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Fall Kickoffs for Goddard's Newest Explorer Schools

By Dewayne Washington

During Sept. and Oct., students at schools in Maryland, New Hampshire, New York, Delaware, and Pennsylvania were welcomed into the NASA Explorer School (NES) Program with an official kickoff event featuring Goddard's top management personnel.

Goddard education personnel were also busy making revisits to Goddard's eight other NES locations to educate and inspire our next generation. According to Goddard's Education Officer, Dr. Robert Gabrys, "Our staff is committed to provide, if requested, 60 days of assistance within the classroom this school year."

The kickoffs are a part of the continuing agency-wide effort that involves every NASA Center Director and members of the astronaut corps making visits to NES locations across the country. The up-



Dr. Weiler's presentation included Hubble images

close and personal touch provides a unique forum to explain the new exploration initiatives being undertaken by NASA. The visits are also meant to impart to students the importance of education and to inspire them to become a part of the next generation of explorers.

The fall 2004 visits began for Goddard at Eastern Middle School in Silver Spring, Md. on Sept. 22. Dr. Ed Weiler presented to an audience of students, teachers and education administrators information about the recent successes of NASA's robotic exploration of Mars. He spoke of his desire as a child to explore the night sky with his telescope and of a desire to become a part of the NASA family. "We figure the first person to walk on Mars is probably in Middle School right now," he told the students. "If you study hard it could be you," he concluded.

NASA astronaut Patrick Forrester followed the Center Director talking about what it takes for mission success and the importance of teamwork. With the aide of video images Forrester relived his mission aboard Space Shuttle Discovery on STS-105, which traveled to the International Space Station in August 2001.

Goddard's newly appointed Deputy Director, Christopher Scolese and Astronaut, Kenneth Ham officially welcomed the students of Mascoma Valley School District, in Canaan,

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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

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Reminder: One NASA Leader Led Workshop is Wed. Nov 3 at 9 a.m. in the Bldg. 3 Goett Auditorium

Editor: Trusilla Steele Click here to view previous issues of Goddard News



Goddard's Own Next Generation Explorers Reaching for the Stars

By Maureen Madden



Renea LaRock

Can you grow up on a farm and end up an Astronaut in outer space? LaRock Renea thinks so and she is on the right track to reach for her dreams. She grew up in Upstate New York, close to the Canadian boarder, and spent a lot of time on her grandparent's dairy farm. Her parents

loved to watch NOVA on PBS and encouraged Renea to watch all the shows. Her parents believed in giving their daughter a strong science and math background. They would give her science and chemistry kits for Christmas and even bought her an inexpensive telescope so she could look at the moon.

It might have been when she watched the coverage of the Challenger accident when she first thought of working for NASA and becoming an Astronaut. While in a ninth grade career development course, she gave a report on becoming an Astronaut when she grew up. Her classmates made fun of her and told her that was not a realistic possibility.

When she shared her dream with her family she received "true support" from them. Her mom helped her find out what was required to become an Astronaut, what degrees and experiences Astronauts needed. She helped to get her the applications to the colleges and the forms for the financial aid. Her family was not well off and at times Renea had to work 40-50 hours a week while going to school to get her BS in Aerospace Engineering from George Washington University.

She was so excited when she found out she was selected for a Cooperative Education Program (CO-OP) position at Goddard that she vividly remembers the day and her conversation with her mother when she called to share the news.

Today, Renea works in code 552, the Cryogenic Branch and plans to start her Masters Degree this January. She is highly motivated and wants to have an important role at Goddard. Her ultimate goal is to become an Astronaut and she plans to get her pilots license to help with her qualifications. She's on her way to making her dream come true and many will say "I knew Renea when..."

By Dr. Aprille Ericsson

"Growing up, I was the tomboy with braces who liked science and math. I was never part of the popular crowds. I was always well liked, but I was never the popular girl. Right now, I am completely taken back by the fact that I have become so popular or should I say the alumni's choice."

Dr. Aprille Joy Ericsson has been elected as an Alumni member of the Howard University (HU) Board of Trustees.

Ericsson was born in Brooklyn, NY. She received her B.S. from M.I.T. and Master's and Ph.D. from Howard University (HU). She is the first African-American female to receive a Ph.D. in Mechanical Engineering from HU.

Currently Ericsson is an aerospace engineer at Goddard and has 12 years of experience in spacecraft structural dynamics and missions controls. As Goddard Instrument/Proposal Manager, Ericsson won significant amounts of development funds for mission enabling technology.

Ericsson is the recipient of the 2002 HU College of Engineering,

Architecture and Computer Sciences (CEACS) Alumni Excellence Award and the 1997 Women in Science and Engineering Award for "Best Female Engineer." She has been featured on NBC Nightly News Series "Women to Watch" and recorded in history books honoring African-American Women in Space and Science. Dr. Ericsson is published in Howard Magazine and numerous scientific journals.

In addition, Ericsson is known as motivational speaker, mentor and



Dr. Aprile Ericsson

friend to students and professionals. She has increased the number of students entering the NASA science, mathematics, and engineering educational pipeline. She is the creator of an email pipeline distribution of grants, internships and employment opportunities. The HU Upper Bound Math and Science Initiative Program is named in Dr. Ericsson's honor.

Ericsson is an adjunct professor at HU. She serves on the Board for Forestville Military Academy, HU Science Engineering Mathematics Program and the proposed HU Middle School of Mathematics and Science. She is also a Charter Member of the HU CEACS Alumni Network.

Explorer Schools

(cont'd from front page)

New Hampshire on Sept. 24. On Sept. 30, Scolese and Astronaut, Mike Massimino visited the students of Middle School 44, in Manhattan, New York. Dr. Weiler along with Astronaut, Ellen Baker welcomed middle and high school students of the Smyrna, Delaware District in the auditorium of Smyrna High School on Oct 4.

On Oct. 5, the final NES fall kickoff in the northeast was presented to the students of Greencastle-Antrim School, in Greencastle, Pennsylvania. Dorothy Perkins, newly appointed Director Flight Programs and Projects at Goddard, along with Astronaut Megan McArthur talked about their

Photos by: Ed Campion/130

GSFC Deputy Director Christopher Scolese and NASA Astronaut Kenneth Ham answer questions from Indian River Middle School students during the school's NES kick-off event on Friday, Sept. 24, 2004.

experiences and excitement about being a part of the NASA team.

Throughout the months of September and Oct., Goddard education personnel also conducted second round kickoffs at the following schools, Matthew Kuss Middle School, in Fall River, Massachusetts; Central Park Middle School, in Schenectady, New York; Shaw Middle School, in Philadelphia, Pennsylvania; Woodbury Junior/Senior High School, in Woodbury, New Jersey; Anne Beers Elementary School, in Washington, D.C.; Sheridan Communications and Technology Middle School, in New Haven, Connecticut; Biddeford Middle School, in Biddeford, Maine; and North County Union Junior High School, in Derby, Vermont.



NASA Astronaut Megan McArthur talks with students from Greencastle, PA on Tuesday, October 5, 2004.

The NASA Explorer School Program, launched in 2003, establishes a three-year partnership between NASA and school teams, consisting of teachers and education administrators from diverse communities across the country. Focusing on underserved populations, NES joins educators, students and

families in sustained involvement with NASA's research, discoveries, and missions. There are currently 100 Explorer Schools that have been chosen, 50 selected in 2003 and 50 selected in 2004, representing 46 states.

The NES program is designed to help administrators and teachers at the fourth through ninth grade levels, improve teaching and learning in science, technology, engineering, and math (STEM) through significant structural (professional development, stipends, grants) and curricular supports based on NASA's resources.

