

Administrator Unveils Next Steps Of NASA Transformation

Release 04-005

In the latest of what will be ongoing briefings, Administrator Sean O’Keefe announced a transformation of NASA’s organization structure designed to streamline the agency and position it to better implement the Vision for Space Exploration.

In a report released last month, the President’s Commission on Implementation of U.S. Space Exploration Policy found, “NASA needs to transform itself into a leaner, more focused agency by developing an organizational structure that recognizes the need for a more integrated approach to science requirements, management, and implementation of systems development and exploration missions.”

“Our task is to align Headquarters to eliminate the ‘stove pipes,’ promote synergy across the agency, and support the long-term exploration vision in a way that is sustainable and affordable,” said Administrator O’Keefe. “We need to take these critical steps to streamline the organization and create a structure that affixes clear authority and accountability.”

This transformation fundamentally restructures NASA’s Strategic Enterprises into Mission Directorates to better align with the Vision. It also restructures Headquarters support functions and clarifies organizational roles and responsibilities. The Mission Directorate organizational structure includes:

- **Aeronautics Research:** Research and develop aeronautical technologies for safe, reliable and efficient aviation systems
- **Science:** Carry out the scientific exploration of the Earth, Moon, Mars and beyond; chart the best route of discovery; and reap the benefits of Earth and space exploration for society. A combined organization is best able to establish an understanding of the Earth, other planets and their evolution, bring the lessons of our study of Earth to the exploration of the Solar System, and to assure the discoveries made here will enhance our work there
- **Exploration Systems:** Develops capabilities and supporting research and technology that enable sustained and affordable human and robotic exploration; includes the biological and physical research necessary to ensure the health and safety of crew during long duration space flight
- **Space Operations:** Direct space flight operations, space launches and space communications, as well as the operation of integrated systems in low-Earth orbit and beyond. Two agency-wide priorities will continue with direct responsibility for all related activities across NASA.
- **Safety and Mission Assurance Officer:** Reports directly to the Administrator and

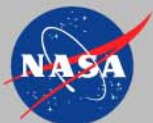
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Editor’s Note:

Correction to article on page 15
Addition on page 31



NASA’s Mission:

- *To understand and protect our home planet
- *To explore the Universe and search for life
- *To inspire the next generation of explorers as only NASA can

For further detail of the NASA mission, go to:
<http://www.nasa.gov/bios/vision.html>

Community Day-Chance for Public To See NASA/ Goddard

By Dewayne Washington

"Explore NASA's Goddard Space Flight Center and Beyond," is the theme for Goddard's community day; it's first in several years. The Goddard gates will open to the public from 10 a.m. to 6 p.m., July 31, 2004.

The first Community Day for Goddard since September 11, 2001, will showcase Goddard's science, research, and engineering programs and projects. Since this is the first time Goddard has opened its' gates to the public in almost three years, the planning committee is expecting a large crowd of residents from the Maryland, Virginia and Washington, D.C. areas. They have been planning for such and are working to provide an enjoyable, positive experience for everyone that ventures to NASA's first research center created specifically to support the space program.

Throughout the day, NASA employees will be giving presentations about popular science topics as well as local exhibits from community organizations and museums. There will be numerous educational hands-on activities for all ages. Families, friends, and employees will be able to enjoy food for purchase from several local restaurants vendors, live entertainment performed by local music groups, and enjoy tours of Goddard facilities.

NASA will have over 25 different exhibits showcasing NASA programs in Earth Science, Space Science, Technology, Aeronautics, Robotics, and more. The list of exhibits includes Mars Exploration Rover, Careers in NASA, Space Operations Spacecraft Models, Exploration of the Solar System, Apollo Moon Rocks, Earth Science Cave, Sun Earth Connection, Science Visualization Studio and much, much more.

Thirty different groups and museums from the Baltimore/Washington metro areas are also scheduled to be here to share their activities. They include live broadcasts from local television and radio stations, as well as participation by members of the National Federation of the Blind, Adopt-A-Pet, Patuxent Wildlife Research Center, Chesapeake Children's Museum, a Maryland State Troopers Helicopter and many others.



Enjoy face paintings

Some Goddard employees are planning a special treat for everyone. Many have hobbies, collections and fun things they do in their free time and they will be showcased. Scheduled to appear will be "INNERSPACE," an employee art gallery, Hot Rod cars, astronomy telescopes, model rockets, a live recording studio and more.



View rocket launch demos

Kids will have two special locations with interactive activities to arouse their curiosity, designed to inspire the next generation as only NASA can. Exploration Station will have educational activities for children of all ages and will include an interactive puppet show, egg drop contest, model rocket launches, solar-viewing and more. Fun-In-The-Sun Zone will be another area of special activities for the kids. It will feature moon bounces, clowns, face painting, a balloon artist and more. Refreshments and treats will be available for purchase at these locations as well.

For that day, NASA employees and passengers in their car can enter Goddard through the parkway gate only. Any NASA employee must have their badge in their possession to be allowed through the gate. They will be required to park in a designated parking lot.



Get upclose and personal with Md and P.G. County Helicopters

All other visitors on that day will be boarding buses at satellite parking near Goddard. Shuttle service to Goddard will be provided free of charge. All adult visitors (ages 16 and older) are required to possess government-issued photo identification, such as a driver's license or military identification. Foreign nationals must possess a valid visa or passport. Canadian citizen only need to bring a valid driver's license. All items brought onto a NASA facility are subject to search.

For complete details about Community Day check the web site at <http://community.gsfc.nasa.gov/> ■

A Chilly Exploration for Cool NASA Glaciologists

By Cynthia O'Carroll, Dr. Waleed Abdalati and Dr. Jay Zwally

Can you imagine spending a month in the frozen North? Sleeping in a tent on an ice sheet? Boiling spaghetti with snow? No newspapers or TV for weeks?

It may seem like a very harsh environment to us, certainly no way to spend a summer vacation, but for two glaciologists from NASA's Goddard Space Flight Center, this trip to the Greenland ice sheet was a very exciting chance to conduct research.

Drs. Waleed Abdalati, head of Goddard's Oceans and Ice Branch, and H. Jay Zwally, ICESat Project Scientist, spent several weeks in May making measurements on different parts of the Greenland ice sheet. The purpose of these measurements is to explore interactions between the climate and the ice sheet, and how changes in the ice sheet are contributing to increasing sea level. Their efforts are part of a larger NASA program to understand changes in ice sheets observed by ICESat and other missions. Currently, sea level is rising at an estimated rate of nearly 2 mm/yr (.7 inches), but there is evidence that in the past it has risen by as much as 1 meter (3.2 feet) in 20 years. Such rapid rise can only come from the shrinking of large ice sheets that once covered much of the northern hemisphere.

Although both scientists were in Greenland during May, they were conducting their research in two different locations.

Dr. Waleed Abdalati spent two weeks on the floating ice tongue of Petermann Glacier, a 300 meter (984.3 feet) thick 20 km (12.43 miles) wide floating ice tongue extending from the northern part of the Greenland ice sheet (81 N, 60W). Dr. Abdalati was participating in a study led by Dr. Konrad Steffen, Associate Director of the Cooperative Institute for Research in Environmental Sciences of the University of Colorado and Dr. Eric Rignot, a senior scientist at NASA's Jet Propulsion Laboratory. The study, jointly funded by NASA and the National Science Foundation, seeks to understand how the water underneath the floating ice tongue causes the ice to melt, and the subsequent implications for ice/climate interactions. Estimates by Dr. Rignot using Synthetic Aperture Radar interferometry suggest that these melting rates are far greater than what was previously believed.

To reach this remote destination, inaccessible by helicopter, the science team used a ski-equipped Twin Otter aircraft. Even though the pilot circled the area in search of the smoothest landing site possible, so as not to break the skis or flip the plane, the Otter still bounced across the rough surface of the ice sheet until it came to an abrupt halt. Every landing is a little tense, and this one was no exception. At last, the group had reached its destination – a frozen, desolate, enormous slab of



Twin Otter Aircraft delivering field equipment on the first day of the deployment. The yellow Arctic Oven Tents would be home for the next two weeks.

ice situated between two mountain walls, a site the glaciologists describe as “beautiful”.

After a quick unloading of supplies, which always includes a few snow shovels – standard tools of the trade, the Otter was gone as abruptly as it arrived, in a flurry of snow, leaving nothing but silence in its wake. The silence was broken by the noise of footsteps walking through the brittle snow and the crunching sound of shovels breaking the icy ground to set up the tents, their home base for the next few weeks. Although the science team members were quiet, they were thrilled to finally be there. Only a handful of people have seen this area, and all recognize what a privilege it is to observe and explore this unique natural environment.

This year's field season on Petermann Glacier had several objectives. The first was to collect data from a pair of automatic weather stations on the glacier and ice tongue that measure surface interactions with the atmosphere at the ice surface. The second was to drill a hole through the floating ice tongue to deploy a probe to measure the conductivity, temperature, and depth of the water masses beneath the ice tongue. The data will be used to study the interactions between the seawater and the underside of the ice. The third was to set up a GPS receiver to operate throughout the year in order to measure seasonal changes in speed, and how speed may vary with the ocean tides.

“Getting out in the field can really be therapeutic. It provides an opportunity to really focus on the science I love in an environment that is absolutely beautiful,” stated Dr. Abdalati. “The air is fresher than you can imagine, and the atmosphere is more pristine than any place I have ever been.”

The science teams sleep in tents called Arctic ovens. They are well insulated and trap warmth like little greenhouses, and most of the time keeping warm isn't a problem. But on the coldest nights, Dr. Abdalati would put a hot water bottle in the bottom of his sleeping bag which would keep his feet warm long enough to fall asleep.

Greenland Ice Sheets (cont'd)

"It is funny how good even the simplest of food can taste under these conditions," stated Dr. Abdalati. "I remember one particularly cold windy trip, when it took us a long time to get the camp up and running. We heated a can of beans and a can of corn and mixed them together. It was a simple meal that we wouldn't think to eat at home, but at the time, we talked about how great it tasted. Of course, its not always that Spartan. This year we had fondue and steak. What takes a lot of getting used to, however, is how long it takes to boil anything. When you are cooking on little camp stoves, and you start with snow instead of water, boiling spaghetti can take 45 minutes."

Of course, after a few weeks of hard work, camaraderie, windburns and sunburns the crew returned home to the many emails, letters and phone messages that accumulated in their absence.

"Being in an environment like that without running water, with no real heat, and constant exposure to the elements, really makes you appreciate the comforts of home, like an oven and indoor plumbing," remarked Dr. Abdalati. "There is nothing quite like that first shower when you get off the ice. Still, dealing with these inconveniences is a small price that we gladly pay to experience this stunning part of nature that so few will ever know."

Dr. H. Jay Zwally spent two weeks on the ice sheet at the Swiss Camp located on the equilibrium line in West-central Greenland at about 70 degrees North latitude over 1200-meters (3/4th of a mile) of ice. The Swiss Camp was established in 1990 by Swiss scientists and was taken over a couple of years later by Dr. Steffen with NASA support. The Camp was established at the equilibrium line, where the amount of snow that melts each summer is approximately as much as the amount that accumulates the previous winter. Since 1990, winter accumulation has varied from a low of 30 cm (11.8 inches) to a high of 2 meters (6.5 feet) at this location. The camp consists of three hooped tents sitting on a platform that was originally 1 meter (1.1 yd) above the ice. Usually, the snow drifts to the top of the tents in winter, but has been melting to below the platform on the southern side in the recent exceptionally warm summers. About five years ago, the tents were connected by a plywood-enclosed walkway, which also houses a propane-fired sauna stove used for bathing and relaxing. Dr. Zwally has been going to the Camp every spring since 1994 when he first worked there with Dr. Abdalati who was then a graduate student of Dr. Steffen.



Dr. Zwally is standing next to a snow-filled moulin, into which a gushing stream of melt water flows during summer. As the melt water reaches the bottom of the ice sheet, it makes the ice slide faster over the bedrock

Arriving at his destination by helicopter was a little more exciting than usual this year. Every landing on the surface brings with it a certain exhilaration and anticipation of what is to come. How cold will it be? How wet will it be? Did the equipment I left running last year continue to make measurements?

The helicopter first circled over one of Dr. Steffen's Automated Weather Stations (AWS) at a location called JAR-3, about 1 km (.62 mile) from the edge of the ice sheet to see whether it was still standing after the strong summer melt last year. After spotting the AWS, they headed toward a second AWS (JAR-2) on the way to the Camp using coordinates from Dr. Zwally's hand-held GPS. Dr. Zwally had installed a continuous GPS there

the previous summer, and wanted to see if it could be located. Visibility was good and he could see the tracks of the snowmobiles used by Russ Huff, a graduate student, and Dr. Nicholas Cullen, a post-doc, who had visited the site the day before and couldn't find the GPS.

About five minutes after passing the second AWS site and not seeing the GPS, Dr. Zwally realized the helicopter was flying in the wrong direction and not toward the Camp. His hand GPS showed where they were, the position of the Camp and all the AWS locations, but the pilot was headed to coordinates about 60 km (37 miles) North of the Camp. Fortunately, his GPS, which was broken last summer when his snowmobile turned over, still had the coordinates of the Camp after being repaired. After arrival at the Camp, everyone realized again how vitally important the correct coordinates and the GPS are for safe travel on the ice.

It would not be long before Dr. Zwally and the team had the answer to the most pressing question. Could all the GPS be found and did they record throughout the year? Fortunately, the answer was yes. His equipment did work, and he was able to bring home new data from five GPS stations extending 40 km (25 miles) from JAR-2 to 7 km (4.35 miles) above the camp. Dr. Cullen and Russ Huff, who have worked in the field with Dr. Steffen for several years, had a little adventure servicing the AWS and recovering the GPS at JAR-2. Because the melt had already started, traveling to the lower elevations would soon not be possible. Consequently, the team had to work quickly. Leaving the Camp at about 10 am, they traveled to JAR-2, redrilled the holes in the ice to remount the AWS equipment, downloaded data, found the GPS buried in melting snow, unscrewed the antenna with hands in ice water, went to another station, and finally camped in a tent at 5 am the next morning. Traveling back to camp the next day, they crossed



Get Ready to Celebrate!

All Civil servants and contractors are invited to Celebrate Goddard's accomplishments through diversity with two days of fun in the Sun on July 27th and 29th, and a drama performance on July 28th sandwiched between both days!

Celebrate Goddard will begin on July 27th with representatives from GEWA Clubs and Goddard contractors providing information on the Mall (grassy area between Bldg 8 and Bldg 3) about their contributions towards making Goddard a success. Enjoy sounds from the DJ while you visit informational booth by such contractors as the ASRC Federal Holding Co., Computer Sciences Corporation and Northrop Grumman as well as such GEWA Clubs as Astronomy, Art of Living, Dance and Blacks in Government.

