

BOY SCOUTS OCEANOGRAPHY MERIT BADGE PROGRAM
September 11, 2004
Troop 2 (Surry, VA) and Troop 94 (Yorktown, VA)



The classroom portion of the Oceanography Merit Badge program is held in Crittenton Hall.
Dr. Hofmann talks about the four branches of oceanography.



Dr. Hofmann details some of her research in Antarctica.



A group photo was taken of the program participants at the NOAA dock, prior to boarding the R/V *Fay Slover*.



With such a large group, two excursions on the *Slover* were necessary.
Members of the first group share the stern with a Rosette/CTD.



Enjoying a ride down the Elizabeth River.



Laura Gibson, the *Slover*'s marine technician, prepares for a Rosette/CTD deployment.



The Scouts took turns using different equipment. These Scouts are guiding the Rosette/CTD off the *Slover*.



The Rosette/CTD is being lowered into the Elizabeth River.



Sinan Husrevoğlu explains how the CTD sensors relay data back to the onboard computers, which are located below deck.



The Rosette/CTD as it is being retrieved. Notice that four Niskin bottles are closed; these contain water samples.



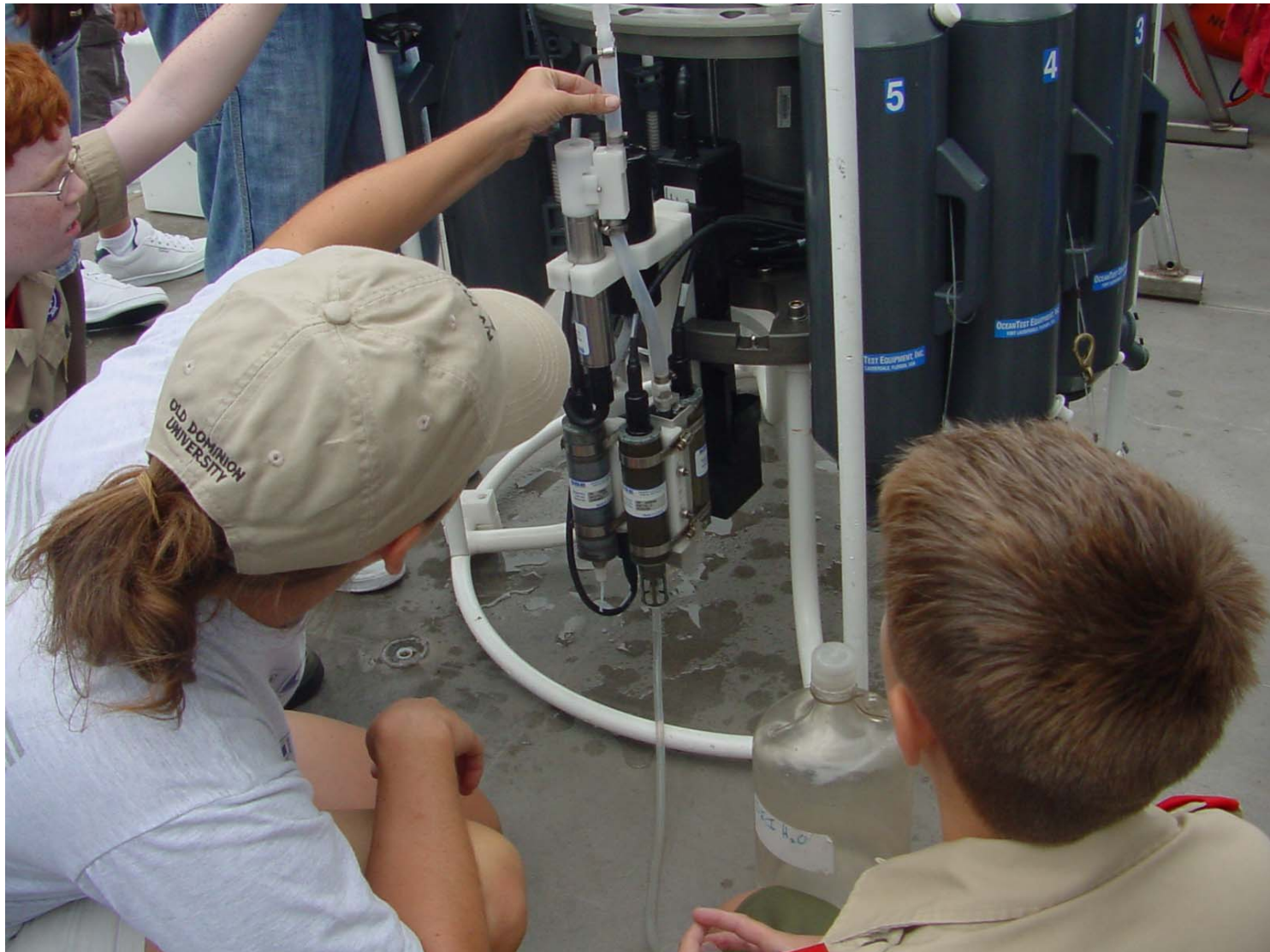
A different trio of Scouts guides the Rosette/CTD back onto the *Slover*.