During the initial three-year partnership, NES teams work with NASA education specialists and scientists to provide learning opportunities and professional development. With a strategic plan in place, staff and students can take advantage of NASA content and programs designed to address specific needs in mathematics, science and technology education.

Educators and students are provided with content-specific activities to be used to support the active engagement of students in science, technology, engineering and math (STEM). The program is also designed to increase student ability to apply STEM and learn about career paths. Schools in the program are eligible to receive up to \$17,500 over the three-year period to support the integration of technology tools that support student engagement in science, mathematics and technology.

NASA is currently accepting applications for the selection of the 2005 Explorer School Program. Any school team from across the country is now eligible to apply on-line for this opportunity to partner with NASA to inspire the next generation of explorers. The NES application must be completed on-line in one session. Deadline for submission is Jan. 31, 2005. For additional information about the NASA Explorer Schools program, and for instructions on how to apply, go to:

http://www.explorerschools.nasa.gov.



Aura Operations, Hand Over to Lockheed Martin

By Lynn Chandler

During a ceremony on Thursday, Oct. 14, Goddard's Earth Science Mission Operations staff and the Lockheed Martin flight operations team formally took over operations of the Aura spacecraft from Northrop Grumman's Space Technology (NGST) and the Aura Project.

This ceremony marks the end of the NGST program that provided the spacecraft, integration of the instruments, launch and early orbit support for both the Aqua and Aura spacecraft.

"This partnership began more than 10 years ago, and the team continued to work very successfully to build, launch and operate

this spacecraft. It was a privilege to be associated with such a dedicated group of people," said Bill Guit, EOS Aqua/Aura Mission Director.

Aura will supply the most complete information yet on the health of Earth's atmosphere, and will help scientists better understand global air quality, climate change and the recovery of the ozone layer. The Aura spacecraft is focusing on our atmosphere with the important goal of understanding and protecting the air we breathe.



Above: NGST's Project Manager, Dana Southwood, (left) presents plaque to Goddard's EOS Aqua/ Aura Mission Director, Bill Guit (right) as Aura's spacecraft operations are handed over to Goddard.

Left: Deputy Center Director and former EOS Program Manager, Chris Scolese addresses the Aura team.

Inclement Weather

It's been snowing all night and the streets are covered. You're not sure what the conditions are like at Goddard-Greenbelt. What do you do now?

While nothing substitutes for you own best judgment when planning your commute, there are five ways to find the Center's current operating condition. Radio and television stations are notified, a message is posted on Code-A-Phone (301-285-NEWS), Public Affairs sends an e-mail to accounts on GSFC domain, and on-line at http://www.gsfc.nasa.gov. For a complete listing of radio and television stations, as well as the listing of operating status codes, go to: http://gsfc-aphrodite.gsfc.nasa.gov/220/snow/snowplan.htm.



Goddard Recycles

By Darlene Squibb

Photos By: Chris Gunn/293



As an effort to encourage employees to recycle and in observance of America Recycles Day, a week long exhibit from Nov. 15-19 and a lunch hour event on Nov. 17 from 11 a.m. to 1 p.m. is planned to provide information about the recycling programs at Goddard. This year's theme is "Recycling 101: It All Comes Back to You".

On Wednesday, November 17th, a lunchtime event will be conducted. The kindergarten class from the Goddard Child Development Center will open with a recycling song with their recycled craft displayed. Goddard's property disposal branch will have a property auction at noon (please come early to peruse equipment and register as a bidder). Store Stock, the organization that manages the Center's supplies and materials will show how it all comes back to you and have vendors to display office products

containing recycled content. They usually provide samples to take with you. Members from the Hazardous Waste team will display examples of recycled hazardous waste items such as batteries and florescent light tubes. In addition, there will also be information about a chemical reuse program to minimize hazardous wastes that are generated due to chemical non-use, expired shelf life or improper procurement. Information will also be available about office waste recycling program.

In support of Goddard's missions, the Safety and Environmental Division is committed to protecting, preserving and enhancing the quality of the environment which is done in various ways that includes recycling. Visit http://ard.gsfc.nasa.gov for more ways to be involved with America Recycles Day.

National Space Club Holds Annual Reception

By Lynn Chandler

The National Space Club held its 23rd annual reception at the Goddard Visitor Center on Thursday, Oct. 21. This year the reception honored the Aura project.

Aura, a mission dedicated to the health of our Earth's atmosphere, launched earlier this year on July 15 from Vandenberg AFB in California.

Aura is a key component of NASA's Earth Observing System (EOS) program and its mission is to study the Earth's ozone, air quality and climate.

EOS Aura is the third in a series of major Earth observing satellites to study the environment and climate change and is part of NASA's Earth Science Enterprise.

Aura continues the observations made by NASA's Upper Atmosphere Research Satellite (UARS) which uncovered key processes that results in ozone depletion and the Total Ozone Mapping Spectrometer (TOMS) series of measurements, which accurately tracked global scale ozone changes over the last 22 years.

Guests at National Space Club Reception

Aura's new objective over previous atmospheric research missions is to also probe the Earth's troposphere, the region of the atmosphere (from the ground to about 10km), which most affects our daily lives.



for Science; Rick Pickering, Aura Project Manager; Chris Waln, President, National Space Club Al Diaz and Rick Pickering were presented plaques

This mission is designed to observe the atmosphere in order

to answer the following three high priority environmental questions:

- 1. Is the stratospheric ozone layer recovering?
- 2. What are the processes controlling air quality?
- 3. How is the Earth's climate changing?

The National Space Club holds this event every fall to recognize the contractor government partnerships that have formed and continued over the years that together have led to America's achievements in aerospace.



A Lunar Convergence: Eclipse and Return to the Moon

By Rachel Wintraub

The year 2004 is shaping up to be a memorable one for the Moon. Wednesday, Oct. 27 brought a total lunar eclipse visible throughout the country, while at the same time NASA begins preparations to return to the Moon with its new focus on exploration.



Artist image of inital lunar eclipse

Lunar eclipses are one of the most beautiful and easiest celestial events to witness - just walk outside and look up - no telescopes or special glasses required. During totality, Earth casts a reddish-colored shadow over the Moon lasting over an hour.

"The basic interest in lunar eclipses is that it's a chance to gauge the quality of the Earth's atmosphere by judging and making

Photo Credit: Fred Espenak

The actual color of the Moon depends on air quality. This photograph was taken in Greece during the Jan. 9, 2001 lunar eclipse.

measurements of the coloration of the moon," said Dr. Fred Espenak, NASA Astronomer. "If we have major dust storms off the Sahara Desert, big forest fires, or more specifically, a major volcanic eruption which throws lots of material up into the Earth's stratosphere, this can sharply color and darken the Moon during that total phase."

Because the active volcanic eruption events at Mt. St. Helens have been largely steam with little ash, Wednesday's Moon did appear coppery

red during totality, between 10:23 and 11:45 p.m. EDT.

This month NASA is also working to firm up the design and instruments for the Lunar Reconnaissance Orbiter (LRO). Slated to launch in 2008, the mission is the first in a wave of robotic probes paving the way for human missions no later than 2020. Its mission is to create high-resolution maps, seek landing sites and continue to search for water ice and other useful resources.

NASA will use this LRO mission, together with its follow-ons to make key decisions about where the first humans back to the Moon should go, the safety of their landing sites and what they will do while on the Moon. Human lunar exploration will lay the groundwork and provide a testbed to prepare for Mars and other destinations.

