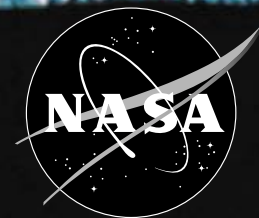


National Aeronautics and Space Administration
www.nasa.gov
Volume 1 Issue 6
September 2005



GooddardView

How We'll get Back to the Moon

Pg 2-3

Wallops Island – 60 Years of Exploration

Pg 4-5

Most Distant Explosion Detected, Smashes Previous Record

Pg 6

NBC 4 Digital Expo

Pg 9

How We'll Get Back to the Moon

By Jim Wilson

Before the end of the next decade, NASA astronauts will again explore the surface of the moon. And this time, we're going to stay, building outposts and paving the way for eventual journeys to Mars and beyond. There are echoes of the iconic images of the past, but it won't be your grandfather's moon shot.

This journey begins soon, with the development of a new spaceship. Building on the best of Apollo and shuttle technology, NASA's creating a 21st century exploration system that will be affordable, reliable, versatile, and safe.

The centerpiece of this system is a new spacecraft designed to carry four astronauts to and from the moon, support up to six crewmembers on future missions to Mars, and deliver crew and supplies to the International Space Station. The new crew vehicle will be shaped like an Apollo capsule, but it will be three times larger, allowing four astronauts to travel to the moon at a time. The new spacecraft has solar panels to provide power, and both the capsule and the lunar lander use liquid methane in their engines. Why methane? NASA is thinking ahead, planning for a day when future astronauts can convert Martian atmospheric resources into methane fuel. The new ship can be reused up to 10 times. After the craft parachutes to dry land (with a splashdown as a backup option), NASA can easily recover it, replace the heat shield and launch it again.

Coupled with the new lunar lander, the system sends twice as many astronauts to the surface as Apollo, and they can stay longer, with the initial missions lasting four to seven days. And while Apollo was limited to landings along the moon's equator, the new ship carries enough propellant to land anywhere on the moon's surface. Once a lunar outpost is established, crews could remain on the lunar surface for up to six months. The spacecraft can also operate without a crew in lunar orbit, eliminating the need for one astronaut to stay behind while others explore the surface.

The launch system that will get the crew off the ground builds on powerful, reliable shuttle propulsion elements. Astronauts will launch on a rocket made up of a single shuttle solid rocket booster, with a second stage powered by a shuttle main engine. A second, heavy-lift system uses a pair of longer solid rocket boosters and five shuttle main engines to put up to 125 metric tons in orbit — about one and a half times the weight of a shuttle orbiter. This versatile system will be used to carry cargo and to put the components needed to go to the moon and Mars into orbit. The heavy-lift rocket can be modified to carry crew as well.

Best of all, these launch systems are 10 times safer than the shuttle because of an escape rocket on top of the capsule that can quickly blast the crew away if launch problems develop. There's also little chance of damage from launch vehicle debris, since the capsule sits on top of the rocket.

In just five years, the new ship will begin to ferry crew and supplies to the International Space Station. Plans call for as many as six trips to the outpost a year. In the meantime, robotic missions will lay the groundwork for lunar exploration. In 2018, humans will return to the moon.

For more images of the proposed spaceship, visit:

http://www.nasa.gov/missions/solarsystem/cev_hi_res.html ■

Table of Contents

Inside Goddard

How We'll Get Back to the Moon - 2, 3

Goddard News

Wallops Island – 60 Years of Exploration - 4, 5

Most Distant Explosion Detected,

Smashes Previous Record - 6

Master Plan Implementation Begins - 7

Goddard Technologies Win 2005

Technology Transfer Award - 8

NBC 4 Digital Expo - 9

Goddard Updates

Elimination of Travel Packets on October 1, 2005 - 10

Proposal Opportunities - 10

Goddard Education

GSFC New York City Research Initiative Completes Third

Summer Program - 11

Goddard Family

Celebramos! - 12

Cover: Close-up view of an astronaut's footprint in the lunar soil photographed with a 70mm lunar surface camera during the Apollo 11 extravehicular activity on the moon.

