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NASA Gives Students "SHARP" Experience

NASA and Modern Technology Systems, Inc., Riverdale, MD, have selected 208 students to participate in hands-on research at various NASA field installations. NASA's 2001 Summer High School Apprenticeship Research Program, or SHARP, not only allows the students to actually participate in research but pays them a salary as well.

An intensive science and engineering apprenticeship program, SHARP is specifically designed to attract and increase under-represented students' participation and success rates in mathematics, science, technology and engineering courses.

SHARP also is used to encourage career paths that help build a pool of under-represented science and engineering professionals in the work place.

SHARP apprentices are selected from an applicant pool of approximately 1,200 students nationwide. During their eight-week apprenticeships, students can conduct meaningful research and participate in a variety of educational and professional development activities.

Four local students will spend the summer at NASA Wallops Flight Facility with mentors in various areas. They are Heather Satterlee, Nandua High School. Her mentor is Dave Wilcox, Shuttle Small Payloads Projects Office. Sidrah Ahmad and Juan Avila from Pocomoke High School will have Bob Reynolds, NASA Planning Resources Office, and Jay Pittman, NASA Real-Time Software Engineering Branch for mentors. Tiffany Maisan, NASA Observational Science Branch will mentor Neil Bonstell from Parkside High School.

Since its inception in 1980, approximately 3,114 students have participated in the program and more than 3,400 NASA employees have served as SHARP mentors. Although the program is for under-represented groups, NASA seeks diversity in all student support programs.

SHARP is sponsored by NASA's Education Division and participating NASA field installations. The program is managed by Modern Technology Systems, Inc.

More information is available at: www.mtsibase.com/sharp

Wallops shorts.....

Balloon Launches

A NASA scientific balloon was successfully launched from Palestine, Texas on June 26. The 3.46 million cubic foot balloon carried a payload for solar cell calibration. The principal investigator was Bruce Anspaugh, Jet Propulsion Laboratory. Total flight time was 5 hours, 51 minutes.

A second NASA scientific balloon was successfully launched and the science payload was recovered on July 4 from Palestine, Texas. The payload on the 3.46 million cubic foot balloon was to calibrate solar cells. Bruce Anspaugh, Jet Propulsion Laboratory, was the principal investigator. Total flight time was 6 hours, 28 minutes.

A NASA scientific balloon was successfully launched on July 6 from Palestine, Texas. The 39.57 million cubic foot balloon carried a high energy astrophysics experiment for the measurement of background spectrum and gondola disturbances for use in the development of new gamma-ray balloon instruments and a new 3-axis pointed gondola. Dr. Jack Tueller, NASA Goddard Space Flight Center was the principal investigator. Total flight time was 7 hours, 32 minutes.

Rocket Launch

A NASA Black Brant V sounding rocket was successfully launched from Wallops Island on June 29. The experiment was to perform in situ measurements to study sporadic-E layers in the lower ionosphere/thermosphere system. Dr. Rob Pfaff, NASA Goddard Space Flight Center was the principal investigator.

NASA, NOAA to Launch Satellite That Will Watch Earth's Weather and Detect Solar Storms

An advanced environmental satellite equipped with instruments to monitor Earth's weather and with a telescope that will be used to forecast geomagnetic storms in space, is being prepared for launch from Cape Canaveral Air Force Station, FL.

The satellite, GOES-M, will monitor hurricanes, severe thunderstorms, flash floods and other severe weather. It is the first of the GOES satellites equipped with a Solar X-ray Imager to detect solar storms.

Liftoff of GOES-M, or Geostationary Operational Environmental Satellite, is targeted for July 15 during a launch window that opens at 2:59 a.m. EDT

from Pad A at Complex 36. GOES-M will be launched on an Atlas II rocket.

GOES satellites are the workhorses of weather forecasting in the United States. The real-time weather data gathered by GOES satellites, combined with data from Doppler radars and automated surface observing systems, greatly aids weather forecasters in providing better warnings of severe weather.

The Solar X-ray Imager will take a full-disk image of the Sun's atmosphere once every minute. The images will be used by NOAA and the U.S. Air Force to monitor and forecast solar flares, coronal mass ejections, coronal holes and active regions.

Space Camp Enrollment Still Available

The Virginia Space Flight Academy, an initiative of the Eastern Shore Regional Partnership, is accepting registration for 12-16 year olds to experience the excitement of week-long residential programs.

Two camps, for 12-14 year olds, will be held, July 22-27 and August 5-10. An advanced camp, for 14-16 year olds, will be held August 12-17. Each camp begins on Sunday afternoon and ends on Friday at 4 p.m.

For more information call 757-824-3800, toll free 866-75SPACE or by e-mail at spaceacademy@intercom.net. Additional information can be found at the following web site: www.vaspaceflightacademy.org.



Shawn Padgett, William and Mary University (left), and Tim Dayton, North Star Science and Technology, LLC, attach a transmitter June 22 that will be used to track the Peregrine Falcon off Wallops Island. NASA is supporting the Virginia-wide project to further understand the habit and migratory activities of the falcon. Further information on the project can be found at <http://www.dom.com/about/environment/falcon/>.