"The Moon is our first step with human explorers back into the realm of Deep Space, and will serve as our 'natural proving ground' for the types of exploration activities we want to enable at Mars. LRO is our first new guide to the best sites for humans to begin exploring other worlds, and ultimately to seek information about life beyond Earth," said Dr. Jim Garvin, NASA's Chief Scientist.

Goddard Library Hosts Annual Open House Event

By Michele Skinner

The Library's Annual Open House Event was held Oct. 20. The theme "Information@work" focused on putting information to work for researchers and scientists at Goddard. The event was launched with Center Director, Dr. Ed Weiler, providing opening remarks.

In the afternoon, NASA Chief Historian, Dr. Steve Dick provided a stimulating and thought provoking presentation on "The Living Universe: NASA and the Development of Astrobiology" which is the title of his recently published book. To view Dr. Dick's slide presentation, click on: http://library.gsfc.nasa.gov/Announce/Oct2004/GSFCAstrobiology.pdf or to view the webcast presentation click on: http://128.183.174.165/asx/Public/KM/2004/Library_OH_2004.asx



NASA Chief Historian, Dr. Steve Dick

Throughout the day, demonstrations were provided to attendees on the Library's Reference Services, the Digital Archiving System, Library1Search, Video Technologies, Knovel Interactive Handbooks, the Web of Knowledge, and IEEE Xplore.

For over 40 years the Goddard Library has played an integral role in the Center's research, supplying the information needed to our researchers and scientists. In 2002, the Library was federally recognized with the Federal Library of the Year Award. For many years now the Goddard Library has provided desktop access to full-text journals and books, numerous indices to research literature and library services such as interlibrary loan requests and book renewals. Online desktop resources and services save our researchers time. Further, the resources made available are carefully and thoughtfully selected by science librarians to ensure the highest levels of information authority.

Goddard Librarians assist researches in seeking out all relevant articles, reports, and other information resources, in order to help the researcher provide the most accurate assessment of existing research.

In all, over 450 people attended the event including librarians and information scientists from the metro D.C. area and even a librarian from New York City. As always, the Annual Open House Event included many giveaways and refreshments and an informative time for everyone.

Employment Disability Month Brings Awareness

By Trusilla Steele

Environmental pollutants, high demands in the workplace and hectic lifestyles. Is it a wonder that there is an increase in psychiatric disabilities?

Meeting the Rising Tide of Psychiatric Disability was the topic discussed by Dr. Daniel Conti. The Equal Opportunities People with Disabilities Advisory Committee (PWDAC) sponsored this special presentation on Oct. 14 in recognition of Disability Employment Awareness Month. Conti is the first vice president and manager of the Employee Assistance Program at JPMorganChase, which is the second largest bank in the nation. In addition, Conti has developed and implemented innovative programs that address the link between behavioral health status and corporate costs. He has published significant research on this subject and other health economic topics.

Michael Hartman, program manager for Individuals with Disabilities opened the program by welcoming all in attendance and expressing how pleased he is with the progress Goddard is making towards diversity awareness and conforming to needs of those with disabilities in the workplace.

Dillard Menchan, acting chief of equal opportunity programs reverberated Hartman's comments by saying, "Goddard has come a long way," recalling the days when there wasn't any handicap parking on Center. Menchan made the point clear for the need

of psychiatric disability awareness by providing pivotal statistics that "an estimated 11 percent of the short-term disability claims are behavioral health related." Menchan continued by stressing the importance of developing a supervisor-employee relationship in situations involving mental disabilities to eliminate misconceptions and disruptions which is due to lack of knowledge. Menchan continued by commending Dr. Weiler's level of commitment to create an inclusive work environment for all individuals.

Center Director, Dr. Weiler addressed the importance of the commitment before he introduced the guest speaker, by candidly saying "the topic is of special interest to me, since I am a single father of a teenage son with a psychiatric disability." Weiler then emphasized the need for awareness and accommodation in the workplace; a place where his son will eventually exist.

Dr. Conti began his presentation by reiterating the statistics taken from his research and from the Social Security Administration which showed mental impairment is on the rise. It is estimated

that depression will rank second as the leading cause of worldwide disability by the year 2020.

Conti engaged the audience when examining the factors that influence the increase of psychiatric disability. Participating

members of the audience correctly pointed the causes to: greater investment in jobs and careers, high demand jobs, increase role of women in workforce, changes in corporate climate and changing nature of work.

Since mental disabilities affect such capabilities as comprehending, performing complex tasks and communicating, the need for managers to be accommodating is apparent. Conti gave examples of specific accommodations to support those with memory and concentration deficiencies which includes, allowing more frequent breaks, dividing large assignments and permitting tape recording of meetings. Additional management practices such as delivering positive feedback along with criticisms in a timely and constructive fashion, demonstrating flexibility and fairness in administering work assignments and being available for consultation was also offered by Conti.

Conti concluded by giving guidance for employees with mental disabilities by encouraging them to use the Employee Assistance Program and developing a good relationship with their supervisor.

For more information on Goddard's Employee Assistance Program, call 301-286-4600

To view slides of Dr. Conti's presentation, or for informatiom on employment disability contact Michael Hartman at (301) 286-5715, voice and TTY.

Photo by Chris Gunn/293



Raun Kaufman, formerly autistic now teaches his parents 'innovative techniques

Psychiatric Awareness continued on Thursday, Oct. 28 with the PWDAC sponsoring Breakthrough Strategies for Autism Spectrum Disorders presented by Raun Kaufman, international lecturer, writer and teacher for the Son-Rise Program at the Autism Treatment Center of America.

Kaufman began his presentation by explaining how he overcame autism. His parents went against recommendations for having him institutionalize because of his severe autism. Instead they designed an innovative home-based child center that was different from existing treatments in an effort to reach

their child. The home-based program transformed their son Raun Kaufman from a mute withdrawn child into a highly verbal, socially interactive boy with a near-genius IQ.

Employee Spotlight

World's First Woman Meteorologist Retires From NASA

By Cynthia O'Carroll



Dr. Joanne Simpson, the world's first woman to ever receive a Ph.D. in meteorology, recently celebrated her 25-year career with NASA at an elaborate retirement luncheon at Goddard's Recreation Center. Many well-known researchers were on hand to discuss the contributions she has made to the study of weather throughout her career as a research scientist.

Those in attendance included Assistant Secretary of Commerce for Oceans and Atmosphere James Mahoney; NOAA Deputy Administrator Dr. Louis Uccellini, the Director of the National Weather Service, National Centers for Environmental Prediction; Dr. Ramesh Kakar, NASA Tropical Rainfall Measuring Mission (TRMM) program scientist; and Dr. Franco Einaudi, head of Goddard's Earth Science Directorate.

Simpson was celebrated as a pioneer in her field and the admiration from her peers was quite apparent. "Dr. Simpson is not only a leading NASA scientist, but she is also a national asset to the weather community," stated Dr. Ramesh Kakar.

Among the gifts presented to her was a very unique bracelet that was handmade by dedicated artisans on St. Croix in remembrance of the impact Hurricane Hugo had on the island in 1999. The silver and gold bracelet had a symbol of a hurricane engraved into it and was a present from Dr. Peter Black, a researcher with NOAA's Atlantic Oceanographic and Meteorological Lab in Miami, Fla.

Simpson came to Goddard in 1979 as branch head of the

Severe Storms Branch in the Goddard Laboratory for Atmospheric Sciences. The research consisted of combined modeling and observations of severe storm systems both in the tropics and mid-latitudes, using aircraft as well as satellite data. In 1986, she became TRMM project scientist and also served as the chief scientist for the Laboratory for Atmospheres. She became chief scientist for Meteorology in the Earth Sciences Directorate in 1988 and was selected as the first Goddard Senior Fellow in 1988.

