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Goddard Space Flight Center

Inside Wallops

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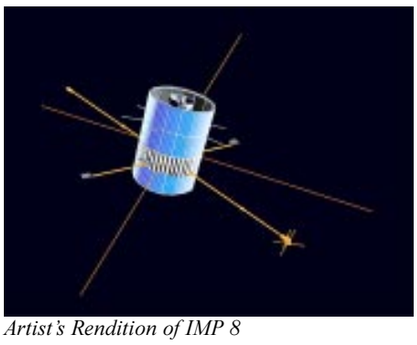
Interplanetary Monitoring Platform Completes 28-Year Observing Marathon

The Interplanetary Monitoring Platform (IMP 8) spacecraft has retired after 28 years on duty being buffeted by the solar wind and zapped by cosmic rays.

Launched on October 25, 1973, IMP 8 was built and operated at NASA's Goddard Space Flight Center and provided important space physics data as part of NASA's Sun-Earth Connection research program.

NASA Wallops Fight Facility began tracking IMP 8, in May 1986, soon after the Wallops Orbital Tracking Station was opened



Artist's Rendition of IMP 8

"We will miss IMP 8 because it reliably provided unique data for so long," said Dr. Joseph King, project scientist for IMP at Goddard. "However, due to the failure of the IMP 8 magnetometer during the year 2000, a senior review panel of Sun-Earth Connection scientists advised NASA's Office of Space Science management that continuing IMP operations may inappropriately divert funding from more science-effective missions."

IMP 8 has deepened understanding of the space environment near Earth in many ways. Observations from IMP 8 provided insight into plasma physics, the Earth's magnetic field, the structure of the solar wind, and the nature of cosmic rays.

Electrically charged gas, called plasma, blows outward from the Sun at typical speeds of 250 to 300 miles per second and is also known as solar wind. IMP 8 helped detail the complex structure of the solar wind.

Magnetic fields embedded in the solar wind plasma get twisted into a spiral pattern due to the Sun's rotation.

Explosive events on the Sun hurl clouds of plasma that plow into slower-moving streams in the solar wind, warping magnetic fields carried by both. Observations from IMP 8, Pioneer and Voyager spacecraft in the outer reaches of the solar system, and from the Ulysses spacecraft orbiting over the poles of the Sun, helped paint this elaborate picture.

IMP 8's longevity presented operational challenges for Goddard. "It has been satisfying to exploit new technologies to expedite, and make less costly, IMP data flow," King said.

IMP 8 is in a nearly circular orbit about the Earth, at a distance a little more than halfway to the moon. In this orbit, IMP is in the solar wind about seven days per orbit and is within the Earth's magnetosphere/magnetosheath system about five days per orbit. Currently, six of the original 12 instruments on board IMP 8 are operational.

Space Shuttle Endeavour to Carry Wallops Experiments

The launch of Space Shuttle Endeavour, (STS-108), is scheduled for November 29, making this the 12th mission to the International Space Station.

In addition to delivering more experiments and supplies, Endeavour will carry 6,000 American flags to be presented to the families of the victims of the September 11 terrorist attacks.

Through NASA's Shuttle Small Payloads Project (SSPP), managed at Goddard Space Flight Center, Greenbelt and Wallops, researchers worldwide will fly experiments on STS-108.

The SSPP designs, develops, tests, integrates and flies a group of carrier systems in the Shuttle's cargo bay. These carriers - the Hitchhiker, Hitchhiker Jr., Get Away Specials and Space Experiment Module - support payloads supplied by NASA, other U.S. government agencies, domestic and foreign commercial customers, foreign governments, and schools from kindergarten through universities.

For detailed information on the small payloads that will be flown aboard STS-108, go to:

http://www.gsfc.nasa.gov/goddardnews/20011102/20011102payloads.html

Wallops Shorts.....

CFC Fun Day

The weather was perfect for the annual Combined Federal Campaign (CFC) Fun Day held November 1. A good crowd came out to have hot dogs and hamburgers cooked by NASA senior management.

PAO Digital Photo

Craig Purdy (left) and Arnold Torres, NASA, have cooking duty for the CFC picnic.

The NOAA team finished on top in the volleyball tournament, with the Facilities team taking second place.

Bob Reynolds had the winning entry in the chili cook-off. John Hickman had a close second place entry and also won the Big Cheese Award.

The winner in the employee cutest baby contest was Cheryl Johnson. Second place went to Terry Ewell and third place to Arnold Torres.

Chris and Deanna Shreves, the reigning bottle rocket champions, took top honors again this year with Rain Maker. Second place went to Real-time Software Group's Soaring Eagle and third went to the Navy entry, Noble Eagle.