Photo Credit: NASA-JSC

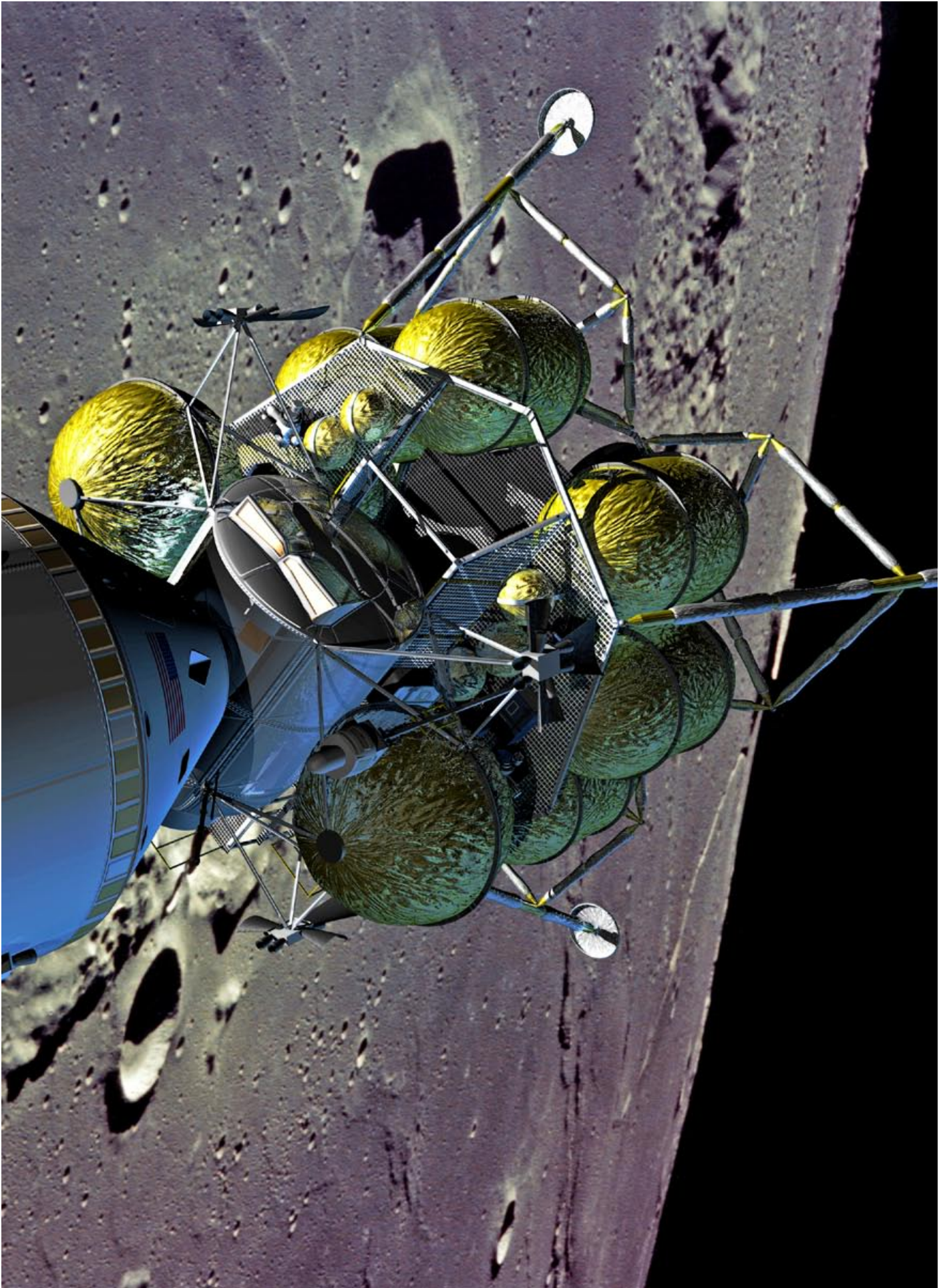
GoddardView Info

Goddard View is an official publication of the Goddard Space Flight Center. It is published bi-weekly by the Office of Public Affairs in the interest of Goddard employees, contractors, and retirees. Its circulation is approximately 11,500.

Managing Editor: Trusilla Steele

Editor: Alana Little

Deadlines: News items and brief announcements for publication in the Goddard View must be received by noon of the 1st and 3rd Wednesday of the month. You may submit contributions to the editor via e-mail at alittle@pop100.gsfc.nasa.gov. Ideas for new stories are welcome but will be published as space allows. All submissions are subject to editing.



NASA's new crew exploration vehicle in lunar orbit.

Artist's concept by John Fressanito and Associates.

Wallops Island – 60 Years of Exploration

By Keith Koehler

As the Sun slowly rises, a light fog begins to dissipate and sea gulls can be heard overhead. The ocean breaks along the beach. A light breeze dances across the sand. The morning begins on Virginia's barrier island formerly called Keeckotank, Accocomoson and Occocomoson.

Further down on the island, crews that have been at work since two in the morning go through the final steps to prepare a rocket for launch, just as they and others have done for the past 60 years—another day begins at America's oldest continuous rocket range—Wallops Island.



Photo Credit: NASA

The first research rocket launched from Wallops Island was Tiamat on July 4, 1945

Since 1945, NASA's Wallops Flight Facility (WFF) has launched more than 15,000 rockets from Wallops Island for science studies, technology development, and as targets for the U.S. military.

Wallops roots are based on this country's need for missile research during World War II. The Langley Aeronautical Laboratory in Hampton, Va. was tasked with supporting this research. A place was needed on the water, near Langley and near a military facility. Wallops Island fit the bill. The first test rocket was launched on June 27, 1945. The first research rocket, a Tiamat, was launched several days later on July 4.

After being established at Wallops, the focus of the Pilotless Aircraft Research Station expanded to include studying airplane designs at supersonic flight and gathering information on flight at hypersonic speeds. These tests included aircraft and missile designs from a variety of organizations and corporations including Douglas, McDonnell, Boeing, North American, Lockheed, and Grumman.

With the establishment of NASA in 1958, Wallops' role in the new space agency changed and it was renamed Wallops Station. The station expanded in 1959 to include the Chincoteague Naval Air Station, which now is known as the Wallops Main Base.

Wallops played a key role in the development of the Mercury space capsule, the first step in the U.S. human space program. The basic design of the capsule and the escape system were tested at Wallops. In addition, the development of the SCOUT rocket was conducted at Wallops and the facility saw its first launch of a satellite into Earth orbit in 1964.

The purpose of rocket launchings at Wallops became more focused on supporting science experiments of Earth's atmosphere and space. In addition, Wallops began to support science studies in countries throughout the world. One project included the launching of rockets from the deck of a ship off the coast of Ecuador.