Savor foods from Constantine's Kitchen serving Greek selections, the GEWA cafeteria providing Classic American grill choices and Frozen Treats. So come out and enjoy the first day of Celebrate Goddard on July 27th on the Mall from 10 a.m. to 2 p.m.!

On July 28th in the Bldg 3 Goett Auditorium at 10 a.m., all employees can enjoy **Plays for Living** of New York as they deliver a dynamic and interactive performance entitled, *People Like Us*. The performance will depict the real-life diversity challenges that many people face on a daily basis that impact the workplace. This performance will include facilitated discussions to examine the main themes and concepts of diversity with each scene.

Then enjoy a second day of fun in the sun July 29th on the Mall! This day includes opening remarks from Center management. Enjoy live entertainment from Goddard employees that includes the kindergarten class of the Goddard Child Development Center, Jolyn Nace (soloist) and Chuck Powers (bagpipes) as you visit Goddard directorate and advisory committee informational booths.



Grap information on GEWA clubs, contractors and directorates from their informational booths

This day also includes mouth watering diverse food selections including Matuba (Japanese), Cho Catering (Filipino), Heaven Inspired Café (Jamaican) and Constantine's Kitchen (Greek) to name a few.

After sending time outside, come inside to hear the special address from Dr. Samuel Betances, Professor Emeritus,

sociologist, educator, and professor of 20 years who will provide an inspirational and motivational talk and share his insights on workforce diversity. Following the Keynote speaker, the renowned Karaoke for Diversity will begin! Test your knowledge in the



Enjoy Greek cuisine from Constantine's Kitchen



(Center) Rick Obenschain, AETD director and employees give diversity performance at 2002 Celebrate Goddard

Goddard Trivia Bee; this will be played in between each Karaoke act. So get ready and stay tuned! This year's Celebrate Goddard promises to be another exciting, and lively, day to celebrate that we are "Many Faces, Many Places, Many Voices: One Goddard" ■

MESSENGER Meets Mercury

By Nancy Neal

The MErcury Surface Space ENvironment GEOchemistry and Ranging (MESSENGER) mission will assist scientists in solving the many mysteries associated with this terrestrial planet, forcing Mercury to resign its rank as one of the least explored planets in our solar system and ultimately leading to a better understanding of the evolution of the solar system.

"The MESSENGER mission will not only help us to better understand the evolution of Mercury, it will also add to our understanding of Earth's history," said Dr. Richard Starr, member of the MESSENGER science team. "There are only five terrestrial planets in our solar system, including the Moon. Studying any one of them helps us to better understand how our own planet evolved."

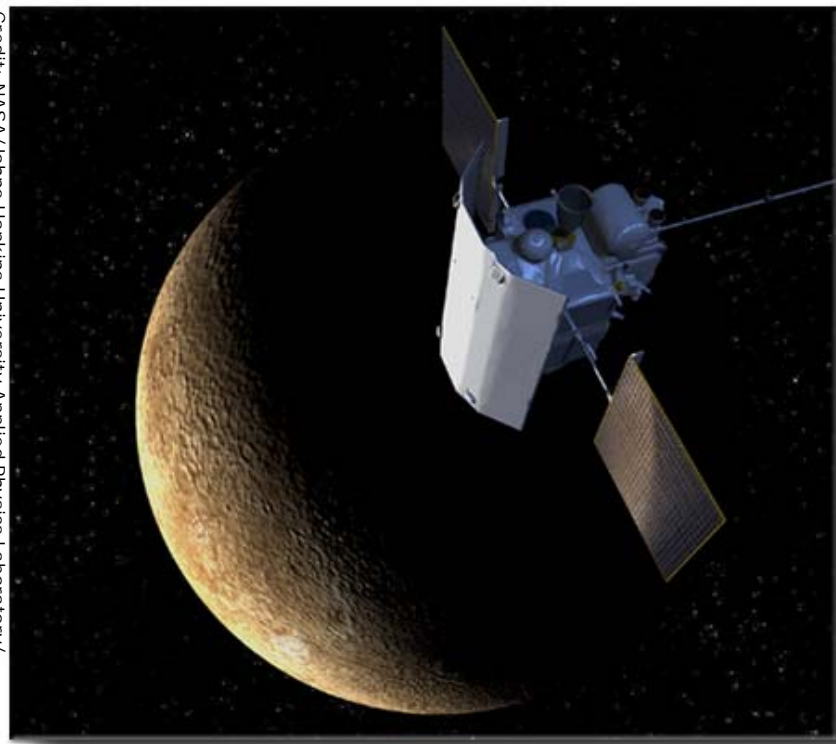
Numerous Goddard scientists and engineers are participating in this planetary mission. The MESSENGER Co-Investigators include: Dr. Mario Acuna (695), develops the Magnetometer (MAG) and analyzes the data; Dr. James Slavin (696), shares in the development of the Magnetometer and leads the analysis of the magnetospheric magnetic field measurements; Dr. David E. Smith (920), leads the development of the Mercury Laser Altimeter (MLA), Radio Science (RS) and the integration of the two data sets; Dr. Jacob Trombka (691), participates in the development X-Ray Spectrometer (XRS) and the Gamma Ray and Neutron Spectrometer (GRNS) and in the analysis of their measurements. Instrument team members include: Jay Smith, the lead instrument engineer for the Mercury Laser Altimeter; and Dr. Richard Starr, instrument lead scientist for the XRS instrument.

The MESSENGER spacecraft is scheduled for launch from Cape Canaveral Florida in the wee hours of the morning (2:17a.m.) on July 31, 2004 aboard a Delta II launch vehicle. The launch period extends for 15 days. The spacecraft will perform an Earth flyby the summer of 2005 and will flyby the love planet, Venus, in October 2006 and June 2007. MESSENGER will enter Mercury's orbit in March 2011.

Mercury, the closest planet to the Sun, is a world of extremes. With an equatorial diameter of about 3,031 miles (4,879 km), it is the smallest of the inner rocky planets that include Mars, Earth, and Venus. Among these four it has the thinnest atmosphere.

Mercury is also the only terrestrial planet besides Earth to have a global magnetic field, although it is 100 times weaker than ours. Because scientists believe that Earth's magnetic field is generated by swirling motions in the molten outer portion of its core, and because of Mercury's high density, scientists have concluded that Mercury contains a large metallic core (about 3/4 of the planet's radius). However, Mercury is small and as a result, its core should have already cooled into a solid state. So the origin of Mercury's magnetic field remains a mystery to be solved.

Credit: NASA/Johns Hopkins University Applied Physics Laboratory/
Carnegie Institution of Washington



Artist concept of MESSENGER in orbit.

"One of the major puzzles with Mercury is how it generates its internal magnetic field," said Dr. Mario Acuna, Co-Investigator on MESSENGER and developer of the MAG instrument. "We are interested in this question because of what we have seen on Mars and the Moon and Mercury remains a major piece of the puzzle that needs to be solved. MESSENGER may find some very interesting surprises just as the Mars Global Surveyor did at Mars."

As a result of its magnetic field, Mercury also stands out as having a "magnetosphere" that appears to closely resemble that of the Earth. Magnetospheres are large magnetic "bubbles" that form around planets as their magnetic fields struggle to fend off the stream of hot plasma that continuously escapes from the Sun's corona. This "solar wind" compresses and energizes the planetary magnetic fields to the point where magnetic "storms" and "substorms", resembling smaller versions of solar flares, take place. At the Earth, these magnetic storms are thought to depend critically upon the presence of the upper atmosphere and ionosphere.

"If MESSENGER finds that these magnetic storms can occur at a planet that has little atmosphere, then we may gather some important clues about how "space weather" works in the Earth's magnetosphere, said Dr. James Slavin, MESSENGER Co-Investigator. "In this respect, the Mercury measurements may be a great exam problem for the scientists studying the Earth and its magnetosphere."

The surface of Mercury is heavily cratered, similar to the surface of the Earth's moon. Huge scarps, some a mile high, spread for

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e-Payroll: Employee Tips for FPPS Transition

By Hunter Keay

On August 08, 2004, NASA plans to replace the current NASA Personnel Payroll System (NPPS) with Federal Personnel Payroll System (FPPS), a new integrated personnel and payroll system provided by the Department of Interior (DOI). The transition to a new system is being driven primarily by the President's e-Government initiative, e-Payroll which seeks to simplify and standardize personnel and payroll processes across all federal agencies in order to improve operational efficiency and to reduce operating costs.

Most of the e-Payroll (FPPS) changes will be transparent to the general GSFC community, but there will be some changes that will impact all civil service employees:

- **Employees will be required to use Employee Express (EE) to view and/or make changes to select personnel and payroll data**
- **Leave and Earnings Statements (LES) will be in DOI's format and will be mailed to employees' homes or can be viewed online at www.employeeexpress.gov**
- **Employees can initiate employment and income verifications by using TALX's free service, "The Work Number"**

With the e-Payroll Go-Live date just around the corner, the e-Payroll Project team would like to ensure that Goddard civil service employees understand what they should do to help prepare for a smooth transition to FPPS:

- **Familiarize yourself with e-Payroll changes and how they will impact YOU!**
- **Don't forget to save your last LES before the transition to DOI's FPPS on August 08, 2004.**
 - After the transition, the DOI LES will only reflect retirement benefits from August 08, 2004 - going forward. (It won't reflect cumulative retirement benefits under the NASA system)
 - After the transition, NASA will send all NASA-tracked retirement data to OPM.
 - DOI will only track and provide information on DOI-tracked retirement data (i.e. Aug 08th – going forward).
- **Wait to receive two W2's before filing your federal tax return.**
 - You will receive one from NPPS (Jan. 2004 – Aug.7th 2004) and one from FPPS (Aug. 8th 2004– Dec. 2004) given the mid-year transition.
- **Check your LES after each pay period for accuracy of personnel and payroll data.**
 - Employees can check accuracy of data by viewing the hard copy LES or online via Employee Express (www.employeeexpress.gov).
- **Be on the lookout for possible tax deduction changes on your LES.**
 - DOI uses the ALLTAX program for tax computations; The ALLTAX program is more up-to-date than NPPS on recent tax regulation changes
 - Employees may notice a slight increase or decrease in tax withholdings due to rounding and other minor computational differences between ALLTAX and the current programs that NASA uses today.
 - If a change does occur, it will be permanent
 - If you notice any unexpected deductions, please contact your Center Payroll Office.
- **Submit forfeited comp time extensions to the Payroll Office no later than July 16th, 2004. (Applies to Managers only)**
 - Comp time that expires after that date will be extended no later than July 30th.

- **Acclimate yourself with Employee Express (EE).**
 - Attend EE Training and encourage employees to attend training (if not current users)
 - Be aware of Employee Express cutover dates & new features:
 - From midnight Aug 21-Aug 26, NASA will only have access to the Leave and Earnings statement portion of EE. (Due to the FPPS Transition)
 - On Aug 26, NASA will gain the ability to allocate up to 16 allotments (4 of which can be discretionary) and turn off home delivery of the Leave and Earnings statement.
 - Employees **will not** have the ability to turn off home delivery of the Leave and Earnings statement before August 26, and so all employees will receive a Leave and Earnings statement at home for the Aug 8-21 pay period.
- **Utilize “The Work Number” service for your employment and income verification needs.**
 - Work Number is an automated free service NASA employees can use to verify their employment and/or income for car loans, leases, mortgages, etc.
 - Not mandatory, but preferred
 - The Work Number website can be accessed at www.theworknumber.com or from the EE website.
- **Pay attention to future emails about e-Payroll**
- **Contact your Directorate Change Agent, as located on the e-Payroll website* or call Felicia M. White, GSFC e-Payroll Project Manager at ext. 4-6964 with any questions or concerns.**

* - (A complete listing of Directorate Change Agents can be found at <http://ifmp.gsfc.nasa.gov>, and then click on “e-Payroll website”

In order to get Goddard employees acclimated on how to use these systems, the e-Payroll project team and OHR will be providing demo sessions during the months of July and August. See a complete listing of upcoming demo sessions below.

If you have any questions about upcoming Employee Express sessions, please contact Khrista White @ ext. 4-9059, Khrista.N.White@nasa.gov. Please contact Felicia M. White @ ext.4-6964, fwhite@pop400.gsfc.nasa.gov for questions about TALX demo sessions.

Employee Express Demo Sessions

July & August (all held from 9am –10am and 1pm – 2pm):

7/8, 7/12, 7/14, 7/15, 7/22, 8/10, 8/12, and 8/19

Where: OHR Training Facility, Bldg. 1, Room B2, Greenbelt Campus

These sessions are open to all GSFC civil service employees. **Employees should bring their EE PIN to the demo session.** If you need to obtain a PIN, you may request a PIN via e-mail within 1 business day through the EE website www.employeeexpress.gov or by phone, 478-757-3169 (from work) or 1-800-571-3453 (from home).

Please sign up to attend either session or both by clicking on the link below!

<http://ifmpserver2.gsfc.nasa.gov/classregistration/courseschedule.cfm?catid=5>

NASA Helps Teachers Take Earth Science from the Classroom to the Field

By Sallie Smith

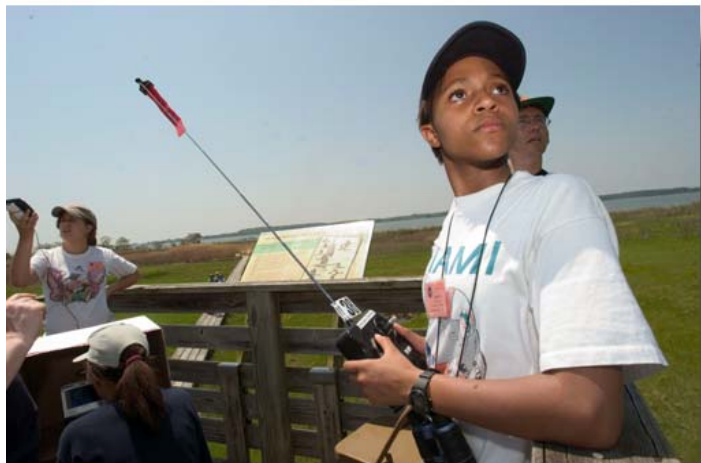
What better way is there to study Earth Science than to leave the classroom and go directly into the field and collect data first hand with research scientists? The NASA Goddard Remote Sensing Earth Science Teacher Program (RSESTeP) under the direction of Patrick Coronado is providing students and teachers the opportunity to do just that.

