

NASA Remembers Columbia Crew with Dedications

By Dewayne Washington



Photo by Bill Ingalls/NASA

Mrs. Sandy Anderson, wife of Columbia astronaut Michael Anderson, looks at the memorial along with astronauts Steve Robinson (right) and Carlos Noriega (left).

On February 2, NASA paused to commemorate and honor lives lost in the continuing efforts of space exploration. A memorial to the fallen heroes of Space Shuttle Columbia was unveiled during a ceremony early in the day at Arlington National Cemetery. Family members of the STS-107 crew were the first to see another permanent

marker of the dangers of space flight. The new memorial is just a few feet from one honoring the crew of Space Shuttle Challenger, lost on January 28, 1986.

In his remarks, Administrator O'Keefe stated that future visitors to the site will learn that these space heroes came from all parts of the United States and from the lands of India and Israel. "They were pilots, engineers and scientists, all motivated by a fire within, a passionate eternal flame within each of their souls that compelled them to live lives of distinction, and to bring the heavens ever closer to our grasp."

The Administrator said the members of STS-107 proved that heroes come in all shapes and sizes. "Generations from now, when the reach of human civilization is extended throughout the solar system, people will still come to this place to learn about and pay their respects to our heroic Columbia astronauts. They will look at the astronauts' memorial and then they will turn their gaze to the skies, their hearts filled with gratitude for these seven brave explorers who helped blaze our trail to the stars," said O'Keefe.

The ceremony concluded with musical performances from the U.S. Navy Band, U.S. Air Force Singing Sergeants and Patti LaBelle, who sang her Grammy-nominated song, "Way Up There." LaBelle originally performed the song at the Columbia memorial at the National Cathedral in Washington last year.

Continued on page 2

Table of Contents

Remembering Columbia ...	Page 1
Women History	Page 2
Columbia Supporters	Page 3
What Turns Hurricanes Into Monsters	Page 4
Can We Talk?	Page 4
Why Go?	Page 5
Explorer Schools Visits	Page 7
Blind Can Reach	Page 8
The Goddard Memorial Symposium	Page 9
Goddard in the News	Page 9
Black History Activities ..	Page 10
Employee Spotlight	Page 11
Goddard Meet CFC Goal ..	Page 12
Gay/Straight Alliance	Page 12
Movie Days	Page 12
FIRST Regional	Page 13
Safety Alerts	Page 14
Bldg 33 Kiosk Locator	Page 14
Safety Corner	Page 15
GEWA Activities	Page 16
Announcements	Page 17
Events	Page 19



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>

National Observance Recognizes Women,

The Hope They Have Provided Throughout the Years

'Women Inspiring Hope & Possibility' is this year's theme of the National recognition of Women's History Month throughout March. The theme celebrates the hope and sense of possibility that come to our lives from the pioneering and inspirational work of women.

According to the group known as the National Women's History Project, the focus is about the hope women have displayed throughout the years. Hope comes in many forms, including laws challenged and changed; new medical research; stories of compassion and courage; and watching women stand tall against great odds.

At Goddard, the Women's Advisory Committee (WAC) is the standard bearer for recognizing women. The committee is tasked with serving as a focal point for the concerns of female employees on matters affecting their employment at Goddard. "We are also looking to maximize the potential of women," said **Donya Douglas**, recently elected chair of the committee. "We want to help women achieve their career aspirations," said Douglas. Assist co-chair for WAC is **Maureen Madden**.

According to **Wanda David**, committee chair for this year's observance at Goddard, there will be a Parenting Workshop on March 18, coordinated by the WAC Parenting Chair, Florence Tan and the Goddard Childcare Development Center. There will also be a forum for networking, 'Knowledge Sharing and Building Successful Communities,' for the women of Goddard, on **March 31, 2004**.

The National Women's History Project (NWHP) has selected eight honorees, chosen because they represent this year's vision of hope in myriad ways. They are *Sarah Buel*, domestic violence activist, attorney and educator; *Edna Campbell*, professional athlete, spokesperson for Breast Cancer Awareness; *Jill Ker Conway*, educator, writer and historian; *Marian Wright Edelman*, Children Rights advocate, and Civil Rights activist; *Maxine Hong Kingston*, writer, educator, peace activist; *Susan Love*, Women's Health and Breast Cancer Research expert; *Vilma Martinez*, Civil Rights attorney and community activist; and *Leslie Marmon Silko*, writer, poet and educator.

Women's History Month observance began modestly in 1978 when the Education Task force of the Sonoma County (California) Commission on the Status of Women initiated a "Women's History Week." In March of 1980, President Jimmy Carter issued a Presidential Message encouraging the recognition and celebration of women's historic accomplishments. The observance became National Women's History Week in 1981, with the first Joint Congressional Resolution declaration co-sponsored by Representative Barbara Mikulski (D-MD) and Senator Orrin Hatch (R-UT).

In 1980, the NWHP was founded in Santa Rosa, California, as a non-profit corporation. The goal was to provide a national clearinghouse for general information about women's history and for

Columbia Dedications (cont'd)



Clip from animation of SuperBowl XXXVII zoom, rendered with imagery from the MODIS instruments.

The Columbia crew was also honored the day before during the pre-game ceremony at Super Bowl XXXVIII. Sunday, February 1, marked the one-year anniversary of the accident. The game was played in Houston, home to NASA's astronaut corps and the Johnson Space Center.

Outside of Earth's confinement, the Columbia was honored by the feat of a distant traveler. The Spirit rover's landing site on Mars was named 'Columbia Memorial Station.'

Later on the evening of February 2, NASA gathered at the Air and Space Museum to remember Rick, Willie, Mike, Chawla, Laurel and Ilan. Keynote speaker for the evening was veteran television news anchor Walter Cronkite, who spoke of seeing man land on the moon and the quest to continue.

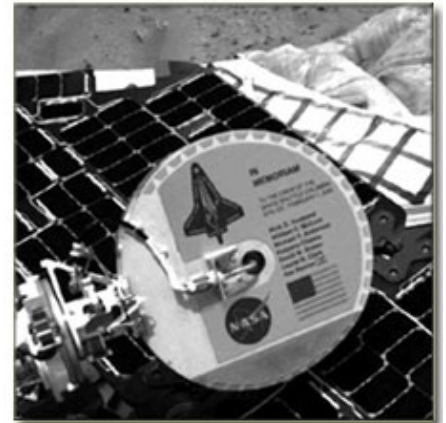


Photo of Columbia Memorial plaque captured by Mars Rover, Spirit.

Throughout the day of activities, family members of the STS-107 crew were in attendance. Goddard was directly involved, assisting with a group of volunteers as escorts at Arlington and greeters at the Air and Space Museum.

"I have reminders at home, I have reminders in my office and I want those reminders because while initially they were sad, they're not as sad anymore; I'd say they're more strengthening; they're making me want to make more of a commitment to the program and to continue their legacy and to continue their mission," says Commander Eileen Collins. She will lead the STS-114 mission, NASA's return to flight mission is currently scheduled for 2005.■

specific information about National Women's History week celebrations.

The week of national observances became a month of activities in 1987. It was at the request of women's organizations, museums, libraries, youth leaders, and educators throughout the country, that the NWHP successfully petitioned Congress to expand the national celebrations to the entire month of March.

Since 1992, a Presidential Proclamation has carried the directive for what is now a major national and international celebration.■

By Dewayne Washington

Goddard Employees Recognized for Support after Columbia Disaster

To honor their support of the Space Shuttle Columbia investigation, the Goddard employees listed below recently received a Certificate of Recognition from GSFC Center Director Al Diaz and Associate Administrator for Space Flight William Ready.