In her role as the former Project Scientist for the (TRMM), she guided the program with her original ideas from its inception through its launch as the first rain

radar instrument in space. This mission ranks among her greatest achievements and will speed progress in modeling and predicting weather and climate resulting in improved forecasting of short-term climate variability.

Simpson always provided a great deal of leadership and guidance to younger scientists. Dr. Chris Kummerow, also a former TRMM project scientist, was unable to attend the celebration but his thoughts were read to the audience.

He said, "A great part of you will always be part of me. The early days of TRMM are still fresh in my mind. I vividly recall a number of occasions, when after major political missteps, you would call me into your office and explain what I did wrong. Then you would explain what you might have done differently and why. In a



Dr. Joanne Simpson says she has been happy working at NASA for the past 25 years, working with "wonderful colleagues."

place where everyone knew better, I am quite certain you were the only one who ever bothered to explain why you might have done things differently. But then, in what some people might call a "Joanne-ism", you would make a public statement that I had been 100 percent right. It has been close to 15 years since then, but if I did not say it then, I'd like to say it now. Thank you. It helped me great deal."

Simpson looks back on her exciting career with pride. "These have

been very happy and productive years and I have been especially happy working at NASA with all the wonderful colleagues that I have had during the past 25 years here," stated Simpson.

During his speech at the luncheon, Dr. David Atlas, a long time colleague and Distinguished Visiting Scientist, recounted a fond memory of working with Simpson in the early days of their research.

"In February 1975, in the midst of the hullabaloo about the National Hail Experiment, I hired Joanne as a consultant to join me in a trip to South Africa where a commercial company was claiming great success in

was claiming great success in suppressing hail and preventing damage to tobacco crops in the vicinity of Nelpsruit," stated Atlas. "We were invited to fly on a seeding mission and we went out to an abandoned military airport on the Mozambique border where the jet airplane was based.

 ${\bf Photograph\ courtesy\ Joanne\ Simpson\ and\ the\ Schlesinger\ Library)}$



Joanne Simpson (second from right) collaborated with Herbert Riehl (right) and Bob Simpson (second from left) to extend her theories of "hot towers" to hurricanes. Standing in front of Simpson is her daughter, Karen Elizabeth Malkus.

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Goddard Hosted Rangers for Earth to Sky Initiative

By Dewayne Washington

Goddard hosted 30 National Park Rangers from across the country, Oct. 19, for a day of exploration. The one-day field trip to Goddard was part of a week long workshop for NASA's Earth to Sky, a program under the NASA Explorer Institute (NEI) initiative.

Known as Earth to Sky, this collaboration between NASA and the National Park Service (NPS) is an innovative partnership designed to enrich the experience of visitors to our National Parks. Rangers were allowed to

visit Goddard for a better understanding of the amazing science and technology available throughout NASA.

Through direct interaction with NASA scientists and education staff, Earth to Sky was created to allow rangers to gain a better understanding of resource issues such as global climate change, invasive species, wildland fire and air pollution. Space scientists were able to talk to the rangers about space weather and its effects on Earth, as well as the aurora borealis sunspots, and other solar phenomena. Topics such as interplanetary geology and astrobiology should help

Some Rangers had the opportunity to explore Goddard's clean room.

Photos by: Chris Gunn/293

Above: Dr. Robert Gabrys talks to Rangers about their importance to NASA.

rangers better understand how Earth and Space science are intertwined.

During the trip to Goddard, Jim Stofan, director of Informal Education for NASA, spoke to the rangers about the importance of NASA's new focus on informal education, the importance of the NEI and why NASA is partnering with NPS.

"This workshop personifies NASA's commitment to foster new learning environments that will inspire workforce professionals, young people and citizen explorers to better understand and protect our home planet as we seize opportunities to venture to the Moon, Mars and beyond," said Dr. Adena Loston, Chief Education Officer for NASA.

While the east coast workshop was being conducted at the Mather Training Center, in Harpers Ferry, West Virginia, Oct. 18 – 22, a simultaneous workshop was being conducted in the San Francisco Bay area and a field trip was scheduled to the NASA Ames Research Center, in Moffett, California.



From left: NASA's Dr. Adena Loston, Charles Mayo of NPS, and NASA's Jim Stofan.

"All successful public programming must be based on good research and our continuing relationship with NASA makes that possible," said Charles Mayo, Chief of Interpretation, NPS.

The Earth to Sky Institute is the first in a series of institutes funded by the NASA Headquarters Education Office, in an effort to more fully extend NASA content to the informal education community. In a continuing effort to inspire the next generation of explorers, NASA will be targeting other segments of the informal education community to include museums, 4-H, scouts, and others.

For more information about NASA's Earth to Sky program or other NASA education programs, visit: http://education.nasa.gov/■

Simpson (cont'd from page 8)

When the alert horn blew we jumped into the plane behind the 22-year old pilot and were about 45,000 ft above the thunderstorms within 10 minutes. The pilot then put us into a dive and released a burst of silver iodide canisters into the clouds. He then pulled up and over in a 4 or 5G turn to repeat the next drop. During this maneuver my eyeballs were in my mouth and my stomach was in my knees – I barely held on to my cookies. When I regained my vision there was Joanne crawling from one window to the other taking pictures of the clouds. I could not believe what I saw – it seemed like a nightmare. But it was real. Only Joanne was unreal, "Atlas exclaimed.

Atlas went on to say, "That incident typifies Joanne's personality in many respects. First and foremost, she is an enthusiast and adventurer – she flew, she sailed, she explored both literally and figuratively. Her research has been the greatest adventure of all time; she has led innumerable expeditions into unknown territory. And her legacies will rest on a vast body of seminal research and the three generations of scientists whom she has led during her wondrous career."

Throughout her professional life Simpson has served as a mentor and role model for young scientists, particularly women. In 2001, the American Meteorological Society honored Simpson with the Charles F. Anderson Award in recognition of her outstanding and extraordinary contributions to the promotion of educational outreach, educational service, and diversity in the AMS and broader communities. She was a Charter member of the AMS Board on Women and Minorities in the early 1970's. She received the Women in Science and Engineering (WISE) Lifetime Achievement Award in 1990.



Joanne and her husband Bob at the Cosmos Club in Washington, DC. This photo was taken in 2003 by Rick Anthes, president of the University Corporation for Atmospheric Research (UCAR).

Another colleague, Tom Wilheit of A&M Texas University (formerly of GSFC), also spoke kindly about Simpson's influence women internationally. "I think that in your role as the TRMM Project Scientist you struck a major blow for the role of women in Japan. Your position forced them to take you seriously in the beginning and then your talent proved it

was justified. At least one segment of the Japanese scientific community could never look at women scientists (or maybe any woman) in the same way again, "stated Wilheit.

Simpson's lifelong journals, personal letters and memoirs are being preserved at the Schlesinger Library at Radcliffe College Photograph courtesy Fritz Hoelzl, NOAA



In 1973 Joanne Simpson lead the Florida Area Cumulus Experiment (FACE)-a NOAA program to enhance rainfall with cloud seeding. She is shown here aboard a NOAA Research Flight Facility C-130.

in an exhibit of the History of Women in America. Her meticulous notebooks comprise records of her observations of weather from boats, airplanes, radar screens and satellite images and her analysis of what she has observed. The library is a national resource, which began by documenting heroic women of the suffrage movement. Today, it includes more than 2000 manuscripts of such notable women as Susan B. Anthony, Betty Friedan, and Amelia Earhart.