In RSESTeP, teachers plan local Earth Science Missions to be implemented by the students and community. NASA provides past and present satellite data of the local area of study, pre-field study classroom remote sensing Education resources and cutting edge data collection tools for the field study including NASA's first Educational Uninhabited Aerial Vehicle, (UAV) (a remote controlled plane equipped with a video/digital camera and thermal sensor) as well as groundtruthing sensors. Wallops Observational Lab engineers Geoff Bland and Ted Miles equipped a hobby plane with added safety features, specialized payload cameras to provide ample data for post field study analysis and a second set of controls for students to operate the science instruments while a certified American Model Club Association pilot fly the plane over the student area of study.

Seventeen JASON Project teachers from eleven states participating in the pilot program came to Goddard last summer for training becoming knowledgeable about NASA's Earth Observing Satellites, satellite analysis tools, basics of remote sensing, UAV operation/safety protocols and received help from NASA Goddard scientists to help plan local missions that were implemented during the school year in partnership with local scientists and certified American Model Club Association Remote Controlled Plane pilots.

Exciting field missions to date using the 3-tiered remote sensing platform of space, plane and ground have include having students use NASA resources to monitor invasive purple loosestrife in MI, effects of MN snow albedo on Earth's Radiant budget and prediction of Spring flooding/water supply as well as identification of Karst geologic features, a survey of NC wetlands, changes in NY's South Shore Estuary, a comparison of Earth/Mars atmosphere compositions, seasonal vegetation and glacial retreat in AK, vegetation in the Congaree Swamp of S.C.

Local RSESTeP teacher Margie Sparks from St. Hughs Elementary in Greenbelt MD and students teamed with Department of Agriculture and Chesapeake Environmental Center's science staff, the



Student from St. Hughes gives full attention while controlling thermal sensing views.

Chesapeake Bay Remote Controlled Plane Club and NASA Goddard and Wallops scientists to conduct a field expedition, Monitoring the Diverse Ecosystems of the Chesapeake Bay. "Using satellite data students could get a "big" overview of the CB watershed. Using the UAV students as well as ground observations are able to identify types of vegetation in the satellite data." said Sparks.

Students participating in RSESTeP begin work in the classroom, becoming informed about NASA EOS satellites, Basics of Remote Sensing, NASA's UAVs and ground tools. Local scientists and AMA club pilots visit the classroom to help students prepare for scientific and to learn more about aeronautics. Local State Space Grants

have been used to help link teachers and local research scientist.

During field missions, students work in their assigned roles with pilots and scientists to collect weather and GPS data, prep the plane for flight, download UAV data and collect ground observation measurements which will later be correlated with satellite data of the area during post flight analysis back in the classroom.

Comments from teachers, students, parents, pilots and

scientist indicate the value of experience of engaging the public NASA Mission Science, discovery and putting NASA resources directly into the hands of teachers.

NASA Goddard Aqua scientist Claire Parkinson commented "For elementary and middle school students in particular, these missions could give them perhaps their first recognition that science can be exciting, fun, relevant and doable. It lets them see science as an on-going endeavor, not just a set of rules in a textbook or a repetition of lab experiments whose answers are already known."

"Ted Miles, Wallops Engineer, UAV builder expressed that, "Watching the students participate in the implementation of the UA was gratifying



Students from St. Hughes conduct pre-launch UAV activities.

Photos by: Chris Gunn/293

Employee Supervisory Feedback Period Is In Process

Starts: July 12, 2004

Ends: August 9, 2004

Have you ever wanted to provide your supervisor feedback about their management style? Now is your chance to give your feedback to help supervisors become more aware of the impact of their supervisory practices. Sharing knowledge, recognizing accomplishments, and offering to develop an Individual Development Plan (IDP) are just a few examples of the impact a supervisor has in the career development of an employee at GSFC.

The Employee Supervisory Feedback Survey allows anonymous employee input which will be combined into a summarized report for each supervisor. This information enables supervisors to receive constructive feedback from their direct employees that can also be used as a guideline to further enhance supervisory performance. All survey responses are **completely confidential**.

All GSFC civil servant employees will have the opportunity to give feedback to their immediate supervisor, and up to two additional supervisors in their matrix organization. Giving feedback is simple and confidential. You'll go to the Goddard Supervisor Evaluation Survey located at <http://supvysurvey.gsfc.nasa.gov> and rate your supervisor's performance around the following seven areas:

- Accountability
- Change Orientation
- Diversity
- Financial/Technical Management
- Human Resources Management
- Organizational Communication
- Teamwork

The information employees provide will be utilized by your supervisors' supervisor to determine training and developmental needs, promotions, and awards. Professional facilitators will be made available to any manager who requests assistance in conducting meetings with their employees.

Access the survey website located at <http://supvysurvey.gsfc.nasa.gov> to enter your feedback, for your immediate supervisor (and up to two other supervisors). Your input DOES make a difference!

You may also contact the Performance Management Coordinator, Tina Lafountain, if you need additional information or have any questions about the Supervisory Feedback Process. Ms. Lafountain can be reached at (301) 286-3729 or by e-mail at Christina.Lafountain-1@nasa.gov.

Thank you for your participation in this important effort! ■

NASA Transformation (cont'd)

reflects NASA's commitment to provide a clear and direct line to agency senior leadership for issues regarding safety

- Chief Education Officer: Directs the agency's important work to improve scientific and technological literacy and inspire a new generation of explorers

NASA functional offices will be restructured as Mission Support Offices. Headquarters and field center offices will be aligned to improve communications and responsibility.

The major Mission Support Offices are:

- Chief Financial Officer (CFO): Conducts all financial matters, including procurement and small and disadvantaged business activities. All field center financial officers report directly to the Headquarters CFO to better address critical financial issues

- Associate Administrator for Institutions and Management: Responsible for providing operational and management support for Headquarters; directs a full range of activities relating to personnel and institutional management across the agency

- Chief Information Officer: Responsible for the development of an integrated focus on information resource management strategies, policies and practices

- Chief Engineer: Ensures the development efforts and missions operations are being planned and conducted on a sound engineering basis; assures independent technical authority within the agency's engineering, operations and safety organizations

- Chief of Strategic Communications: Directs NASA's communication efforts in Public Affairs, Legislative Affairs and External Relations; responsible for internal communications management

- General Counsel: Responsible for the legal aspects of all NASA's activities; manages the agency's intellectual property and ethics programs

To improve the decision-making process, NASA will create:

- Strategic Planning Council: Chaired by the NASA Administrator, the Council develops multi-year strategic plans, strategic roadmaps, and a multi-year detailed plan that forms the basis for policies and budgets

- Director of Advanced Planning: Responsible for the preparation of options, studies and assessments for the Strategic Planning Council

- Chief Operating Officer Council: Chaired by the Deputy Administrator, implements direction provided by the Strategic Planning Council and develops standard administrative practices to build on the President's Management Agenda

The Associate Deputy Administrator for Systems Integration is responsible for strategic and systems integration across Mission Directorates and mission support functions.

The changes outlined today become effective August 1, 2004.

For more information on the NASA transformation and organizational charts, visit: <http://www.nasa.gov/audience/formedia/features/index.html> ■

Top Students Win Competitive Selection Gain Real World Experience at Goddard

By Dewayne Washington

While some students have opted for a summer to relax and recharge, others have been competitively selected to endure a summer of structure, new challenges and more work. On June 1, Goddard welcomed more than 60 of this country's best and brightest graduate and undergraduate students in the fields of science, engineering, mathematics and several other college disciplines.

They have gathered here from across the country for 10 weeks of real world work experience. Each intern has already been competitively selected from a pool of top candidates at their school and will spend their summer working with some of the world's premier teams devoted to space research and technology for NASA. These summer internship programs are coordinated through Goddard's Equal Opportunity Programs Office (EOPO) and involve 17 diverse summer programs.

"This year's Equal Employment Opportunity (EEO) Intern Program represents an extremely diverse group of 75 students in all senses of the word," said Dan Krieger, Summer Internship Program Manager. "We have students from all corners of the continental United States and Puerto Rico, all skill disciplines represented, and a very nice blend of racial, gender, ethnic, and physical ability diversity."



Dan Krieger, program manager greets interns during their first day at Goddard.

According to Krieger, the goal of the program is to allow members of underrepresented groups in the fields of science, engineering, and mathematics the opportunity to work within



Dillard Menchan, Chief Office Equal Opportunity Program Office explains to the interns what is expected of them.

an environment requiring those skills. Hopefully the experience will give them an inside look of the real world environment and opportunities available at aerospace installations such as Goddard. Each intern will gain exposure to NASA, the opportunity to see the types of projects developed here, as well as gain valuable work experience.

"We are hoping that as a result of their experiences here this summer that Goddard will be their future employer of choice," added Krieger. "Many have already expressed that, based on their experiences here so far, Goddard is where they want to be."

The majority of the internship programs focus on undergraduate students. The largest program, the Bowie State University Summer Institute in Engineering and Computer Applications Program (SIECA), is providing 14 undergraduates with summer positions at Goddard. The Achieving Competence in Computing, Engineering, and Science Program (ACCESS) is allowing three students with disabilities an opportunity to spend the summer here as well.

Other undergraduate internships are components of NASA grants with specific colleges and universities. These programs include the Morehouse College Strategic Preparedness in Advancing Careers in Engineering Project (Project SPACE), the Spelman College Women in Science and Engineering Program (WISE), the University of Puerto Rico/NASA Goddard Partnership Program and the Florida A&M Increase Minority Access to Graduate Engineering Program (IMAGE).

Continued on page 14

Staring At The Sun... Safely Online

By Jason Townsend

Your mother always told you to never look directly at the Sun. While that's great advice outside, NASA now gives you a way to stare at the Sun indoors. Thanks to some high-tech aides, you can now see the up-close and dazzling details of the big ball of fire for yourself.

An interactive Sun-Earth Media Viewer provides nine satellite views of the Sun and three views of the Earth, updating itself every two hours. These real images are the same ones that scientists use to track stormy space weather events that affect everything from power grids and satellites to astronauts in space. Using the Flash interface, you can zoom into the incredible details of solar storms, and see the true impact of the Sun on the Earth's atmosphere. To keep things in perspective, keep an eye on the size of the planet Earth in the info bar to the right of your screen. You can also get in-depth information about flares and auroras with a special section devoted to animating these sometimes difficult-to-grasp concepts.

But why on Earth would NASA develop this viewer to bring you real-time images of the Sun?

It all started with a series of satellites, several ground observatories, a really big computer, and lots of data. There wasn't really a great way to share all these great satellite images to the public, though. The Viewer not only has "real NASA data," but also explains "what all of this data means in an easy-to-understand way," according to NASA educator Troy Cline. "We wanted a way to allow students and teachers to have one-stop shopping for information about the connection between the Sun and the Earth."

Setting out to make these really 'cool' images even 'cooler' by kids understanding just what they are looking at, the Sun-Earth Connection Education Forum worked with IDEUM multimedia design studio in Sausalito, Calif., to create the Macromedia Flash interface to house all of this information. Concepts such as coronal mass ejections, sunspots, flares, and auroras are explained with movies, words, and pictures thanks to top-notch NASA visualizers.

Internationally, web surfers have taken notice. The Viewer recently received a Pirelli INTERNETional Award for excellence in scientific communication. This international award recognizes



Sun-Earth Viewer Web page

the top multimedia works that contribute to science and technology learning through the Internet.

"We just wanted a way to get real NASA data out to students," says NASA educator Troy Cline. His colleague Elaine Lewis quickly agreed. "This is a great honor to be [given] this award."

The NASA Sun-Earth Viewer was selected from more than 1,700 entries, winning top honors in the environment category. Pirelli, an Italian multinational manufacturer of tires, energy, and telecommunications systems, launched the international multimedia competition in 1996.

The Pirelli Award was presented to the Sun-Earth Viewer team on May 27, 2004 in Rome. Elaine Lewis received the award on behalf of the group. She attended the ceremony in Rome along with about 200 other people, and was joined by Marco Trenchetti Provera, President of the Pirelli Group and Andrea Mondello, President of the Chamber of Commerce of Rome. NASA also received this award once before in 2000 for the Science@NASA website.

So next time you journey outside, take your shades and remember what your mother always told you... 'Don't look directly at the Sun.' But if you really want to, you can look directly at the Sun online, and look safely due to the NASA Sun-Earth Media Viewer.

So log on now to start being a solar weather sleuth at: http://sunearth.gsfc.nasa.gov/sunearthday/media_viewer/flash.html

You can also learn more about the Pirelli Awards at: <http://www.pirelliaward.com> ■

In the Safety Corner

Tips for the Summer Season

First Aid for Insect Bites and Stings

For an insect bite or sting, follow these steps:

- Wash the bite site with soap and water.
- Apply a cold pack for 15 to minutes to reduce pain and swelling.
- Use aspirin or acetaminophen to relieve pain.
- Use a topical steroid cream to further reduce itching and swelling.

If the victim shows signs of an allergic reaction (breathing difficulties or extensive swelling), infections, or other unexplained symptoms, get medical help immediately.

Swimming Pool Safety

Each year many children drown in backyard swimming pools and in small kiddie pools. Children can drown in only one inch of water.

- Never let a child out of direct eyesight in or near a pool, not even for a second!
- Teach your children good pool habits; no running, pushing playmates, no jumping on others, no diving or jumping in shallow water, no dunking.
- Swimming skills, instruction, and experience don't make young children water safe.
- Do not rely on inner tubes, inflatable arm bands, or other toys to prevent accidents.
- Limit pool access with fences and locked doors or gates.
- Take a course on pool safety, first aid, and lifesaving skills (such as CPR).
- Make sure lifesaving equipment and a first aid kit are handy.

Foodborne Illness Never Takes A Vacation

As the song says, "Summertime and the livin' is easy." Although life's just as hectic in July as in January, enjoying a picnic on the beach or grilling up steaks on the deck seems to make it more relaxing, even if we're fooling ourselves.

With summer food safety, no one can afford to relax too much, because nasty foodborne bugs never take a holiday. The results of serving an undercooked burger, or vegetables contaminated with raw meat juices can be a lot more serious than an upset stomach.

Young children and elderly adults have become critically ill and sometimes died from kidney failure after contracting E. coli O157:H7, otherwise known as Hamburger Disease. Eating undercooked meat (especially ground beef) is a common means of exposure. Serving a hamburger that's still pink inside is inviting trouble.