Morty Abzug	Gerry Daelemans	Randy Honeycutt	Meir Moalem	Karl Schuler
Shirley Adams	Bryan Denny	Michele Hull	Leslie Mohr	Steve Schulte
Dave Affens	Jacques Descloitres	Steve Inselberg	Fay Moore	Dave Schuman
Michael Allen	Adam Devir	Tony Ippolito	Steven Mooty	Jake Scott
Joseph Anokye	Steven Dewitte	David Israel	Sofia Morgan	Bonnie Seaton
Tony Anthony	Jeff Didion	Tom Jackson	Patrick Morinelli	Ben Shayne
Scott Applebaum	Tom Dixon	Bob James	Richard Morris	Gary Slebzak
Robert Atlas	Cheryl Dry	Scott Janz	Sue Motil	Eric Sletton
Hal Baesch	Albert Duany	Shari Jarvis	David Moulton	John Smith
Alexander Bakos	Scott DuBridge	Michelle Johns	Melki Moussa	Ted Sobchak
Danny Ball	Chuck Duignan	Joanna Joiner	Jim Myers	Douglas Solomon
Davis Baregas	Gerard Durback	Michelle Jones	Nancy Neal	Valerie St. John
Karen Barksdale	Rick Dykstra	Robert Jones	Jeff Nelms	Mike Stager
Katie Barthleme	Lynn Edmondson	Jahochim Joseph	Constance Ness	Trusilla Steele
Shawn Belton	Phyllis Eggleton	Mahima Kaushik	John Niemann	Jim Stefanov
Melissa Blizzard	Dyhan J. Emmanuel	John Kazeva	Holly Offerman	Ed Stevens
Mary Boolori	John Evans	Douglas Keyzer	Frank Pacheco	Bill Stout
Don Borcher	Jody Fillmann	Larry Kindrick	James Parks	Larry Strader
Bill Borree	Gale Fleming	Charlie Knapp	Bimal Patel	Robert Summa
John Bradbury	Tony Foster	Brian Knox	Miral Patel	Len Switalski
David Bradt	David Frazier	Christina Kominoth	James Pavlicek	Steve Sypher
William Braun	Leonard Frost	Ilan Koren	Steven Pawson	Keiji Tasaki
Reid Brockway	Paul Gagnier	Victor Laczo	Janie Penn	Fran Teel
Chuck Brodell	Leon Garrett	Dennis Ladd	Jennifer Perez	Tim Thompson
Tammy Brown	David Glasscock	Mark Lamberson	Robert Perrin	Mark Thornton
Robert Bryant	Carolyn Sue Gonser	Bill Lawler	Fred Pifer	Bernie Tomardy
Greg Burns	Bob Gonzales	S.J. Lin	Ken Post	Steve Traversy
Melvin Calhoun	Lashonda Goodwynn	Shawn Lindsey	Pepper Powers	Carroll Trickey
Veronica Calligan	Craig Gray	Steven Lloyd	Chris Prieto	Eric Underhill
Ed Champion	Elwyn Grier	Charles Lobiondo	Cruz Puentes	Eric VanDenHeuvel
James Capellari	Ken Griffen	Peter Malinovsky	Adrian Rad	Keith Vick
Eric Carmen	Craig Griffith	Dan Mandl	Steve Raque	Wirawat Wachrathit
Mike Carpenter	Jim Hagar	Jose Manriques	Norman Reese	Kevin Walters
Maggie Carsen	Bob Hancock	Sandra Marshall	Judy Reynolds	Roy Warner
Johny Chavez	John Hankinson	Ed Masuoka	Nannette Rhoads	Dewayne Washington
Don Childs	Ken Harbert	Ken McCaughey	Bob Rise	Britton Weins
Jeff Colin	Marc Harlacher	Kent McCullough	Martin Rivas	Rachel Weintraub
Christopher Collins	Jamie Harper	Eric McHenry	Frank Romero	Andy Wells
Greg Coombs	Mark Harris	Martin McKeever	Jeff Rooney	Patrick Wilhelmi
Randy Corrillo	Nina Harris	Matt McLaughlin	John Rosier	Jesse Williams
Roger Counts	Rich Harris	Sabri Mekaoui	Eve Rothenberg	Kimberly Williams
Carl Cramer	Jeny Hehir	Mark Melton	Jan Ruff	Frank Wright
Phillip Cretsinger	J.R. Hendrickson	Dave Miller	Jim Russell	Kevin Wright
Francie Crosby	Mark Hess	Jerry Miller	Donna Sadof	Mike Wright
Angela Culley	Michael Hieber	Tim Miller	Jeff Schmaltz	Yoav Yair
Arlindo da Silva	Steve Holson	Barbara Milner	W. Bruce Schneck	

Scientists Discover Clues to What Turns a Hurricane into a Monster

By Rani Chohan

Deep within the fierce heart of a hurricane, where winds blow at least 75 miles per hour, NASA scientists have found a clue to what determines if a hurricane will grow monstrous. Fed by warm air, tall clouds sometimes explode nine miles high above the storm and “breathe fire into the hurricane,” says NASA scientist **Joanne Simpson**, a pioneer in the field of hurricane meteorology.

When these tall clouds, called “hot towers,” are present, they double the chance that a hurricane will gather strength within hours. An unusually large hot tower exploded above Hurricane Bonnie in August 1998, a few days before the storm struck North Carolina. In the end, Bonnie caused \$1 billion of damage and three deaths according to the National Hurricane Center at the National Oceanic and Atmospheric Administration (NOAA).

In the 1950s, Simpson discovered hot towers using photographs and radar observations. She counted and measured the size and number of hot towers that formed in tropical cyclones. Simpson and her collaborators showed that hot towers increase the chance that a new tropical cyclone will form.



Goddard Scientist Owen Kelley

Continuing that pioneering work, **Owen Kelley** and **John Stout**, scientists at NASA Goddard Space Flight Center, noticed some interesting patterns in satellite data. After data reduction, statistical analysis and visualization,

they developed precise criteria for locating hot towers and they discovered that a tropical cyclone with a hot tower in its eyewall is twice as likely to intensify in the next six hours as a cyclone that lacks a tower.

In January, they presented their findings at the 2004 annual meeting of the American Meteorological Society in Seattle, Washington.

“It is not enough to predict the birth,” Kelley says, “We want to improve our ability to predict the intensity and damage of a storm.”

Continued on page 15

Can We Talk? - A Dialogue With the Center Director

By Trusilla Steele

As one of the efforts to respond to the Columbia Accident Investigation Board (CAIB) Report, and to enhance the workplace culture and leverage the strength of the Agency's workforce diversity, Goddard initiated *Can We Talk: A Dialogue with the Center Director* in February 2004. These informal one-hour dialogue sessions are scheduled every month with Center Director Al Diaz or Deputy Director Bill Townsend. The sessions are structured after NASA Headquarters *Can We Talk* sessions conducted every other month by NASA Administrator, Sean O'Keefe.

The sessions are intended to provide constructive dialogue that will respond to existing anxieties and heightened concerns of employees, and to achieve improved communications within NASA.

The first *Can We Talk* session with Al Diaz was held on February 12. The session provided employees the opportunity to discuss topics, concerns, or issues as they relate to the Goddard or NASA workforce culture. The atmosphere was relaxing and open. Employees stated that they felt comfortable with how the session was conducted. There was no facilitator or early submission of questions. Everyone was given an opportunity to speak and voice their opinion. Mr. Diaz answered questions candidly.

Some of the topics discussed at the first *Can We Talk* session included the new Space Exploration Vision, Independent Technical Authority, Mr. Diaz' views on the progress of diversity at Goddard, and recent Director's Colloquium speaker, Loretta LaRoche.

The next *Can We Talk* session with Mr. Diaz will be held on **Wednesday, March 10** in Building 6, Room W137 at 11:30 a.m. To register to attend, please visit <http://internal.gsfc.nasa.gov/canwetalk.html>. In order to maintain an environment conducive for conversing, attendance is limited and responses will be accepted on a first-come, first-served basis.

Did You Know?



Some SOHO team members hold snowboard

A designers for the **T e m p e s t** Snowboards stumbled upon SOHO imagery which was used as a graphic on one of its snowboard design. Tempest used the image for a short period because they change the images on their boards yearly.



Photo of Bruce McCandless in the manned maneuvering unit, flying at a 45 degree angle over the Earth.

WHY GO?

By Bill Steigerwald

Why explore space when there are so many problems to solve right here on Earth? Consider this: "All civilizations become either spacefaring or extinct." — Carl Sagan

Why send people to Mars when we

haven't cured cancer or eliminated poverty yet? A good question, and it can be turned around to get the answer. We've made progress against these problems, and this is creating new challenges that can only be overcome by a civilization that opens the space frontier.

In 1900, there were no antibiotics or cancer medications, and the global population stood at about one and a half billion people. After a century of medical revolutions, the world population quadrupled to more than six billion today. It will grow to nearly nine billion people by 2050, according to the World Population Prospects 2002 Revision published in February 2003 (<http://www.un.org/esa/population/publications/wpp2002/WPP2002-HIGHLIGHTSrev1.PDF>) by the United Nations Population Division. This is just their middle-of-the-road estimate. More advances in medicine or living standards will increase this number dramatically, by prolonging life and allowing more children to live long enough to bear children of their own. But the population increase is just half of the new problem.

Most of these new people aren't expected to consume much because, unfortunately, they will be poor. However, by definition, any reduction in poverty will mean more resources consumed. Since 1900, developed nations like the United States have reduced poverty through technological and social inventions that greatly improved the standard of living. If this is hard to believe, just talk to your grandparents. The downside is that the United States leads the world in consumption. The bigger the economy, the higher the consumption. The United States accounts for nearly a third of the world's economy, even though it has less than five percent of the global population. What happens to the environment when the entire world reaches this level of consumption?

Human compassion compels us to help others overcome life-threatening illness and poverty, but eventually, people will consume more than the Earth can provide. However, in space the things we value and need the most — energy, resources,

and room to live — are unlimited, as far as we can see. Let's explore what just our own solar system can offer.

Every second, the Sun produces enough energy to power the United States for nine million years, according to the National Oceanic and Atmospheric Administration's primer on the Sun. (<http://www.un.org/esa/population/publications/wpp2002/WPP2002-HIGHLIGHTSrev1.PDF>) There is no energy

shortage in space. Sunlight could be collected in space by vast arrays of solar cells to power space colonies, or it could be beamed as pollution-free energy for use on Earth once space technology is sufficiently developed to make it competitive.

There are plenty of resources (<http://www.permanent.com/a-overvw.htm>) in our solar system, also. A small, metal-rich asteroid contains millions of tons of iron and billions of dollars worth of rare metals, like platinum, nickel, and cobalt. There are tens of thousands of these asteroids within relatively easy reach, because their orbits approach or cross Earth's orbit. Many more, perhaps millions, orbit in the main asteroid belt between Mars and Jupiter. Their small size (a few miles (kilometers) or less) and extremely low gravity make them easy to mine.

A small, metal-poor asteroid contains billions of tons of other material necessary to support a spacefaring civilization, like oxygen, carbon and water (as ice). There are tens of thousands of these also nearby and millions in the main asteroid belt. If you go even further, to the fringes of the solar system, billions can be found — they appear as comets when their orbits get disturbed and take them in close to the Sun.



View of the Remote Manipulator System (RMS) end effector over the Earth's limb with a solar starburst pattern behind it.

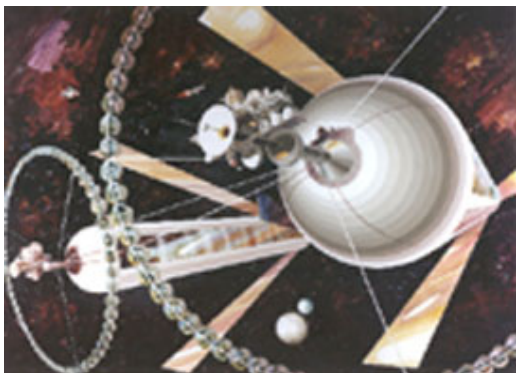


Asteroid EROS (taken with NEAR spacecraft)

Continued on page 6

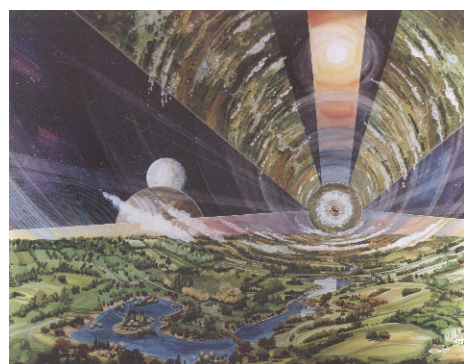
Why Go? (cont'd)

Space is immense, so of course there is plenty of room. People can either build enclosed colonies in space, or live in enclosed cities on the nearest suitable worlds — the moon and Mars.