Laura explains how the plankton net works.



The plankton net is thrown out for sampling. It remains under water for 5 minutes before retrieval.



While waiting for the plankton net sampling, the CTD is flushed out with deionized water using a syringe.



The water samples are collected from the Niskin bottles.



These Scouts guide the plankton net back onboard.



More guiding of the plankton net.



Dr. Hofmann looks on as Jake Morgan, son of Julie Morgan (photographer for the event), turns on the water to rinse off the plankton net.



With the net rinsed, the sample jar can be detached. The rinsing helps to remove any organisms trapped in the net, allowing them to fall into the sample jar.



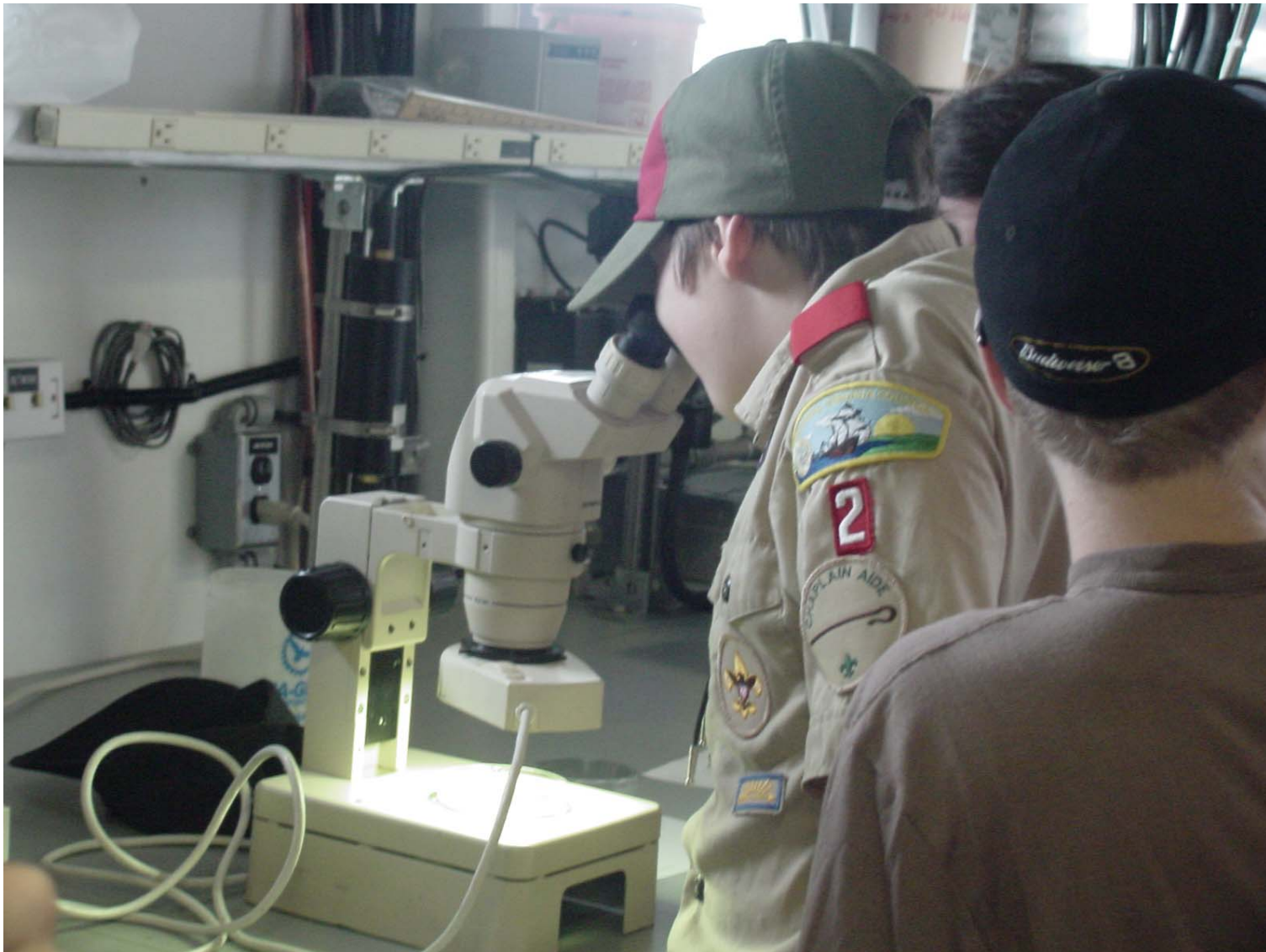
Dr. Hofmann examines the catch from the plankton net.



