GODDARD news

National Aeronautics and Space Administration
Goddard Space Flight Center

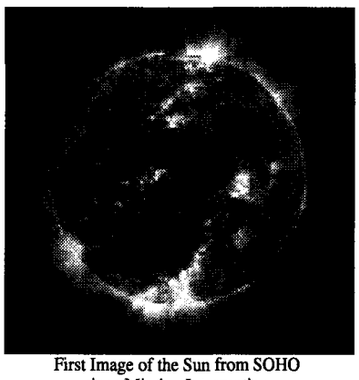
Greenbelt, Maryland/Wallops Island, Virginia

Oct. 1998 Vol. 2 No. 41

The Goddard News is published weekly by the Office of Public Affairs, Goddard Space Flight Center, Greenbelt, MD 20771

SOHO Is Nearly Back In Business

High-quality new pictures of the Sun, taken earlier this week from the Solar and Heliospheric Observatory (SOHO), have raised hopes that the mission may soon be returned to scientific operations. Engineers have successfully reactivated nine of the 12 instruments on the European Space Agency (ESA)/NASA SOHO mission, which has been out of commission for nearly four months after contact was lost on June 24. Images from the Michelson Doppler Imager and the Extreme Ultraviolet Imaging Telescope on SOHO are posted on the Internet at: **http://sohowww.nascom.nasa.gov**



First Image of the Sun from SOHO since Mission Interruption

"Scientists on both sides of the Atlantic have waited anxiously for the recovery of SOHO," commented Roger Bonnet, ESA's director of science. "Thanks to the extraordinary determination and skill of ESA and NASA personnel, with industrial contractors and scientific teams also playing their part, the world has recovered its chief watchdog on the Sun. SOHO is needed more than ever, because the Sun is rapidly becoming stormier with a mounting count of sunspots."

"It's very exciting to see these images again after so many weeks of concern. We hope that all the SOHO scientific instruments can be returned to the same level of health, so we can resume normal scientific operations in the near future," said Dr. Joseph Gurman, the U.S. project scientist for SOHO, and co-investigator on the Extreme Ultraviolet Imaging Telescope (EIT).

"As of today, nine of the 12 instruments on board SOHO have been turned on. Four of them are already fully functional; the other five are still undergoing careful recommissioning activities. But so far no signs of damage due to thermal stress during the deep freeze have been detected. I tip my hat to the engineers who built this spacecraft and these sensitive but robust instruments," said Dr. Bernhard Fleck, the ESA project scientist for SOHO. The remaining three instruments will be switched on over the next few weeks.

For further details visit the Goddard homepage at **http://www.gsfc.nasa.gov**. The first EIT recovery image is available at **http://sohowww.nascom.nasa.gov/operations/Recovery/eit_171_981013.gif**

EMPLOYEE VIEWING OF STS-95 LAUNCH

Are you wondering where you can view the launch of STS-95 on October 29? Wonder no more. Goddard Employees are invited to view this historic launch via NASA TV in the Building 8 auditorium. Pre-launch activities begin at 1:30 p.m., the launch is currently scheduled for 2:00 p.m. Employees attending the launch will receive special handouts and refreshments will be served.

CONTINUING RESOLUTION UPDATE

The fourth stopgap Continuing Resolution to fund the Federal Government extends through midnight on Friday, October 16. It is expected that an Omnibus budget will be passed and signed by the President before the Continuing Resolution expires. In the event this does not occur, employees can call the Goddard code-a-phone (301-286-NEWS) for guidance.

Earth Sciences Directorate Garners Six Selections

NASA's Office of Earth Sciences recently announced the selection of 27 proposals under a new program to develop and demonstrate new measurement technologies through ground-based laboratory activities. The Instrument Incubator Program (IIP) will reduce the risk, cost, size, and development time of Earth-observing instruments and enable new Earth-observation measurements.

