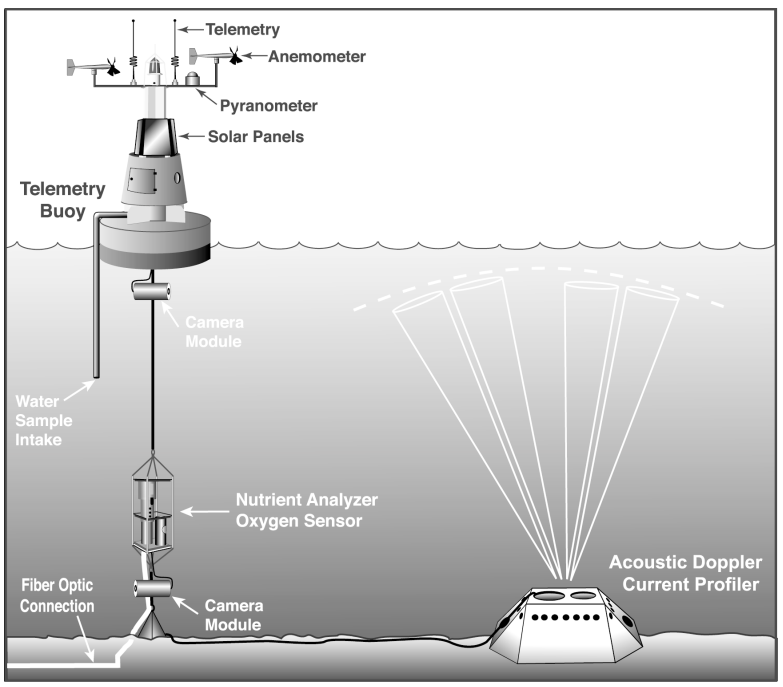
VIMS to Deploy First Buoy to Initiate Coastal Observing Program

By David Malmquist

Imagine life with no weather stations—no thermometers, barometers, wind gauges, or rain gauges. Farmers, flight controllers, commuters, tourists, event organizers, all who depend on weather data and forecasts would be left to guess at nature's whims.

An analogous situation now faces maritime interests in Hampton Roads—an almost complete lack of instruments to provide the sustained real-time data needed for characterizing or predicting the condition and behavior of coastal waters.

VIMS scientists plan to help remedy this shortfall by implementing a system of instrumented buoys in the lower Chesapeake Bay that can measure winds, waves, currents, salinity, nutrients, water density, water quality, and fish stocks. These buoys will be connected to the Internet via telemetry and eventually by submerged fiber optic cable. This will allow high-speed transmission of real-time data to any and all who need them, including researchers, military and shipping concerns, watermen, sailors, surfers, and beach-goers. The first mooring is expected to be deployed in the lower York River in early January 2002.



The planned system is termed CBOS-II, for Chesapeake Bay Observing System-Phase II. It will be part of a larger regional Southeastern Coastal Ocean Observing Program (SCOOP). Both systems support the international call for an integrated and sustained Global Ocean Observing System (GOOS).

The data provided by the CBOS buoys will also be fused with computer models to help predict the future state of Bay waters. This will allow modelers to more readily test the models and improve the accuracy of their predictions. Bay models can be used to predict the likely path of an oil spill, coastal erosion hazards, the location of a menhaden school, or even the chances for encountering jellyfish at a local beach.

CBOS-II will also provide an enhanced ability to forecast the likely paths of toxic substances or dangerous objects. This is particularly important given current concerns regarding homeland security.

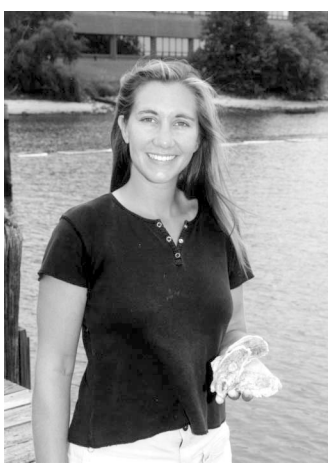
The CBOS-II project promises significant economic benefits for Tidewater Virginia. A 1999 Congressional report suggests that the ports of Hampton Roads and Baltimore, now behind only New York and Los Angeles in tonnage, will see doubled trade over the next 20 years. CBOS will provide for better planning of future port development, and also allow for better tracking of any environmental effects.

According to VIMS Director Don Wright, "CBOS-II, like the more expansive SCOOP, will provide a multi-functional infrastructure in support of the scientific community, the general public, and students at all levels. Key features of CBOS-II are that access to the data will be open to everyone in real-time and the observations will be sustained for decades."

CBOS will also provide a testing ground for development of new marine observing technologies and is likely to attract new electronics and instrumentation industries to Hampton Roads. Given the proposed scope of the Global Ocean Observing System, the market for this type of environmental-monitoring equipment is likely to be large.

VIMS Student One of Five Nationally to Receive Dr. Nancy Foster Scholarship Award

The U.S. National Oceanic & Atmospheric Administration (NOAA) recently awarded the newly established Dr. Nancy Foster Scholarship to five outstanding graduate-level researchers in the fields of oceanography, marine biology, and maritime archaeology.


Laurie Ann Sorabella

VIMS student Laurie Ann Sorabella was one of the five recipients nationally. Sorabella is currently pursuing a Master's degree in marine biology at VIMS. Her research centers on estuarine and coastal habitat restoration and on citizen involvement in restoration initiatives. Her thesis, entitled "Oyster and seagrass interactions in restoration," has two objectives— first, to define the most desirable oyster strain for use as broodstock in oyster reef restoration, and second, to characterize water quality changes associated with a restored oyster reef and the potential for reefs to create a more habitable environment for seagrasses.

NOAA received more than 500 applications for the five awards. The award carries a stipend of $16,800 per year and up to $12,000 annually for tuition. "We received a large number of applications from a pool of extremely well-qualified students. It is great to see such interest in the first year of the program," said NOAA acting administrator, Scott Gudes.

CHEF'S Symposium

The Chefs' Seafood Symposium, an education program for professional chefs certified by the American Culinary Federation, was held at VIMS on October 15. Over 100 Virginia chefs, culinary students, educators and representatives from seafood businesses attended the event.

Guest presenters included Bob Fisher, VIMS seafood specialist; Michael Jahnke, of the Virginia Agricultural Seafood Research Center in Hampton, Shirley Estes, Executive Director of the Va. Marine Products Board; Chef Joaquim Buchner, CEC, CMC, from Chevy Chase Club, Chevy Chase Maryland, and Chef Harry Brockwell, CEC, from Oceanside Caterers, Westlake Village, California.

Sea Grant Virginia


Chef Harry Brockwell offers tips for cooking seafood to participants in the annual Chef's Seafood Symposium.