



NOAA Teacher at Sea
Brett Hoyt
Onboard NOAA Ship RONALD H. BROWN
October 8 – October 28, 2006

NOAA Teacher at Sea: Brett Hoyt

NOAA Ship: Ronald H. Brown

Mission: Recovery of Stratus 6 mooring and deployment of Stratus 7 mooring
Recovery of SHOA tsunami warning buoy and deploy a fresh replacement buoy

Days: Tuesday & Wednesday, October 17 & 18, 2006

Weather Data from Bridge October 17

Visibility: 12nm(nautical miles)

Wind direction: 130° True

Wind speed: 7 knots

Sea wave height: 1-3ft

Swell wave height: 4-5 ft

Sea level pressure: 1020.3 millibars

Sea temperature: 19.1°C or 66°F

Air temperature: 21°C or 69°F

Cloud type: cumulus, stratocumulus

Weather Data from Bridge October 18

Visibility: 12nm(nautical miles)

Wind direction: 120° True

Wind speed: 10 knots

Sea wave height: 2-4ft

Swell wave height: 3-5 ft

Sea level pressure: 1021.6 millibars

Sea temperature: 19.3°C or 67°F

Air temperature: 22.5°C or 72°F

Cloud type: cumulus, stratocumulus

We are going to use a different format for today because it is:

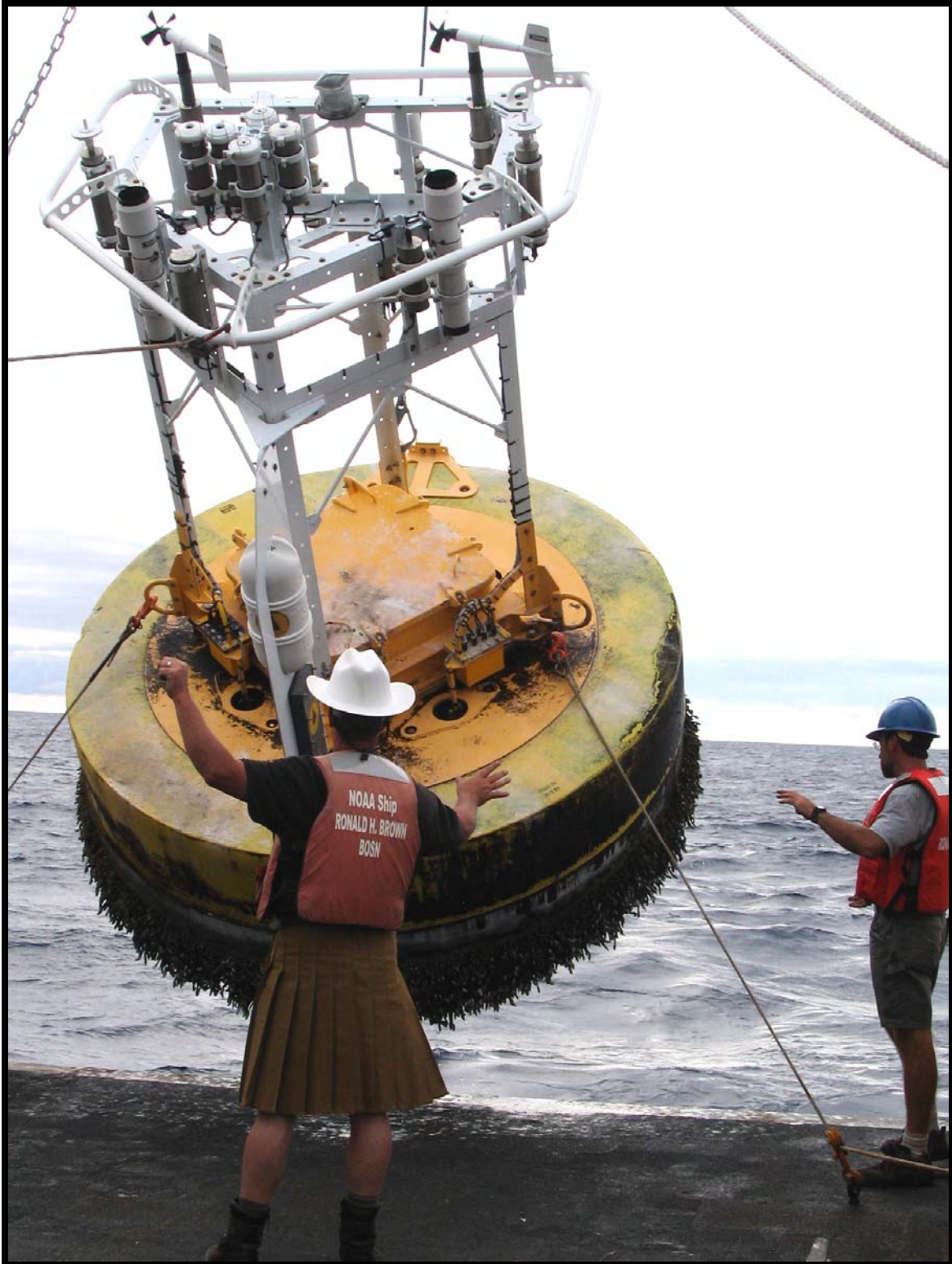
It's Recovery day

On October 16th we deployed the Stratus 7 buoy. The second part of this cruise is the recovery of the Stratus 6 buoy that was deployed approximately one year ago. To ensure a continuous record, a new buoy is installed at the same time the old one is recovered. Today, October 18th, is the recovery of the Stratus 6 buoy. Please compare and contrast

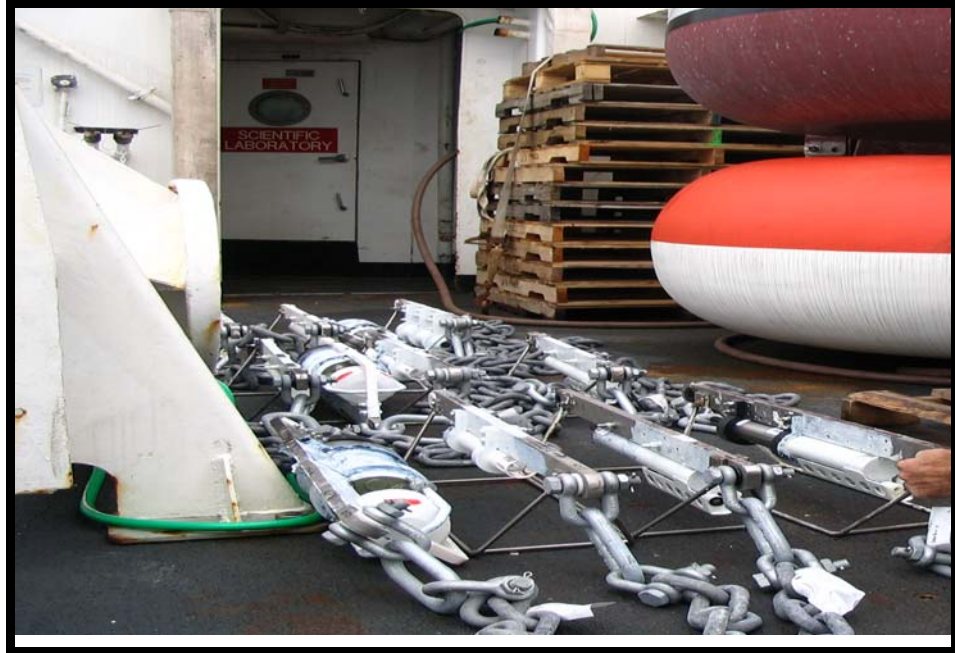
the photos of October 16th (Deployment) with that of October 18th (Recovery). If you should have any questions please feel free to contact me at hoytbk@gmail.com.



The Stratus 6 Buoy one year after it was deployed. The nearest Land is 600 miles to the east. These birds are feeding off the marine life this buoy collects in the waters around the mooring.



Recovering of the Stratus 6. Can you spot the Scotsman? Hint: He's the one in the cowboy hard hat.



Instruments waiting deployment for Stratus 7.