The six IIP proposals selected from Goddard's Earth Sciences Directorate were:

A Small, Lightweight Radiometer to Improve the Temporal Sampling of Rainfall -- Principal Investigator: ***Chris D. Kummerow.*** This proposal is intended to demonstrate the feasibility of building a new, cheaper, lightweight radiometer that could eventually be flown in a constellation similar to new communications satellites in order to obtain global rainfall in 3 hour intervals. Such measurements have applications not only in climate change research, but a multiplicity of immediate practical applications from agriculture to flood prediction and aircraft routing just to give a few examples.

A Compact Multispectral Infrared and Visible Spectral Imaging Radiometer for Cloud and Surface Observations from Small Spacecraft, Engineering Model Development -- Principal Investigator: ***James D. Spinhirne.*** This proposal is to develop an imaging radiometer with infrared and visible channels that is much smaller and lower cost than previous designs. The instrument will be based on revolutionary new types of detectors. Such compact instruments will enable multiple instrument combinations on small satellites for improved earth science observations.

Airborne Scanning Raman Lidar System Based on a Holographic Optical Element Scanner/Receiver -- Principal Investigator: ***David. N. Whiteman.*** This proposal is a novel approach to Raman scattering lidar measurements which incorporates a set of holographic optical elements will be developed under this program. This new set of elements will allow a 60 nm band of wavelengths to be imaged on a stationary array of fiberoptics allowing a range of measurements to be performed using a minimum of additional optics. These measurements include water vapor mixing ratio, aerosol scattering and extinction as well as others. The design goal for the new system would allow these measurements to be made during either the daytime or nighttime.

Compact Hyperspectral Mapper for Environmental Remote Sensing Applications -- Principal Investigator: ***Scott J. Janz.*** The goal of this proposal is to design and build a laboratory demonstration of a low-cost, compact filter radiometer that could be used to do highly spatially resolved global mapping of ozone or other chemical constitutents, and aerosols in the stratosphere and upper troposphere.

Spaceborne microlaser (Micro Altimeter) for Earth Science Applications -- Principal Investigator: ***John Degnan.*** This proposal is to develop and test an aircraft-based multikilohertz aircraft-based microlaser altimeter (or "microaltimeter") for generating 3D maps of underlying terrain, cloudtops, and tree canopy heights. Unlike conventional laser altimeters, the microaltimeter operates in a regime where solar photons scattered from the surface and intervening atmosphere into the receiver far outnumber the photons reflected from the surface. The instrument uses very low energy laser pulses, small telescopes, single photon detection, and sophisticated receivers and software algorithms to extract the surface topography from the noise background in near real time. Potential advantages to future spaceborne missions include significantly higher surface return rates and improved spatial resolution from a lighter, more compact and efficient instrument.

Two Dimensional Synthetic Aperture Radiometer for Microwave Remote Sensing from Space -- Principal Investigator: ***David M. Levine.*** This proposal is to develop interferometric technology (aperture synthesis) to achieve high spatial resolution for passive microwave remote sensing from space. The extension to synthesis in two dimensions represents the next step the development of a technology pioneered here at Goddard. An aircraft instrument will be built with application to the measurement of soil moisture and sea surface salinity.

A complete listing of the first group of awards is available on the Internet at URL: **http://www.hq.nasa.gov/office/ese/nra/winners_list.html**

Goddard Annual New Technology Reporting Program and James Kerley Award Winner

By Lynn Sanders, Technology Commercialization Office

The Technology Commercialization Office (TCO) recently hosted its Seventh Annual New Technology Reporting Program. According to ***Nona Minnifield-Cheeks***, Manager of the Commercial Outreach/Integration Office, "We hold this event to demonstrate the commercial uses of Goddard-reported technologies...and to acknowledge Goddard employees who work with the TCO in the reporting and processing of new technologies." Over 160 Goddard employees attended.