Artist's concept of a large space colony.

Life in a space colony does not have to be harsh at all. The colony can be rotated to provide artificial gravity, and the environment can be controlled to provide exactly the conditions the colonists desire.



Artist's concept of interior of a large space colony.

Like snowboarding? Keep it cold. Like the beach? Keep it warm, and make a lot of lakes. These will be designer worlds, as luxurious as the inhabitants want them to be. And since the

colony is built, rather than existing as occupied territory, no one has to fight over it. Refugees could build a new home, and nations can expand without war.

Mars is an unoccupied world as well, a world with the same land area as all the continents on Earth, with all the resources needed to begin a new technological civilization (http://www.nw.net/mars/docs/m_fronti.pdf) in one place. We may even be able to transform its environment so that its surface eventually becomes habitable for life.

Although the moon does not have all the resources Mars does, it is much closer to the Earth, so it's a good place to test new technology. Astronauts can get home quickly if there is any trouble.

We want to improve our condition; to make life better for our children than it was for us. However, to accomplish this without placing an unbearable strain on our fragile planet, we need to learn to live in space and harvest its abundance. As our population increases, we can either fight over Earth's limited wealth, or cooperate to expand our civilization into unbounded space.

How much will it cost? NASA's budget (<http://www.nasa.gov/about/budget/>) is about 16 billion dollars a year, yet this is less than one percent of the annual federal budget. It equals approximately 15 cents per day for every American. Developing the technology and gaining the experience to live in space will take decades, so only a sustained commitment is required instead of an expensive, intense program. The United States has invited other nations to join it on this journey. When shared among many people over several decades, the cost to secure our future by opening the last frontier becomes affordable.

Why explore space when there are so many problems on Earth? Because space exploration is part of the solution.



A quarter moon is visible in this oblique view of Earth's horizon, recorded with a digital still camera aboard the Space Shuttle Columbia.

Human space exploration uplifts our spirit, promotes education, develops technology useful on Earth, and can even guard against global catastrophe, spread democracy, and bring nations closer together. Ultimately, however, we need to enter space to give our children a hopeful future, one filled with opportunity and wonder,

not restrictions and conflict.

"The Earth is the cradle of humanity, but one cannot live in a cradle forever." — Konstantin Tsiolkovsky ■



Artist's concept of the aeroshell protecting a Mars Rover as it enters the Martian atmosphere.

Goddard and NASA Headquarters Officials Visits Two NASA Explorer Schools

By Ed Campion

In mid-February, students at NASA Explorer Schools in Vermont and the District of Columbia had the opportunity to hear from NASA Headquarters and Goddard Space Flight Center personnel about the space program's current and future space exploration efforts.

The presentations were part of an agency-wide effort that involved every NASA center director and several members of the NASA astronaut corps making visits to Explorer schools around the nation. Last month's visits, along with future planned visits in April, are giving NASA personnel opportunities to present information to students,

teachers and local officials about near-term and long-range NASA activities. The visits will also provide opportunities to explain new exploration initiatives being undertaken and impart to

students the importance of education and how they are indeed the next generation of explorers.

In the case of the Goddard-sponsored schools, students and teachers had the opportunity to make a "local" connection as



Alison McNally, Goddard Associate Director speaks with students at Anne Beers Elementary.

Photo by Ed Campion/130



Goddard Center Director, Al Diaz speaks to students at one of NASA's Explorer school's, North County Union Junior High in Derby, Vermont.

part of the discussions. Students at Anne Beers Elementary School in Washington, D.C. heard from NASA Deputy Administrator Fred Gregory, who grew up in that community. Joining Gregory at the Anne Beers presentation was GSFC Associate Director Alison McNally and Dr. Bernice Alston, recently appointed Director of Elementary and Secondary Education, NASA headquarters and a graduate of Anne Beers.

The students at North Country Union Junior High School in Derby, Vermont had the chance to hear from GSFC Director Al Diaz, Nantel Suzuki from NASA Headquarters' new Office of Exploration Systems and Mars scientist Dr. James Garvin, himself a native of Vermont.

At each of the school events, NASA personnel emphasized to the students that the beginning of the 21st century is an exciting time to be alive, that the United States is in the midst of a great era of exploration that is not unlike the time of the Lewis & Clark expedition that ventured into the uncharted territory of the American West 200 years ago.

It was pointed out to the students that they are living in a time when there will always be men and women living and working in space.

The NASA presenters also stressed that being successful in school is the best path to a future that could be filled with great adventures and wonderful discoveries in whatever career fields the students pursue. ■

Photo by Chris Gunn/293



NASA Deputy Administrator speaks to students at Anne Beers Elementary, which is in his former neighborhood.



Photo by Keith Koehler

The Blind Can Reach for the Stars Too

By Kenneth A. Silberman, Jennell Dewitt, Michael Hartman

The excitement of the visitors at the grand opening was amazing. People were enthusiastic with the presence of NASA at the event and the partnership of the NFB and NASA in the summer science camps. I don't know how many times I heard people exclaim "I wish they had this offered when I was younger."

Phil Eberspacher (right), Sounding Rocket Program chief, talks with a NFB visitor about rocketry and the 2004 Summer Science Camp.

With the *Can Do Spirit* of NASA, the National Federation of the Blind (NFB) held the Grand Opening of the NFB Jernigan Institute on Friday, January 30, 2004. This state-of-the-art, sprawling complex, located on an entire city block in the Federal Hill section of South Baltimore, will conduct cutting-edge research into blindness. This research will change the lives of blind people everywhere; and in doing so, will better the lives of all people around the world.

This vision is shared by NASA Administrator Sean O'Keefe and by Goddard's Director Al V. Diaz. In his remarks to a crowd of 1500 blind and sighted guests, Administrator O'Keefe discussed how NASA and the Federation will develop new technologies and educational techniques that will enable talented blind students to pursue careers in engineering and science with NASA. Director Diaz picked up the gauntlet that Mr. O'Keefe threw down by offering to support one of the institute's inaugural projects, a science camp for blind students. Dr. Marc Maurer, President of the 50,000-member Federation, accepted the offer and has begun planning for the Summer 2004 camp is well underway.

Two groups of blind students from around the United States will gather in Baltimore to reach for the stars. One group of high school students will design, prepare, and launch a scientific payload on a sounding rocket from the Wallops Flight Facility. The other, a group of Junior high school students will conduct soil research at Goddard. Both groups will do their initial preparation and data analysis at the Jernigan Institute in Baltimore.

The campers will conduct their own research under the supervision of blind and sighted engineers and scientists from Goddard, Wallops Flight Center, Johnson Space Center, and the NFB. This joint effort will be the first step for the blind along the road that leads back to the Moon and onto Mars.

The following are a few impressions of the evening given by members of the Goddard Initiatives for the Blind team who attended this special event.

Jennell Dewitt –

I was inspired and motivated most by the celebration attendees. They made me appreciate even more how working to achieve one's goals, despite obstacles, can be so rewarding.

Although most of the attendees were visually impaired, these were individuals who prided themselves on always doing their best. The environment was a joyous uplifting evening shared by all.

In my mind, undoubtedly, 12-year-old Courtney was the best speaker during the formal program. Her delivery was humorous and honest. Her perception, confidence and discernment of NFB's future and its role to positively impact the blind community was well beyond her years.



Photo by Chris Gunn/293

Russ Werneth, HST Project Office, shaking the gloved hand of a next generation explorer (perhaps our first blind astronaut?).

NASA and space has an inherent mystical quality to the public. That flavor continued to be relayed throughout the evening with actual tactile hands-on exhibits of Mars, 12-foot sounding rockets, the Mars Rover wheel and robot arm that helped to bring those mysteries into a realm of reality through touch.

Continued on page 9

The Blind Can (cont'd)

Innumerable positive comments could be overheard about the NASA exhibit room like, "neat, wow, isn't that amazing."

Michael Hartman –

"I think that the NFB Jernigan Institute has an incredible potential to change people's lives. I am proud that NASA is taking an active participatory role in some of the efforts of the Institute."

Photo by Chris Gunn/293



Ken Silberman, Code 933, touching 3-D tactile artwork of Mt. Everest, with artist Ann Cunningham looking on.

said Michael Hartman, GSFC Disability Program Manager. "I was moved when I heard Al Diaz say that the first blind person to go into space was most certainly alive today."

"What affected me most," Hartman said, "were the two kids that came to visit our NASA exhibit room and they could touch a Mars Rover wheel, and feel the 3-dimensional model of the Gustev Crator. They were very interested in our cool stuff and enjoyed talking to our scientists and engineers who are blind. Both expressed an interest in working at NASA when they grew up."

