**Inside Wallops**

**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.

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

**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.

**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.

**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.
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.