Orlando Figueroa(l) and Charles E. Cote (r) present Geary Schwemmer with James Kerley Award for his commitment to technology transfer and commercialization

The program began with a presentation by Dr. Robert Scaringe, President of Mainstream Engineering. Dr. Scaringe discussed the successful commercialization of QwikBoost, an energy-saving coolant that is a spinoff from a Goddard Small Business Innovation Research (SBIR) contract for spacecraft thermal control systems.

The program concluded with a brief awards ceremony. Center Director ***Al Diaz*** presented patent awards to the following Goddard employees: ***Charles Clagett/Code 573***, ***Jim Chern/Code 750***, ***Peter Hughes/Code 580***, ***Leslie Payne/Code 686***, and ***Ted Swanson/Code 545***. Finally, ***Orlando Figueroa***, Director, Systems, Technology, and Advanced Concepts presented the prestigious Kerley Award to ***Geary Schwemmer/Code 912*** for his commitment to reporting new technology. Commercialization of his holographic optical element technology could have a $40-million impact on the economy.

If you would like to become involved in the technology commercialization process, please call x65810 or visit our website at **http://techtransfer.gsfc.nasa.gov/**.

The Fabulous Four

The National Technical Association (NTA) has recently announced the winners of the 1998 NTA Top Women in Science Award. Goddard is proud to announce that four of the winners are Goddard employees: ***Jacqueline L. Mims/Code 586, Stephanie Nickens/Code 586, Shiela Ritter/Code 583, and Jeannine Shirley/Code 586***. Each woman was selected for her contributions to the technical arena.

The NTA was created in 1925 for the purpose of providing an organization that would create an exchange of information and ideas among minorities in technical fields. The NTA has since expanded its goal to reach minority students pursuing the study of mathematics, science and engineering. As a result of this, the organization has created several educational and science programs to mentor potential technical students and to provide scholarships for science students and researchers.

The NTA 1998 Top Science Award Ceremony will be held at the Hyatt Regency Crystal City on Nov. 21. Congratulations once again to our fabulous four.

A luncheon was held on Oct 8, 1998 to celebrate the Chinese Mid-Autumn Festival. Dr. Ghassem Asrar, the Earth Science Associate Administrator, came to address the participants in the Rec. Center. Asrar gave a brief description of Earth Science Enterprise and its related activities. He also addressed the unique talent of the Asian American work force within the Federal agencies.

Jen Tung Ku, Dr. Richard Kiang (President of the Chinese American Club), Dr. Ghassem Asrar, Maria So (Chair of the Advisory Committee for Asian & Pacific Islander American Employees), Al Diaz, Mike Maroof.

Brown Bag" Lunch Sessions

The Women's Health Center of Bowie will be offering a series of brown bag" lunch sessions at Goddard from 11:30 a.m. - 1:30 p.m. A brief synopsis, the date, and location for the lectures is listed below. Watch Dateline Goddard for the Nov 18 session details. There are a total of 30 spaces available for each session. Therefore, NASA/GSFC civil servants will be registered on a first come, first served basis.

"Breast Cancer"
Date: October 22, 1998
Location: Building 1, Room E100E
The lecture will focus on the importance of mammograms and self breast exam. Risk factors will be addressed as well. An open forum for questions will follow the lecture.

"Healthy Eating in the Fast Lane"
Date: November 5, 1998
Location: Building 1, Room E100E
This lecture will focus on preparing foods on a tight schedule and weighing your options. Free healthy recipes will be given out. An open forum for questions will follow the lecture.

To register for these session please contact ***Nichole Richmond***, Code 114, on 6-5757 or e-mail Nichole.L.Richmond.1@gsfc.nasa.gov.

NEW SHUTTLE PRESS KIT MAKES ONLINE DEBUT

The STS-95 press kit is now online, inaugurating a new service that will enable members of the news media and the public to obtain access to each mission's information earlier and with more detail than ever before. The press kit can be accessed on the World-Wide Web at: http://www.shuttlepresskit.com.