The GSFC blind initiatives team would like to recognize individuals from the NASA family who were wonderfully enthusiastic about supporting our efforts for this event. Goddard's Initiatives for the Blind team lead, Jan Ruff, Special Assistant to the Center Director for External Relations. Ms. Ruff has been cited as the catalyst for many of the efforts this team has accomplished over the past year on behalf of the Center. The team would like to express their appreciation for Jan's leadership, vision and perseverance. Connie Gennaro, Outreach Coordinator, Mars Public Engagement, Jet Propulsion Laboratory, Pasadena, California, and Dr. David Hurd, Planetarium Director/Professor at Edinboro University of Pennsylvania. For this grand opening celebration, Connie loaned a Cable Mock-up of the Robotic Arm and a model of the Rover wheel; and gave two layers of the Rover Airbag material and a "ratted" rock. David loaned a tactile Full Sky Planisphere and a copy of "Our Place in Space - A Tactile Exploration"; and gave a thermoform Tactile moon, a Circumpolar Star Chart, and a raised image of the Cassini-Huygens spacecraft. All of the donated materials will find a home in Goddard's Visitor Center. ■

The Goddard Memorial Symposium - To the Moon and Beyond



Come join us for the 42nd Annual Goddard Memorial Symposium, sponsored by the American Astronautical Society. The two-day event will be held **March 16 and 17** at the Greenbelt Marriott on Ivy Lane.

This year's theme, Exploration - To the Moon and Beyond, will provide an excellent opportunity for Goddard employees and managers to become better informed about NASA's new 'Vision for Space Exploration' from a NASA, congressional, industrial, university, and international perspective. Center Director, **Al Diaz** will provide the opening keynote address, 'NASA: Building for the Future.'

Session topics include: The New Exploration Challenge, Returning to the Moon, Technologies for Human Exploration, Beyond the Moon, and Getting There and Back. Session six will feature an education panel that will focus on NASA's new vision and career implications for future scientists and engineers.

Goddard employees are encouraged to attend the symposium. GSFC civil servants are not required to pre-register and may attend sessions free of charge. Just show your NASA government badge at the AAS registration desk inside the hotel when you arrive and sign in. All others are encouraged to pre-register and pay on-line at the AAS website. Lunch is not included with the sessions.

For complete information about this event go to: <http://www.astronautical.org/> ■

Goddard in the News

NASA's *SORCE* satellite celebration of a year of Sun observation was of interest to the media. The Associated Press's Datebook noted the satellite's anniversary which then appeared in many newspapers such as: *Aberdeen American News*, SD; *Times Picayune*, LA; *Bradenton Herald*, FL; *Boston Globe*, MA; *Akron Beacon Journal*, OH; *Times Daily*, AL; *Centre Daily Times*, PA; *Wilmington Morning Star* NC and *Macon Telegraph*, GA.

A Month Of Activities To Share A Rich History Of Achievement

By Dewayne Washington

During the month of February, Goddard joined in the national recognition of Black History Month. The observance was in honor of the heritage and accomplishments of African Americans and to recognize their extraordinary contributions to America.

In the 2004 White House Proclamation, the President wrote, "African Americans have upheld the ideals of America, defended our homeland, and enriched American culture and society. Brave leaders such as Sojourner Truth, Harriet Tubman, Booker T. Washington, Martin Luther King, Jr., and Leon Sullivan, caused America to examine its heart and to respect the dignity and equality of all people, regardless of race. Today, African Americans are leaders at the highest levels of the military, business, education, law, government, the arts, sports, and religion."

Goddard's observance included a presentation by Dr. Dorothy



Dr. Dorothy Hayden-Watkins, NASA Assistant Administrator for Equal Opportunity Programs.

H a y d e n - W a t k i n s , A s s i s t a n t A d m i n i s t r a t o r f o r E q u a l O p p o r t u n i t y P r o g r a m s f o r N A S A H e a d q u a r t e r s . E n t i t l e d , " T h e E l e p h a n t i s i n t h e R o o m , " h e r t a l k c e n t e r e d o n t h e c o n c e p t t h a t w h e n s o m e t h i n g i s o b v i o u s , t h e r e ' s n o s e n s e t r y i n g t o i g n o r e i t . T h e o b v i o u s s h e w a s s p e a k i n g o f

included myths, stereotypes, rigid thinking and discrimination. "Rosa Parks saw the elephant on the bus that day and refused to move because she was sick and tired of being sick and tired," said Hayden-Watkins.

"We must be the change we wish to see," said Hayden-Watkins quoting Gandhi, as she did of other famous American heroes such as John and Robert Kennedy, and Dr. Martin Luther King Jr. She praised Goddard's Center Director for his efforts as a NASA leader and his personal efforts of equality for all. She spoke of the President's new agenda for NASA and how great a time it is to be at NASA. "I believe that NASA can become the model agency within the federal government when you think of diversity and equal opportunity," insisted Hayden-Watkins.

Storytelling, laughing, joking, demonstrations, audience participation and just plain fun was the agenda for a presentation of Bette McLeod.



Photos by Chris Gunn/293

Bette McLeod tells a group of visiting students to "be proud of who you are."

This seasoned educator of 35 years within the public school system of Prince Georges County, Maryland, provided insight into the rich culture inherited by today's African Americans. An audience of Washington D.C. school children joined members of the Goddard community for an enlightening presentation aimed at dispelling myths, stereotypes and at changing ones perspective of some historical facts.

"I am here to dispel some myths about Black History, particularly African American history; to fill in the gaps in history that were not written down, and to get youngsters to join in the fight for freedom," said the retired school teacher. McLeod spoke of inherited values from African culture that African Americans still, sometimes unknowingly, possess. They included unity, self-determination and a respect of age. "Don't let anyone define who you are," she told the audience. "People in this country seem to never be satisfied with what they see in the mirror," said McLeod.

She spoke of people seeing themselves as either too short, too tall, too fat, too thin, and wearing uncomfortable clothes in an effort to look good. "Just let go so you can feel good," McLeod insists. She encourages to do what needs to be done with what you have. "Crispus Attucks fell down, Rosa Parks sat down and Dr. King marched down so that you can fly," she told the group of junior and middle school students.

Other activities during the month included: **Mr. Carroll R. Gibbs** presentation of "Journey To Justice: The Civil Rights Movement Yesterday and Today," and **Professor Larry S. Gibson** presentation of "Maryland: Brown's Launch Pad."

Dr. Carter Godwin Woodson is considered the founder of the annual observance of African-American contributions. His hope was to neutralize the apparent distortions in Black history and provide a more objective and scholarly balance to American and World history.

Black History is all around us...Everyday, Everywhere: **George T. Sampson** invented the clothes dryer; **Alice Parker** invented the heating furnace; **Alexander Miles** invented the elevator; **Dr. Daniel Hale Williams** performed the first open heart surgery; **Philip Emeagwali** is considered one of the fathers of the Internet; **Henry Sampson**, inventor of the cellular phone; and **William Harwell** invented the attachment for the Shuttle arm to catch satellites.■

Employee Spotlight

Dream to Become an Engineer is Today's Reality

By Dewayne Washington



Goddard's Donya Douglas is a thriving example of how family influence can positively impact career decisions. She was predisposed at an early age in pursuing an engineering career, involvement in advocacy work and inspired to take a proactive role in the educational development of her own children.

"I wanted to be an engineer since the age of 10," says the aerospace engineer. Although her parents separated early in her life, her father was never that far away. Douglas admits her father, an electrical engineer, has been a major influence on her career path. "He has always valued education," says Douglas.

Besides playing football and basketball together, they always had open conversations, "We talked about everything from news to science to technology and I even went to work with him on several occasions," says Douglas. "He really instilled in us (she has three younger sisters) a sense of self worth and value," says the mother of three boys. "Whenever he addressed me and my sisters, he always called us princess."

Apparently her father's influence has been a guiding light throughout her education path. "I was always good at math and science and was technically inclined and I was always analytical," admits the lead thermal engineer for Space Technology Five. After graduating from Wicomico Senior High School in Salisbury, Maryland, Douglas accepted a full scholarship to attend Rutgers University, New Brunswick, New Jersey.

She returned home after a couple of years, accepting a summer internship at Wallops Island Flight Facility. At summer's end, she transferred from the University of Maryland Eastern Shore to the College Park campus, becoming a co-op student and accepting a position at Goddard. She graduated with a mechanical engineering degree from the University of Maryland at College Park in December 1994.

Douglas readily admits that her NASA career has been all she envisioned from the age of 10. "I enjoy the flexibility, opportunities and the prestige of working at NASA," says Douglas. She says her dad is very proud of her accomplishments. "My dad even passes out my business cards and tells everyone his daughter works for NASA," says a laughing Douglas. "Looking back over my career, (she began

here full time in 1991), I've had so many positive experiences because I have been fortunate to have good people as advisors and mentors," adds Douglas.

Photo by Debbie McCallum/293



Aerospace Engineer, Donya Douglas

Besides her regular duties, Douglas is also co-investigator for Space Technology 8, enrolled in the Accelerated Leadership Program, wife and mother, and recently elected as chairperson for the Women's Advisory Committee (WAC). "I have inherited a strong sense of advocacy and have been heavily involved in the PTA, appealing to local school board members on behalf of students and parents," says Douglas. "It is important to me at work as well as at home."

With such a commitment to advocacy Douglas spent the previous three years as first a board member, vice-chair and finally the chair position with WAC. According to Douglas, WAC is an Equal Employment Opportunity committee tasked with looking at representation of women, to include hiring practices. "But we also look at maximizing the potential of women," says Douglas. "This group has been instrumental in quality of work programs including the Child Development Center, referral programs and other special interests for women," according to Douglas.

Establishing better communication between committee members and the women of Goddard is a goal the new chairperson is working toward. "We've started looking at ways to better develop a two-way dialogue. "We want to properly represent our constituents, helping to facilitate informal mentoring among women at Goddard," says Douglas.

She talked about a recent incident in which her son was interviewed for an advanced education program at school. When he was asked who was the most influential people in his life he spoke of Gandhi and his mother. "If my mother did not push me so hard, I wouldn't be where I am today," was his response. "My son has never said that to me so I was like - oh my God, that really made me feel good and I still remember my tears," says a proud Douglas.

"One of my favorite quotes is *to whom much is given, much is required*," says Douglas. "So I serve on WAC and I go and talk to students and try to inspire young women," admits Douglas. And it also appears that within her family circle, the desire to inspire the next generation has been a developing family tradition for years. ■

Goddard Succeeds with CFC!

