Inside Wallops

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New Biogeochemical Lab Opens at NASA Wallops Flight Facility

The Observational Science Branch, (OSB) at NASA Wallops Flight Facility recently celebrated the opening of a new Biogeochemical Laboratory that will address phytoplankton, which are microscopic organism in the marine environment. The open house and tour of the new facility was held on July 23, 2003.

The new Biogeochemical Laboratory.

Phytoplankton serve as the base of the marine food chain and are responsible for the carbon flow to upper trophic levels, similar to grass in terrestrial environments.

According to Dr. John Gerlach, Head of the Laboratory for Hydrospheric Processes, OSB, "The laboratory will help researchers further understand the optical ecology of phytoplankton, which has implications for mission concepts such as the latest MODIS Ocean Color Mission."

Another goal of the laboratory is to understand how phytoplankton acclimates to different environmental conditions, such as light and temperature. Understanding the basic ecology of phytoplankton through detailed optical laboratory studies will allow researchers to understand how phytoplankton absorb light for photosynthesis.

Laboratory studies are being conducted to extrapolate to larger scales utilizing ocean color satellite imagery by developing computer programs for predicting phytoplankton biomass and primary productivity.

The laboratory is equipped with a culturing facility to grow these organisms under controlled environmental conditions such as temperature, light and nutrients, which are responsible for controlling how fast the phytoplankton photosynthesize.

The laboratory also has a biogeochemical component that includes a laboratory chemical fume hood and cabinetry to perform biochemical techniques for assessing phytoplankton concentrations, pigments and microscopy.

The Wallops Facilities Management Branch and the Cube Corporation were responsible for the design of the laboratory, which is located in Building N159.

The laboratory is under the direction of Dr. Tiffany A. Moisan, NASA OSB, and Matt Linkswiller, of EG&G. Other researchers supporting the laboratory include Rachel Sipler, Salisbury University, and Dr. Madhumi Mitra of the University of Maryland Eastern Shore.

NASA Headquarters and Goddard Space Flight Center's Earth Sciences Directorate provided laboratory equipment.

Photos by Tiffany Moisan

The new laboratory is equipped with a chemical fume hood and cabinetry to perform biochemical techniques.

Wallops Shorts……..

On the road

Bill Krabill, NASA Observational Science Branch, was the guest speaker for the Pocomoke Rotary Club on August 11. He spoke on "Mapping the Greenland Ice Sheet".

Balloon Launches

A NASA scientific balloon was successfully launched from Palestine, Texas, on August 11. The 3.46 million cubic foot balloon carried instrumentation for solar cell calibration. Bruce Anspaugh, Jet Propulsion Laboratory, (JPL), was the principal investigator. Total flight time was 5 hours, 59 minutes.

A second NASA balloon launch was successfully conducted from Palestine, Texas, on August 15. The 3.087 million cubic foot balloon was an engineering flight test of the semi-automatic parachute release. Mike Farman of the National Scientific Balloon Facility was the principal investigator. Total flight time was 4 hours, 24 minutes.

The third launch of a NASA balloon within a week from Palestine, Texas, occurred on August 16. The 3.46 million cubic foot balloon carried a balloon apex mounted solar cell calibration payload that has flown two previous times this summer. Bruce Anspaugh, JPL, was the principal investigator. Total flight time was 8 hours, 7 minutes.

Sounding Rocket Launch

A NASA Black Brant IX sounding rocket was successfully launched from White Sands Missile Range, N.M., on August 12. The mission was to provide an underflight calibration for the Solar EUV Experiment (SEE) on NASA's Thermosphere-Ionosphere-Mesosphere-Energertics-Dynamics, (TIMED) satellite. All systems functioned nominally and the payload was recovered. Dr. Thomas Woods, University of Colorado, was the principal investigator. Gordon Marsh, NSROC, was the mission manager.