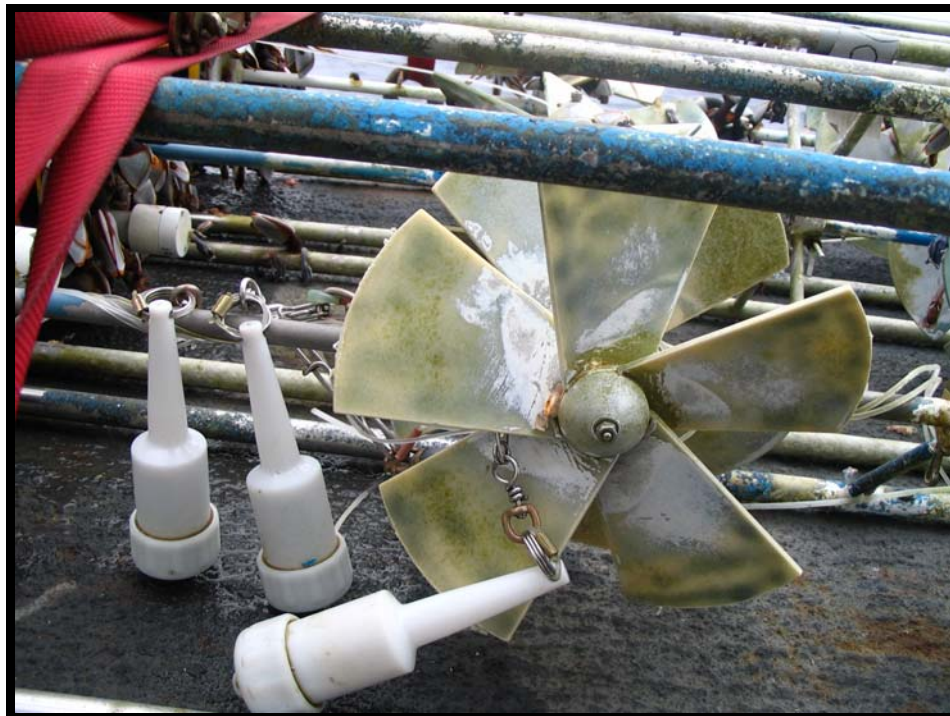


**Stratus 6 instruments one year after deployment covered in barnacles.
What would two years of deployment look like?**



Gooseneck barnacles from the Stratus 6 buoy.

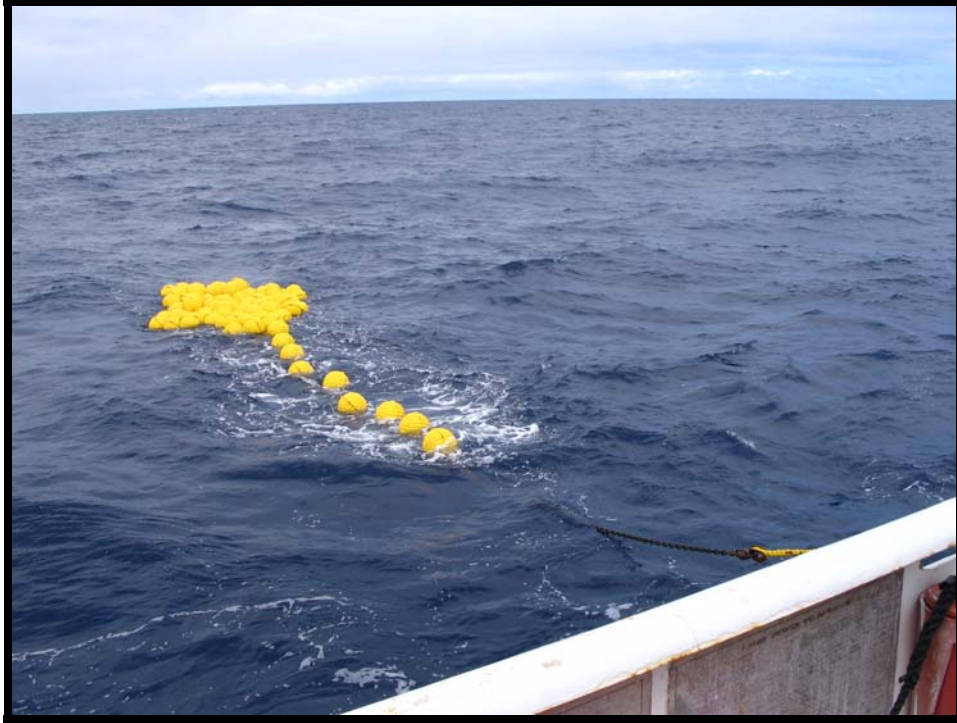
Photo by Jackie Almeida



Damage to a current meter caused by fisherman's gear. Of the 8 meters, 6 were fouled. Here we have entanglement of the current metering fans by fishermen's lights. They use these lights on their lines to attract fish to their hooks at night. Once the entanglement occurs data cannot continue to be gathered.