Warm and Dry

by Ted Wilz
Senior Meteorologist

June ushered in summer along the Eastern Shore with very warm, dry weather suitable for many outdoor activities. While June was a very warm month with an average temperature of 73.8 degrees, which is 2.6 degrees above normal, it also proved to be less than a banner month for the farmer with only 1.51 inches of rainfall, less than ½ our 3.16 inch average.

There were nine days with measurable rainfall, one more than average, but no heavy rainfalls. The .53 inches of rain that occurred with thunderstorms on the June 23 accounted for the highest 24-hour total.

As far as temperatures go, the 50-degree reading that occurred on the first was the chilliest temperature of the month. The warmest temperatures of the month occurred when we hit a sweltering 94 degrees on the June 28, eclipsing the previous record high for the date, which had been a 93-degree reading in 1986. Two days later the mercury again reached 94 degrees, as we ended the month in true summer fashion. In fact, on only two days from June 10 to the end of the month did we fail to reach 80 degrees. Even then we reached 79 degrees on both days.



What kind of weather does August usually bring to the Eastern Shore? An abundance of mosquitoes, heat and humidity are usually a sure bet along Delmarva at this time of year.

Average highs start in the mid 80's and are still in the low 80's as September approaches. Lows start out in the upper 60's and cool off only slightly to the mid 60's by month's end.

August is usually the second wettest month of the year, precipitation total-wise, with an average 3.73 inches of rainfall. Measurable rainfall usually occurs on only eight days with the greater amount attributable to the higher frequency of summer showers and thunderstorms which can often drop significant rain in a short period of time. Last August was a very wet one with measurable rainfall occurring on 12 days, totaling 5.32 inches!

Mid to late August is usually the time that the Bermuda High begins to lose its grip on the area and tropical activity starts to get in full swing. With the possibility of increased hurricane and tropical storm activity, it's easy to see why the monthly rainfall average for August is greater than the earlier summer months. It's not too early to start planning for the tropical season as it looms right around the corner.

Raytheon Employees Receive Award



Department Manager, Anita Brenner presents Dennis Lockwood with the 2000 Peer Award.

The Raytheon group at NASA Wallops Flight Facility recently held its second annual RITSS business meeting. The group was recognized for its accomplishments in support of the Wallops Observational Science Branch. Dennis Lockwood was selected as the 2000 Individual Peer Award recipient for his work on the TOPEX/Poseidon and GLAS/ICESat projects.

Steve Klosko, GGSG Program Manager and Gordon Ward, RITSS Director of Quality and Communications, thanked employees for their contributions in winning the NASA George M. Low Award. The trophy they received was on display. The Low Award honors companies that best exemplify NASA's ideals for quality and productivity. Raytheon ITSS was the first contractor ever nominated by more than two NASA centers.

Congratulations to the Wallops Raytheon Group — Lisa Brittingham, Rock Hilmoe, Peggy Jester, Jeff Lee, Dennis Lockwood, Gerry McIntire, Elizabeth McNamara, Christina Morris, Carol Purdy, Ngan Tran and Greg Twigg.

Employee Notice

by George Postell, Aircraft Office

Any persons that may frequent or otherwise pass through the hangar bay or office spaces, Building N-159, should be aware that a hazard exists in the hydrazine fuel system on the ER-2 aircraft that will be operating out of Wallops between July 10 and August 3. Employees are required to attend a 20-minute training session on protective measures and emergency spill procedures before entering the hangar bay, Building N-159. The 20-minute training session will be conducted daily in the Aircraft Office Conference Room (Room 234W) at 9 a.m. during the week of July 9. No personnel should approach the ER-2 without being escorted by one of the aircraft support crew.

Sympathy is extended to the family, friends and co-workers of John R. Callaway who died at Shore Memorial Hospital on June 27. Callaway was employed by Litton-PRC as a guidance navigation control systems technician.

Equal Employment Opportunity, Affirmative Action, and Diversity Training

by Lisa Johnson
Equal Opportunity Programs Office

How can NASA managers use techniques and approaches which will enhance their overall supervisory skills, while simultaneously managing and reducing their organizational risks? How do the principles of Equal Opportunity, Affirmative Action and Diversity apply to all employees in the Wallops workforce?

These and other critical issues were defined and addressed during a one-day workshop on Equal Employment Opportunity (EEO) and Diversity held recently for Wallops supervisory and management personnel.

Carrolle Rushford, Rushford and Associates, led the group in the history, laws, regulatory legislation and real world applications of EEO. She also discussed how Wallops managers could enhance their skills, understanding, practices and approaches to become more effective in all areas of tasks and responsibilities.

The NASA Goddard Equal Opportunity Programs Office commends the following managers for their enthusiastic participation and completion of the training: Bernie Pagliaro, Procurement Office; Bill Phillips, Facilities Management Branch; Steve Nelson, Applied Engineering and Technology Directorate; Bobby Flowers, Sounding Rockets Program Office; Steve Smith, Balloon Program Office and John Gerlach, Observational Science Branch.

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