Daily Log for *USNS Pathfinder* Day Nine, Saturday, August 12, 2006



Photo 1: The orchid is a common flower in Hawaii.

Day Nine began with group sessions in meteorology, acoustics, and biological oceanography. Liz Crapo and Keisha Wallace conducted the class in meteorology. Liz introduced the group to the basics of meteorology which includes layers of the atmosphere, global and local circulations, high and low pressures, air masses and fronts, and thunderstorms. Keisha explained how weather balloons are used to gather information about the weather. Next, the group viewed the equipment as Keisha explained the steps that would be used for launching a weather balloon.



Photo 2: Keisha Wallace is explaining the equipment for the balloon experiment.



Photo 3: Carol Ann Drane and Mary Ruch get the weather balloon ready to be launched.

The next session was acoustics with Jay Walmark. His presentation was entitled "Underwater Acoustics – The Eyes of The Sea." He covered key points such as what sound is, concepts related to sound, and sound in the ocean. Jay explained that sound is a mechanical wave that transfers energy and covered factors that affect sound in the ocean. The participants then listened to simulated sound with various frequencies.



Photo 4: Jay Walmark is utilizing a PowerPoint presentation during the acoustics session.

The session on biological oceanography was conducted by Dr. Shelia Brown. The major topics included features of the world's oceans of major ecological interest, oceanic zones, and methane seeps. The hands-on activities involved observing a refractometer and a demonstration of the ocean flow in the northern and southern hemisphere. This session was very informative and provided the participants with an enhanced understanding of biological oceanography.



Photo 5: Dr. Shelia Brown is demonstrating the many ways of testing salinity by utilizing the refractometer.

After supper, all Sea Scholars attended the nightly meeting held in the library. Sea Scholars, in Group 2, joined Stan Breedlove, chief mate, for a tour of the Bridge.



Photo 6: Stan Breedlove is answering questions asked by Mary Ruch during the Bridge tour.

Sea Scholars participating in "sharing presentations" were Carol Ann Drane and Lois Eppich. Carol Ann discussed how she relates career information involving science and other careers to students and teachers in her school district. Lois had the Sea Scholars participate in cloud formations, warm and cold fronts, and constellations activities she utilizes in fifth grade.



Photo 7: Carol Ann Drane is sharing career awareness information with the Sea Scholars.



Photo 8: Lois Eppich is demonstrating a science activity that her students enjoy.