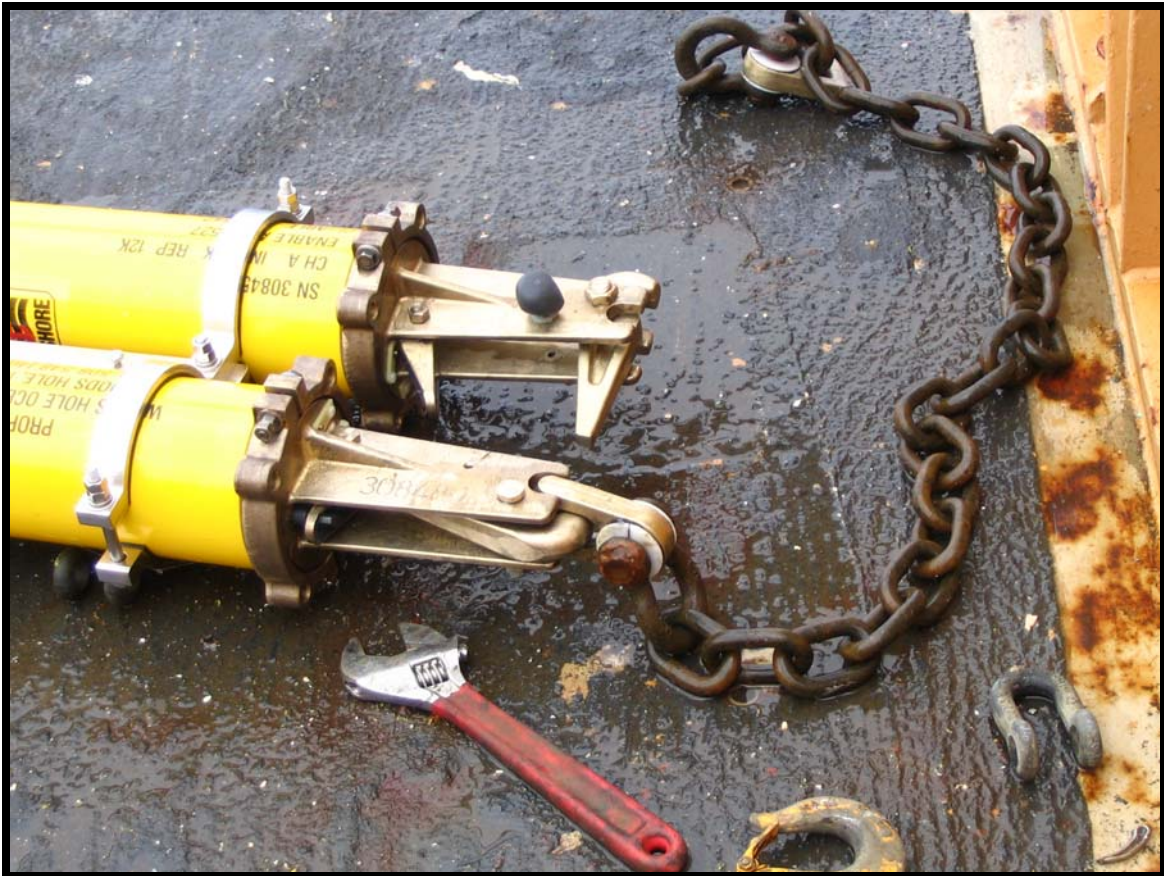
NOAA Teacher at Sea, Mr. Hoyt, scraping barnacles off one of the sensors from Stratus 6. “I’ve got to talk to my travel agent.”



Remember the glass balls from Stratus 7? Here are the glass balls from Stratus 6. It took them over one hour to reach the surface after the acoustic release was activated. They are not in the nice neat line as we had in deployment.



Anyone like puzzles?



The acoustic release, one year after being sent 13,000 ft to the bottom of the ocean. Scientists sent a signal to this release to let go of one side of the chain. Should one release fail, they could trigger the other release.



Dr. Weller, leading by example, cleaning the equipment free of barnacles. Remember in an earlier posting when he stated he was a “hands on scientist”?