Following are some other summer food safety tips to keep illness from raining on your picnic or barbecue:

- Food safety starts at the supermarket. Don't place frozen foods into your shopping cart until just before you reach the checkout stand. A hot car is no place to leave groceries, even if they are out of the sun. Get them into your fridge or freezer immediately.
- Defrost meat in the refrigerator, or in cold water if it's in a sealed package. Never leave frozen meat on a countertop to defrost, because bacteria can have their own party before you have yours. Marinate steak or other raw meat in your refrigerator.
- Cross-contamination sounds like a mouthful – a mouthful you'll want to avoid. If you've used a cutting board to slice up raw chicken or beef, carefully wash it with hot, soapy water before re-using it to cut up vegetables or bread. Otherwise, bacteria can be transferred onto these foods. Cross-contamination can also occur when someone handles raw chicken, for example, and then goes on to touch other food, plates, or utensils without thoroughly washing their hands with hot, soapy water. Washing your hands is also vital after using a toilet and before handling food.
- Cook meat thoroughly and use a food thermometer to check the internal temperature. It's unsafe to serve chicken pieces that haven't reached at least 170 degrees Fahrenheit (77 degrees Celsius). Burgers and pork must be heated to at least 160 degrees F (71 C) and steaks, roasts and chops should reach a minimum of 145 degrees F (63 C). Partially pre-cooking meat in your microwave is fine, as long as you don't let it sit around before it's barbecued.
- Serve hot foods hot and cold foods cold. Keep meat hot on the barbecue until it is served, and cold items such as salads refrigerated. Use convenient freezer packs to transport perishable foods in coolers to picnic spots.
- In these days of soaring food prices, leftovers look more appealing than ever, but if food has been left to sit for an hour in hot weather, don't take a chance by serving it again. Get it off the table and into the fridge right after dinner.■

Several Living With the Star Educational Activities on Tap for The Summer

By Jim Sahli

We all have a teacher that stands out in our minds because of their excitement and creativity in the classroom! July 6-9, a hundred K-12 teachers will meet in Anchorage, Alaska to share their ideas, activities and inspiration for future generations.

This inaugural conference is just one of four educational forums the Solar Terrestrial Probe/Living With A Star Education and Public Outreach office have scheduled for this summer. Additional educational activities include two LWS Summer Institutes in Puerto Rico, an Upward Bound Math and Science Regional Center event in Maryland and the Astronomy Institute in West Virginia.

STP/LWS Education and Public Outreach have coordinated a four-day conference full of engaging plenary speakers and hands-on workshop sessions. The NASA/LWS Star Partner teachers who participate will have plenty of opportunities to get classroom ideas focusing on Science, Technology, Engineering and Mathematics subjects. Local teachers from Alaska will also attend and get science and curriculum to take back to their schools, said Laura Madachy of the LWS Educational and Public Outreach office. Star Partners is a group of teachers that for three years have been in the STP/LWS science oriented workshops program.

Science concepts don't have to be limited to a science class and the NASA Star Partners Educators Conference will encourage participants to integrate scientific ideas and principals into each classroom. These teachers will encourage their students to think about and use science in a variety of subjects and everyday life!

Presenters include scientists and engineers from STP/LWS and the Sun Earth Connection Education Forum (based at the University of California, Berkeley), professors and educators from across the country and teachers who will share their

successes in the classroom using STP/LWS science. Presentations will include Sun and Earth Science, education, technology and culture as they relate to the STP/LWS mission of education and public outreach..

The LWS Summer Institutes will be held at the University of Puerto Rico, Mayaguez. The two one-week workshops are being held July 17-24 and July 25-31. Each workshop will have approximately 30 pre-service teachers (educational students and graduated teachers) attending. "To attend this workshop the prospective teacher doesn't have to be a science person. We are interested in working with teachers from different disciplines. We plan to teach them how they can integrate science principals into their course lesson plan," said Laura Madachy of the LWS Educational and Public Outreach office.

July 18 to 24 the LWS Education and Public Outreach office will be hosting an Astronomy Institute at the National Radio Astronomical Observatory in Greenbank, W.Va. At this event teachers will have lectures, hands on activities and field trips.

A final event which has already begun (June 20) and runs until July 30 is being held at the University of Maryland. STP/LWS has teamed with the Upward Bound Math and Science Regional Center. This is a program for first-generation and low-income students from Maryland, Virginia, District of Columbia, Delaware, Pennsylvania, and West Virginia who are seeking future careers in science and math. The students (10-12th grade) are engaged in solar energy research projects where they will investigate cooking times using solar cookers where they will investigate cooking times using solar cookers that they construct as well as solar pasteurization of water using the same solar cookers.

For more information on the LWS education and outreach activities, visit: <http://stargazers.gsfc.nasa.gov/epo/jsp/index.jsp> ■

Goddard '04 Interns (cont'd)

Some of Goddard's EOPO summer programs are also designed to provide academic reinforcement to students who are about to begin their freshman year in college and are interested in pursuing a career in math, science, or engineering. This year the Capitol College PREP Program has an enrollment of eight students currently on the campus.

Two of the internship programs are aimed at students at the graduate level. The SIECA program provides Goddard internships to nine students seeking advanced technical

degrees. The Howard University Public Service Intern Program (PSI), is providing summer experiences to four students in Howard's focused administration.

"Our summer internship and outreach programs provide students a valuable opportunity to gain hands-on experience," Al Diaz has said. "Goddard's efforts are consistent with NASA's goals to support the educational community."

For more information about EEO education programs check their web site at <http://eeo.gsfc.nasa.gov/>. ■

Newly Selected NASA Explorer Schools Final Stop For The Vision Presentation

By Dewayne Washington

Three final stops to newly selected NASA Explorer Schools (NES) within Goddard's service region concluded a year of successful visits for NASA officials to schools across the country. These latest visits were made to schools newly selected as a NES.

The visits were an agency-wide effort involving NASA representatives to include members of the astronaut corps in a continuing effort to 'inspire the next generation as only NASA can.'

On May 27, Angela Diaz, Deputy Assistant Administrator, Office of Legislative Affairs, presented NASA's vision for space exploration to a group of next generation explorers at the Biddeford Middle School in Biddeford, Maine. Accompanying Diaz was astronaut Richard Linnehan, Doctor of Veterinary Medicine and veteran of three space flights to include STS-109, the fourth Hubble Space Telescope (HST) servicing mission.

Dr. Clifford Houston, NASA's Deputy Associate Administrator for Education Programs and astronaut Jerry Ross, veteran of seven space flights, visited Woodbury Junior/Senior High School in Woodbury, New Jersey on June 4. They presented NASA's vision for space exploration to more than 700 students, teachers and elected officials.

The final visit of the year for Goddard was to Anna Howard Shaw Middle School in Philadelphia, Pennsylvania. Dr. Anngienetta Johnson, Assistant Chief Engineer at NASA Headquarters, spoke to an audience of students, teachers and elected officials about an exciting future with NASA. She spoke of an exploration vision that will release us from earth's orbit to again venture to the moon and beyond. Chris

Photos by: Chris Gunn/293



Astronaut Chris Ferguson speaks at Anna Howard Shaw Middle School.

Ferguson spoke about the exciting work of being an astronaut.

These three newly selected Explorer Schools will be formally recognized during a kickoff celebration to be scheduled during the fall of this year. NASA's Explorer School Program establishes a three-year partnership between NASA and the Explorer School teams consisting of teachers, and education administrators from diverse communities across the country. The goal is to join educators, students and families in sustained involvement with NASA's research, discoveries, and missions.

"NASA's mission is to inspire the next generation of explorers by helping to make learning science and math more fun," NASA's Associate Administrator for Education, Dr. Adena Loston has said. "The NASA Explorer Schools program provides us with yet another promising avenue to positively and uniquely impact science and math instruction in the Nation's classrooms...as only NASA can."

For more information about NASA Explorer Schools visit <http://explorerschools.nasa.gov>



Dr. Anngienetta Johnson tells students you too can be involved.

2003 Presidential Rank Award Recipients

The 2003 Presidential Rank Award recipients were recognized in late May 2004. Each year, the president honors a select group of career members of the Senior Executive Service (SES), Senior Level (SL) and Scientific and Professional (ST) corps who are selected for their outstanding leadership accomplishments and service over an extended period of time in some of the nation's most critical positions in the Federal government.

These senior executives are outstanding leaders, who consistently demonstrate strength, integrity, industry, and a relentless commitment to public service. Through their personal conduct and results-oriented leadership, they have earned and kept a high degree of public confidence and trust. They have demonstrated their success in balancing the needs and perspectives of customers, stakeholders, and employees with organizational results. Executives from across the government are nominated by their agency heads, evaluated by citizen panels, and, finally, designated by the President.

There are two categories of rank awards for the SES, Meritorious and Distinguished. The Meritorious Executive rank is awarded to leaders for sustained accomplishment. Only 5 percent of SES career members may receive this award, which includes a lump-sum payment of 20 percent of the executive's base salary, a silver pin, and a framed certificate signed by the President. The following NASA/Goddard Space Flight Center (GSFC) employees are among the Meritorious Executive Rank:

Joanne Simpson (ST award recipient)

Dr. Simpson is in her third decade of leadership roles at the GSFC. She is the Chief Scientist for Meteorology in the Earth Sciences Directorate and a Goddard Senior Fellow.

As a Senior Fellow, Dr. Simpson is recognized as a top Goddard scientist who advises the Center Director on missions, science,

and policy. In her daily work, she leads groups on two important frontiers of Goddard's Earth science program. First, she leads a group on computer simulations of atmospheric cloud systems. She also leads a group on the most difficult aspects of Tropical Cyclones, using TRMM data together with numerous other satellite products. Significant progress has been made with understanding, and eventual better prediction, of the formation and intensification of hurricanes. Early results on formation are in a book on hurricanes, published in November 2002 by the American Geophysical Union (AGU).

Photos by: NASA



Lft: Administrator, Sean O'Keefe, Mario Acuna and Deputy Administrator Fred Gregory.

Mario Acuna: (ST award recipient)

Since July 1971, Dr. Acuña has served as a Research Scientist and Project Scientist in the Laboratory for Extraterrestrial Physics (LEP) at NASA's Goddard Space Flight Center (GSFC). In this capacity, he has been responsible for the successful execution of more than 30 world-class space research projects, the development of advanced space research instruments and the publication of approximately 160

papers in major scientific and engineering journals. He has also been responsible for the scientific management of key NASA national and international projects such as the Active Magnetospheric Particle Tracer Explorers (AMPTE), the Satélite de Aplicaciones Científicas Program (SAC), and the International Solar Terrestrial Physics Program (ISTP). As a Principal Investigator or Co-Investigator, he has made

numerous discoveries about our solar system, where his instruments flying aboard spacecraft have unraveled the magnetic fields generated by all the planets of the solar system (with the exception of Pluto), and those of comet Halley and asteroid 433 Eros. In addition to his research, development and scientific management responsibilities, Dr. Acuña has been deeply involved in international scientific collaborations and multi-lingual outreach and education projects. He is a founding member of the Latin American Association of Space Geophysicists, a member of the Committee on Space Research (COSPAR), the International Association of Geomagnetism and Aeronomy, the Inter-Agency Consultative Group and other international coordination and scientific organizations. He is also a Goddard Senior Fellow, a Fellow of the American Geophysical Union, a member and Distinguished Lecturer of the Institute of

Electrical and Electronics Engineers and a member of Sigma Xi, the Scientific Research Society of North-America.



Lft: Administrator, Sean O'Keefe, Joanne Simpson and Deputy Administrator Fred Gregory

Presidential Rank (Cont'd)

All Photos by: NASA



Lft: Administrator, Sean O'Keefe, Preston Burch and Deputy Administrator Fred Gregory

Preston Burch (SES award recipient)

Mr. Burch, Associate Director/Program Manager for Hubble Space Telescope (HST) Program Office at

GSFC, has overall program management responsibility for the HST program, which includes Hubble operations, ground systems, science, new science instrument and flight hardware development, and on-orbit servicing, and the Space Science Mission Operations (SSMO) Project, which is comprised of 18 separate missions. Mr. Burch is responsible for managing a workforce of approximately 1250 personnel, and a total budget of approximately \$280 million per year, and technical activities with the European Space Agency (ESA), which is NASA's partner on the Hubble program. The HST alone represents a government investment of approximately \$6.5 billion. Under the leadership of Mr. Burch, Hubble has continued to be the world's foremost facility for astronomy research and scientific discovery and has remained an American cultural icon. This has been made possible by major upgrades in observatory science instruments, spacecraft subsystem improvements, and advancements in ground system capabilities.

John Dalton (SES Award recipient)

Mr. Dalton is the Deputy Director of Space Sciences at GSFC. He provides technical direction and management for approximately



Lft: Administrator, Sean O'Keefe, John Dalton and Deputy Administrator Fred Gregory

240 civil servants, 420 contractors and on-site university staff. The civil service personnel are predominantly scientists, engineers, and managers performing research in astrophysics, astronomy,

and solar physics utilizing advanced space-borne instruments. The organization's annual budget of approximately \$250M funds

in-house laboratory projects, university agreements, advanced instrument development, and university grants for research and data analysis. Mr. Dalton's responsibilities include general management of the Directorate operations; strategic planning of the Directorate workforce; internal and external integration of science data management activities; improvement of Directorate cost-competitiveness; and implementation of the President's Management Agenda, including strategic workforce planning and competitive sourcing of future cooperative agreements with universities.

Martin Davis (SES award recipient)

Mr. Davis is currently the Associate Director/Program Manager for the Geostationary Operational Environmental Satellite (GOES) at Goddard. In his current position he is responsible for managing a culturally diverse workforce with activities throughout the United States, and an annual budget of over \$200M to design, build, and launch the GOES-N series of missions from 2004 through 2010. In addition to these activities, is the development and implementation of several advanced concepts and technologies for the GOES missions of the next decade, with launches from 2012 through 2021.

John Day (SES award recipient)

Dr. Day is Chief of the Electrical Engineering Division (EED) at Goddard. He provides technical and managerial leadership to approximately 280 civil servant engineers, scientists, technicians, administrative support personnel, and managers. In this capacity,



Lft: Administrator, Sean O'Keefe, Dr. John Day and Deputy Administrator Fred Gregory

Dr. Day is responsible for providing the electrical engineering expertise to develop remote sensing instruments, spacecraft, and associated technologies for NASA's scientific space missions.

He also manages a multidisciplinary engineering support contractor workforce of approximately 300 to supplement civil servant led tasks. Dr. Day is responsible for electrical engineering products and services exceeding \$100 million per year, including operation of the EED's world-class institutional infrastructure (facilities, laboratories, equipment, tools, etc.).

