford team to pilot the *Tiburón* along a series of parallel transect lines, a pattern playfully called “mowing the lawn.” As the ROV travels above the seafloor along its transect line, a High Definition Camera periodically captures images that are assembled to create the photo-mosaic. Due to the low light and at times murky conditions, the camera can't be more than a few meters off the sea floor.

Imagine trying to create a picture of your local soccer or football field by walking the entire field holding a camera at arm's length facing straight down.

Tomorrow we will continue the photo-mosaic efforts!