The new online press kit was a collaborative effort between NASA, United Space Alliance and Boeing North American. Full text available at: ftp://ftp.hq.nasa.gov/pub/pao/note2edt/1998/n98-066.txt

Clip-n-Save

Goddard Engineering Colloquia Fall 1998 Schedule

All colloquia are held at 3:30 p. m. on Mondays in the Building 3 Auditorium, unless otherwise indicated below. Any changes in the schedule will be indicated on their webpage listed below with the minimum possible delay.

October 19	The Jungles of Randomness	Ivars Peterson, Editor, Science News
October 26	Nano-Satellite Technology Development	Peter Panetta /GSFC
November 2	High Temperature Super Conductors	Paul Chu, Texas Center for Superconductivity Research
November 9	Early Automata	Charles Cohen, Cybernet Systems Corp
November 16	Higher Education and Development	David Bloom, Harvard Institute for International Development
November 23	Are Comets and Asteroids a Real Danger?	Robert D. Chapman, Allied Signal Technical Services
November 30	No Colloquium	
December 7	New Satellites for Personal Communications	John V. Evans, Comsat
December 14	Application of Signal Processing to Financial Markets	Richard A. Mueller

Visit the Engineering Colloquia webpage for the latest updates at url: **http://groucho.gsfc.nasa.gov/ecolloq**

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Historic John Glenn Flight To Feature Maryland And Goddard Science Experiments

Official Launch Date October 29, 1998, 2:00pm EST

When Mercury astronaut and Ohio Senator John Glenn returns to space October 29, a fascinating array of science experiments from Goddard and from Maryland students will fly with him. Goddard is providing a solar observatory; the Hubble Orbital Systems Test or HOST; telescopes attached to the IEU Hitchhiker; and Get Away Special canisters. Maryland Students from Woodmore Elementary in Mitchellville and DuVal High School in Lanham, will provide experiments carried aboard the GAS canisters. The University of Maryland is working with a Goddard engineer to perform the first-ever test in space on the 3-D sprag.

Employee Viewing of STS-95 Launch

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Ever wonder what this building is on the way to Cafeteria 21?

This specialized facility houses the ISOMAX instrument. This instrument has a magnetic field in the center of the superconducting magnet that can be more than 20,000 times the strength of Earth's magnetic field. Because of the strength, and the sensitivity of magnetic instruments on other experiments developed at Goddard, this facility was built The construction and design of the building was quite a challenge for our FMD folks. They came up with the solution after 2 years of struggle. The unique requirements to have non-magnetic material resulted in an all wood construction.

Upcoming Launches

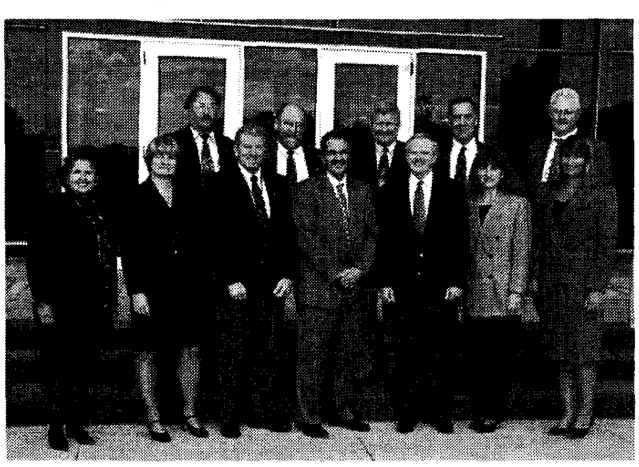
DEC 3, 1998 -- Submillimeter Wave Astronomy Satellite
The SWAS instrument is a submillimeter wave telescope that incorporates dual heterodyne radiometers and an acousto-optical spectrometer to investigate the composition of dense interstellar clouds.