Dr. Hofmann prepares the sample for viewing under the ship's microscope.



A Scout looks at the plankton net samples. Some of the organisms viewed were copepods, jellyfish medusae, and filamentous algae.



Everyone wanted a chance to view the sample.



A mud grab sampler was used to retrieve sediment from the bottom of the river.



The sediment sample was put into a plastic box to investigate what is found in the sediment.



Laura and the Scouts dig through the sediment sample.



Even the Scoutmasters got in on the science activities!



Checking out the data on the ship's computers.



More sediment investigating.



Participants from the second group board the *Slover* and prepare the equipment for the next excursion.



Laura instructs how to attach the “smart” cable to the Rosette/CTD before deploying.



On the bridge, Capt. Richard Cox fields questions from visiting Scouts.



The Rosette/CTD being moved for deployment.



Guiding the Rosette off the ship to be lowered down.



Below deck, Laura controls the smart cable and winch, while Dr. Klinck shows how the data is fed back to the ship's computers.



The Rosette/CTD being guided back onto the ship after the second deployment of the day.



The Scouts check out which Niskin bottles contain water samples.



Laura disconnects the smart cable.



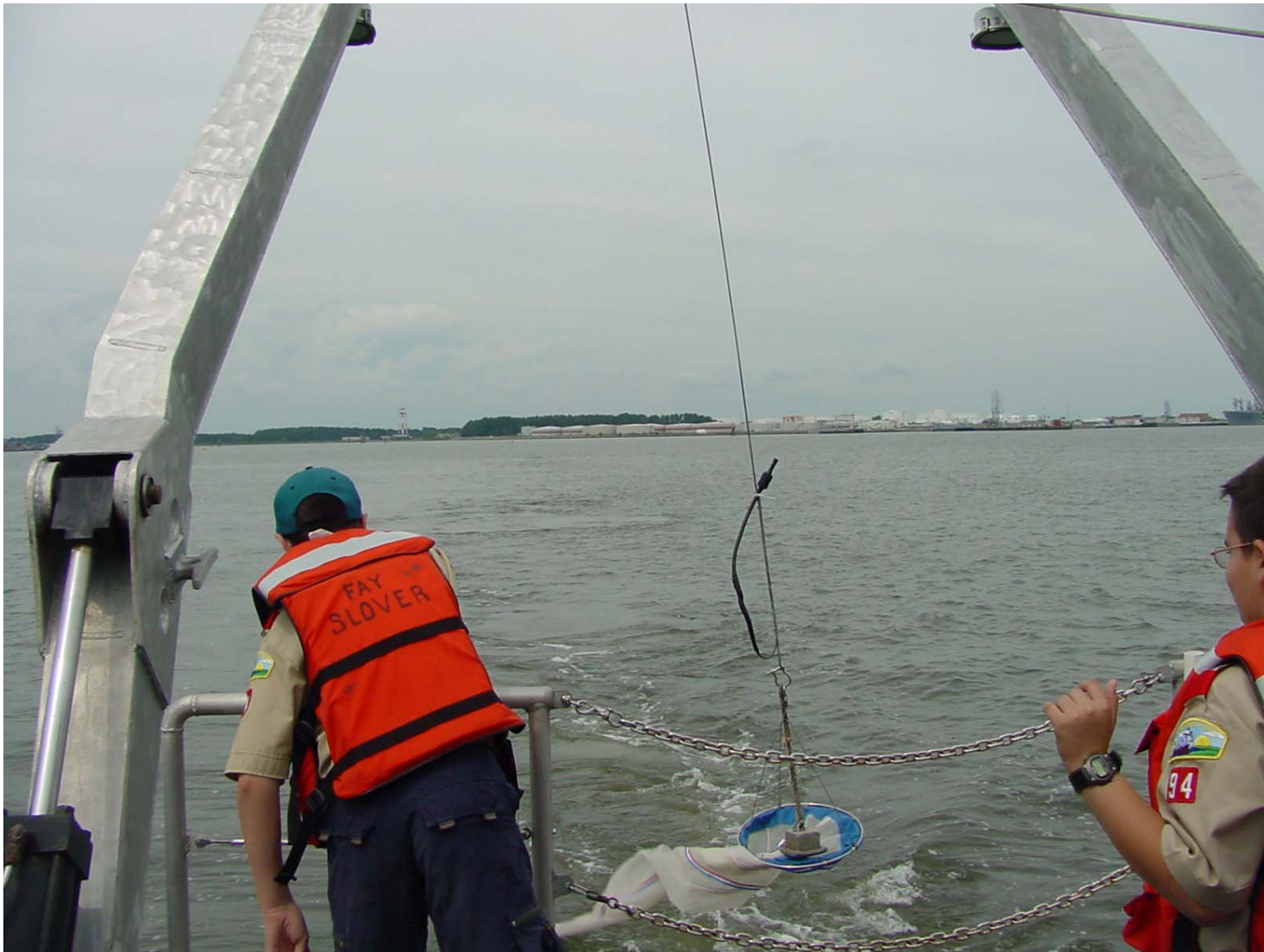
Another trio of Scouts prepares the plankton net.



Laura made sure everyone got a chance to participate in the various sampling methods.



The equipment is checked and ready.



A Scout launches the end of the net out beyond the vortex created by the ship's propeller.



A view of the *Slover's* A-frame. The A-frame is raised and lowered by hydraulics, and it is used to deploy equipment.



With the five-minute sampling period done, the net is brought back in.



The weight is carefully guided back to avoid swinging.



The sampling jar is removed from the net after rinsing is completed.



Laura prepares the mud grab sampler for another round.



A view of the mud grab sampler.



The sampler is guided out and lowered down.



One of the Scouts inspects organisms collected during the day's second plankton net tow.



Another look under the microscope, while Dr. Hofmann talks about the jellyfish medusae, copepods, and filamentous algae that were collected.



A curious group inspects what was brought up in the mud grab sampler.



Laura talks about the unpleasant smell of the sediment, which is caused by sulfur.



Dr. Hofmann shows the Scouts a benthic amphipod and a polychaete, both of which were found in the sediment sample. These are put into a Petri dish for viewing under the microscope.



Dr. Klinck explains the data on the ship's computers to a chaperone.



A Celebrity Cruise ship, which was docked next to Nauticus, is seen on the return leg.



Winding down after a successful program.