The winner of the 50/50 was John Scaia.

Check out next week's "Inside Wallops" for pictures of Fun Day events.

Balloon Launch

A NASA scientific balloon was successfully launched from Ft. Sumner, N.M. on November 2. The 4.0 million cubic foot balloon carried a sub-millimeter astrophysics payload for Dr. Alan Kogut, NASA Goddard Space Flight Center. Total flight time was 14 hours, 32 minutes.

Honoring All Who Served
Veterans Day
November 11, 2001

Dorine Trent

Jacob Horsman, son of Karen and Ronnie Horsman

Halloween's a good time to be a kid of any age!

Keith Koehler

Phil Eberspeaker

Tyler Joynes, grandson of Betty and Bobby Flowers

Sympathy is extended
to the family of
Paul Evans
who died at Shore Memorial Hospital on October 24. Evans was an aircraft mechanic at NASA Wallops Flight Facility prior to his retirement.

Wallops Aerobics Club

Lunch-time classes are back. Get in shape and stay in shape during the holiday months. The Wallops Aerobics Club will begin a new six-week session starting on November 7.

This session the Aerobics Club will be offering the following class schedule:

Monday
noon - 12:30 p.m. — Toning
5 - 6 p.m. — Step Aerobics/Toning

Tuesday noon - 12:30 p.m. — Aerobics

Wednesday
noon - 12:30 p.m. — Toning
5 - 6 p.m. — Step Aerobics/Toning

Friday
4:40 - 5:40 p.m. — Step Aerobics/Toning

For more information, call Annette Conger on x2596, or Jeanette Smolinski on x1512. Check out the Wallops Aerobics Club web page at: http://www.wff.nasa.gov/WAC/ ~

Mammogram Screening

The Sentara Leigh Hospital Mobile Unit will be at Wallops Flight Facility on November 29 to perform mammography screenings.

All civil servant participants must have had a breast exam performed by a physician within three months prior to the date of the mammogram. The exam may be given at the Health Unit or a form may be obtained at the Health Unit authorizing your private doctor to provide this information.

For additional guidelines contact the Health Unit on x1266. Appointments need to be scheduled by November 9.

Don't Miss --

On Top of the World

The Journey and Insights
Aviation Pioneer Gus McLeod
November 6
10 a.m. to 11:30 a.m.
Building D-10 (Wallops Gym)

.....

Spaghetti Dinner

November 16
Building F-3

Tickets are $6 for adults and $3 for children under 12. To purchase tickets, contact Sandy Gunter, x1454, or Karen Thornes, x2020.

Another Dry October

by Bob Steiner, Meteorologist

Once again the month of October was very dry. With a meager 0.47 inches of measurable precipitation falling on four days, (normal is 7 days), we came up 2.4 inches short of the monthly average of 2.87 inches. The greatest daily total for the month was 0.21 inches falling on Saturday, October 6.

Moderate temperature swings also were experienced during October 2001. High temperatures were above normal for the date on 18 days while the overnight minimums were below normal for the date on 17 nights. The average temperature for the month was 58.3 degrees, which is only 0.7 degrees below normal. The high temperature recorded for the month was 81 degrees and occurred on three days, October 3, 5 and 25. The coolest temperature was 33 degrees recorded on October 9 and 29. Numerous daily record temperatures were either tied or set during October. New daily record highs were set on October 24 of 79 degrees and 81 degrees on October 25. The low of 39 degrees on October 7 tied the record low for the date. With the temperature falling to 35 degrees on October 8 and 19, new daily record lows were set. Also setting a new daily record was the 33 degree reading on October 9.

We can expect high temperatures in December to start out in the low 50s and be down to the upper 40s by the end of the month. Normally low temperatures at the first of December are in the mid 30-s and only fall to near 30 degrees by New Year's Eve. The record high for December is a reading of 76 degrees reached on Dec. 8, 1978. The record low of 4 degrees was felt on Dec. 21, 1989. Look for measurable precipitation to fall on 9 days during the month with a monthly average total of 3.2 inches. We can also expect about an inch of snow to fall on at least one day during the month.

It is during this time of year that families get together and celebrate the past year and share hopes for the year to come. Travel is inevitable for some of us. On the Eastern Shore, we are quite spoiled with mild weather and generally dry road conditions. Drive with care and call ahead for a weather forecast for your intended route. Keep in mind that you also have to make the trip back.

Editors Note: In a previous edition of "Inside Wallops" the official end of the hurricane season was noted as "the first of November". It should have read "the end of November". Apologies to the weather folks!

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Editor — Betty Flowers
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http://www.wff.nasa.gov