Simpson has received recognition from many prestigious organizations. In 2002 she received the International Meteorological Organization Prize by the Executive Council of the World Meteorological Organization (WMO). She was the first woman to ever to win this prize and was credited internationally for her 54 years of pioneering work on cloud modeling, observational experiments on convective cloud systems and hurricane research.

Among the awards that Simpson has received are the Guggenheim Fellowship in 1954, the American Meteorological Society Meisinger Award in 1962 and the C.F. Brooks Award in 1992. Simpson's other awards include the Rossby Research Medal, the highest award of the American Meteorological Society, which she received in 1983, and Goddard's first Nordberg Award for Earth Sciences in 1994.

Simpson, a resident of Washington, D.C., was born in Boston in 1923 and spent her childhood in Cambridge, Mass. and Cape Cod. She met her husband, Dr. Robert H. Simpson, when she was a consultant for his National Hurricane Research Project. They have been married 39 years and have had many adventures with their combined families of five children, six grandchildren and two cats.

Even though Simpson officially announced her retirement you will still see her occasionally in her office in Building 33 and around Goddard at other events. She will also continue to study the weather and publish scientific papers from her home office.

To learn more about Simpson and her fascinating career, visit:http://earthobservatory.nasa.gov/Library/■

NASA Wallops Partners with the Nature Conservancy to Study Migratory Songbirds

By Elizabeth Flowers

NASA Wallops Flight Facility and the Nature Conservancy have formed a partnership that allows the conservation group to study migratory birds on Virginia's Eastern Shore with one of the most advanced radar systems available for ornithological research.

Though millions of neo-tropical songbirds may fill the skies over a given area during spring and fall migrations, most people are in the dark, quite literally, when it comes to visualizing this spectacular natural phenomenon. Because these enormous flocks take flight only after sunset, they remain practically invisible.

The information gleaned from the radar will guide the Conservancy's future protection and restoration work along the Eastern Shore.

NASA's Polarimetric Radar (N-POL) was developed by a research team from Goddard Space Flight Center's Wallops Flight Facility, Wallops Island, Va., to measure the characteristics of various forms of precipitation within rain and snow storms.

A little over a year ago, searching for a site roughly midway between existing radar facilities at Wallops Island and Wakefield, NASA Wallops researchers focused on Oyster, where the Conservancy owns Cobb Island Station and some 1,400 acres around the harbor. In approaching the Nature Conservancy's Virginia Coastal Reserve (VCR) about the possibility of placing the radar on its property, NASA scientists described their intent to study rainfall.

"NPOL is NASA's only portable polarimetric precipitation research radar. The radar allows researchers to conduct more extensive ground measurements to support orbiting satellites and enhance their data gathering capabilities," said John Gerlach, Head of NASA's Observational Science Branch. "We are delighted to work with and to share resources with the Nature Conservancy."

In the short term, the most significant conservation impact entails researchers identifying stopover sites that migratory songbirds depend on for resting and feeding. In addition, field research partners are conducting point counts and netting and banding birds at ground level, helping to validate data and determine the types of habitat beneath the birds' radar "exit signatures." Calibrating the radar and evaluating its effectiveness as a remote sensing tool are long-term goals that will require both time and significantly more funding.

"The radar project will help us make the most efficient use of our resources," said Barry Truitt, the project's research coordinator and chief conservation scientist for the VCR. "This is the most sophisticated radar available for bird research. This project has the potential to advance the whole science of radar ornithology."

Truitt wanted to know the radar's capability to detect birds. He

learned that radar technicians normally apply filters to screen out not only birds, but insects. Truitt, who already had amassed an unparalleled three decade's worth of bird research at VCR,

Photo by Betty Flowers



NASA's Polarimetric Radar

recognized an opportunity to take the Conservancy's bird program to higher levels.

Cold fronts tend to trigger a mass exodus of songbirds that take advantage of prevailing tailwinds. Shortly after sunset, when the songbirds begin to ascend, they circle around and around, gaining altitude before continuing their southerly migration.

"This makes for a perfect radar target," Truitt said. As signals emitted from the radar tower bounce off the birds and return

to the 18-foot flat-panel antenna, computer software creates onscreen loops that show the movement in swirling patterns of vivid color. With only a little imagination, suggested Truitt, "The sky looks like a river of birds."

The project also involves researchers from North Carolina State University, the College of William & Mary's Center for Conservation Biology, U.S. Geological Survey and the Virginia Department of Game and Inland Fisheries. ■

Memorial Contributions

Memorial contributions on behalf of Goddard employee, John Catena who suddenly passed away October 6 can be made to: American Heart Association, PO Box 5216, Glen Allen, VA 23058-5216

or

American Diabetes Association, PO Box 2680, North Canton, OH 44720

In addition, contributions can be made towards a scholarship fund for John's daughter, Lisa Catena through the NASA Family Assistance Fund. Contributions are tax deductible. To make contributions, go to the Federal Employee Education and Assistance Fund at http://www.FEEA.org and then click on the NASA Family Assistance Fund block. This will give you all the information on how to contribute.

Or, you may send a check to:

NASA Family Assistance Fund 8441 W. Bowles Avenue, Suite #200 Littleton, CO 80123



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, Dell Inc. Announce Recall of AC Adapters for Notebook Computers.

http://www.cpsc.gov/cpscpub/prerel/prhtml05/05004.html

CPSC, Teng Fei Trading Inc. Announce Recall of Energy Saving Light Bulbs.

http://www.cpsc.gov/cpscpub/prerel/prhtml05/05005.html

CPSC, New York Zion Trading Corp. Announce Recall of Electric Fans.

http://www.cpsc.gov/cpscpub/prerel/prhtml05/05002.html

CPSC, Goodman Company, L.P. Announce Recall of Amana, Trane, and American Standard Brand Package Terminal Air Conditioners/Heat Pumps.

http://www.cpsc.gov/cpscpub/prerel/prhtml04/04229.html

November, National Recognition Month for First Americans

By Dewayne Washington

"Bridging Tradition with Technology," is the theme for this year's national observance of Native American history throughout the month of November.

Goddard will mark the month with observances and activities. Special guest lecture, John Goes In Center, Lacota advisor and Geographic Information Systems Specialist from Sinte Gleska University, Mission, South Dakota, will speak on Wednesday, Nov.18, from 11:30 a.m. 12:30 p.m., in the Bldg.3 auditorium.

Wanda David, Native American Program Manager, is responsible for the yearly observance activities at Goddard and stated that it provides an opportunity for all to gain a better understanding of the culture and great contributions Native Americans have made to our great nation.

According to David each year a presentation is scheduled to enlighten the Goddard community about Native American culture. "It is our attempt to reverse stereotypes with facts and information about Native Americans presented by Native Americans," said David. "This year's program will afford Goddard employees an opportunity to see the world from an aboriginal perspective."

The first American Indian Day in a state was declared on the second Saturday in May 1916 by the governor of New York. Presently, several states have designated Columbus Day as Native American Day, but it continues to be a day we observe without any recognition as a national legal holiday.

The establishment and growth of the U.S., has resulted in a month designated for the purpose of recognition and education. In 1990 President George Bush approved a joint resolution designating November 1990, "National American Indian Heritage Month." Similar proclamations have been issued each year since 1994.

"I have been told that in past years these activities have helped others within the Goddard community connect to their Native American ancestry," said David. "It reminds me of a program I watched several years ago. Within the program an elder stated that he had a vision in which he saw a circle of people from all nations coming together as one. Maybe these types of activities can assist in transforming that vision into a reality," concluded David.

Around 1900 an effort was started to recognize significant contributions of the first Americans, according to the U.S. Department of the Interior, Bureau of Indian Affairs.