By Trusilla Steele

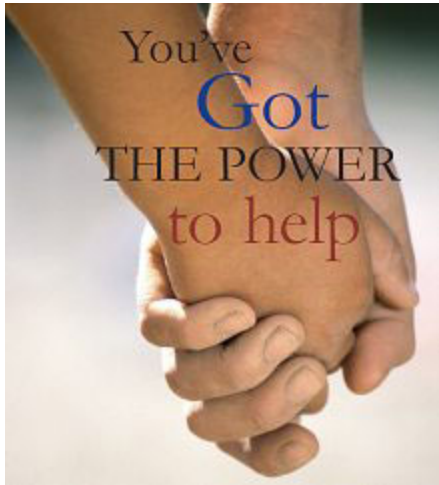


Photo of this year's CFC catalogue

NASA Goddard Space Flight Center exceeded in meeting their Combined Federal Campaign (CFC) goal, receiving more than \$475,000 in contributions.

'You've got the power to help,' was the National Capital Area CFC theme. This is clearly demonstrated since the CFC provides a way for federal employees to voluntarily support

charitable organizations. Millions of federal employees help improve the quality of people's lives locally, nationally and internationally. The charitable organizations that receive funding through the CFC provide many services, including helping abused and neglected children, feeding the hungry, searching for cures to diseases, preserving our natural resources and giving help and hope to those in need.

This year's Combined Federal Campaign effort at Goddard began with a special kick-off event that included an encouraging address from Goddard's Associate Director, **Alison McNally**. McNally emphasized the importance of "taking the time to give" and expressed how confident she was in meeting this year's goal since Goddard only fell short of 2% in achieving last year's goal. It was through her confidence, the guidance of Goddard's CFC Manager, **Chris Beidel** and each directorate's keyworkers that Goddard surpassed its goal with 38% of participation and more than \$500,000 in contributions. Beidel agrees that it was a collaborative effort, saying, "It was an excellent orchestrated team accomplishment. The keyworkers within each directorate worked diligently with office co-workers to help this year's campaign become a success."

This year's CFC's appreciation luncheon, *Heartfelt Thanks* was held on February 11, 2004 at the Ronald Reagan and International Trade Center in Washington, D.C. for all the federal CFC managers. Although Chris Beidel was unable to attend, he knows there will be additional recognition since NASA is such a large contributor.

McNally, thanks "all the participants of the CFC" and says it "feels good to know that Goddard exhibits 'the power to help' amongst the other great strengths this organization possess." ■



NASA/GSFC Gay/Straight Alliance Forming

In response to December's successful Dialogue on Sexual Orientation sponsored by the Diversity Council, interest in a gay/straight alliance is emerging at NASA Goddard. Thus, several members of the Goddard community are forming the NASA/GSFC GLOBE, or Gay, Lesbian, Bisexual, and Transgender Employee Organization. The NASA/GSFC GLOBE shall be an alliance of NASA/GSFC employees with the mission to create a work environment free of discrimination and harassment based on sexual orientation and gender identity. This group will be part of the FedGLOBE system, an organization for Gay, Lesbian, Bisexual, and Transgender Employees of the Federal Government. Other agencies with GLOBE chapters include NIH, NIST, the EPA, the FAA, and the Department of Justice.

NASA/GSFC GLOBE will work to advance the fundamental principle of non-discrimination on the basis of sexual orientation and gender identity at the NASA Goddard Space Flight Center. Other goals of the group are to provide outreach to NASA/GSFC employees on issues of sexual orientation and gender identity; to promote better integration of gays, lesbians, bisexuals, and transgender individuals into the NASA/GSFC community; and encourage and stimulate interest in the understanding and acceptance of gays, lesbians, bisexuals and transgender individuals.

The first NASA/GSFC GLOBE general meeting will be held **Wednesday, March 24** at noon. For the meeting location or additional information, please contact Bob Lutz at Robert.J.Lutz@nasa.gov. All Goddard civils servants and contract employees with an interest in supporting the ideals of NASA/GSFC GLOBE are encouraged to attend.

Movie Days

The Goddard Diversity Action Team will be hosting a series *Lunchtime Diversity Movies* as a continuing effort to build an organizational climate in which employees respect, appreciate and value individual differences. All Goddard employees (including contractors) are invited to the first Diversity Movie Day on **Thursday, March 25** in building 3 Geott Auditorium **at 11:30 a.m.** for the showing of "Radio" starring Ed Harris and Cuba Gooding, Jr. The movie is approximately 90 minutes and is the real life story of Robert "Radio" Kennedy, a person with a disability, whose journey from a man, no-one understood, to the coach no-one could live without, inspired a football team to become champions. In addition, an opportunity will be given for viewers to discuss various aspects of the movie as it relates to the importance of respecting diversity. ■

Second Annual Maryland Regional Competition to be Held at Historic Naval Academy

By Dewayne Washington

The 2004 FIRST Robotics Chesapeake Regional Competition will be held March 18-20 at the U.S. Naval Academy's Halsey Field House in Annapolis, Maryland. The three-day event is free and open to the public from 9 a.m. to 4 p.m. Thursday is a practice day, competition rounds will run all day Friday and Saturday.

On January 10, as part of the kickoff event, Dean Kamen, FIRST Founder; Dr. Woodie Flowers, FIRST Vice Chairman; and Dave Lavery, NASA Program Executive unveiled this year's game, "FIRST Frenzy: Raising the Bar." Participants for the 2004 season have been tasked with designing robots to race around a playing field collecting and passing 13" balls to human players who then shoot the balls into fixed and moveable goals.

Additionally, robots may attempt to hang from a 10' bar. Time has been of the essence as FIRST participants work with their mentors to solve common problems using the "kit of parts" while following a standard set of rules. Teams participate in regional competitions that measure the effectiveness of each robot, the power of collaboration and partnerships, and the spirit and determination of students. Teams are rewarded for excellence in design, demonstrated team spirit, gracious professionalism, maturity and the ability to overcome obstacles.

By now these young inventors should have created and shipped their robot for the start of the 2004 season. The 2004 FIRST season will be comprised of 26 regional competitions (held in the U.S. and Canada). Regional competition begins the first weekend of March in Manchester, New Hampshire; Trenton, New Jersey; Richmond, Virginia; and Portland, Oregon. There will be a regional each weekend leading up to the championship to be held April 15-17, inside the Georgia Dome, in Atlanta, Georgia.

Goddard is a major sponsor for the local Chesapeake Regional Competition, which is endorsed by the state of Maryland. This is the second year that the Chesapeake Regional committee has hosted a FIRST competition in the state of Maryland. This year, sixty-two teams will comprise more than 1,500 students from throughout the state of Maryland and 11 other states.

John Murdock, chairperson for the Chesapeake Regional Planning Committee, had the opportunity to see students in action recently at the National Building Museum in the District of Columbia. "It is truly amazing to see the ingenuity of the students who had converted a 300 pound container of sensors, wheels, pneumatic equipment, wiring, and other pieces of hardware into a robot in such a limited amount of time," said



Photo by Debbie McCallum/293

The playing field for the 2004 FIRST robotic competition.

Murdock. "These kids are representative of all students in the competing high schools, from all economic levels. "It is truly exciting to see the smiles and joys on faces of students that discover that regardless of gender, race, or heritage, they can have fun and earn scholarships that prepare them for the future work force," added Murdock.

FIRST was founded in 1989 by accomplished inventor Dean Kamen to inspire an appreciation of science and technology in young people, their schools and their communities. Based in Manchester, N.H., the non-profit organization designs accessible, innovative programs to build self-confidence, knowledge and life skills while motivating young people to pursue academic opportunities.

"The FIRST Robotics Competition is not just about the design and building of sophisticated robots. These students also develop maturity, professionalism, teamwork and mentoring skills that enrich their lives," said Dean Kamen. "Many of our students develop an affinity for their science and math courses, go on to study engineering, technology or science in college, and also to pursue employment opportunities with sponsoring companies," added Kamen.

Teams will compete for honors and recognition that reward design excellence, competitive play, sportsmanship and high-impact partnerships between schools, businesses and communities. For 2004, FIRST is offering eligible high school participant's more than 180 merit-based scholarship opportunities amounting to more than \$3.8 million from leading universities, colleges and companies. Teams are vying for a chance to compete at the championship in Atlanta.

Currently in its thirteenth year, the FIRST Robotics Competition anticipates its largest season ever with 935 teams, including 220 rookie teams, representing Brazil, Canada, Mexico, the United Kingdom, and nearly every state in the U.S.

For more information about FIRST or the 2004 competition visit www.usfirst.org or www.mitc.org/first/. ■

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 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>

Sta-Rite Industries Announce Recall of Pool Filters
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04072.html>

BBK Enterprises Inc. Announce Recall of Tree Climbers
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04071.html>

Nautilus Direct Announce Recall of Bowflex Power Pro Fitness Machines
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04073.html>

From International-Solis USA Announce Recall of Hair Dryers.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04080.html>

GE Security, Inc. Announce Recall of Carbon Monoxide Alarms.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04534.html>

Dollar Tree Stores, Inc. Announce Recall of Candle Sets.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04081.html>

Progress Lighting Announce Recall of Fluorescent Light Fixtures.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04082.html>

Grand Hall Announce Recall of Gas Grills to Repair Temperature Gauges.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04085.html>

Ariens Co. Announce Recall of Snow Throwers.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04084.html>

Lamson & Sessions Inc. Announce Recall of Drop-In Floor Box.
<http://www.cpsc.gov/cpscpub/prerel/prhtml04/04083.html>

Earth Sciences Building Gets a Helping Hand

By Franco Einaudi, Director of Earth Sciences



Building 33's locator kiosk

Have you been to Building 33 lately? If so, you may have noticed the sleek Navigo employee locator system kiosk located in the main lobby. This system was designed by Interactive Touchscreen Solutions Inc. to help visitors find their way around Building 33.