William Townsend (SES award recipient)

Since 1998, Mr. Townsend has been the Deputy Center Director of the NASA/GSFC. As such, he shares with the Center Director the responsibility for the executive leadership and overall direction and management of the Center and its assigned programs and activities. Goddard's overall mission includes major roles in three areas of responsibility: Earth Science,

Continued on page 17

Presidential Rank (Cont'd)

Space Science, and Technology Development. Carrying out this mission are approximately 3300 civil servants and about twice that many support contractors, or a total of about 10,000 employees. The annual operating budget for the



All Photos by: NASA

Lft: Administrator, Sean O'Keefe, William Townsend and Deputy Administrator Fred Gregory

Center is approximately \$3 billion. The number of active space flight projects in development at any given time is about 35, with about another 25 in 24/7 operations, each being unique in terms of their objectives and implementation approach. Mr. Townsend started his career at NASA in 1963 as an Electronic Technician apprentice. In 1993, he received NASA's Outstanding Leadership Medal, and in 1994, the French Space Agency's Bronze Medal, both for his work on Topex/Poseidon. Via a successive series of promotions and assignments, he became the Deputy Associate Administrator, and later, (Acting) Associate Administrator (Head) of the NASA Enterprise responsible for leading research into a variety of climate change issues such as global warming, El Nino, etc. This led to his receiving NASA's highest honor, the NASA Distinguished Service Medal, in 1995.

Alphonso Diaz (SES award recipient)

Mr. Alphonso V. Diaz has served as NASA's Goddard Space Flight Center Director since January of 1998. Mr. Diaz is responsible for an organization comprised of over 3300 civil service employees, approximately 7000 contractor employees, and the activities of numerous private sector contractors. The Goddard Space Flight Center is the Center of Excellence for Scientific Research and a principal NASA Center responsible for the implementation of Earth Science, Space Science, Science Enabling Technologies, and NASA Program & Enterprise Support. The Center has been entrusted by NASA to provide scientific leadership, program and project management, systems and discipline engineering, spacecraft and instrument development, as well as procurement, logistics and other administrative functions that are necessary to place scientific instruments into space, retrieve and distribute data, and advance knowledge of space

and the Earth. The Center has an annual budget of approximately \$3 billion for specific programs and activities, which include Earth Science, Space Science, Space Flight, Aerospace Technology, Safety and Mission Assurance, and Institutional Operations.

The Distinguished Executive rank, the second category is of the Executive awards recognizes leaders who achieve extraordinary results. Only 1 percent of the career SES may earn this award. Distinguished Executives receive a lump-sum payment of 35 percent of their base salary, a gold pin, and a framed certificate signed by the President. Dr. John Mather was one among the five other Distinguished Senior Professional members of the SL/ST corps.

John Mather (ST award recipient)

Dr. Mather is the Senior Project Scientist for the James Webb Space Telescope (JWST), and has served as its scientific leader since its inception in 1995. He conceived the deployable telescope concept now chosen for flight, and showed that its Lagrange Point orbit was the right place to put it to meet its objectives. He chairs the Science Working Group, organizes the work of all the science teams within the project, and serves



Lft: Administrator, Sean O'Keefe, Dr. John Mather and Deputy Administrator Fred Gregory

as the chief scientific spokesman for the JWST. He represents the JWST science program to NASA management, the press, the international user community, and all review committees. The JWST is the nation's top priority for astronomy and astrophysics, according to the National Academy

of Sciences' "Decadal Survey" report entitled "Astronomy and Astrophysics in the New Millennium". The most important objective of this \$2B mission to be launched in 2010, is to see the first light in the universe released after the Big Bang. Theory says that the objects that emitted this light were formed when the universe was only 1/20 of its present dimension, 8000 times its present density, and about 1/20 of its present age. In consequence, the light we seek to observe is redshifted so that its wavelength is 20 times as great as when it was emitted, and can not be observed with any existing telescope. This requires a truly extraordinary new mission, the JWST. ■

NASA Showcases Exhibit at the 97th A&WMA Conference and Exhibition

By Susan Hendrix

For the third year in a row NASA participated in the annual Air & Waste Management Association's Conference and Exhibition, held June 22-25 in Indianapolis, IN.

This year's theme, "Sustainable Development," featured more than 150 technical sessions including optical sensing and measurements. The event provides environmental professionals from the public, private, and academic sectors opportunities to share information on emerging challenges, unique insights, and proven solutions for protecting our limited resources.

NASA Applications Program Manager Lawrence Friedl chaired the "Satellite Measurements of Particulate: Capabilities and Applications" session, which highlighted NASA's sponsorship of atmospheric aerosols research by the University of Maryland and Washington University in St. Louis, Mo.

A NASA spokesperson was also on hand to address the Agency's involvement in a landfill gas project.

Goddard environment engineer Kathleen Moxley of Code 250 presented at a technical session called "Environmental Issues for Industrial Boilers". Moxley's technical presentation focused on the engineering issues involved in converting over to landfill gas, as well as the environmental benefits that the Center has been reaping since they started burning back in January 2003.

The U.S. Environmental Protection Agency formally recognized NASA for being the first federal agency to burn landfill gas at its facility in Greenbelt to heat various buildings located on Center. The project is the culmination of a successful public-private partnership between NASA, Prince George's County, Md., Waste Management, Toro Energy, and EPA's Landfill Methane Outreach Program.

Goddard and Kennedy Space Center shared an exhibit booth that offered curious event attendees and exhibitors with an abundance of information about NASA's Earth science missions and resultant data, environmental protection efforts, and general information about the Agency. "It was great to be able to share our efforts with visitors and hear them say, 'Wow, I didn't know NASA did that,'" Lawrence Friedl said.

The A&WMA added a new twist this year - E-theater presentations. Free to attendees, the e-theater presentations offered yet another



(Above) Goddard employees Sterling Spangler and Susan Hendrix in front of the Earth science display at the NASA booth, 2004 Air & Waste Management Assoc. Conference and Exhibition.



NASA Applications Program Manager Lawrence Friedl at the "NASA: Monitoring Air Quality from Earth and Beyond" e-theater presentation, 2004 Air & Waste Management Assoc. Conference and Exhibition.

avenue for attendees to showcase their products and efforts in air quality management. Friedl talked to "NASA: Monitoring Air Quality from Earth and Beyond," a newly produced 15-minute animated sequence revolving around the Agency's recent Earth science efforts, and which highlighted the

upcoming Aura mission. Aura will help researchers determine whether the stratospheric ozone layer is recovering, address the processes that control air quality, and determine how the Earth's climate is changing. It also showcased other NASA missions that examine global air quality events, which can affect our air quality here in the United States. After Friedl's e-theater presentation, exhibitor John Morris of CL Solutions, LLC, said, "This is great because you're letting people know what NASA is doing and how these missions benefit U.S. citizens."

The A&WMA is a nonprofit, nonpartisan professional organization that enhances knowledge and expertise by providing a neutral forum for technology exchange and public education and outreach to more than 9,000 environmental professionals in 65 countries. The association also promotes global environmental responsibility and strives to increase the effectiveness of organizations to make critical decisions that benefit society.

Next year's conference and exhibition will be held in Minneapolis, MN and NASA will be there. ■

Greenland Ice Sheets (cont'd)

streams of melt water and slushy-snow, and arrived smiling broadly from the great time they had.

Previous GPS measurements of the ice velocity at the Swiss Camp from 1996 to 1999 had revealed a remarkable increase in the flow rate of the ice sheet during summer time. They also showed that the increase is linked to the amount of melting that occurs on the surface of the ice sheet (ref Top Story and Zwally et al, Science 297, July 2002). During warm years when more melt water is created on the ice-sheet surface, the ice sheet accelerates, indicating that the surface melt water must penetrate to the bottom of the ice sheet through crevasses and large deep holes in the ice called moulins. Water at the bottom of the ice sheet lubricates the interface between the ice and the bedrock over which it slides, causing the ice to move more rapidly.

In 1995, when Dr. Zwally got the idea to study the ice velocity through out the year to see whether the ice flow changed in summer or from year to year, such continual measurements had not been made on ice sheets before. Scientists did know that some small glaciers speeded up in summer, but they thought that ice sheets only changed their flow rate very slowly. Dr. Abdalati, who had just received his PhD, found a GPS receiver that could be programmed to turn on and off to make a measurement 50 times throughout the year at Swiss Camp. After several years the data showed very interesting changes. In 1996, which was a summer with below average melting, the ice velocity increased only a little from 32 cm/day (12.6 inches) to 33 cm/day (13 inches). By 1998 and 1999, the summer melting was well above average and the velocity increased by 25 percent during the maximum melting in July.

Since 1999, the melting has continued to increase. In 2002, the maximum velocity was 53 cm/day (20.87 inches). The increase in surface melt water has profound implications for the rate at which ice sheets can contribute to sea level rise as climate warms. Previously, ice sheets were believed to respond very slowly to changes in climate – on scales of centuries or millennia. Most estimates of future increases in water from the ice sheets only considered the increased melting at the surface. Another effect considered was how increased melting of floating ice, like the Petermann Glacier and the Antarctic ice shelves, might allow the grounded ice to flow into the ocean faster. Now with the discovery of how melting water directly causes the grounded ice

at the Swiss Camp to flow faster, a new mechanism for faster response of ice sheets to climate change is being taken into account as scientists around the world redo their calculations.

With the new data collected this year, Zwally and his colleagues will be able to show how much faster the summer acceleration may be closer to the edge of the ice sheet. Also, small variations in the surface height detected in the GPS data may show how the ice sheet is lifted upward by the increase in basal meltwater during summer. Over future decades, as the melt may continue to increase and the ice speed up, the surface elevation should gradually get lower, which will cause the surface temperature to be even warmer.

Photo by: Dr. H. Jay Zwally



On the way to service the AWS at JAR2 in May 2003, the Nansen sled on the snowmobile Dr. Zwally was following broke through a snow-covered crevasse. Large crevasse fields are carefully mapped and avoided. Using mountaineering equipment for safety, the sled was unloaded and repacked to continue the traverse to JAR-2.

When Russ Huff and Dr. Cullen returned with the new GPS data from JAR-2 Dr. Zwally, who regretted not being with them, was preparing one of his famous sushi dinners. Using frozen salmon brought with him as checked airline baggage from Maryland, along with lobster tails, smoked salmon, and a beef filet, this was going to be another of his gourmet dinners prepared at less cost than a typical restaurant dinner on Government per diem. After a long days work, a fine dinner, a relaxing sauna, a run over the snow, all agreed life was good on the ice sheet before crawling into sleeping bags in their tents.

On Sunday everyone was back out in the field at JAR-1, 17 km (10.5 miles) from the Camp, reinstalling the AWS and GPS. Since this was in the middle of one of the 33-day operation periods of ICESat's lasers, Dr. Zwally was keeping in touch with the ICESat operations team back at Goddard. When he took out the Iridium satellite phone and announced he had to connect to a conference call at NASA, the accompanying writer from the New Yorker asked "Don't they know this is Sunday?" In the field, all days are working days, and as he sat by the snowmobile to reduce the wind noise,

talking to Ed Chang, ICESat operations Manager, he smiled as he thought about how the dedicated ICESat team worked around the clock as needed. All was well with ICESat, and since this operation period was selected to measure the ICESat elevation before the beginning of the melt season, it was an interesting coincidence that the ICESat pass over the Swiss Camp was on the day the melting started.

For more information about this research and the ICESat mission please go to these links:

<http://www.gsfc.nasa.gov/topstory/20020606greenland.html>
or
<http://icesat.gsfc.nasa.gov>

Safety Alerts

The Center receives information from the Government-Industry Data Exchange Program (GIDEP) concerning product recalls. In an effort to keep employees informed of recalls that may affect you at work and at home, Code 300 will provide alerts or recalls that have been issued by the Consumer Product Safety Commission (CPSC) along with web site links for retrieving further information on the recalls or alerts.

New Federal Web Site for Agency Recalls: <http://www.recalls.gov>

CPSC, SMC and Home Depot Announce Recall of Oscillating Fans.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04157.html>

CPSC, Echo Inc. Announce Recall of Gas-Powered Hand Tools.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04171.html>

CPSC, Basler Electric Co. and Lutron Electronics Announce Recall of Power Supply Units.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04161.html>

CPSC, Targus Announce Recall of International Plug Adapters.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04152.html>

What's Hidden Behind the "NASA Portal" on NASA.GOV?

By Rob Gutro

Time, patience and know how. Those are the three things that are behind adding information to the NASA.gov website. During two days of intensive training in June, nine Goddard employees learned what it's like to post stories and images to the "NASA portal" otherwise known as NASA.gov.

Ellie Trevarthen of the NASA portal training team came to Goddard from NASA's Jet Propulsion Laboratory in Pasadena, Calif., and led the day-long training sessions. She was assisted by Rachel Weintraub and Rani Chohan, who manage input to the portal from Goddard. Both Rachel and Rani are producers for NASA-TV, and you've likely seen space and Earth science video that they've produced on national television.

The NASA portal is the public's entryway into learning about NASA, and is a critical piece in the outreach plan. NASA Headquarters manages the portal, and is supported through the centers to input data and provide quality checks to ensure accuracy.

The nine Goddard employees, Tara Holby, Trusilla Steele, Lynn Jenner, Jason Townsend and Bill Steigerwald all from NASA Public Affairs; Rob Gutro and Mike Bettwy from NASA's Earth

Science News Team; Holli Riebeek of NASA's Earth Observatory; and Kathy Bender of the education:Special Project Initiatives (e:SPI), were all students in the classes.

Photo by: Rob Gutro



Trusilla Steele asks Rachel Weintraub, NASA portal guru, how to perform a function while creating a web page on the NASA.gov web site. Ellie Trevarthen instructs Kathy Bender in the background while Jason Townsend catches a breath!

Rob Gutro, Team Leader of NASA's Earth Science News Team, said "Writing the story and finding the images is half the battle. The process to input the material is complicated, but it's worth the time for a great presentation." The students found that it takes about 1-2 hours to create a story page and add in all the coding and the images. They were assured that it "gets easier as you keep doing it."

By the end of the second day, the students had created mock webpages and placed images in them. "You've all done well," instructor Ellie Trevarthen told the class. Rachel and Rani looked relieved as the classes ended and the students walked out with a new knowledge of how to populate the NASA portal. As the students were walking out of the class, they could have sworn they heard two big sighs of relief! ■

Employee Spotlight

By Tomeika Blackwell



Mansoor Ahmed has been a dedicated employee of NASA for over 21 years. His passion for Earth Science has allowed him to venture the classrooms of this country's senior leadership workshops, work with NASA's senior leadership members, as well as, international partners.

Ahmed began his track of excellence at the age of 15, when he and his family came to the United States and took residence in Bladensburg, Maryland. He received his bachelors in mechanical engineering at the University of Maryland, College Park and a master's degree in mechanical engineering at George Washington University, Washington D.C.

Ahmed started his career at Goddard Space Flight Center in 1982 as a contractor in the Thermal Engineering Branch. Here, he helped oversee the thermal design for Hubble science instruments. "I really enjoyed my experience at this branch. There was never a dull moment," said Ahmed. He later converted to a civil servant and was appointed lead for the thermal team for the Hubble mission.

Ahmed has spent most of his GSFC career in serving the Hubble program in different capacities. First, as the leader of the thermal team, then as a systems engineer for the HST Observatory Development Office and finally as the Hubble Flight Operations Manager.