For more information about Native American activities at Goddard contact Wanda David at 301-286-1091 or Marcellus Proctor at 301-286-9402. ■



Goddard in the News

Earth Science Press Releases and Media Coverage in Sept/Oct 2004

By Rob Gutro

Scientists Report Thinning of West Antarctic Glaciers (Release: 9/23/04) Partners: Wallops and JPL

Glaciers in West Antarctica are shrinking at a rate substantially

higher than observed in the 1990s. They are losing 60 percent more ice into the Amundsen Sea than they accumulate from inland snowfall. For the full story:http://www.gsfc.nasa.gov/topstory/2004/0923westglaciers.html

**The release attained worldwide media coverage, including BBC news, ABC news, CNN international, Reuters and more.

Glaciers Surge When Ice Shelf Breaks Up (Release: 9/21/04)

Since 2002, when the Larsen B

ice shelf broke away from the coast of the Antarctic Peninsula, scientists have witnessed profound increases in the flow of nearby glaciers into the Weddell Sea. These observations were



This is an aerial, close-up view of the floating section and ice front of Pine Island glacier, Antarctica, November 2002.

made possible through NASA, Canadian and European satellite data. For the full story: http://www.gsfc.nasa.gov/topstory/2004/0913larsen.html

The release attained worldwide media coverage, including ABC news, Associated Press, CNN International, Hindustian Times (India), Independent Online (South Africa), LA Times and much more.

NASA Announces Geoscience and Remote Sensing Presentations (Note to Editors: 9/14/04)

NASA researchers will present Earth and space science findings at the 2004 IEEE International Geoscience and Remote Sensing Symposium (IGARSS), Sept. 20-24 at the Egan Convention Center, Anchorage, Alaska. The Symposium theme is "Exploring and Managing a Changing Planet." For the full story: http://www.gsfc.nasa.gov/topstory/2004/0916igarss.html Some web outlets

reproduced this notice to reporters, even though it was only for the media. ■

Big Hits With Live Media Interviews on Lunar Eclipse



Dr. Jim Garvin

The lunar eclipse live shots on Oct. 27 were a great success and also a chance to start getting the public excited about NASA's new Vision and Goddard's Lunar



Image of partial eclipse on left and full lunar eclipse, taken on October 27, 2004

Reconnaissance Orbiter mission. On-air talent included Dr. Jim Garvin, NASA's Chief Scientist; John Connolly, Exploration Systems Engineer; and Dr. Mario Acuna, Astronomer. The three explained the eclipse and LRO's goals live on the *Today Show, Fox News Channel, CNN Espanol, Discovery*, and the *Weather Channel*, as well as local morning shows in DC, Dallas, Atlanta, Denver, Minneapolis, Phoenix, Las Vegas, and 18 others.

Twyla Tharp Visits GSFC

By Nina Harris

What does a choreographer and an engineer or scientist have in common? They very often both start with a blank page or "white room" with a goal of creating something useful, functional or simply beautiful to behold.

Well known dancer and choreographer, Twyla Tharp, gave the keynote presentation at the October Center Director's Colloquium. Her topic was creativity and how everyone: artists, scientists, administrators, mathematicians, and engineers can make creativity a habit and an integral part of our lives. According to Ms. Tharp it takes skill and hard work to bring something you've imagined into the world (whether it be a design for a new rocket engine or choreography for a Broadway show). No one is born with that skill. It is developed through exercise, through repetition, through a blend of learning and reflection that is both painstaking and rewarding.

Tharp talked to a packed house of Goddard employees on October 21. A petite woman (think ballerina) dressed in leather pants and cowboy boots, Ms. Tharp, is still quite flexible after several decades of creating, teaching, coaching, and dancing. A veteran Broadway choreographer, Ms. Tharp recently won the Tony Award for her work on the musical *Movin Out* with songwriter Billy Joel. Throughout her talk, Ms. Tharp offered a number of creative exercises for audience members who volunteered to participate.

Twyla Tharp's book, *The Creative Habit*, shares the lessons she's learned over a remarkable 35-year career, offering practical and immediately doable exercises for all of us. In her book, Ms. Tharp comments on the paradox in the notion that creativity should be a habit, since most of us think of creativity as a way of keeping everything fresh and new, while habit implies routine and repetition.

Following the colloquium, Ms. Tharp toured the Goddard Space Flight Center and learned about how some of Goddard's most creative minds are developing scientific visualizations with satellite data, preparing to service the Hubble with robots, and testing and evaluating spacecraft in our world class clean rooms and integration facilities. Ms. Tharp also spent some time with SeaWiFS oceanographer, Gene Feldman, learning about the Sea-viewing Wide Field-of-view Sensor Project and what the significance of ocean color and phytoplankton are to Earth scientists.

Ms. Tharp was in awe of what we do here at Goddard and was impressed with how creative we are on a daily basis. ■



Mark Hubbard, HST, shows Twyla Tharp, choreographer and Director's Colloquia Speaker, HST model and clean room robotic activities

Autism Break Throughs (cont'd form page 7)

No longer exhibiting any hints of his former autistic condition, Raun graduated from Brown University with a degree in biomedicial ethics and became the director of an educational center for schoolaged children. He currently teaches at the Autism Treatment Center of America, a center founded by his parents, which use the non-traditional techniques for treating people with autism.

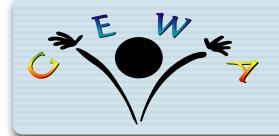
The Autism Treatment Center of America, Son-Rise Program in Sheffield, Ma., offers a wealth of programs for children with special needs and for their parents. In addition, the center provides training for certification as a Son-Rise Program teacher and child facilitator. There are also support services which includes phone consultations.

Kaufman then explained several "break through strategies" that can be beneficial for any child. For example, when teaching a child one should use the three E's, energy, excitement and enthusiasm. Kaufman pointed out how long-lived educational programs are successful because of using the three E's, engaging a child and inspiring them to continually love learning, communicating and interacting. Another strategy was to celebrate when a child, performs a "good try," not focusing on reaching the goal, but building a bridge from on try to the next giving encouragement and incentive for reaching the goal.

In closing, Kaufman offered a list of substances found in foods that should be removed from a child's diet especially one with autism and encouraged parents to leverage an unparallel commitment and dedication in their child's day-to-day experience to maximize the advantages and outcome.

For more on the Son-Rise Program, visit http://www.son-rise.org ■





GEWA Activities

GEWA Special Events for 2004

Nov. 9 - 14th Annual Fall Crafts Fair

Dec. 9 - Toy Wrap for Children's Holiday Party

Dec. 11 - Children's Holiday Party Dec. 13 - Toy Liquidation Sale

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

14th Annual Fall Arts Craft

GEWA is presenting the 14th annual Fall Art Craft Show and, it will be held on **Tuesday, Nov 9**, in the Bldg. 8 Auditorium from 10 a.m. until 2 p.m. The artists are our own GSFC and NASA HQ government and contractor employees, retirees, family members and friends. Items are all handmade and are great for the holidays. We have a full 38 tables of various crafts to select from. Let's support our fellow employees.

Also see the previous crafters on the GEWA website by going to http://gewa.gsfc.nasa.gov/. Click on Special Events on the left side of the home page. Look under the 14th Annual Art Craft in the special events page and you will be able to see the past Fall Craft of 2003, and the Spring Craft show of 2004.

If any questions or concerns then please call Kenny Dearth at 301-286-3003 or email at kdearth@pop500.gsfc.nasa.gov.

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.

City of Angels - Ticket Sales!

Tickets to MAD's Fall Dinner Theater production City of Angels are on sale now and selling fast. Performances run through November 20. Don't miss your chance to see your friends and co-workers in this fun, musical comedy (note: some content is not suitable for children). Tickets can be ordered by phone at 240-475-8800 or online at http://gewa.gsfc.nasa.gov/.