In the 1970s, Wallops expanded its research role as it became a NASA center and was renamed Wallops Flight Center. Aircraft began to be used as flying science platforms, conducting missions world-wide. Wallops played a key role in the development of using instruments for use on satellites to measure sea topography. Today, these instruments provide critical information on ocean phenomena such as El Nino.

In 1981, Wallops became a part of the NASA Goddard Space Flight Center and was renamed the Wallops Flight Facility. This change brought additional mission responsibilities including the management of the scientific balloon program.



Photo Credit: NASA

Crews prepare a Little Joe rocket for launch from Wallops Island. The Little Joe project tested escape systems for the Mercury capsule and biomedical conditions during rocket flight in the early 1960s.

[Continued on Pg. 5](#)

Wallops Island – 60 Years of Exploration—Continued

By Keith Koehler



Photo Credit: NASA

A Black Brant XII sounding rocket takes flight from Wallops Island. The four-stage rocket can fly to altitudes higher than 800 miles.

Today, the exploration efforts at Wallops are based on its 60 years of experience in conducting research using rockets, scientific balloons and aircraft. Sounding rockets continue to carry science instruments conducting space and Earth systems research. They also are being used to support rocket technology development including testing of new innovative rocket systems to improve safety and reliability and reduce costs of spaceflight.

Research is being conducted to expand the use of scientific balloons on Earth and other planets. NASA is working to develop balloon systems to expand the current flight duration from a few hours and weeks to more than 100 days. Also, balloons are being explored to carry science instruments on planets such as Mars and Venus.

Aircraft research is expanding from traditional airplanes to include uninhabited aerial vehicles (UAVs), similar to those that have been used to support the military.

Wallops scientists study the interaction between the oceans, atmosphere, and land. This includes researching the affect of global climate change on the world's ice sheets, providing accurate measurements of the topography of the oceans, land and developing systems to measure ocean microscopic plants and the role these plants have in the global carbon cycle.

The facility provides unique capabilities for students in kindergarten through university level to receive hands-on experience in engineering and science. Thousands of students in the United States participate in programs to design and fly experiments and support systems on NASA flight vehicles annually.

For the past 60 years, NASA's Wallops Flight Facility has applied its unique capabilities and facilities to expanding our knowledge of flight, earth and the universe. The facility is poised to support a new era of discovery as the agency embarks on the Vision for Space Exploration.

For information about Wallops on the Internet, visit:
<http://www.wff.nasa.gov> ■



Photo Credit: NASA

A NASA scientific balloon is launched in McMurdo, Antarctica. About 25 scientific balloons are flown annually from sites around the world.

Most Distant Explosion Detected, Smashes Previous Record

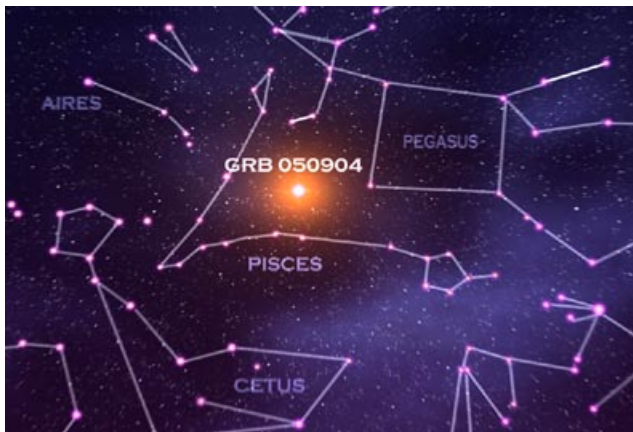
By Susan Hendrix

Scientists using NASA's Swift satellite and several ground-based telescopes have detected the most distant explosion yet, a gamma-ray burst from the edge of the visible universe. This powerful burst was detected September 4, 2005. It marks the death of a massive star and the birth of a black hole. It comes from an era soon after stars and galaxies first formed, about 500 million to 1 billion years after the Big Bang.

"We designed Swift to look for faint bursts coming from the edge of the Universe," said Swift principal investigator Dr. Neil Gehrels of NASA GSFC. "Now we've got one and it's fascinating. For the first time we can learn about individual stars from near the beginning of time. There are surely many more out there," he added.

Only one quasar has been discovered at a greater distance. Quasars are super-massive black holes containing the mass of billions of stars. This burst comes from a lone star. Scientists say it is puzzling how a single star could have generated so much energy as to be seen across the entire Universe. The science team has not yet determined the nature of the exploded star. A detailed analysis is forthcoming.

Scientists measure cosmic distances via redshift, the extent to which light is "shifted" toward the red, or lower energy, part of the electromagnetic spectrum during the light's long journey across the Universe. The greater the distance, the higher the redshift.



The most distant explosion ever detected occurred deep deep in the constellation Pisces. The explosion—a gamma-ray burst, from a star explosion—occurred nearly 13 billion years ago. The light passed by the earth on September 4, 2005 in the form of a brilliant flash of gamma-rays, detected by NASA's Swift satellite.

The September 4 burst, named GRB 050904, has a redshift of 6.29, which translates to a distance of about 13 billion light-years from earth. The Universe is thought to be 13.7 billion years old. The previous most distant gamma-ray burst had a redshift of 4.5. The most distant quasar known is at a redshift of 6.4.

This burst was also very long, lasting more than 200 seconds, whereas most bursts last only about 10 seconds. The detection of this burst confirms that massive stars mingled with the oldest quasars. The detection also confirms that even more distant star explosions can be studied through combined observations of Swift and the network of world-class telescopes.