FEB 26, 1999 -- Wide-Field Infrared Explorer
The WIRE survey will detect primarily galaxies with unusually high rates of star formation or "starburst" galaxies which emit most of their energy in the far-infrared.

MAR 18, 1999 -- Far Ultraviolet Spectroscopic Explorer
FUSE looks far into the ultraviolet portion of the spectrum of light, extending to shorter ultraviolet wavelengths than can be observed by the Hubble Space Telescope.

APR 1, 1999 -- Tomographic Experiment using Radiative Recombinative Ionospheric EUV and Radio Sources
TERRIERS is designed to conduct a global upper-atmospheric study.

Visit Goddard's Upcoming Flight Projects webpage at url: **http://pao.gsfc.nasa.gov/gsfc/missions/projects/projects.htm** for the latest status. Final launch dates are determined at Flight Readiness Reviews.



Goddard's Center Director Diaz hosts Kennedy Space Center's Center Director Bridgers with senior staff members for a day of briefings and tours

Ancient Cosmic Rays Captured by Powerful Magnet On the Edge of Space

by Beth Jacob, Code 661

A highly successful first flight of the (ISOMAX) took place this summer, launched from Lynn Lake, Manitoba, Canada. ISOMAX flew near the top of the Earth's atmosphere, at an altitude of 38 km (126,000 ft), carried by a huge 1.1 million m3 (39 million ft3) helium balloon. At full expansion, this balloon is about 64 m (210 ft) in diameter and at launch the balloon system is taller than an 80 story building. This experiment measures the only sample of material from outside our solar system we can obtain - the cosmic rays, atomic nuclei and electrons with speeds up to nearly the speed of light.

ISOMAX uses a large superconducting magnet and a state-of-the-art suite of high-energy particle detectors to measure galactic cosmic ray nuclei, believed to originate in supernova explosions. Over millions of years in the Milky Way galaxy, these particles are accelerated to high speed and energy by encounters with rapidly moving magnetic fields, probably created by supernovae.

This instrument weighs approximately two tons and is about 4 m in height. The ISOMAX team, lead by Principal Investigator ***Dr. Robert Streitmatter*** and Experiment Manager ***Dr. John Mitchell***, was able to overcome technical problems with the manufacture of the superconducting magnet that delayed the first launch by two years.

The particles measured by ISOMAX give science information about conditions that they have encountered in their travels, both outside and inside of our solar system. Unlike visible light, however, the direction from which cosmic ray particles arrive at Earth does not indicate where they originated; magnetic fields and shocks constantly deflect them along the way. But the species and energy of the measured particle tells scientists a great deal.

The "life cycle" of a cosmic ray nucleus has several stages. Some are formed by nuclear reactions inside a star, then ejected into Interstellar space, and accelerated to high energies. Others are formed directly in supernova shock explosions. The galactic magnetic field confines these particles, however they are produced, so that they travel through the interstellar medium (the gas and dust between the stars) for millions of years before arriving at Earth.

For more information on ISOMAX see their Fact Sheet at url: **http://pao.gsfc.nasa.gov/gsfc/service/gallery/fact_sheets/fsheet.htm.**

Smith received into American Association for Advancement of Science

Dr. James A. Smith has been elected Fellow of the American Association for the Advancement of Science (AAAS), and will be awarded his rosetta at the Association's annual meeting at Anaheim, CA on January 23, 1998. The citation states that he is "...being honored for basic research in reflectance and thermal IR modeling of canopies and soils for the advancement of optical remote sensing."

FY'99 On-Site Training Calendar

The Human Resources Development Office is pleased to announce that the FY'99 On-Site Training Calendar is now available on the Goddard Homepage.

The URL address for the Training Calendar is: **http://ohr.gsfc.nasa.gov/gsfc/training/Annualcal/ANNDESC.HTM** We have received a limited amount of training funds. Please submit all critical off-site training requirements that will be needed within the next several weeks. Please do not hold on-site training requests. If we don't receive training orders it may cause us to cancel scheduled on-site courses.