MAD 2005 Winter Show - Dancing at Lughnasa Scripts for Auditions

Full scripts and audition scenes for MAD's 2005 Winter show "Dancing at Lughnasa" are now available! There are parts

for five women and three men. The audition flyer (available at http://www.madtheater.org) has a brief description of the characters.

Interested participants can go to Eliot Malmuth's office in Building 21 room 046. Eliot doesn't need to be present; just take one copy of what you want. Any questions, contact Eliot at 301-286-5776 or eliot.malumuth@gsfc.nasa.gov.

Auditions for Dancing at Lughnasa are on Nov 8 and 9 at 6:30 p.m. in the Building 3 Auditorium

Flying Club Accepting Donations

From now til Nov. 5, the Goddard Flyning Club is accepting donations of new and used clothing, canned goods, non-perishable foods and usable toys for the benefit of the needy people in the mid-Atlantic region.

Please bring your donations to the self-service collection station in the big parking lot west of Bldg 8. Donations can be made daily from 8 a.m. to 6 p.m. Mon. thru Fri. Tax deduction receipts will be available.

The club will fly or drive all donations to the Salvatioin Army at the Reading Regional Airport in Reading, PA on the morning of Saturday, Nov. 6.

GEWA Art of Living Club Offers Free Guided Meditation Every Monday and Wednesday at Noon

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. On Monday, we meet at 12:15 p.m. in bldg. 23, Rm S300, and on Wednesday, we meet at 12:00 noon in same place. 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

NASA Engineering Training Web Site

You are invited to visit the newly-launched NASA Engineering Training (NET) Web site at http://net.larc.nasa.gov. The NET Web site will provide NASA engineers with information and links to the training and career-development resources necessary for success. The site will also serve as a forum for news, discussions, lessons, and strategies.

On the site you will discover information (sponsored by NET through NASA Headquarters) about the engineering training that is available to the NASA engineering community, including a comprehensive list of all NET courses, course descriptions, syllabi, and class schedules. The site also features news articles, testimonials, and links to NASA, Government, and other training and educational facilities. Future features will include information on career growth opportunities, training workshops and conferences, discussion groups, a "course workshop area", and an online subscription engineering newsletter.

The NET curriculum will continue to grow and expand to meet the needs of the engineering community. The Web site will also provide NASA engineers with a forum for discussing items of interest and a conduit for suggestions that will go directly to Headquarters engineering management. Please join other engineers often at this Meeting Place and send your comments and suggestions!

LTC, FSA & LTP Reminders

Long Term Care Insurance is available throughout the year to Goddard civil servants & eligible family members. You may enroll at any time on the LTC website at: www.ltcfeds.com. New employees may submit an abbreviated underwriting application, while all others must complete the full underwriting application.

Flexible Spending Accounts (FSA's) for medical & dependent care expenses in 2005 must be set up during the open season - Nov. 8 - Dec. 13. Enroll directly at www.fsafeds.com. Also, don't forget to submit claims for 2004 within 120 days after the Dec. 31 services/costs. It's "use it or lose it".

Got extra annual leave to spare? Consider donating it to a Goddard employee in need! A list of Leave Transfer Program recipients and the form to complete a donation may found on OHR's website at: http://ohr.gsfc.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 Natile Simms at x6-8955.

Want To Challenge Students to Focus On Their Futures?

The Maryland Business Roundtable for Education needs volunteers from the working world to participate in its nationally renowned Speakers Bureau. The Bureau is part of a comprehensive program that informs and motivates middle and high school students about the rigorous coursework they will need to take and complete while in high school in order to succeed in the future, whether they go on to college or directly into the workplace.

Volunteer speakers are asked to commit to making 3-5 classroom presentations. Before entering the classroom, they are equipped with a lesson plan and receive 3 hours of training on facilitating the Achievement Counts presentation. The messages they deliver are based on their own personal and work experiences, with each speaker bringing his or her own unique perspective. If you are interested please contact Charles Mercer at 301-286-7478 or by email at cmercer@pop100.gsfc.nasa.gov so we can set-up a training session for employees here at Goddard.

To sign up to be a speaker visit our website: http://www.mbrt.org/speak or contact LaTara Harris at 410/727-0448 or latara@mbrt.org.

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.

GSFC Software Assurance Website Launched

The Goddard Space Flight Center (GSFC) Software Assurance Website http://sw-assurance.gsfc.nasa.gov provides tools, procedures and training materials for software and safety assurance personnel, software engineers, as well as program and project managers.



Software Assurance Website (Cont'd from page 16)

Practitioner assets can be found for each of the five Software Assurance disciplines, including:

- * Software Quality
- * Software Reliability
- * Software Safety
- * Software Verification and Validation
- * Software IV and V

For more information, please contact Susan Sekira (mailto:Susan.J.Sekira@nasa.gov) at 301-286-6160, or visit the website at http://sw-assurance.gsfc.nasa.gov.

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 NASAs 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 todays latest research. Innovative features include full-text images in PDF format, custom display formats, saved search capability, and on-line document and

Volunteering to Read to Kids!

Pizza Hut National Local Celebrity Read Day at Anne Beers Elementary on Nov. 9, from 10 to 11 a.m. You may bring a earth or space book or they will have books available for you to select. The grades at this school range from Pre-K to 6th. They are also in need for scientists, engineers and EPO staff members to provide hands-on activities/speakers on Tuesday and Thursday from Nov. 2 to Dec 14, 2004 from 3:45 p.m. to 5 p.m. (prefer reading and mathematics related activities for grades 2 through 6.

For further information contact Andrea Owens NASA Explorer School Coordinator at 301-286-9211 or by email: andrea.owens@aesp.nasa.okstate.edu.



Events

One NASA Leader Led Workshop

What/Who: The One NASA team at Goddard Space Flight Center will host a Leader Led Workshop. Key senior leaders will provide a broader understanding of the Agency's Transformation, information on our progress toward achievement of the Vision for Space Exploration and a greater understanding of our Mission Directorate and Center's role in Exploration. All are invited to attend.

When/Where: Wednesday, Nov. 3, at 9 a.m. in Bldg. 3 Goett Auditorium.

Can We Talk

The next Can We Talk session with Dr. Weiler or Deputy Director Chris Scolese is scheduled for **Thursday**, **Nov 18**. To sign up and say what's on your mind at http://internal.gsfc.nasa.gov/canwetalk.cfm or call the Office of Public Affairs at x6-8955.

Space Chats

What/Who: Who Hid the Dark Matter? is the topic of discussion at the next Space Chats. Dr. Barbier, astrophysicist at Goddard will discuss dark matter, dark energy and why we think they exist. While there is no fee for this event, please registration is required. Register online at http://www.gsfc.nasa.gov and click Space Chats.

When/Where: Thursday, Nov. 18 at 7:30 p.m. at the Goddard Visitor Center.

For more information, contact Michelle Jones at 301, 286-8102

What/Who: Dr. James Foster of the Hydrological Science Branch and Eric Erbe from the USDA Agricultural Research Service will discuss *Something About Snow*. Foster and Erbe will review their observations taken from their study of the structure of snow. Through the use of a scanning electron microscope and with new collection procedures, Foster and Erbe have viewed for the first time, clearly focused snow crystals and will share a number of highly magnified crystals.

When/Where: Thursday, Dec. 2 at 7:30 at the Goddard Visitor Center

Engineering Colloquium

Please note that all of the Engineering Colloquia are held on Mondays in the Building 3 Goett Auditorium at 3:30 p.m. unless stated otherwise.