"This is uncharted territory," said Dr. Daniel Reichart, University of North Carolina (UNC), Chapel Hill, who spearheaded the distance measurement. "This burst smashes the old distance record by 500 million light-years. We are finally starting to see the remnants of some of the oldest objects in the Universe," he added.

Swift detected the burst and relayed its coordinates within minutes to scientists around the world. Reichart's team discovered the afterglow using the Southern Observatory for Astrophysical Research (SOAR) telescope atop Cerro Pachon, Chile. Over the next several nights, the UNC team used SOAR and the Gemini South telescope, also on Cerro Pachon, to calculate a redshift of greater than 6 using a light filtering technique. A team led by Nobuyuki Kawai of the Tokyo Institute of Technology used the Subaru Observatory on Mauna Kea, Hawaii, to confirm the distance and fine-tune the redshift measurement to 6.29, using a technique called spectroscopy.

"The earliest stars exploded eons ago, we know very little about them," said Josh Haislip, a UNC team member who analyzed data from SOAR. "One of the best ways we can study them is by watching for their explosions. Swift can pinpoint the location of the explosions, and telescopes such as SOAR can study the composition of the debris to understand where and when these stars formed and what they were made of," he added.

The SOAR telescope is funded by the U.S. National Optical Astronomy Observatory, Tucson, Ariz., through the National Science Foundation (NSF), Arlington, Va.; the Ministry of Science of Brazil; Michigan State University, East Lansing; and UNC. The twin Gemini Observatory telescopes represent an international partnership funded in part by the NSF. Goddard manages the Swift mission for NASA's Science Mission Directorate, Washington. Mission operations are conducted by Penn State University, University Park. Swift's other national laboratories, universities and international partners include the Los Alamos National Laboratory, N.M.; Sonoma State University, Rohnert Park, Calif.; the United Kingdom; and Italy.

For more information on the Internet, visit:

http://www.nasa.gov/vision/universe/starsgalaxies/2005_distant_grb.html ■

Master Plan Implementation Begins

By Karen Flynn

The Facilities Master Plan for the Greenbelt campus was approved in April 2003 and preparations have been underway since that time to begin implementation of the physical changes called for in the plan. The plan includes many interrelated proposals, spanning a twenty-year period, to enable the Center to effectively meet its long-term mission objectives. The principle features of the plan include re-routing of Soil Conservation Road and modification and construction of facilities to meet state-of-the-art quality requirements for the Center's most mission critical activities. This summer, the Center reached two critical milestones in the implementation of the Master Plan.

First, on July 27 the Facilities Management Division awarded a contract to Melvin Benhoff Sons, Inc of Baltimore, MD for the construction project to reroute Soil Conservation Road. Some initial survey and mobilization work has begun but significant construction is not expected to begin until October. The duration of the contract is 14 months and the new roads are expected to be put into operation in Fall 2006.

The project will construct a two-lane road around the perimeter of the East Campus and install a new signalized intersection at the northern intersection with the existing Soil Conservation Road.

The project will also install a new signalized intersection with Good Luck Road near the GSFC Recreation Center, widen Good Luck Road to Greenbelt Road, and upgrade the Good Luck Road/Greenbelt Road intersection. A new access road will also be installed to the Visitor Center.

The second critical milestone reached this summer was the completion of the design schematics for the new Exploration Sciences Building (ESB). The ESB is the first major building project associated with the Master Plan and it will provide offices and state-of-the-art laboratories for approximately 750 people in the Sciences and Exploration Directorate. Following the rerouting of Soil Conservation Road, construction on the new building will immediately begin. The site for the new building straddles the current location of Soil Conservation Road just north of Explorer Road. Locating the new building on this site will help link the current east and west campuses into a single, unified installation and better integrate Buildings 32 and 33 with the rest of the campus. The new ESB is expected to be occupied in the Summer 2009.

