



**NOAA Teacher at Sea  
Scott Sperber  
Onboard R/V *Kilo Moana*  
July 9 – 17, 2009**

**NOAA Teacher at Sea: Scott Sperber**

Ship: R/V *Kilo Moana*

Mission: WHOTS-6 (Woods Hole Oceanographic Institution Hawaii Ocean Time series Station)

Geographical Area: Central Pacific, North of O'ahu (23 01'N 157 23'W) and changing, we are underway

Date: July 16, 2009

**Weather Data from the Bridge**

Temperature: 22.64 C

Humidity: 80.6%

**Science and Technology Log**

I am up very early today, 0530, the last full day at sea. I did not make a log entry yesterday it was a very busy day. The day totaled a full 12 hour hard work day for me. The day started out about 0545 with the initial recovery of the old buoy. The acoustic (sound) release mechanism was triggered and the glass balls came up to the surface with the rope attached. The glass balls were in a large cluster once onboard and had to be untangled.



**Glass balls coming onboard**



**Popped glass ball**

Five of the glass balls have imploded at some time and the glass that had remained had turned into a fine white powder. After the glass balls were brought onboard and untangled and put into their boxes the chore of bringing the 5 miles of line and cable began. I started out in the box to flake (lay the rope down) the line as it came in. After quite a while and a lot of rope the capstan (the vertical winch) broke. It was the only break I had since we began. A break when the brake

broke. LOL. The line was cut and placed on the main winch to complete the process. This slowed the whole procedure down because once the rope was on the winch; we had to unwind it all into its storage boxes. This had to be done 2 times and it set the whole recovery procedure behind about 2 hours. If you remember the procedure of deploying the new buoy, one chain link section at a time with the sensors attached, this procedure was now reversed for the recovery.



**Scott in the box**



**Scott in the box**

When the sensors came up each one was taken into the lab, photographed, videoed and a narrative was taken on to the condition of the sensor including what type of marine (ocean) growth had taken place over the year. I was given the task of taking the sensors into the lab, hanging them for photographic purposes and then bring them back outside. A dirty job but someone had to do it. This process from start to finish, recovery of the buoy to the end of documenting the condition of the sensors took 10 hours. After this the real fun started, cleaning the sensors. Now we are talking dirty. We had to clean off all marine growth from the sensors so Jeff could then start recovering data.



**Jeff and the sensors in the lab**



**Dirty sensor with goose barnacles**

## Personal Log

Well today I was able to put on my new steel toed boots. I should have broken them in a couple of times before this; my feet ached at the end of the day, wore a hard hat all day, a safety vest, got to climb into a box with miles of rope, got to smell like an old aquarium. All and all a great day. Sure didn't need to ride the bike, Carly passed on it too.

All this said and done I would really like to take the time to thank all the people who made this possible. I have done many things in my professional career to broaden my professional knowledge and this has got to be one of the best experiences of all. First and utmost I would like to thank the NOAA Organization. Without their desire to stress the importance of Science education through increasing the knowledge base of the educators of the world this would not have been possible. Thank you to Dr. Al Plueddemann, Chief Scientist, Dr. Roger Lukas and Dr. Fernando Santiago, both of the University of Hawaii. Not only did they share their wealth of knowledge with me but guided me through the practices of this WHOTS project and confirmed in me my beliefs of the importance of long term research in science. Thank you to the rest of the Science Party. You all put up with me and showed me how to do what you needed. Thank you to the Captain and the crew of the R/V *Kilo Moana*.



**R/V *Kilo Moana* at dockside**



**Dr. Plueddeman, Paul Lethaby, Sean Whelan and Dr. Roger Lukas**

What a great experience. Thank you to my principal, Robert Weinberg, at Sherman Oaks Center for Enriched Studies and to my students. Keep it up kids, it is you that make SOCES number one. I would also like to thank my wife. Without her encouragement and enthusiasm towards our profession, she is also a teacher, I don't know if I would have applied. She is my inspiration. Thank you one and all for allowing me to participate in this career and life enriching experience.

I see skies of blue..... clouds of white  
Bright blessed days.....dark sacred nights  
And I think to myself .....what a wonderful world

~ Louis Armstrong



Folks on the ship take in the beautiful Hawaiian sunset...