The layout of Building 33 has always presented navigational challenges to visitors and fellow employees. The Earth Science Directorate worked closely with Interactive Touchscreen Solutions Inc. to familiarize them with the building layout and organization locations. Using this information, Touchscreen Solutions developed custom floor plans that provide animated maps to building locations. With Navigo, you can search for a person by name, division affiliation, or phone number. A simple "touch" of the screen begins your search. It's also a handy way to find conference rooms, elevators, stairways, restrooms and vending machines. As personnel and events change, they can be reflected in the directory using the systems built-in editing program.

Navigo quickly stands out in the lobby because of the shiny, brushed aluminum modern design of the enclosure that compliments the surroundings. Please stop by and check out the Navigo system during your next visit to Building 33. Your questions and comments are welcome and will help improve the locator system. Contact Jack Richards by email at Jack.E.Richards@nasa.gov or visit Jack in Building 33 – directions to his office are available on the Navigo system!■

In the Safety Corner

Prevent Eye Injuries

March is Save Your Vision Month. Eyes are one of the most vulnerable parts of the body and are susceptible to all kinds of injuries.

- You can receive burns to your eyes by being splashed or sprayed with organic solvents, certain metals and acidic or alkaline substances.
- Tiny particles, dust and chips can penetrate your eyes.
- Your eyes can be punctured by sharp objects and splinters or struck by blunt ones.
- Extreme heat, chemical or gaseous fumes or mists in the air can damage your eyes.
- Eye injuries can occur from exposure to ultraviolet light, infrared rays... ionizing radiation, microwaves and lasers.

Often you will know right away that you have injured your eyes because of the immediate pain. In other instances, one may not feel nothing and the loss of vision is gradual.

Wearing the correct kind of protective eyewear can prevent many of these injuries. Your job and the workplace hazards you deal with will determine your best choice; whether it's safety glasses, goggles, face shields, hoods or welding helmets.

Become familiar with the different kinds of lenses available. Continually being developed and improved according to new technology, they protect against all kinds of hazards. Some lenses that will resist scratches, impact, heat and fogging. Others protect against infrared or ultraviolet rays, as well as radiation. You can obtain prescription or non-prescription lenses.

The lenses of your safety eyewear should be precisely what you need for your job, should offer you clear vision and should not fog up. Scratched or broken lenses should be replaced immediately. Use anti-fogging products when necessary, and keep your lenses clean.

Whatever safety eyewear you choose, make sure you have it custom-fitted so it is snug, yet comfortable. It should not slip off too easily, nor should it be too tight so to causes headaches and that "iron band" feeling.

There is much you can do in the workplace to prevent eye injuries. Splashes by harmful liquids can be controlled to a certain degree with guards and screens. Airborne particles

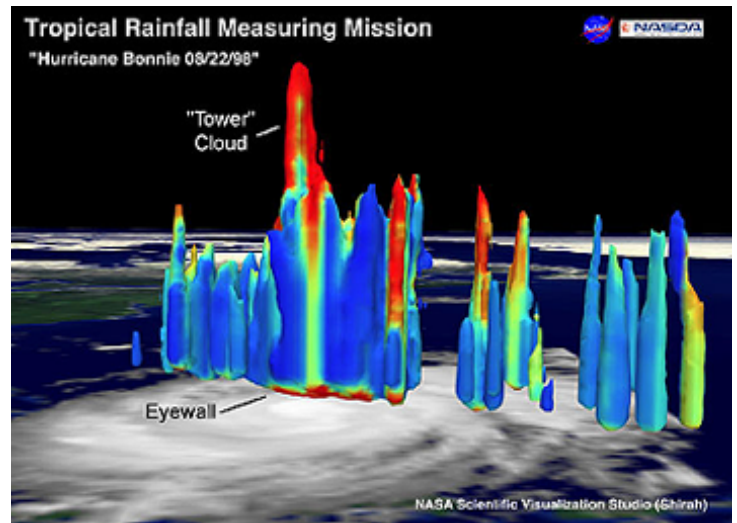
can be somewhat prevented with the use of screens, exhaust systems and dust extractors.

There should be eyewash stations installed throughout the workplace. Learn how to use them properly...and use them immediately when something gets in your eyes.

Protect your eyes in the workplace and ensure you never end up "in the dark".

Hurricanes Into Monsters

(cont'd)



TRMM picture of Hurricane Bonnie

The Tropical Rainfall Measuring Mission (TRMM) satellite collected the data for their research. TRMM is a joint U.S. and Japanese mission dedicated to studying tropical rainfall.

Stout and Kelley look forward to analyzing more hurricane observations during this year's hurricane season so that they can improve the reliability of their statistics.

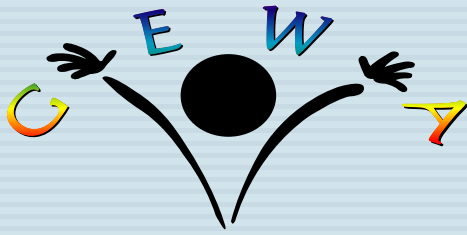
Currently, Stout and Kelley work at TSDIS, which is the TRMM Science Data and Information System. TSDIS is the group that generates the standard data products and real-time products for the TRMM satellite. Stout started working at Goddard in 1982. He worked in Joanne Simpson's Severe Storms Branch for eight years before joining TSDIS in 1994. Kelley joined TSDIS when he came to Goddard in 1997.

Several newspapers and television stations reported on Stout and Kelley's research including:

The front-page of the *Galveston County Daily News* on January 19, 2004: <http://www.galvnews.com/story.lasso?wcd=17020>

Page A4 of the *Dallas Morning News* on January 20, 2004: <http://www.dallasnews.com/sharedcontent/dallas/tsw/stories/012004dntexhurricane.a2f4f.html>

NBC-5 TV in Dallas-Fort Worth on January 20, 2004: <http://www.nbc5i.com> ■



GEWA Activities

Goddard Dance Club

New class series start in March. Basic Ballroom Dance classes start on 7:30 p.m. **Wednesday, March 3, 2004** featuring Foxtrot and Samba. Intermediate Dance classes start at 7:30 p.m. **Monday, March 1, 2004** featuring Hustle, Waltz, and Tango. Dance Variations (beginning material with some intermediate material) classes start at 6:00 p.m. Sunday, March 7, 2004 with a Dance Practice session from 7:00 - 9:00 p.m. For more information about the Goddard Dance Club visit <http://gewa.gsfc.nasa.gov/clubs/dance/goddard.htm>

13th Spring Craft Fair-Registration

This year's Fair will be held on **Tuesday, March 30**, in the Bldg. 8 Auditorium from 10 a.m. til 2 p.m. Registration is only \$15 per space and is open to all GSFC and NASA HQ government and contractor employees, retirees, family members and friends. Items must be handmade. Cutoff for registration is **March 19** — check out GEWA's webpage (<http://gewa.gsfc.nasa.gov>) for details and registration form, or contact Tasha Davis (tadavis@pop200.gsfc.nasa.gov).

April Trip to Curacao

The Goddard Sea Ventures (scuba club) has organized a trip to the island of Curacao off the coast of Venezuela. This trip is for divers and non-divers. We will be staying at Habitat Curacao (<http://www.habitatcuracao.com>) which offers plenty of easy diving from shore or boat as well as many things to do for non-divers. The trip is planned for **April 13-21, 2004**. The cost is approximately \$550 (non-divers) to \$800 (divers) double occupancy in mid-level room. Price includes room, breakfast, unlimited shore diving, and three 2-tank boat dives (other options available). Airfare is not included in this price and is up to each traveler. Contact Hugh Dowell, 6-9366 or hdowell@hst.nasa.gov for more information.

Rock 'N' Roll Standards

A new club of musicians, vocalists, engineers and song writers is in the works on site. All are invited to participate. Initially the club will focus on playing and sharing rock 'n' roll standards, and then diversify accordingly to interest. For the agenda send an e-mail message to Patrick.L.Kilroy@nasa.gov.

GPSA Preparing for Upcoming Season - New Teams and New Players Welcome!

The Goddard Slow Pitch Softball Association (GSPSA) leagues are preparing for the upcoming season, and would like to extend an invitation to any new teams or players to join the GSPSA. The leagues are open to all civil servants and contractors working on a NASA contract, and/or their immediate family members (spouse, siblings, children or in-laws).

The games are played at the old Antenna Test Facility, located off of Beaver Dam Road, on Monday through Wednesday evenings, immediately after work. The games are supervised by Goddard umpires. All skill levels are represented on the various teams, and the games are competitive, but fun. The GSPSA is interested in any new teams that would like to join, or individuals who might want to play as the existing teams may need a few players. Interested new team representatives, or individuals, should contact Bill Guit (GSPSA President) at 301-614-5188, William.J.Guit@nasa.gov or Walt Moleski (GSPSA Treasurer) Walt Moleski 301-286-7633 or Walter.F.Moleski@nasa.gov

Goddard Co-Ed Softball

Spring is right around the corner, and that means Goddard co-ed softball! The Goddard Mixed League softball season starts **April 19**, with openings for new teams and individual players on both Monday and Tuesday nights. This recreational league emphasizes fun over competition, and is open to all Goddard employees, their families and friends. League fees are minimal. Contact Jim Closs at James.W.Closs.1@gsfc.nasa.gov or 301-867-6252. Come out and join the fun!

Wanted: Strong Men or Women

For all of you who are armchair umpires and believe that you know the rules and can do better than the major leaguers, here is the opportunity to, prove your point and get paid at the same time. Even if you have never officiated before, but have a learning attitude, I can teach you the rules and how to umpire. If you are experienced - all the better. The Goddard Slow Pitch Association is looking for a few new umpires to fill out our existing roster. League play starts in late April and goes thru August. You need to be able to commit to either a Monday/Tuesday/Wednesday night for most of the season. The games are played at the Beaver Dam complex off Soil Conservation Road starting at 5:30PM. Pay is \$18/game payable at the end of each month. If you are interested, contact: Frank Stocklin 301 286-6339 or frank.j.stocklin@nasa.gov.