Who: Susan Strasseer, Professor of History at the University of Delaware and Senior Resident Scholar at the Hagley Museum and Library's Center for the History of Business, Technology, and Society will deliver the lecture entitled, *Ragpickers, Bottle Caps and Space Trash.* In the last hundred years, that way of life has been superseded by mass consumption, disposables, and waste on a previously unimaginable scale. Americans became hooked on convenience, fashion, and constant technological change, as mountains of garbage rose higher and higher. Space trash, Susan Strasser suggests, epitomizes the tendencies of our consumer culture and the dangers those tendencies pose.

When: Monday, Nov. 1

For more information, visit: http://ecolloq.gsfc.nasa.gov/announce.strasser.html

Who: Michael Neufeld, Museum Curator at the National Air and Space Museum Smithsonian Institution Washington, DC will discuss, *Von Braun, Collier's and Disney: Selling Space in the 1950s.* In this talk, Michael Neufeld will discuss the military and Cold War origins of von Braun's vision of space stations and spaceflight in the early 1950s and describe its evolution and its impact on the American public.

When: Monday, Nov. 8

For more information, visit: http://ecolloq.gsfc.nasa.gov/announce.neufeld.html

Who: Professor, Ken Alder, Northwestern Univ. will speak on the topic, *The Measure of the World*. Alder will recount the history of the Revolutionary expedition to measure the world and the human drama of moral choice in science. In doing so, it will examine the origin of one of the crucial tools at the heart of modern science — error analysis — as well as the rise of modern geodesy and the significance of history's first debate over economics of globalization. As an added bonus, it will also explain why, despite the best efforts of Thomas Jefferson, the United States is still the only country in the world (aside from Liberia and Mynamar) to stand outside the metric system.

When: Monday, Nov. 15

For more information, visit: http://ecolloq.gsfc.nasa.gov/announce.alder.html

Who: Andrew Chaikin, author and lecturer will deliver on the topic entitled, *The Other Moon Landings: A Soviet Triumph in the Shadow of Apollo*. The Soviet space program had successfully sent the first man-made object to the moon,

Continued on page 19



Engineering Colloquium (Cont'd)

transmitted the first photos of the backside of the moon, transmitted the first images from the lunar surface, and even sent the first living beings (turtles and simpler organisms) to make a circumlunar voyage. This colloquium will discuss the story of those rovers, their design, operations, and successes/failures.

When/Where: Monday, Nov. 22 in the Bldg 8 Auditorium

Who: Ronald Muller, QSS Group, Inc will review the *Echo Balloon Satellites*. This talk will give a first hand account of the suborbital tests and orbital launch of Echo II. Included will be vintage video including the first video images from space — the suborbital inflation test balloon that burst on inflation. The video of a successful suborbital inflation test will be shown and then the first video taken from orbit — the successful inflation of the Echo II satellite. The legacy of the Echo satellites to today's missions — communications, gossamer structures, solar sailing, video from space — will be incorporated into the talk. When/Where: Monday, Nov 29 in the Bldg 8 Auditorium

Upcoming Training

You may also contact Tracey White at x6-7823 or Tracey.C.White.1@gsfc.nasa.gov to enroll in any of the listed courses.

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.

NASA Tech Briefs Nano2004 Conference

What: The Nano2004 conference will focus on critical nanotechnology applications, including nanoscale fabrication & manufacturing, nanotools & metrology, nanomaterials, and nanoelectronics. Attendees will be provided with the opportunity to explore real-world applications in key market segments, such as Aerospace, Defense, Bio-Medical Technology, Power & Energy, Electronics, and Environmental & Safety. A complimentary reception will be held at the Maryland Science Center on the evening of Nov. 11 to provide attendees an opportunity for networking with influential players in government, industry, and academia, who are leading the nanotech revolution.

When/Where: Nov. 11-12 at Wyndham Inner Harbor Hotel, Baltimore, MD

For additional info please visit: http://www.techbriefs.com/nano/

Center Director's Colloquium

The 2004 Fall series of the Center Director's Colloquia will held in the building 3 Goett Auditorium from 10 a.m. to 11 a.m. with afternoon group discussion at 2 p.m. in the bldg 1 training facility.

Who: Dr. Bruce Cryer, President of The HeartMath Institute, will speak on the subject of *Heart Intelligence*, the synthesis of mental, emotional and intuitive intelligence and how this synthesis will increase our effectiveness and enable us to control stress. Bruce will offer us a set of business tools to link our head and hearts so we can think more clearly, perform better, and become healthier.

When: Dec.1 in the Bldg 8 Auditorium

For more information, check out: http://centerdircolloq.gsfc.nasa.gov/

Information Science and Technology (IS&T) Colloquium

All IS&T colloquia are held in building 3 Goett Auditorium at (3:00 p.m. for refreshments) with the colloquium 3:30 p.m. unless stated otherwise

Who: Dr. Eric Baum, will talk about *What is Thought?*. Can the strong Al/Turing picture be extended to a plausible model of all aspects of mind, such as understanding, creativity, language, reasoning, learning, and consciousness?

When: Wed, Nov 3

Who: Garth Gibson, Associate Professor of Computer Science Department and Department of Electrical and Computer Engineering, Carnegie Mellon University will discuss *Parallelism in Secondary Storage System Technologies*.

When: Wed, Nov 17

Scientific Colloquium

All colloquia are held in building 3 Goett Auditorium at 3:30 p.m. unless otherwise noted.

Who: Christopher Martin, Calif. Institute of Technology will discuss *GALEX A Year Exploring The UV Universe*. Martin will discuss UV and star formation rate density and luminosity functions and their evolution, luminous UV galaxies in the local universe and their relationship to Lyman Break Galaxies, dust reprocessing and its astrophysical implications, the starburst history in galaxies over time, star formation at small and large galactic radii and gas surface density, star formation in interacting systems, UV spectroscopy of galaxies and the IGM, and UV from young and old stellar populations in early-type galaxies.

When: Nov 5

Who: The Willian Nordberg Lecturer will be given by distinguished Univ. of Calif., Irvine Professor and Director, Center for Hydrometeorology and Remote Sensings Soroosh Sorooshian. Sooroshian will discuss, *Water Distribution and Availability* by examining the requirements of "non-structural" solutions and more efficient use of fresh waters for an integrated water resources management system.

When: Nov 19 in Bldg. 8 Auditorium

Who: Robert Crease will discuss, *The Prism and the Pendulum: the Ten Most Beautiful Experiments in Science.*

When: Dec 9 in Bldg. 8 Auditorium Continued on page 20



Technology Expo

What: All employees are invited to the Information Services Division's Technology Expo. Come see demos for the latest Digital Automation Platforms, Voice and Data Products, IT and Internet Solutions, Reversed Engineering, Integrated Security Systems, Knowledge Management and Much More!

When/Where: Thursday, Nov 18 from 10 a.m. to 2 p.m. in the Bldg 8 Auditorium

Expendable Launch Vehicle Payload Safety and Mission Sucess Conference

What: The Office of System Safety and Reliability, NASA Goddard Space Flight Center, Code 302, is pleased to announce the NASA Expendable Launch Vehicle (ELV) Payload Safety and Mission Success Conference. The conference will emphasize the safety and mission success aspects of ELV Payloads. It will also highlight the exciting future of ELV Payload programs and provide a forum for current, past and future ELV Payload customers and suppliers to interact with other members of the ELV Payload community in structured and casual settings.

When/Where: Nov. 16-18, 2004 in in Santa Barbara, California.

Additional conference details are available at the following web address:http://www.tisconferences.com/elv/

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