Training funds will be debited from your training allocations when we areable to release the allocation to your Directorate. We look forward to meeting your training needs for FY'99.

Upcoming Standard First Aid Sessions

Are you prepared to handle various types of medical emergencies on the job before professional help arrives? If not, then you'll definitely want to register for one of the upcoming Standard First Aid sessions. This course includes videotaped sessions and practice demonstrations on how to handle various types of medical emergencies on the job before professional help arrives. The course includes adult cardiopulmonary resuscitation (CPR).

The skills and techniques you learn will: Help you to stay clam in emergencies; Help to make you decisions and take appropriate steps to keep victims alive; Help keep injuries from becoming worse until medical assistance arrives.

Target Audience: All employees interested in learning about Standard First Aid and CPR.

Certification Dates:

November 3, 1998	(Building 1, E100B)
December 8, 1998	(Building 1, E100H)
February 9, 1999	(Building 1, B6)
March 9, 1999	(Building 1, E100H)
April 13, 1999	(Building 1, E100E)
May 11, 1999	(Building 1, E100E)
June 14, 1999	(Building 1, E100B)
July 12, 1999	(Building 1, B6)
August 10, 1999	(Building 1, E100B)
September 9, 1999	(Building 1, E100D)

(All certification sessions are scheduled to take place from 8:30-4:00)

Recertification Dates & Location (CPR only):

December 7, 1998	(Building 1, E100H)
February 8, 1999	(Building 1, E100D)
April 12, 1999	(Building 1, E100H)
July 13, 1999	(Building 1, E100B)

(All recertification sessions are scheduled to take place from 8:30-12:00)

Don't delay, reserve your spot today! Complete the registration form on to last page of the Health and Safety section of the training calendar and fax it to Attn: Sheila Jackson (301) 286-3093. If you have any questions please call Sheila Jackson (301) 286-3093 or Nichole Richmond (301) 286-5757.

New Versions of Center Reports Posted to the Web

Goddard Annual Report, Goddard's Plan for Implementing NASA's Strategies for the 21st Century, and Goddard's Performance Plan for Fiscal Year 1999 are all available in Adobe's Portable Document Format (PDF) on your employees homepage at url: **http://internal.gsfc.nasa.gov**, choose Reports and Directives from the leftside navigation bar.

Urgent IT Security Warning Banner Reminder Notification

An IT Security Warning Banner shall appear on NASA-owned or -funded IT systems when an external user (someone whose Internet Protocol address is not in the "nasa.gov" domain) accesses or logs on to a "nasa.gov" system. Additionally, it is strongly and urgently recommended that NASA-owned or -funded IT systems, including IT desktop systems (e.g. "Wintel" and Macintosh microcomputers), have the Warning Banner appear each time the IT desktop or system is powered on.

The standard banner, as shown below, shall be loaded onto all computer systems covered by this guidance so that it is affirmatively displayed at the time a user boots their system or is initially challenged for an authentication, unless the access is being initiated from a "nasa.gov" Internet or Intranet domain system. Access connections being initiated from within the "nasa.gov" domain may be considered as already receiving the banner and need not display it again. Users outside the "nasa.gov" domain will see the banner only when the NASA system they are attempting to access requires a user password identification.

U.S. GOVERNMENT COMPUTER
If not authorized to access this system, disconnect now.
YOU SHOULD HAVE NO EXPECTATION OF PRIVACY
By continuing, you consent to your keystrokes and data content being monitored.

For further details visit the CIO homepage at url: **http://cio.gsfc.nasa.gov**, choose What's New, Guidance on Implementing the IT Security Warning Banner.