In the News

Eastern Shore News

"Research Doppler Radar System Planned for Farm Near Oyster"

American Heritage Week

Monday, October 6 – Thursday, October 9, 2003

Safety Glasses and Safety Shoes

Some jobs require personal protective equipment (PPE) to protect you from injury. Examples of PPE include eye and face protection, safety shoes, hard hats, and hearing protection. A job hazard analysis is one of the best ways to identify the hazards and the PPE necessary to protect the employee. The Wallops Safety Office also is here to assist you.

The following guidance is provided to Civil Service supervisors and employees:

Safety Glasses – The Health Unit and the Wallops Environmental Office are no longer involved with purchasing prescription safety eyewear. This responsibility now resides with the employee's supervisor. Employees may purchase prescription glasses from any vendors with supervisor approval. The NASA small purchases credit card is recommended. All safety eyewear must comply with ANSI Z87.1-1991, "American National Standard Practice for Occupational and Education Eye and Face Protection."

Safety Shoes – Providing protective footwear is the responsibility of the employee's supervisor. All protective footwear must comply with ANSI Z41-1991 "American National Standard for Personal Protection Protective Footwear." Organizations may purchase protective footwear under existing procedures such as the NASA small purchases credit card. To facilitate the purchase, the Safety Office has made arrangements with Lehigh Shoe Company to mail out footwear catalogs upon request and provide a regular shoe van schedule.

For civil service employees with questions, the contact person is Stan Williams, x 2369.

Safety Glasses

AO Safety will on-site to assist employees with orders for safety glasses. They will be located in the Conference Room in Building F-3 (Rocket Club) on September 15, from 8 a.m. until noon.

All employees including contractors can take advantage of the service which includes safety glasses and fittings for frames.

You must bring a current script (no more than one year old) and be prepared to pay by check or credit card for any amount over your benefit allowance.

Washington Students Spend Two Days at Wallops

Photo by Rebecca Hudson.

Tom Connolly, NSROC, (second from right), explains the functions of the Machine Shop and Environmental Labs in Building F-10.

Students from the Science, Engineering, Mathematics, and Aerospace Academy, at the University of the District of Columbia visited Wallops on Thursday and Friday, August 14 and 15. The 57 students in grades 4 through 10 and 16 adults were given a tour of the Machine Shop, Balloon Lab, Aeronautical Control Center, and Range Control Center.

They were able to see several aircraft including NASA's ER2, P3-B Orion and the C-130 as well as NOAA's Twin Otter, a Navy OSPREY V22, two Air Force A-10's, a Navy P-3 Orion, two Navy F-18s, a Hughes 500 Helicopter and a Civil Air Patrol Cessna 182.

Wallops employees assisting with the tour included: Doug Young and Rich Rogers, NASA Aircraft Office; Steve Skees, NASA Safety Office; Roy Tolbert, NASA Carrier Systems Branch; Ed Parrott and Rebecca Hudson, Public Affairs Office; Meghan Marsh, SHARP; Berit Bland, BBCo.; Debbie Stanley, GHG; Glenn Maxfield, Randy Carrier and Tom Connolly, NSROC.

Beach Cleanup Slated for September 13

The annual beach cleanup of Wallops Island is scheduled for Saturday, September 13. The activity is part of the U.S. Coastal Cleanup.

The cleanup begins at 9 a.m., takes about two hours and is open to employees, family and friends.

Material collected is classified and tabulated. This information goes to the Center for Marine Conversation, which monitors the health of the U.S. coastline.

To register, call the Public Affairs Office on x1139 or email Rebecca.S.Hudson@nasa.gov by September 10.

Safety Alerts

The Government-Industry Data Exchange Program (GIDEP) issues alerts concerning product recalls.

In an effort to keep employees informed, links for retrieving information on recalls or alerts are posted on the following web site: http://www.gsfc.nasa.gov/goddardnews/20030815/safetyrecalls.html

Creative Workshop

August 21

11:30 a.m. to 12:30 p.m.

Building E-2 Training Room

This workshop explores the fundamentals of creative thinking and problem solving by investigating several 'right-brain' approaches. You will leave with tools to boost creativity. Call Tracey White on x66-7823 or Pat Dworske on x2394 to register.

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Editor: Betty Flowers