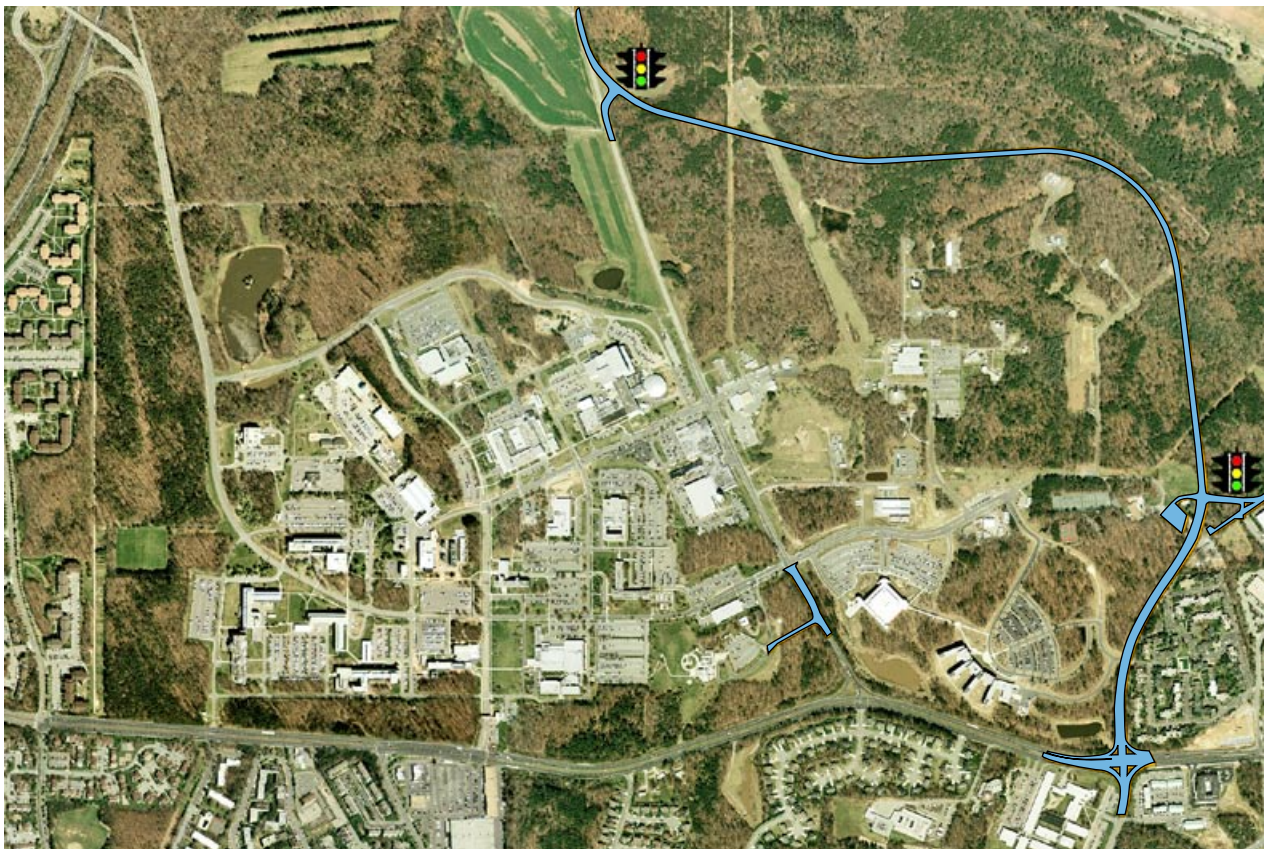


Photo Credit: Michael Westbrook

Plan for re-routing of Soil Conservation Road.

Goddard Technologies Win 2005 Technology Transfer Award

By Nicole Quenelle

At a September 15, 2005, awards ceremony in Rocky Gap, Maryland, NASA Goddard Space Flight Center's (GSFC's) Micro Pulse Lidar (MPL) technology and its MPL Network (MPLNET) were awarded the 2005 Federal Laboratory Consortium (FLC) Mid-Atlantic Regional Excellence in Technology Transfer Award. Revolutionizing atmospheric aerosol and cloud data gathering, the MPL device provides ground-based, continuous monitoring of vertical distributions of dust, soot, sulfate, sea salt and other aerosol particles in Earth's atmosphere, helping researchers better understand pollution patterns and climate change. Extending the technology beyond NASA, MPLNET organizes data gathered by MPL devices around the globe and makes it available to other researchers online, enabling further progress toward understanding and controlling pollution and predicting climate patterns.

A government-wide forum for technology transfer, the FLC each year recognizes innovations that are transferred beyond the laboratories that created them to benefit the larger research community and U.S. industry. GSFC's researchers were recognized based on achievements in transferring the MPL and MPLNET technologies to benefit other researchers and commercial efforts.

Improving atmospheric monitoring

Unlike earlier lidar-based research devices, the MPL device allows safe, easy-to-use and cost-effective means of monitoring the distribution of clouds and pollutants in remote areas.

"The MPL device was the first lidar-based design to be eye-safe, small, simple and reliable, allowing us to make long-term, unattended lidar monitoring of the atmosphere possible," said Dr. James Spinhirne, GSFC's MPL project leader.

Transferring the MPL technology to the commercial sector enabled initial improvements to the MPL design, according to Dr. Spinhirne.

Sharing atmospheric data

As NASA began providing technical support for MPL devices being sold to foreign and domestic institutions, GSFC scientists recognized the need for an organized network. "We wanted to provide a means of disseminating MPL expertise to those purchasing commercial MPL systems. We also sought to organize MPL operations into a network so that the data could be merged with larger climate and weather observation programs around the world. Thus, MPLNET was born," said Dr. Ellsworth Welton, GSFC's MPLNET project leader. Established in 2000 and funded by NASA, MPLNET collects data from many MPL devices across the globe and publishes the data online, making it available for free to all researchers. It also provides a means of standardizing the MPL design, calibration techniques, and operating procedures to ensure high-quality data is obtained. The network gave scientists unprecedented access to atmospheric data not previously available. The

MPLNET Web site has received more than 15,000 hits to date and has more than 170 registered users. Contributions from MPLNET include studies of Saharan and Asian dust, pollution aerosols, smoke from biomass burning, and blowing snow and cloud heights over Antarctica.

With its far-reaching data-collection capabilities, MPLNET is now fully intertwined with the MPL project itself. "MPLNET now leads the instrument-development effort," notes Dr. Welton.

Recent MPL device enhancements have been funded by MPLNET, led by Tim Berkoff at the Goddard Earth Sciences and Technology Center at the University of Maryland. These improvements support ongoing commercialization efforts for companies licensing the devices, specifically Sigma. According to Dr. Spinhirne, GSFC researchers have worked extensively to secure funding and to help Sigma transfer the revised technology. "Sigma now has established engineering capabilities and adequate training to ensure a high-quality product to benefit other commercial research interests," said Dr. Spinhirne.