Moving on from Hubble, he was appointed as the mission manager for the Compton Gamma Ray Observatory De-Orbit mission and then as the deputy project manager for the James Web Space Telescope. Ahmed was selected in the SES Career Development Program (SESCDP) class of 2002 and has spent the last two years completing the necessary training requirements and detail assignments required by the program.

The SESCDP allows an employee the opportunity to take educational courses at prestigious institutions and participate in details at other centers. The SESCDP permits employees to gain a wealth of knowledge and experience and prepares them for leadership positions within the Agency.

Ahmed has partaken in several details within the Agency. He was assigned to the Astronomy and Physics Division within the Office Space Science at Headquarters. Under the auspice of Dr. Ann Kinney, Ahmed worked diligently on developing the Science Roadmap for the Navigator Program.

From there, he went to Argentina, to work with the Argentina Space Agency, CONAE. Being a small space agency, Ahmed was able to participate in all facets of the agency operations, from the agency level budget development and justification to the flight hardware development. As CONAE was preparing a partnership with NASA on the Aquarius mission, Ahmed was able to help CONAE prepare for this partnership. "It was an extraordinary learning experience as I was able to learn from them and they were able to learn from me. My interest was to learn how to be a good international partner. I figured if you could live in their shoes for a while you can be a



Dr. Mansoor Ahmed

Photo by: Patizzo/293

better partner by understanding their limitations and political constraints," Ahmed said.

Recently Ahmed completed another detail at the Earth Science Enterprise at Headquarters. He was in charge of organizing the development and composition of the Enterprise Management handbook, documenting the processes, procedures and expected products in performing the enterprise business. This handbook would be beneficial to NASA's Headquarters and all centers that do business with Code Y. Ahmed said, "This project required a lot of dedication and coalition building. It was very important to get all the divisions within the enterprise on board and show how this handbook would be beneficial to all."

One of his favorite leadership courses he has participated in thus far was at the well-known Kennedy School of Government at Harvard University. "This was a great course. You really come out proud to be a civil servant. It gives you a better understanding of how the American government works and civil servants are here to serve the American public," Ahmed proclaimed.

Ahmed has completed his training requirements and is back at GSFC heading the Advanced Concepts Studies Office with in the Large Aperture Telescopes Program Office.

"NASA is extremely important to me and I have enjoyed every minute working at the Agency. NASA pushes and challenges their employees as well as aid in character building and self-esteem," Ahmed adds.

While at NASA, he has received the NASA Group Achievement Award, 2001; the GSFC Group Achievement Award, 1995; and the NASA Exceptional Service Medal, 1995. These accolades showcase his dedication, talent and commitment to NASA. He and his family reside in Glenn Dale, near the Goddard community. ■

2004 NASA PM Conference Team Recognition Ceremony

By Nancy Neal



Bottom Row (Left to Right) Julie Sullivan, Kim Tann, Tabitha Merchant, Trish Johnson, Jeanine Simpson, Jennifer Dickens, Colleen Rapp, Marge Rich, Diane Trakas, Sandy Adorney, Linnette Morales, John Baniszewski, Dorothy Perkins, Kevin Miller Back Row (Left to Right) Ed Hoffman, Shanta Arur, Jane Langan, Dwight Norwood, Sean O'Neil, Mark Wu, Dorothy Tiffany, Jeff Slade, Lynn Wyatt, Steve Xander, Walt Majerowicz, Jahi Warts

The 2004 NASA Project Management (PM) Conference Team held its award ceremony on June 14 in the Building 3 Auditorium. The team was presented with plaques honoring their role in the success of the conference.

The "Meeting the Project Management Challenge Conference" was held this past March. It was expected that about 200 – 300 people would partake in the conference but over 700 attendees participated from across the Agency and the contractor community. This event has helped to forge new alliances within and outside of NASA.

The recognition ceremony began with opening remarks from Bill Townsend, Deputy Center Director at Goddard. "One of the things I was most impressed was of course the attendance but more important was the breadth of the attendance. We had representation from all of the NASA centers. This was definitely a One NASA event. I do want to call special attention to Dorothy and Walt. Here you have a contractor and a civil servant working together." said Townsend.

Dorothy Tiffany, Structure and Evolution of the Universe Program Business Manager and Walt Majerowicz of Computer Science Corporation developed the conference.

Next, Dolly Perkins, Director of Flight Projects at GSFC had this to say. "One of the things I wanted to express is my pride. I am proud of Goddard that we are fostering entrepreneurship. I am proud of the number of people who came up to me to say what a good event this was. We have done something that has benefited the Agency."

In addition, Dr. Ed Hoffman, Director of NASA Academy of Program and Project Leadership, expressed his gratitude to the team. "I would like to express my sincere appreciation and thanks for your hard work and determination in making the first annual NASA PM Conference such a great success. The program organization and the seamless integration of speakers, participants and exhibits were demonstrative of your

outstanding event planning and execution skills. Equally commendable was your extraordinary effort in bringing such a wide variety of talented and experienced project managers to share their ideas and solutions to the challenges NASA is facing", he said.

The Project Management Conference was developed in an effort to meet the changing needs of project management. The conference was developed to allow an intensive examination of current trends and to provide a forum for knowledge sharing an exchange of lessons learned. By attracting attendees from all experience levels of civil service and contractor workforce, an important link was established between NASA's world class experts and our emerging leaders for tomorrow.

Specifically, the PM Conference wanted to:

- Enhance the understanding of the integration of the cost, schedule, risk, safety and technical aspects of projects
- Introduce the latest project management tools and techniques
- Provide a team building forum for learning
- Promote professionalism in project management
- Hear expert speakers from government and industry
- Address management implications of the Columbia Accident Investigation Board Report

Speakers from across NASA and industry discussed topics including: Meeting the Project Management Challenge, The New Exploration Initiative, New Initiatives in Project and Program Management, A Common Sense Approach to Project Management, Managing in Turbulent Times and much more.

The conference was such a success, that it has already has been categorized as the "First PM Conference." See everyone next year.■



New Employee Welcoming Board (NEWB)

Are you a New Employee in need of some assistance? Do you need help with all the paperwork or a map to find where all the buildings are?

Are you wondering how you can get to know other new employees on center? The New Employee Welcoming Board (NEWB) is here to help you with what you need. NEWB is a new committee that arose from the Applied Engineering and Technology Directorate's (AETD) interest in helping new employees integrate into the Goddard community. The committee is composed of new employees (less than 5 years) primarily from AETD, but also in different directorates, including 400 and 200. "We bring our past experiences and future hopes into the development of NEWB," said Betsy Pugel, one of the committee co-chairs.

In December 2003, Alda Simpson, AETD Deputy Director and Dan Krieger, Special Assistant to the Director of AETD, brought a small group of new employees together. The group met, first calling themselves the New Employee Committee (NEC). Although there were less than 10 members at that time, many of their exciting ideas centered on developing community among new employees with an informal, yet informative feel. From this, the New Employee Welcoming Board, and its acronym, NEWB, emerged. In March 2004, Alda Simpson retired and passed the baton to Bruce Butterworth, Deputy Director of Development and Planning who has continued AETD's strong support of the NEWB effort.

In five short months, NEWB has developed a website for on-line interaction and meeting, created a handbook entitled



NewB First Social Hour- (Front row from left) Rivers Lamb, Linnette Morales, Betsy Pugel, Oscar Hsu and Marcellus Proctor (second row from left) Enidia Santiago, Edwin Dove, Nat Gill and Russell Roder

Goddard 101, and developed a managerial checklist to aid in the pre-arrival, arrival and acclimation phases of the new employee. They also had social gatherings in and outside of work.

The Goddard 101 handbook is a user-friendly handbook designed to give quick access to information about the structure of NASA and GSFC. The handbook serves to broaden the understanding of the NASA community and to give information for simple day-to-day issues that the new employee may encounter at Goddard.

The NEWB website consists of two components: a public site and an intranet site. The public site is a source of general information for anyone interested in finding out about NEWB. The intranet site is a central location for all NEWB members to gain access to general documents, find out about NEWB organized events, and to interact with other NEWB members through the

discussion boards.

NEWB will hold a kickoff event on July 29th, 2004 during Celebrate Goddard week of events. This will include distributing information about NEWB from their booth on the mall as well as holding a "Build your own slingshot competition" between Buildings 6 and 11.

If you want to learn more about this group you can visit their website: <http://newb.gsfc.nasa.gov>, or stop by their booth at the Celebrate Goddard Event on July 29th, 2004. ■

Goddard Holds Warehouse Reutilization Clearance

By Trusilla Steele

Have you ever gotten rid of government property that still had some significant usage to it? The property is usually tagged EXCESS and is taken away to the Excess Warehouse (16W) at Goddard. There it sits waiting for reutilization from Goddard, or from other NASA centers, federal and state agencies or schools. If the property still remains after a period of time, the property becomes available for sale to the public.

The Property Management Branch, located in the Logistics Management Division (Code 230) is responsible for the planning and execution of the policies and services for the Center's equipment management, property disposal and contract property operations. Excess surplus of government property is kept in building 16W at Goddard for reutilization. Also the Property Management Branch provides excess equipment and furniture to organizations at Goddard who may not have the funding for the purchasing of new equipment.

Joyce Brooks, property disposal specialist and Property Disposal Team lead, Arthur Wade coordinated a three-day open warehouse in May 2004 in conjunction with support from their support contractor TRAX International (Code 239). The warehouse clearance was its first in 15 years to assist in finding new homes for excess government property. The open warehouse was an opportunity to welcome federal and state agencies, D.C. government and local schools as an effort to increase awareness, create networks and to clear warehouse space. In addition, Brooks collaborated with the General Service Administration (GSA) to have Property Disposal Specialists, Juanita Williams and Karen Somerville at Goddard for the three-day event. GSA's presence expedited the process of transferring property, eliminating the lengthy procedures and waiting period.

On the first day of the three-day open house, representatives from the Department of Corrections, the D.C. Library and some public schools were present to go shopping. Representatives were first briefed on the various items in the warehouse and given guidance on how to identify the items of interest.

Kevin Winston of Treasury Inspector General for Tax Administration claimed various electronic goods such as cell phones and palm pilots while in attendance of the first day of open warehouse. Winston thought the Goddard Open warehouse was very beneficial and looks forward to any future warehouse clearances. The D.C. Department of Corrections, (Lorton Correctional Complex) received communication equipment and several pieces of furniture.



Property Disposal Specialist, Joyce Brooks (right) assist Department of Correction representaves with donated items.

By the end of the three-day warehouse clearance, 627 peices of equipment and furniture, with and estimated value of \$1,237,107 were transferred to various agencies and schools. Brooks is currently working with GSA to coordinate future warehouse clearances.

For further information on the reutilization of excess government property contact, Joyce Brooks at Joyce.D.Brooks@nasa.gov or call on 6-5912. The Excess Warehouse (16W) is open to Center employees, Monday through Friday from 8 a.m. to 4 p.m.



D.C. representatives compares items to catalogue listing

NASA Presents Findings at the Joint Assembly Meeting

By Rob Gutro

From May 16th through the 19th, NASA scientists and public affairs officers attended the Joint Assembly Meeting (JAM) in Montreal, Canada and presented both Earth and Space science findings.

The JAM consisted of the American Geophysical Union (AGU), the Canadian Geophysical Union (SGU), The Society of Exploration Geophysicists (SEG), and Environmental and Engineering Geophysical Society (EEGS).

NASA's Earth Science News Team coordinated all of NASA's Earth and Space news to develop a "tip sheet" for reporters who attended the conference, to let them know of newsworthy presentations and press conferences. For some of the highlights, see: <http://www.gsfc.nasa.gov/news-release/releases/2004/n04-000.htm>

NASA had several press conferences, including a well attended Press Conference about the forthcoming launch of the Aura satellite. Phil DeCola of NASA Headquarters, John Gille of the National Center for Atmospheric Research, Joe Waters and Mike Gunson, both of NASA's Jet Propulsion Laboratory (JPL), and Pieternel Levelt, of KNMI, the Netherlands, took part in the press conference.

The press conference, titled "NASA to Put an Aura Around Earth to Understand the Sky" was created to generate interest among the news community before the satellite's launch in June. Read about the press conference at: <http://www.gsfc.nasa.gov/topstory/2004/0517aura.html>

NASA's next generation Earth-observing satellite, Aura, will supply the most complete information yet on the health of Earth's atmosphere, once it is launched in June 2004. This satellite will help scientists understand how our climate is affected by changes in the atmosphere, what the processes of controlling air quality as well as track whether our ozone layer is recovering as predicted. For more information, go to: www.aura.gsfc.nasa.gov.

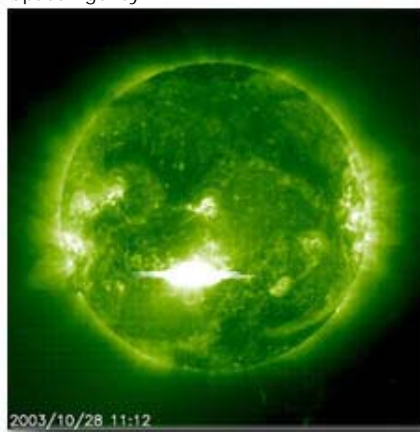
Each attendee was provided with an information package about Aura, including fact sheets and the Aura Science Writer's Guide (which is available on line at the NASA's Earth Observatory website, under the "Newsroom" and "Media Resources." You can find it at: http://earthobservatory.nasa.gov/Newsroom/MediaResources/Aura_SW_Guide.pdf).

The "Aura Science Writer's Workshop: A Reporter Crash Course in Atmospheric Chemistry," was a one hour long instructive session. It was hosted by 3 scientists, and gave reporters an "Atmospheric Chemistry 101" crash course, so they could better understand the atmospheric chemistry and processes that NASA's Aura satellite will study. It also played to a packed room. Mark Schoeberl and Anne Douglass of Goddard presented basics on climate change and low level ozone and Mike Gunson from NASA JPL talked about upper level ozone.