NASA OIG Newsletter Online

To further continue efforts to improve and expand OIG outreach, the OIG has just issued the 1st edition of the NASA OIG Newsletter. The Newsletter's principal target audience consists of NASA managers and employees, and NASA contractors. The Newsletter, a cooperative effort of all NASA OIG elements, will be published every two months with special editions issued as needed. The Newsletter will appear on their web site at url: **http://www.hq.nasa.gov/office/oig/hq/** and will be transmitted in hard copy to NASA Officials-in-Charge, key Congressional committees and subcommittees, and to other parties on request.

Student Art On Display

During the next four months employees in selected buildings will have the opportunity to see artwork from the three Maryland winners of the Intergalactic Art Competition State Winners, sponsored by NASA and National Science Teachers Association (NSTA).

The works being displayed in the lobbies are: "Fireworks!" by Mito Habe-Evans, Grade 10, and Lauren Barna, "Planetary Nebulae", Grade 10, Winston Churchill High School, Potomac, MD and "Lunar Greenhouse and Lunar Station" by Jordy Goldstein, Grade 4, Forest Knolls Elementary School, Silver Spring, MD.

Buildings and dates are as follows: Bldgs. (28)-Oct. 5-16; (8)-Oct. 19-30; (1)-Nov. 2-13; (2)-Nov. 16-27; (32)-Nov. 30-Dec. 11; (12)-Dec. 14-25; (23)-Dec. 28-Jan. 8; (21)-Jan. 11-22 and (22)-Jan 25-Feb. 5.

IMP-8 Celebrates 25 Years on Duty

The Interplanetary Monitoring Platform (IMP-8) spacecraft continues to make valuable observations a quarter century after its launch on Oct. 25, 1973. IMP-8, built and operated at NASA's Goddard Space Flight Center in Greenbelt, Md., provides important space physics data as part of NASA's Sun-Earth Connections research program.

"IMP-8 is the Cal Ripken of spacecraft. Space is a very harsh environment to work in, with radiation and temperature extremes. Nevertheless, Goddard engineers made IMP-8 so well that it is still active and contributing importantly today," said Dr. Joseph King, project scientist for IMP-8 at Goddard. For further details visit Goddard homepage **http://www.gsfc.nasa.gov** and choose HOT TOPICS.

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National Aeronautics and
Space Administration
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The Goddard News is published weekly by the Office of Public Affairs, Goddard Space Flight Center, Greenbelt, MD 20771

STS-95 Launches Successfully

Space Shuttle Discovery blasted off into a cloudless blue sky at 02:19 p.m. on October 29 carrying a crew of seven, including John Glenn, who thirty-six years ago made history when he became the first American to orbit the Earth.

Discovery's 9-day mission is packed with a variety of payloads and experiments, including several major payloads provided by Goddard Space Flight Center.

The Petite Amateur Naval Satellite, or PANSAT, a small Navy communications satellite is scheduled to be launched from Discovery's payload bay on Friday via a Hitchhiker Ejection System. The mini telecommunications satellite, developed by the Naval Postgraduate School in Monterey, Calif., is similar to ones that handle telephone calls and the satellite will operate in the frequency range of the amateur radio community.

This weekend, the crew is scheduled to deploy the Spartan free-flyer payload. Spartan will investigate physical conditions and processes of the hot outer layers of the Sun's atmosphere, or solar corona, and will gather measurements of the solar corona and solar wind. These observations will help scientists better understand the Sun's influence. which can effect satellites as well as communications and power distribution systems on Earth. Spartan will be retrieved on Tuesday.

Other primary payloads from Goddard include operations with the HST Orbiting Systems Test (HOST) which will validate key technologies and equipment to be installed during the next Hubble servicing mission in the year 2000. HOST will test a state of the art cryogenic cooling system, the HST 486 computer and a solid-state recorder to replace one currently on Hubble. The International Extreme Ultraviolet Hitchhiker (IEH) payloads will have a number of experiments, ranging from astronomical telescopes and communications experiments to a GetAway Special student experiment from nearby DuVal High School that will examine the effects of space on the life cycle of the American cockroach.