Photo of Jim Spinhirne (Middle) and members of FLC-MAR

According to Dr. Welton, MPL and the data provided by MPLNET are revolutionizing the way Earth's atmosphere is researched and understood. Routine profiling of aerosol and cloud layers can now be obtained safely and less expensively than was previously possible and shared with a large and growing range of researchers. "MPL and MPLNET help us better understand cloud and aerosol movement over the globe, so we can predict and protect against dangerous conditions," said Dr. Spinhirne. "Sharing the technology and data with other researchers around the world can help us understand the sources of pollution, and even make changes to protect our environment."

For further information about MPL, visit:

<http://afc.gsfc.nasa.gov/ft-tech-micro-pulse-lidar.html>

For access to MPLNET, visit: <http://mplnet.gsfc.nasa.gov>

For more information about this award or Goddard's Office of Technology Transfer, visit: <http://techtransfer.gsfc.nasa.gov>

NBC 4 Digital Expo

By Amy Pruett

A 12 ft NASA meatball suspended 10 ft in the air is noticeable. During the weekend of August 12-15, 2005, NASA GSFC presented an eye-catching, interest-grabbing exhibit to over 40,000 individuals at the NBC4 Digital Expo. The 12th Annual event, held at the DC Convention center always highlights and promotes advances in technology. This year's event was no exception as attendees had the opportunity to ride Segways, snap photos with the newest high-tech digital cameras, watch engineers-in-the-making battle robots in a FIRST competition, and enjoy race vehicle and aviation simulators.

NASA GSFC presented a 3-dimensional exhibit with not just one, but four components to draw individuals in. Children and adults eagerly waited in line at Goddard's photo booth that made them instant astronauts.

In another area, a touch-screen computer that manipulated 3-D models of the planets, gave them a closer look and new perspective of our solar system. Then, the public had a chance to observe the future of robotic vehicles that will be used in NASA's Planetary exploration missions. Mike Combriate and his team demonstrated their autonomous robot that navigates around obstacles by taking a 3-D image every few feet. Other portions of the exhibit included an earth-science display and a multimedia presentation on space sciences. And, of course, the weekend would have been incomplete without the thousands of informational handouts that flew off the tables and into visitors' hands.

As is NASA GSFC's tradition at the NBC4 Digital Expo, its fascinating exhibit had to have been one of the most memorable stations. Where else could one be an astronaut, touch and manipulate planets, and watch the maneuvers of the next generation of Planetary exploration rovers? Attendees that did not stop by NASA's area certainly missed out. ■