NASA invited media and science writers to a special press conference that included an overview of an extraordinary period

of violent solar activity in fall 2003. An overview presentation was made by Dr. Nat Gopalswamy of Goddard. Other scientists on the press conference panel included: Dr. Thomas Immel of

Photo Credit: NASA and the European Space Agency



A false-color image of an X-17 solar flare on October 28, 2003, made with SOHO's Extreme ultraviolet Imaging Telescope (EIT)

University of California, Berkeley; Dr. Thomas Zurbuchen of University of Michigan; Dr. Paal Brekke of the European Space Agency; and Dr. Justin Kasper of the Massachusetts Institute of Technology. For more information about the Solar Press Conference, visit: <http://www.gsfc.nasa.gov/topstory/2004/0519solarstorm.html>

One of the press releases at the conference featured the work of Katherine Nazarova, a researcher at NASA Goddard Space Flight Center (GSFC) who is coordinated with Jonathan Glen from the USGS. NASA and the United States Geological Survey (USGS) are teaming up to create one of the most complete databases of magnetic properties of Earth's rocks ever assembled. The complete story can be found at: <http://www.gsfc.nasa.gov/topstory/2004/0517magnet.html>

Another press release from the conference was called "NASA's Terra Satellite Tracks Global Pollution" The information focused on how Terra satellite data are adding to our understanding of how pollution spreads around the globe. The information will help scientists protect and understand the Earth. NASA funded scientists from the National Center for Atmospheric Research (NCAR), Boulder, Colo., presented two studies focusing on global air pollution. For the full story, see: <http://www.gsfc.nasa.gov/topstory/2004/0517mopitt.html>

Public affairs support was provided by several NASA centers. Lynn Chandler of Goddard Public Affairs, Krishna Ramanujan and Rob Gutro of the Earth Science News Team, Gretchen Cook-Anderson of NASA Headquarters public affairs, and Alan Buis of NASA JPL Public Affairs supported the press conference and writer's workshop, as well as the press releases.

At this writing, all of the press releases and press conferences presented at the Joint Assembly meeting received media coverage in various outlets around the world. ■

Scientist Honored with Goddard's Highest Space Science Award

By Jim Sahli

An English-born NASA scientist who has been studying the Sun for 25 years has received the top space science award at Goddard. Dr. Brian Dennis, a member of the Solar Physics Branch (Code 682) in Goddard's Laboratory for Astronomy and Solar Physics, was recently awarded Goddard's annual John C. Lindsay Award for Space Science for the "successful development, construction, launch and scientific operation of the Reuven Ramaty High-Energy Solar Spectroscopic Imager (RHESSI)."

Dr. Dennis has served as Mission Scientist for RHESSI (<http://hesperia.gsfc.nasa.gov/hessi>) since its inception and led the Goddard RHESSI team in all phases of the project, from instrument development through testing, launch, data analysis and scientific interpretation. He has been at Goddard since 1967.

Since its launch in February 2002, the spacecraft has been very successful observing solar flares, which are capable of releasing as much energy as a billion one-megaton nuclear bombs. In its first two years on orbit, RHESSI observed over 10,000 flares. In August 2003, the NASA Senior Review Panel rated the RHESSI program as "clearly superior" with compelling science and relevance to the Sun Earth Connection program."

"I feel honored to receive this award," said Dr. Dennis. "To be recognized by my peers is great," said the solar scientist. Dr. Dennis has spoken internationally and published extensively on the RHESSI results. Previously, he was the Principal Investigator of the Hard X-Ray Burst Spectrometer aboard the Solar Maximum Mission and of the X-ray spectrometers aboard the Argentinean Satellite de Aplicaciones Cientificas-B.

"We couldn't be on orbit at a better time. The solar storm activity of last fall has given us tremendous amounts of data. I often say it is like drinking water from a hose pipe. The data are continuously flowing at a high rate. Last fall, there were an unprecedented 12 X-class flares in the space of only three weeks, including the largest flare ever recorded from space."

When asked about the significance of studying the Sun, Dr. Dennis said "studying the Sun is critical, particularly now in light of our new exploration initiative to explore the Moon, Mars and beyond. We need to understand how the Sun affects us and how we can predict solar activity that could pose a threat to astronauts in space. Plus, it is an international science so



Left: Deputy Center Director, Bill Townsend and Lindsay awardee Dr. Brian Dennis

you get to travel and work with fellow scientists from all over the world."

Dr. Dennis earned a bachelor of science degree in physics from the University of Leeds, England in 1961. He got a doctorate in Cosmic Ray Physics from the same university in 1964. Over his career he has authored or co-authored over 100 papers in scientific publications.

When Dr. Dennis is not at work studying the Sun, he is reminiscing about his days playing soccer in the Goddard Soccer League. He is the father of a daughter and two sons. Another pastime is crossword puzzles. "I am addicted to crosswords. Love to do them," said Dennis.

The John C. Lindsay Award has celebrated this type of cutting-edge thinking since 1966. It was named in honor of Dr. John C. Lindsay, who contributed greatly to exploration of the Sun via satellite and rocket-borne instruments and who founded the Orbiting Solar Observatory Project. The award "recognizes the Goddard employee who best exhibits the qualities of broad scientific accomplishments in the area of Space Science."

Scientists at Goddard nominate each other, based on what they think is the best real science that was done. The nominations are judged by a panel of previous Lindsay winners. ■

Goddard Researcher Wins Popular Writing Award

By Bill Steigerwald



Dr. Kenneth Phillips displays his AAS 2004 Award for Popular Writing on Solar Physics

Dr. Kenneth Phillips won the American Astronomical Society's 2004 Award for Popular Writing on Solar Physics, along with his colleague, Dr. Bhola Dwivedi of the Banaras State University, India. Phillips, who is "greatly honored" to receive the award, is a National Research Council Senior Research Associate affiliated with the RHESSI project at Goddard.

The award was presented May 31 at the American Astronomical Society's (AAS) meeting in Denver, Colo., for the article "Paradox of the Sun's Hot Corona," which Phillips co-authored with Dwivedi. The article was published twice by Scientific American magazine, first in June 2001 and again in October 2003 for a special edition "New Light on the Solar System".

The article explores the mystery of the Sun's hot outer atmosphere, or corona, which is many times hotter than the Sun's visible surface. The apparent paradox is "...as if you got warmer the further you walked away from a fireplace," according to the article. Since the corona is permeated by magnetic fields, researchers suspect the release of magnetic energy may heat it up, but the exact mechanism remains unknown.

The article explains technical phenomena like the dynamics of solar magnetic and electric fields in an engaging and accessible manner. This follows from Phillips' rule of thumb when writing for a popular audience: "Don't assume that people know the jargon. Astronomy has a long legacy, and as a result, astronomers use language ordinary people don't." The AAS award thanks the authors "for their effort in educating the public about contemporary scientific studies of the Sun and heliosphere."

"I got involved in the subject matter of the article through eclipse expeditions in 1998 (Caribbean), 1999 (Bulgaria) and 2001 (Zambia) with a CCD camera instrument which images the white-light corona with a fast cadence (40 frames per second)," said Phillips. "The object of this instrument was to look for oscillations which would point to magnetic wave heating of the corona (the alternative hypothesis is heating by numerous "nano-flares" or tiny releases of magnetic energy)."

Phillips, a citizen of the United Kingdom, became interested in solar astronomy as a schoolboy, when he projected the Sun's image through a telescope to observe sunspots. "I never let go of the subject," he says. He is now with the Ramaty High Energy Solar Spectroscopic Imager (RHESSI) project at Goddard, which makes observations of the high-energy radiation emitted by enormous explosions in the corona called solar flares.

Magnetic energy is also implicated as the power source of solar flares, but "the mechanism that drives them is unknown," says Phillips. "Something very dramatic must happen on a local scale. It's a fascinating area to jump into."

Phillips has written several popular articles in the UK magazine "Astronomy Now," and a semi-popular book "Guide to the Sun," published in 1992 and again in 1997 by the Cambridge University Press (CUP). He co-authored a brochure to guide women who wished to enter astronomy with Dr. Helen Mason of Cambridge University, which was published in 1992 for the UK Royal Astronomical Society. Currently, he is writing a book for specialists on Ultraviolet and X-ray solar astronomy with Dr. Uri Feldman of the Naval Research Laboratory, also to be published by CUP, around the year 2006.

For more about the award, refer to:

<http://cfa-www.harvard.edu/~vanballe/SPD/> ■

Hands-Ons Learning (cont'd)

in that students were able to get "hands-on" experience in the use of a remote observational platform to conduct scientific research."

"It's real science.. It's kids going out there doing what scientist do and not just sitting in a classroom reading a textbook" This is the Best thing I've done in 20 years of teaching – Rose Hotchkiss, RSESTeP, Weeksville Elementary, NC.

"The students are really excited because our mission has really aligned with one of NASA's" – Dee McLellan, Meadow Creek Christian School, MN.

"This is a GREAT opportunity for the Radio Control Community to show its stuff. What a great way to get our youth involved into aviation and science and not the computer screend at home with all the games that are out today. Kist the fact that these kids are interested in after school activities blowas my mind. I haven't seen that kind of curiosity in a long time. – Michael Beckman, Pilot, President of Hamburg Flyer's R/C Club, MI.

"I think this trip has had an impact on me. This trip made me want to rethink what I want to do for a career. I am now starting to think I want to work for NASA as a scientist for remote sensing and radio telemetry. – 7th Grade student, St. Hughs Elementary, Monitoring the Diverse Ecosystems of the Chesapeake Bay.

Additionally, Two Remote Sensing Science Clubs have been started as a direct result of participation in the RSESTeP program.

NASA's Remote Sensing Earth Science Teacher Program successfully has been proven putting NASA science and technologies into the hands of teachers and student and engaging students in public in NASA research, using AS Only NASA can satellite, can inspire the next generation of Explorers to think about pursuing careers in Math, Science and Technology. ■

2004 Technology Exposition

By Tara Holby

On May 27, the Information Services Division (ISD), Code 290 in conjunction with the Federal Business Council, Inc., hosted the NASA Goddard Technology Exposition. The approximately 700 people who attended the expo were not disappointed. This event showcased an extensive range of current and new technologies from more than 30 different exhibitors. The goal of the Tech Expo was to introduce the GSFC community to new and useful technologies that may potentially advance the Center's mission, technological programs and initiatives. The Tech Expo also brought to the Center knowledgeable experts in the information technology field to explain how new and emerging technologies can be applied to solve work-related problems.

Code 290 utilized the Tech Expo as a forum to display the many products and services it provides to the GSFC community, such as business software applications and website development, telecommunication services, graphics



ODIN Tech Expo Exhibit



Code 290 Tech Expo Exhibit

and printing, and library services. Other organizations, such as Langley Research Center's Scientific and Technical Information (STI) Program Office, participated in the expo in order to address its various constituents' technological needs. In addition, the National Federation of the Blind was there to display assistive technology for employees with disabilities.

The Center Network Environment (CNE) project, which provides network services for the Greenbelt and Wallops user communities, participated in the Tech Expo. CNE staff was on hand to explain the CNE's services. Kurt Bruhnke, CNE computer engineer said, "The Tech Expo was a good setting to interact with the customers and users. It was also a great opportunity to hear their comments on the services they would like the CNE project to provide in the future."

The ODIN project also was on hand to demonstrate the latest equipment available under the new contract; for example, the

PDA2 seat, which is a Blackberry-type PDA that includes cell phone, pager, e-mail, and calendar capabilities. Furthermore, visitors were given the opportunity for hands-on interaction with the new tablet PC, which is very compact, converts handwritten notes to text, and includes a voice recognition feature. ODIN representative, Sharon Helms, explained that the Tech Expo provides an opportunity for ODIN to network with the customer/user community and to let them know about new services and seats offered under the contract.

In addition, the Tech Expo showcased the latest in high-speed audio and video recorders, amazing printers with dramatic colors and precision, and impressive 3D visualizations using LCD and plasma displays. The MPC Computers vendor demonstrated a sleek laptop with an innovative biometric fingerprint scanner for security. Interactive Touchscreen Solutions, Inc. educated visitors about the navigation system developed for Bldg. 33. The system, entitled Navigo System, provided visitors with current information at the touch of a finger.

With the easy to use touch screen interface, visitors instantly identified the locations of employees, rooms, and other services.

The visitors to the expo enjoyed light refreshments as well as opportunities for networking with a variety of vendors and GSFC employees. Live demonstrations and hands-on interaction engaged the visitors and vendors alike. After reflecting on the Tech Expo, Education Specialist, Dr. Antoinette Wells, said, "There was an excellent display of essential technology to support the creation and completion of many tasks." Echoing this view, Alison Mc Nally, Associate Director, stated, "The Information Services Division orchestrated an impressive display and an excellent showcase for some of the most cutting edge technologies that are currently available to potentially increase the productivity of the Center. Congratulations to Code 290 for organizing an outstanding Tech Expo event."

The next Tech Expo will be held on November 18, 2004. ■

Goddard in the News

Photo Credit: NASA/GSFC, SeaWiFS Project



The lake-effect is particularly clear in this Sea-viewing Wide field-of-view Sensor (SeaWiFS) true-color image of the North American Great Lakes region, acquired Dec 5, 2000. Notice the distinct cloud plumes that develop off Lakes Superior and Michigan as cold, northwesterly winds blow over the relatively warm waters.

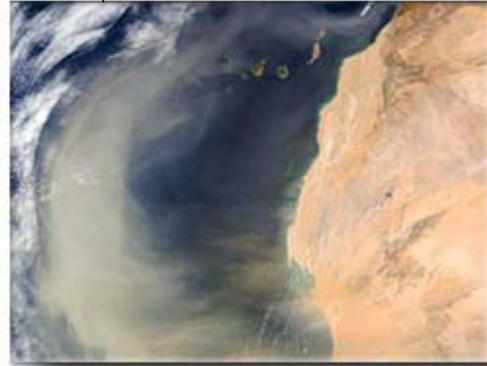
Snow Serpent (May/June 2004)

Halverson discusses the science behind lake-effect snow, one of the greatest snow-producing machines on Earth, that can bury one community under several feet of the white stuff in under 24 hours, while leaving towns only a few miles away unscathed!

Out of Africa (May/June 2004)

Although we often think of rain or snow when we hear the word "storm," another important type of storm often brews over the barren landscape of North Africa. Here, massive storms of dust form and then travel thousands of miles, influencing everything from hurricane development to the spread of disease.

Photo Credit: NASA/GSFC, MODIS Rapid Response Team



An intense African dust storm sent a massive dust plume northwestward over the Atlantic Ocean on Mar 2003. In this true-color scene, acquired by the Moderate Resolution Imaging Spectroradiometer (MODIS) aboard NASA's Terra satellite, the thick dust plume (light brown) can be seen blowing westward and then routed northward by strong southerly winds.

MESSENGER (cont'd)

hundreds of miles. Between the craters lie extensive plains with smooth surfaces, perhaps indicating early volcanic activity. Radar images of the polar regions show that the permanently-shadowed interiors of large craters there are highly reflective at radar wavelengths - a behavior that may indicate the presence of ice.

"Both the XRS and GRNS instruments are there to produce geochemical maps of the surface of Mercury," said Dr. Jacob Trombka, MESSENGER Co-Investigator. "These global maps give us the context to learn of the dynamics and evolution of the planetary bodies. These chemical signatures and their ratios hold the secret to understanding these processes. However, no one experiment can give us all the answers, it is the interaction of the all data from the various instruments that will yield the answers that we are looking for."