Announcements

2004 Diversity Theme Contest:

The Goddard Diversity Action Team (GDAT)* is now accepting submissions for its annual Theme Contest. The winning entry theme will be used in all of the promotion material for our annual Celebrate Goddard Day, which is scheduled to take place on **Thursday, July 29, 2004**. It will also be used for the remainder of the year to promote diversity awareness on Center.

The theme will be recognized at our Diversity Movie Day, on Thursday, March 25, 2004, at 11:30 a.m. in the Bldg. 3 Goett Auditorium.

Entries should be emailed to gdat@listserv.gsfc.nasa.gov. The contest is open to all Goddard employees (civil servants and contractors). Theme ideas must focus on diversity and be consistent with GSFC's Workplace Vision and the Diversity Strategic Plan, and be 10 words or less. Please visit our Diversity website at <http://diversity.gsfc.nasa.gov> for information regarding these items. You may submit more than one entry. Entries will be judged by the GDAT committee.

Submission deadline is 4:30 p.m., Monday, March 15, 2004.

* GDAT is an all-volunteer committee of Center employees who serve as a resource for the Diversity Council to implement year-long activities to educate and outreach to the Goddard community, and recognize and celebrate the diversity of the workforce.

Information Science & Technology Award: Call for Nominations - Due Date: March 12th

The call for the IS&T award nominations is now open. Please take a moment to nominate someone who's work is recognized under IS&T. The Centerwide announcement will be published shortly. In addition, award details and nomination instructions may now be retrieved from OHR's website at: <http://ohr.gsfc.nasa.gov/Hot/home.htm>. Please contact Khrista White (x6-9059) or Theresa Wirth (X-64574) with questions.

NASA Scholarship Fund Applications: Once again, the announcement has been received for college scholarships for qualified dependents of NASA and former NASA employees. The scholarships are provided and awarded by the NASA College Scholarship Fund, Inc. The scholarship fund was established as the direct result of a substantial unsolicited gift offer by the noted Pulitzer Prize winning author, James Michener. Other contributions have been made by the Freedom Forum to honor Shuttle crewmembers and the JSC Chapter of the NASA Alumni League and contributions through contributions through the Combined Federal Campaign. Five scholarships will be awarded in the amount of \$2,000 renewable for a maximum of \$8,000 over 6 calendar years.

For additional information and a copy of the application, please use the following URL: <http://jscpeople.jsc.nasa.gov/ncsf.htm>

Applications and additional information may also be obtained from the Education Office, Barbara Yates at x6-7356, or visit Building 28, Room N165. All applications are due by **March 22, 2004**.

Employee Briefing on NASA's New Office of Exploration Systems

Tuesday, March 2, 11 a.m. - 1 p.m. GSFC Bldg 8 auditorium.

The Office of Exploration Systems (Code T) invites NASA **civil servant** employees to attend an overview of the organizational structure and management priorities the Agency has established to achieve the exploration goals in human and robotic technology and transportation systems contained in the nation's Vision for Space Exploration.

The overview will take place on Tuesday, March 2, 2004 from 11 a.m. – 1 p.m. EST and presentations will be restricted to the concept of operations governing Code T activities; specific status about on-going or contemplated contract actions will not be addressed. The event will be carried on internal NASA Television.

Civil servants at participating NASA centers will be able to ask questions. Employees at GSFC who wish to watch the presentation and/or ask questions should come to the Building 8 auditorium.

The ODIN's January Issue of Newsletter is Available

The **January** issue of the **ODIN Interchange Newsletter** is available on our Website at <http://www.acs-odin.com/gsfsc/newsletters/GSFCJan04.pdf>. This issue features new server seats, new wireless service, newest technology offerings, the new CNE project.

Call for 2004 Software of the Year Award Submissions

NASA has opened nominations for its 2004 Software of the Year Award, which recognizes software developed and owned by NASA. The award is sponsored by the Chief Engineer, the Chief Information Officer, and Office of Safety and Mission Assurance. Last year Goddard's submission was 2003 co-winner which resulted in \$35,450 being awarded. Full details on submitting applications can be found on the Inventions and Contributions Board homepage at <http://icb.nasa.gov/> or refer to Announcement No. 04-17. Information about past winners and finalists can also be found at that Web site. Entries and supporting material must be submitted by **March 26, 2004**, to Ms. Dale Hithon, Code 504

The New CNE Call Center

The Code 290 Center Network Environment (CNE) Project, which provides network support to the Greenbelt and WFF user communities, is now fully operational. Some of the services offered by the CNE include: Network Connectivity and Design, IP Address Management, Wireless Networking, Remote Access as well as Back Office Services such as Electronic Mail, Web Mail and Web Drive, Video Webcast, Meeting Maker, Active Directory and GSFC Domain Management and much more. For more information on the CNE services and functions, please visit the CNE web site at <http://cne.gsfc.nasa.gov>.

Effective March 1st, 2004, for all your service requests, you can contact the CNE Customer Call Center directly, Monday through Friday from 6:00 a.m. - 6:00 p.m. at (301) 286-7342.

The CNE Project is committed to providing our customers with the highest quality of services and support. Any questions pertaining to the management of the CNE Project should be directed to Curt Suprock, CNE Project Manager, at extension **Volunteers Needed for Educational Programs/Fairs:**

Charles Carroll Science Fair will be held on **March 11 or March 12, 2004** at the Charles Carroll Middle School 6130 Lamont Drive, New Carrollton, MD 20784. You can contact Donna Polite at 301-918-8640. if you are available to participate and for further information.

Anne Arundel County Public Schools 2004 Regional Science and Engineering Fair will be held **Saturday, March 13, 2004** from 1:30 p.m. - 3:30 p.m. at South River Senior High in Edgewater, MD. If interested, contact Rochelle Slutskin at 410-222-5451 (rslutskin@accps.org) or Valerie Wesner at 410-222-5447 (vwesner@accps.org) to be a judge in this year's science fair or to gather further information.

Career Fair at Western School Technology and Environmental Science on Wednesday, **March 31, 2004** at 100 Kenwood Avenue, Baltimore, MD 21228 from 8 a.m. - 1pm. For further information contact Lynn C. Bogash at 410-719-7024.

Career Day Speakers Needed

The Education Office has received a request for a "speaker from GSFC" to address 2 classes of 6th graders at St. Mark's School in Catonsville, MD, on **Thursday, March 11** from 8:30 a.m. - 10:30 a.m. or 10:30 a.m. - 12:30 p.m. (whichever fits his/her schedule best). It is for their Career Day, and the format requested is a 20-minute verbal presentation followed by a 25-minute activity in which students can participate. The contact is Jim Lerch, James_Lerch@pmagroup.com or 410-591-9900.

Call For Mentors: SHARP Program

Mentors are needed for the Summer High School Apprenticeship Research Program (NASA SHARP). Students will have the opportunity to work with a scientist, engineer or technologist conducting meaningful research to enrich and develop oral and written communications, computer and leadership skills, experience in preparing written final reports and developing abstracts of research. If you are interested in mentoring a SHARP student this summer contact Charles Mercer at cmercer@pop100.gsfc.nasa.gov or Mrytle Brijbasi at mybrij@comcast.net.

Hands On Science Program Needs Volunteers in Montgomery County

Be an Adult Leader teaching after school enrichment science classes in Chemistry and Earth Science. Gain experience helping children become aware of how the world works. Learn about the schools near your home as you lead 'Hands On Science' classes that take place in the schools. Meet other parents in your community and in the Hands On Science program. Learn safe, simple science activities appropriate to your child's age and be a part of a team while you help your school and community. If you have previous experience working with groups of children in any setting, a college degree in any field, or equivalent professional experience and are available after school for at least one hour a week for eight weeks, get involved in Hands on Science! Course curriculum and all supplies necessary to teach the class are provided. If this sounds like something you'd like become a part of contact Kimberly Jackson at 301-929-2330

Events

Space Chats

Who: David A. Clary will be discussing and signing his book, "Rocket Man – Robert H. Goddard and the Birth of the Space Age." David A. Clary, former Chief Historian of the U.S. Forest Service, is the author of numerous books and other publications on military and scientific history. He has served as a consultant to several government agencies, and teaches history at Eastern New Mexico University at Roswell, where he resides.

When/Where: **Monday, March 1** at 7 p.m. in the Goddard Visitor Center

This event is open to all and is free, however please register at: <http://www.gsfc.nasa.gov/chats/chat.html>

System Engineering Seminar

Who: Dan Mandl/584, Dr. Steve Chien/JPL, Sandra Grosvenor/SSAI, and Stuart Frye/Mitretek will present about *Experimenting with Sensor Webs Using Earth Observing 1*. The New Millennium Program (NMP) Earth Observing 1 (EO-1) satellite was launched November 22, 2000 as a one year technology validation mission. After an almost flawless first year of operations, EO-1 continued to operate in a testbed mode to validate additional technologies and concepts that will be applicable to future sensor webs. This presentation describes the experiments using EO-1, the lessons learned and the implications for future sensor webs. All employees and visitors with a Goddard badge are welcome.

When/Where: **Tuesday, March 2** at 1p.m. in the bldg 3 Goett Auditorium.

For more information call Tom Bagg, 301-867-0063, email Thomas.C.Bagg.1@gsfc.nasa.gov, or visit: http://seacd.gsfc.nasa.gov/SE_Seminar/

The seminar will be webcast live to the NASA domain at: http://128.183.174.165/Colloquia_asx/NASA/Live/B3NASALive.aspx

Director's Colloquia

Who: Dr. Robert Thomas will discuss his co-authored book, *Geeks & Geezers: How Era, Values and Defining Moments Shape Leaders*. The book presents a model that describes how leaders come to be and identifies the process that allows an individual to under-go testing and to emerge, not just stronger, but equipped with the tolls needed to lead and learn.