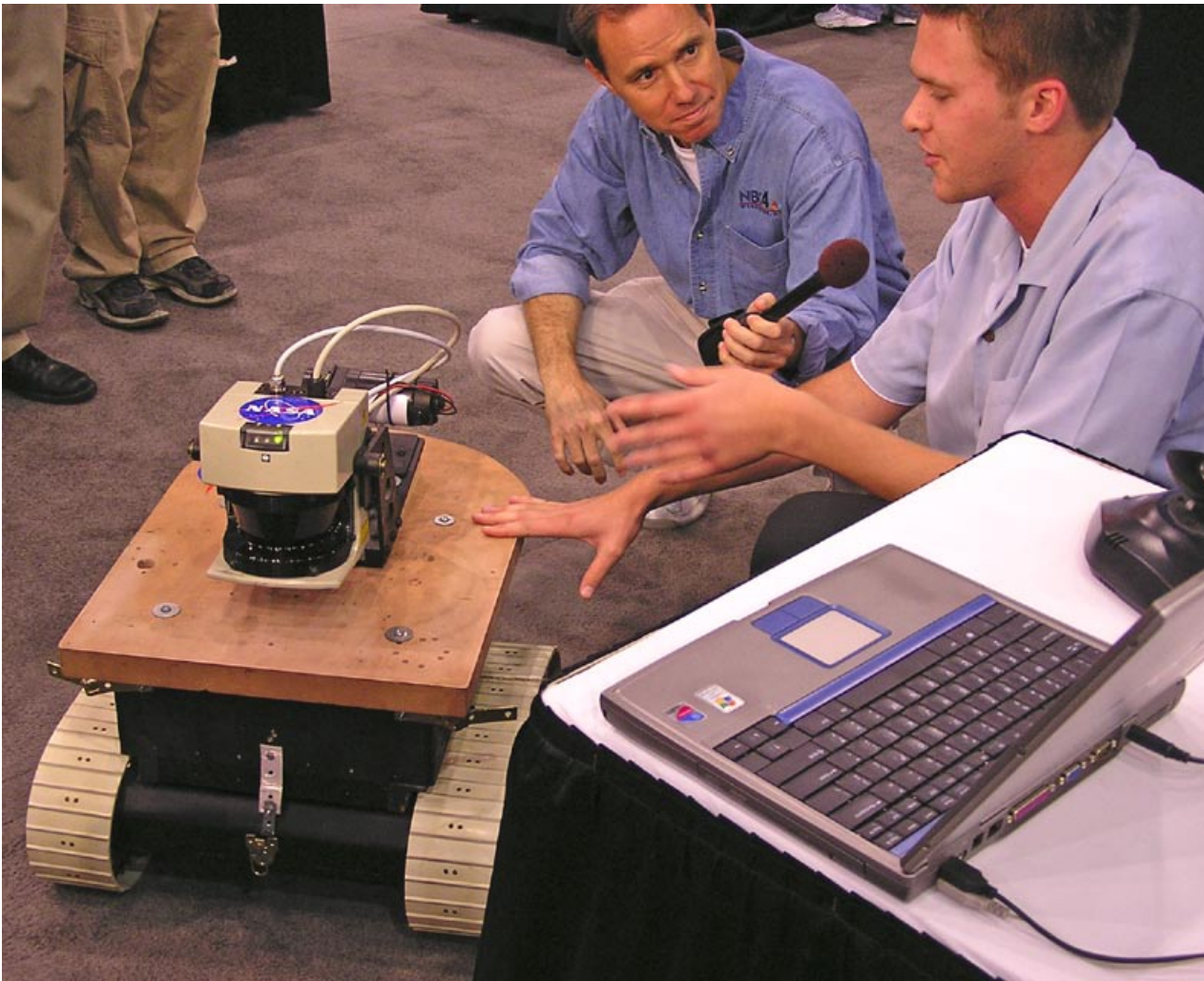


Photo Credit: Mike Combriate

Goddard intern Stephen Nan, a graduate of Michigan State University introduces NBC4's Jim Handy to a member of the next generation of Planetary Exploration Vehicles.

Elimination of Travel Packets on October 1, 2005

By Gail Allen

CI Travel books airline, hotel, and rental car reservations for GSFC travelers. They also issue travel packets that contain an itinerary, hotel tax exempt form, rental car insurance information, and the GSFC Form 26-2 (Worksheet for Travel Voucher). Since travel itineraries and tickets can be provided electronically for all domestic travel, the CI Travel on-site office will no longer issue travel packets for domestic travel starting October 1.

CI Travel will issue the GSFC traveler an electronic itinerary when the reservation is booked and the E-Ticket receipt when the Travel Authorization (TA) is approved by finance. Most international airline tickets are not available electronically, so paper tickets would be issued from the CI Travels' on site office in Bldg. 17. Travelers must maintain a copy of the airline receipt and other required receipts for travel voucher submission and reviews (FTR 301-52.4).

The information currently contained in the travel packets can be found at the following Web sites:

To view the tax exempt and GSFC Form 26-2 (Worksheet for Travel Voucher), visit: <http://travelmanager8.gsfc.nasa.gov/documents.html>

To view the web site for rental car information, visit: <http://www.mtmc.army.mil/frontDoor/0,1865,OID=3--215-219--219,00.html>

The Travel Authorization document can be printed from the Travel Manager Website under "Preview Document" after it is signed and approved by finance. The Travel Manager is not operated or maintained by CI Travel. It is a finance system. Questions on this system can be addressed by calling 6-2800.

For questions or more information about this new process, contact Mr. Fritz Ankerman at Frederick.Ankerman-1@nasa.gov or x6-4384. ■

Proposal Opportunities

NASA Research Announcements (NRA)

InfraRed Telescope Facility (IRTF) Observing Time

Close Date: 10/3/2005

For more information please visit <https://nspires.nasaprs.com>

Research Opportunities in Space and Earth Science (ROSES)

NASA Astrobiology Institute - Cycle 4

Proposal Due Date: 10/28/2005

Radiation Belt Storm Probes Investigations and Geospace-Related Missions of Opportunity

NOI: 9/27/2005

Proposal Due Date: 11/22/2005

For more information contact the New Opportunities Office x6-5442

GSFC New York City Research Initiative Completes Third Summer Program

By Leslie McCarthy

The NASA Goddard Space Flight Center New York City Research Initiative (NYCRI) just completed its third summer team research program. In this innovative program, teams of high school and undergraduate students and faculty work along side graduate students and the principal investigators of NASA-funded research projects at universities within a 50-mile radius of New York City (NY, NJ and CT); or at the NASA Goddard Institute for Space Studies (GISS) for eight weeks.

NYCRI is sponsored by the NASA Education Office and the Science Mission Directorate. Partners include the NASA Summer High School Research Apprenticeship Program (SHARP), the NSF New York City Louis Stokes Alliance for Minority Participation (LSAMP), and the Space Grant Consortiums of New York, New Jersey and Connecticut, as well as NASA Graduate Student Research Program and Summer Faculty Fellowship programs. Thirty NYCRI research teams were assigned to 12 colleges in the New York City metropolitan area and at NASA GISS in the summer of 2005. During the academic year, NYCRI high school and college faculty formulate and implement NASA research-based learning units in existing high school and college science, technology, engineering and mathematics courses.

Summer enrichment experiences included content and research seminars, team oral research reports and visits to various research laboratories and informal education institutions such as the American Museum of Natural History (AMNH), the Liberty Science Center and the Bronx Zoo. Teams

also participated in a final research summit with participants from other government agencies, such as NSF, NOAA, and the United States Departments of Education and Defense. Dr. Bernice Alston, Acting Associate Administrator for Education, was keynote speaker at the 2005 NYCRI Research Summit, which was held at the Stevens Institute of Technology (lead institution for the New Jersey Space Grant Consortium). Also, Dillard Menchan, GSFC Deputy Education Officer, served as the luncheon speaker and stated, "the NYCRI students are extraordinary, as young people and as students, dedicated to pursuing their education and helping NASA scientists in their research."

The students had several interesting opportunities to participate in NASA outreach activities. In August, many visited the set of CBS' The Early Show to join in welcoming home the crew of the Discovery. The students also participated in a special program at AMNH with Discovery commander Eileen Collins, Mission Specialist Charles Camarda and spacewalkers Stephen Robinson and Soichi Noguchi.