MESSENGER consists of the following instruments to help scientists answer key scientific questions:

Magnetometer (MAG): A shared development between Goddard and the Johns Hopkins University Applied Physics Laboratory (JHU/APL), the MAG maps Mercury's global and possibly crustal magnetic field and determines its origin. The MAG also measures the interaction of Mercury with the solar wind.

Gamma-Ray Neutron Spectrometer (GRNS): Developed by JHU/APL measures surface elements including polar materials.

X-ray Spectrometer (XRS): Developed by JHU/APL, the XRS measures Mercury's crust.

Mercury Laser Altimeter (MLA): Developed by Goddard, the MLA produces highly accurate measurements of Mercury's topography (surface features).

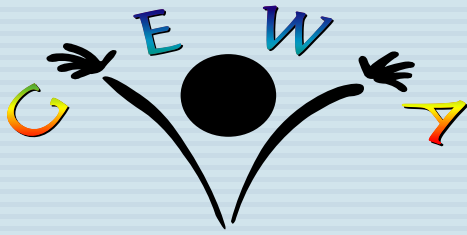
Mercury Dual Imaging System (MDIS): Provided by the JHU/APL, the MDIS maps the landforms, surface variations, and topography from stereo imaging.

Mercury Atmospheric and Surface Composition Spectrometer (MASCS): Provided by the University of Colorado Laboratory for Atmospheric and Space Physics, the MASCS measures the abundances of atmospheric gasses and detect minerals in surface materials.

Energetic Particle and Plasma Spectrometer (EPPS): Provided by JHU/APL, EPPS measures the charged particles within and surrounding Mercury's magnetosphere.

Radio Science (RS): Built and designed by JHU/APL, this instrument measures Mercury's mass distribution.

More information about this mission can be found at the following Internet address: <http://messenger.jhuapl.edu/>



GEWA Activities

Goddard Dance Club

New classes in basic and intermediate Ballroom Dancing "Touch Dancing" will be offered by the Goddard Dance Club in Building 8 Auditorium. No partner is required. Our basic instruction class in the Tango and Triple Swing will begin Wednesday, July 7, 2004 at 7:30 pm in the Building 8 Auditorium. Intermediate classes in Samba and Foxtrot will begin on Monday, July 5th, and classes in Rumba and Samba beginning in August. Beginner classes are also offered on Sundays at 6 pm, followed by a two-hour dance practice from 7-9 pm. The cost for these bi-monthly classes is \$60 per person. GSFC Civil Servants can take advantage of the Spring Special with a free dance session. The Club's Pot Luck Suppers (July 17, July 31 and August 18) are Saturday night dinner dances at \$5 per person for members. For further information, call Billie Byard on 301-429-2581 or 410-757-9433. We welcome you to join the fun and make new friends. <http://gewa.gsfc.nasa.gov/clubs/dance/goddard.htm>

NASA Day at King's Dominion

NASA Day at King's Dominion is this Saturday, 7/10 and it's an excellent deal at \$34/adult and \$28/youth (ages 3-12) since it includes a feast of chicken, hot dogs, hamburgers, salads, ice cream, and sodas as well as park admission. Tickets sold at the GEWA store.

GEWA Special Events for 2004

TBA - Free Lunchtime Concerts - with Guest Chefs and Special Sales throughout the year
July 10 - NASA Day at King's Dominion

August 29 - NASA Day at Six Flags/Largo

September 30 - EOY Shrimp Feast

TBD - Fall Party?

October 1 - GEWA Appreciation Dinner

November 9 - 14th Annual Fall Crafts Fair

December 9 - Toy Wrap for Children's Holiday Party

December 11 - Children's Holiday Party

December 13 - Toy Liquidation Sale

Please go to <http://gewa.gsfc.nasa.gov/SpecEvents/> for more information.

Goddard Bible Club

The Goddard Bible Club meets on Tuesdays at noon in building 21, room 242. We have both speakers and videos, details may be found in Dateline. You are welcome to eat your lunch during the meeting. If you have questions, please call Bill 6-7756.

GEWA Art of Living Club Offers Guided Meditation

Come and feel more peaceful and less stressed; be more focused and energetic - no training required! Our mental and emotional state affects those around us, and by culturing a state of mental stillness we bring that peacefulness into our environment, one mind at a time. There are some things that effort cannot accomplish. Meditation is the delicate art of doing nothing - letting go of everything and being who you are. It gives your mind such a wonderful rest. Come get a charge, and help make Goddard a better place to work. We meet in Bldg. 23, Rm S300. On Monday we meet at 12:15 pm, and on Wednesday we meet at 12:00 noon. Please call Bill Hayden at 6-4267 or Chris Smythe-Macaulay at 6-2490 if you have any questions. For new folks, we will be there 5 minutes early for a quick orientation.

Announcements

AURA Web Cast

The Aura spacecraft is scheduled to launch on July 10th via a Delta II launch vehicle from Vandenberg Air Force Base in California. Be a part of the live web cast on launch day from 5:00 - 7:00 a.m. EDT. Join key NASA project and science personnel who have conceived, designed and built the Aura spacecraft for its mission to study the Earth's atmosphere. The web cast will feature segments live from the launch site at Vandenberg AFB, the Earth Observing System Operations Center at GSFC, and students attending an overnight space camp at Northrop Grumman Space Technologies in Redondo Beach, CA, the contractors who built the Aura spacecraft. To participate in the web cast, visit <http://spioffice.gsfc.nasa.gov/aura>

Community Day Volunteers Needed

Here's your chance to be apart of the team! The Office of Public Affairs needs volunteers to help staff Goddard's Community Day Event on July 31, 2004 from 10:00 a.m. - 6:00 p.m. Please don't hesitate, call or email today! To volunteer or for more information contact, Leslee Cork X6-8955 or via e-mail at Leslee.M.Cork@nasa.gov

2004 Awards of Excellence Call for Nominations

Submissions for this year's Awards of Excellence are being accepted through Friday, July 16, 2004. The ceremony has been scheduled for October 6, 2004.

Moe I. Schneebaum Memorial Award Call For Nominations

Nominations are being accepted for this year's Moe I. Schneebaum Memorial award for excellence in engineering. The deadline for submissions is July 30, 2004. The ceremony is scheduled for September 13, 2004.

2005 NASA Honor Awards Call for Nominations

Nominations are now being accepted for the 2005 NASA Honor Awards Call. A Centerwide announcement is forthcoming. Nominations are due NLT Friday, August 20, 2004.

Entertainers Needed

The Entertainment Committee for this year's Celebrate Goddard festivities and Community Day are looking for talented singers, dancers, musicians or anyone with a unique talent to volunteer to be a part of the festivities. Celebrate Goddard will have entertainment events **on Tuesday, July 27** between 10 a.m. to 2 p.m., and **on Thursday, July 29** between 10 a.m. to 1 p.m. and Community Day will take place on **Saturday, July 31** from 10 a.m. to 6 p.m. The events will be occurring on the Goddard Mall. Acts/performances should be approximately 20 minutes in length. Interested performers/individuals should contact Gerald Tiqui, 301-286-9461 for Celebrate Goddard festivities. Those

interested in performing at Community Day should contact Nancy Neal, 301-286-0039.

Goddard Referral Service

Looking for information on issues such as adult care, child care, legal or financial assistance, health & wellness, or education, but don't know where to start? Let Goddard's Referral Service do the work for you! This service includes a website as well as Specialists available 24 hours a day/7 days a week - whenever the need arises. Check it out at: www.worklife4you.com, and enter the following information: Agency Code: GSFC; password: last name + last 4 digits of SSN. Don't worry - the site is very secure & you're information remains confidential. Please contact Khrista White at X6-9059, khrista.n.white@nasa.gov, or <http://ohr.gsfc.nasa.gov/family/home.htm> for assistance.

Register for the NASA Aeronautics and Space Database

The NASA Aeronautics and Space Database is the Scientific and Technical Information (STI) Programs new repository for documents relevant to NASA's mission. From your own workstation, you have free access to over 3.5 million metadata records that include citations and abstracts of NASA journal articles, technical reports, conference papers and proceedings, preprints, theses, and other forms of STI. Content ranges from the early NACA publications to today's latest research. Innovative features include full-text images in PDF format, custom display formats, saved search capability, and on-line document and video purchase. Register for free at www.sti.nasa.gov.

Wanted: Band & Singers for free Lunchtime Concerts

Singers and bands are wanted to entertain GSFC employees for free at Lunchtime Concerts sponsored by the Goddard Employees Welfare Association (GEWA) from now through September. All performers receive an opportunity to showcase their talents and, as a token of appreciation for their services, a free lunch of their choice at the GSFC Building 21, Cafeteria. For more information, please contact Cindi Jones-Savoy, at x6-7149, email: Cynthia.A.Jones-Savoy@nasa.gov, or Tasha Davis, at x6-3243, email: Tasha.L.Davis@nasa.gov.

Dateline Newsletter

The Dateline Newsletter is a daily bulletin that highlights current GSFC events and announcements. The newsletter is e-mailed daily to subscribers only. To subscribe to Dateline send an e-mail message to Majordomo@listserv.gsfc.nasa.gov in the text area type subscribe dateline_daily_copy and within a few days you should start receiving dateline. To submit announcements direct e-mails to dateline@listserv.gsfc.nasa.gov For more information, contact Tara Holby at x6-8955.

Events

Can We Talk?

The Can We Talk Session scheduled for **Thursday, July 8** has been cancelled. The Can We Talk session will be on Thursday, **August 12**. To sign up, visit the Goddard Internal home page at <http://internal.gsfc.nasa.gov/canwetalk.cfm> or call the Office of Public Affairs at x6-8955.

Technology Education and Assessment Seminars (TEAS)

Atif Memon, University of Maryland, will discuss "Testing Event-based Software."

When/Where: Tuesday, July 13 at the Goddard Visitor Center from 1:30 - 3:30 p.m.

Property Management Branch - Auction Sale

Property Management Branch will hold an auction sale. Auction items include Misc. ADP Equipment; Misc. Testing & Electronic Equipment; Mainframe System; and other misc. items

When/Where: Thursday, July 22 in Bldg. 16W Excess Whse at 10 a.m. Inspection will be from 8 a.m. to 9:45 a.m.

For more information, visit: <http://sales.gsfc.nasa.gov> or call Sales Hotline (301) 286-5517; contacts: Jackie Cooper (301) 286-3976, Art Wade (301) 286-8740 or Dorothy Williams (301) 286-9625.

Women's Networking Luncheons

The Women's Advisory Committee (WAC) would like to invite all Goddard women (civil servant and contractor) to WAC Women's Networking Luncheons. The luncheons provide an opportunity to meet and greet new people, as well as, share ideas and experiences. More importantly, the luncheons offer Goddard women an opportunity to relax and enjoy regular social time with other women.

The biweekly luncheons will take place the second and fourth Tuesday of every month, beginning at 11:30 a.m. The luncheon on the second Tuesday of the month will be an on site event in the Bldg. 1 cafeteria, while the luncheon on the fourth Tuesday of the month will be an off site event, location changes every month. For updated information about luncheon locations, visit the WAC web site at <http://eeo.gsfc.nasa.gov/wac/> and click on upcoming events. There is no commitment involved at all, participants can come when they can and stay as long as they want.

MAC Tech Fair

This event highlights Mac OS X solutions that are available to the Macintosh, Windows, and UNIX communities. The event is sponsored by Apple Computer and presented by the GSFC Mac Users Group (MUG). This event is free to exhibitors and attendees and light refreshments will be provided.

When/Where: Wednesday, July 14 from 9:30 a.m. – 2:00 p.m. in the Bldg. 8 Aud.

For more information, contact Tim Sauerwein at: Timothy.A.Sauerwein@nasa.gov or x6-4738.

Upcoming Training

IDP Workshops

In the IDP Workshop for Supervisors and the IDP Workshop for Employees, many questions have come up around the IDP process. Under OHR's career development page, there is a list of Frequently Asked Questions (FAQs) that have come from both supervisors and employees. These questions have been answered by OHR staff and legal counsel. Please take time to review these FAQs at <http://ohr.gsfc.nasa.gov/DevGuide/idp.htm>. Questions? Please contact Tracey White. To view all of the upcoming training courses, visit: <http://ohr.gsfc.nasa.gov/DevGuide/Calendar/home.htm>

Resume Writing Training Classes

All the classes scheduled for Greenbelt will be held in building 1 room 006.

| | |
|---------|--------------------|
| July 15 | 10:00 - 11:30 a.m. |
| Sept 15 | 1:00 - 2:30 p.m. |

Classes will also be offered at WFF in the MEC room 208. The dates and times are as follows:

| | |
|-----------|-------------------|
| August 19 | 9:00 - 10:30 a.m. |
|-----------|-------------------|

If you need any additional information, please contact Sherri Tepper 6-5170. No training form required.

One-On-One Career Coaching...

Whether you are contemplating a career change, in need of assistance with resume writing, interviewing techniques, or trying to develop an Individual Development Plan (IDP), a career coach can help. To schedule a confidential one-on-one appointment, contact Tracey White at x6-7823. This service is provided to civil servants only.

Second Annual NASA Project Management Conference

Project team members interested in learning new concepts during a full 2-days of high-quality, high-intensity professional interaction. Teach, learn, and network about Project Management. This conference includes:

- Major keynote speakers daily
- Highly informative speaker sessions
- Thought-provoking case studies
- Engaging panel discussions
- Innovative project management tool demonstrations

Conference Registration will open in early fall

When/Where: March 22-23, 2005 at the University of Maryland University College Inn and Conference Center College Park, MD

Conference website (pmchallenge.gsfc.nasa.gov) still has the presentations from the 2004 Conference. Check back soon for the new 2005 website.

Contact Conference Chairpersons: Dorothy J. Tiffany - NASA GSFC 301-386-5917 Walt Majerowicz, PMP – CSC 301-286-5622

To add names to our mailing list: Sandy Adorney 301-286-3413

Think BIG! The NASA GSFC/WFF Chapter of Blacks in Government (BIG) welcomes new members and visitors to join us for our monthly General Meeting. Meetings are held **the third Wednesday of each month** from 11:30 a.m. – 1p.m. Individuals who are interested in attending our Membership Meetings should contact Larry Phillips, Chapter President at (6-6035 or 6-4401) or Anetra Tucker (6-9708) to have his/her name added onto the mailing list.

For more information, please contact the following BIG Members:

Joyce Brooks, BIG GSFC/WFF 1st Vice President, at GSFC, 6-5912
Regina Waters, BIG GSFC/WFF 2nd Vice President, at Wallops Flight Facility, 7-1337
Willis Jenkins, BIG GSFC/WFF Executive Vice President, at NASA Headquarters, (202) 358-1285