When/Where: **Wednesday, March 3** at 10 a.m. in the bldg 3 Goett auditorium

Who: In honor of this year's Goddard Outstanding Management Honor Award winners, Ms. Rosalin (Roz) Jeffries, President of Performance Enhancement Group, Inc. and author of *101 Recognition Secrets: Tools for Motivating and Recognizing Today's Workforce* will discuss the organizational and individual benefits derived from unleashing the power of recognition at Goddard and how each of us can contribute to creating a culture of recognition.

When/Where: **Wednesday, March 24** at 10 a.m. in the bldg 3 Goett auditorium.

For more information, visit: <http://centerdircolloq.gsfc.nasa.gov/>

African-American Organizations' Open House

All are invited to come out to network and meet with members of GSFC's African-American organizations and learn more about their strategic plans and goals.

When/Where: **Wednesday, March 3** at Bea and Barney Rec Ctr (Goddard Rec Ctr) at 10 a.m.

For more information, contact Merle Robbins, 6-7819

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

GSFC/WFF's Chapter of Blacks in Government (BIG) Gold Dinner Dance

The GSFC/WFF's Chapter of Blacks in Government (BIG) is sponsoring a Black and Gold Dinner Dance on **Saturday, March 13** from 6 p.m. - 12 Midnight at GSFC's Rec. Center. Guest speaker will be **Frederick Gregory**, Deputy Administrator, Code AD. The menu includes chicken (advance request), prime rib, baked potato, garden salad, rolls, oven roasted

Continued on page 18

veggies, dessert, sodas and libations. Tickets are **\$25.00 per person /\$40.00 per couple**.

If you would like to attend, please contact Tereda Frazier, 6-5875, Milton Cromer 6-7520, Joyce Brooks 6-5912 or contact any of the BIG members.

Space and Cosmic Ray Physics Seminars - Spring 2004

All seminars are held at the University of Maryland, Computer and Space Science building in room 2400 at 4:30 p.m., tea and cookies at 4 p.m.

Who: Dr. Lynn M. Kistler, U. of New Hampshire, Durham will discuss, *Earth's Magnetosphere/CLUSTER*

When: Monday, March 1

Who: Dr. Bonnard J. Teegarden, Goddard Gamma Ray and Cosmic Ray Astrophysics Branch will discuss *Gamma Rays/INTEGRAL*

When: Monday, March 8

Who: Dr. Janet U. Kozyra, U. of Michigan, Ann Arbor will speak about the, *2003 Super Storm or High Speed Streams and the Upper Atmosphere*

When: Monday, March 15

Who: Dr. Barbara J. Thompson, Goddard Solar Physics Branch will discuss, *EIT Waves: What we Have Learned*

When: Monday, March 23

For free parking please park in lot DD or anywhere on levels 1-2 in lot B (the big parking garage) after 4:00 pm. Make sure that you park in a spot WITHOUT a parking meter.

For information call Matthew Hill at (301) 405-6209 or go to the following website: http://space.umd.edu/seminars/Spring_2004_Seminar.html

Lunch and Learn Sessions

Pressure Point Therapy – Dr. Robert Rufkin of White Flint Healing Center will discuss pressure point theory and how to locate and relieve active pressure points. Participants will be able to locate and treat pressure points associated with common conditions such as headaches, neck pain, back pain, low energy, carpal tunnel syndrome, PMS, and sinus problems. This talk includes handouts, a slide show and group participation doing pressure point therapy. Please call the Health Unit with any questions and to register at 286-6666. Open to civil servant and contractor employees.

When/Where: Thursday, March 11, 12 noon - 1p.m.in Bldg. 26, Room 105

Managing Sick Days with Diabetes - A 45-minute learning session discussion on how diabetics can safely manage the common cold or flu episode. The learning session will also discuss an action plan to prevent excessive work absences and acute diabetic complications. The speaker will be Carolyn Philson, BSN, RN, CDE. She is a Registered Nurse and

Certified Diabetes Educator at the Prince George's Hospital Diabetes Center. Call the Health Unit with any questions and to register at 286-6666. Open to civil servant and contractor employees.

When/Where: Wednesday, March 31, 12 noon - 1p.m. in Bldg. 8, Room 121

Goddard Referral Service Lunchtime Lecture Series

What: The Career Development & Employee Worklife Office, Code 114, is sponsoring a series of lunchtime lectures, through our Goddard Referral Service, to enhance your Quality of Worklife. The next lecture will be **March 18:** "Adult Care: Overview" from 11:30 a.m. - 12:30 p.m. in the Bldg. 8 Aud. Bring your lunch and a friend! The remaining session will be **April 13:** "Budget Basics." For more information, contact Khrista White at x6-9059, khrista.n.white@nasa.gov

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>

Information Science and Technology Colloquia

The IS&T colloquia are held at 3:30 p.m. in the bldg 3 Goett Auditorium

Who: Mr. Richard G. Lyon, optical scientist from the Goddard Applied Information Sciences Branch. Mr. Lyon will talk about *Coronagraphic Methods for Detection of Extrasolar Planets*. It is nearly within our grasp to directly detect Jupiter- and Earth-like planets and to spatially resolve them from the central star with enough photometric sensitivity to identify molecular species including greenhouse gases, estimate orbital parameters, and determine the distribution of exo-planets in our solar neighborhood. Two primary approaches are under consideration for anticipated space-based extrasolar planet search missions: (i) visible (reflected) light coronagraphy and (ii) IR (emitted) nulling interferometry. Which method will be the most viable is still an active area of research. This talk will give a brief overview of the two approaches followed by a detailed overview of a series of coronagraphic approaches that we are currently evaluating via parallel Beowulf computer models.

When: Wednesday, March 10

Who: Chaitan Baru, director of Data and Knowledge Systems, San Diego Supercomputer Center. Mr. Baru will discuss *GEMS: Grid-Enabled Mediation Services*.

When: Wednesday, March 24

Information Science and Technology Colloquia (cont'd)

Who: Mema Roussopoulos, assistant professor of Computer Science on the Gordon McKay Endowment, Harvard University. Roussopoulos will discuss *Preserving Data Integrity in Peer-to-Peer Networks*. Peer-to-peer systems have become synonymous with file-sharing systems. Much of the focus of research in this area has been on providing algorithms to improve the efficiency, robustness, and security of routing in peer-to-peer systems, or designing services such as indexing and search for use by file-sharing applications running on these systems. There has been less focus on discovering new applications or enumerating the characteristics of applications for which peer-to-peer systems provide a viable, if not the only, solution.

When: Wednesday, April 7

First Annual NASA Project Management Conference

Slots are filling up quickly for the First Annual NASA Project Management Conference, so you should act quickly if you want to take advantage of this opportunity.

The First Annual NASA Project Management Conference is a unique opportunity to:

- Enhance understanding of the integration of the cost, schedule, risk, safety, and technical aspects of projects.
- Introduce the latest project management tools and technique.
- 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.

When/Where: March 30-31, 2004, University of Maryland's Inn and Conference Center, College Park, MD

Web Site for Detailed Information <http://pmchallenge.gsfc.nasa.gov/index.htm>

First Call for Papers-7th Mil/Aerospace Applications of Programmable Logic Devices International Conference (MAPLD)

This Conference is hosted by the NASA Office of Logic Design

What: The 7th annual MAPLD International Conference's extensive program will include presentations, seminars, workshops, and exhibits on programmable logic devices and technologies, digital engineering, and related fields for military and aerospace applications.

Devices, technologies, logic design, flight applications, fault tolerance, usage, reliability, radiation susceptibility, and encryption applications of programmable devices, processors, and adaptive computing systems in military and aerospace systems are among the subjects for the conference.

This event promises to be exciting with presentations by government, industry, and academia, including talks by distinguished invited speakers. This conference is open to US and foreign participation and is not classified. For related information, please see the NASA Office of Logic Design Web Site (<http://klabs.org>).

This year, there will be special emphasis on the following themes:

- "War Stories" and Lessons Learned
- Programmable Logic and Obsolescence Issues
- Implementing high performance, high reliability processor cores.
- Logic design evaluation, design guidelines, and recommendations.
- Verification methods for radiation hardness and fault tolerance.
- Applications such as MIL-STD interfaces, UAV's, and controllers.
- Automated Checkers for low reliability design constructs.
- PLD tools/methods that we need but vendors don't supply.

When/Where: September 8-10, 2004 at the Ronald Reagan Building and International Trade Center in Washington, D.C.

For more information, visit the Conference home page at: <http://klabs.org/mapld04>

NCS AIAA Space Systems Technical Committee Dinner

The American Institute of Aeronautics and Astronautics, National Capital Section and the Baltimore Section (NCS AIAA) will host the Space Systems Technical Committee Dinner at the Goddard Recreation Center on **Tuesday, March 2** at 5:30 p.m. Cost is \$10.00.

The featured speaker is Mr. Troy Statton, 2003 NCS AIAA Young Scientist/Engineer Award Recipient. Mr. Statton will speak on 'Considerations for Personnel Training and Qualification in the Conduct of Commercial Space Launch Operations.' An often-overlooked fact is that the Federal Aviation Administration has authority over Commercial Space Launch public safety. This is in addition to its commercial aviation oversight activities. If Commercial Space Flight activity continues to grow, we may need an Aerospace Traffic Control System analogous to the Air Traffic Control System we use for current aviation commercial flights. Guidelines for support personnel training and qualifications may need development such as: Aerospace Maintenance Technicians, Aerospace Ground Controllers, and International Aerospace Liaison personnel. Mr. Statton, during his prior tenure with the FAA, lead a sub-team that studied foreseeable issues and challenges.

Everyone is welcome, however, reservations are required. Contact: [Darlene Ahalt Dahalt@aol.com](mailto:Darlene.Ahalt.Dahalt@aol.com) - 301-812-2764 for Reservations/Info.