Dr. Frank Scalzo, a GSFC Education Programs Specialist stationed in New York, is the Technical Officer for this program. Dr. Leon Johnson, a professor at Medgar Evers College (City University of New York) is the Principal Investigator. Manuel Garmendez, former NASA SHARP student and current undergraduate at Stevens Institute of Technology, is the NYCRI webmaster. For more information on NYCRI, visit: <http://education.gsfc.nasa.gov/nycri/>. ■

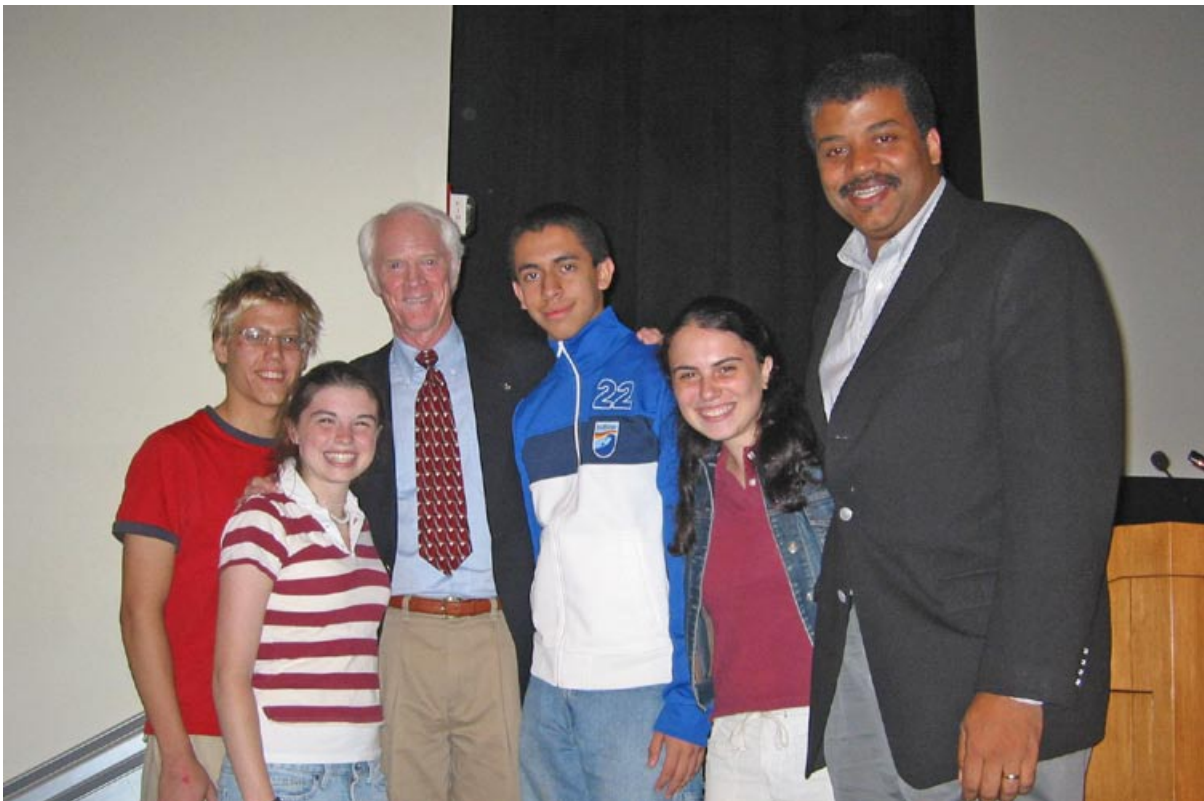


Photo Credit: NASA

Starting from left are student researchers: Nick Van Nispen, Nancy Huemer, Rusty Schweigert (astronaut), student researchers: Oscar Puente, Amy Brazin, and Dr. Neil deGrasse Tyson (Rose Center Astrophysicist).

Employee Spotlight

Celebramos!

By Alana Little

September 15–October 15, National Hispanic Heritage month and all month long the members of the Goddard Hispanic Heritage Club (GHC) and the Hispanic Advisory Committee for Employees (HACE) have been promoting the awareness of Hispanic heritage and culture around Center and in the community. Comprised of Hispanic employees from each Directorate on Center, members of HACE meet regularly to discuss issues of importance and concern for the Hispanic community.

Doing this ensures that Goddard will be able to continue to tap into the wealth of talented individuals in the Hispanic community. This also ensures that the Hispanic employees on Center can then go back to their communities and promote NASA and Goddard’s missions which in turn creates all-around fellowship and understanding.

The purpose of the GHC is to provide a medium by which members can share and promote their culture; serve as a sponsoring organization to arrange social events and recognition ceremonies; provide support/information to new Hispanic employees at Goddard; and provide activities to encourage young people to pursue careers in engineering, math and science.

Goddard’s Hispanic employees are also very active in local Hispanic community, sharing Goddard resources with students and teachers. Goddard’s Spanish-speaking employees also serve as bilingual judges for science fairs, speakers for career fairs and other activities, and hosts for on-site visits. GHC/HACE activities this month feature the always-successful Paella Night which took place September 23rd, and a Hispanic Heritage Luncheon featuring newly appointed Director of AETD, Orlando Figueroa. Other celebrations throughout the year include the celebration of Three Kings Day, and Cinco de Mayo (May 5). ■



Members of HACE and the GHC

Photo Credit: Gil Colon