The commander of the STS-95 crew is Curt Brown, with Steve Lindsey in the pilot's seat. There are three mission specialists assigned to this flight — Scott Parazynski, Steve Robinson, and Pedro Duque, from the European Space Agency (ESA). Other crewmembers include two payload specialists — Chiaki Mukai, from the Japanese Space Agency (NASDA), and Glenn.

Discovery will make 144 circuits of the Earth before returning to the Kennedy Space Center on Saturday, Nov. 7.

The primary objective of this flight is to conduct a variety of science experiments being carried in the pressurized SPACEHAB module.

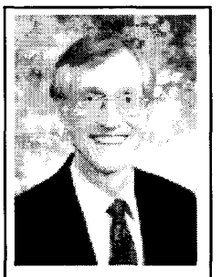
Visit the Goddard homepage at **http://www.gsfc.nasa.gov** for details throughout the mission.

Message to the Goddard Team from Al Diaz

I want to take this opportunity to bring you up to date on the reviews of Goddard's Earth Science Program/Project Management and our discussions with NASA Headquarters regarding changes to clarify and strengthen our program management responsibilities for the Earth Science Enterprise.

For some time, we have recognized that the Mission to Planet Earth Programs Office's (Code 170) dual role of program integration for all of NASA's Earth Science Enterprise flight and ground programs and program formulation, implementation, and integration of the Earth Sciences Programs at Goddard had placed Code 170 in a conflict of interest situation. To resolve that situation and to strengthen the overall management of Earth Science activities within the Agency, we have proposed the following:

Continued on page 2



Dr. John C. Mather

Mather Receives Franklin Medal in Physics

The Benjamin Franklin Medal in Physics will be presented by the Franklin Institute of Philadephia to ***Dr. John C. Mather***, Senior Astrophysicist at Goddard and Akira Tonomura on April 29, 1999. Mather was chosen for his scientific vision, proposal and management of the COBE experiments and its far infrared absolute spectrophotometer, which precisely confirmed the black body radiation remnant from the Big Bang. Tonomura, of Hitachi in Japan, developed the high brightness field emission electron beam and high resolution electron holography interference microscope.

Goddard's CFC -- It All Comes Back To You

The Combined Federal Campaign is a great opportunity for federal employees to contribute towards helping improve the quality of life for thousands of people who need our help.

You created the CFC to show that you care. By the early 1960's, the number of charitable campaigns had increased so that federal employees began looking for a way to have just one campaign each year. The CFC was the perfect solution. It has evolved as ONE campaign, ONCE a year, and gives federal employees the opportunity to give generously through payroll deduction to hundreds of charities. An executive order made it possible, and though it started as an experiment, it proved to be a very effective way for federal employees to help those in need.

Goddard's Goal is $445,000, our total to date is $92,504 which includes 21 Eagles and 3 Double Eagles. (Eagle = pledge of 1% of your yearly gross salary; Double Eagle = pledge of 2% of your yearly gross salary). Visit Goddard's CFC homepage at url: **http://internal.gsfc.nasa.gov/cfc/cfc.html**

Goddard Honors Bob Price

Center Director Al Diaz presents Wilbur and Ruth Price (Bob's Parents) with a U.S.Flag as Bill Townsend (r) and Lake Barrett (Bob's Son-in-Law) (l) look on

On Wednesday, Oct. 21, 1998, family, friends and former co-workers of the late Dr. Robert "Bob" Price, gathered outside of Building 8 to dedicate a plaque in his memory. A 30-year veteran of NASA, Dr. Price died suddenly last March, just 7 months after the death of his wife Rosalee. The plaque, placed next to a plaque dedicated in memory of Rosalee last year, reads, "In Memory of Dr. Robert Price Devoted Husband, Dedicated Scientist, Caring Friend, and a True Gentleman 1998."

Message from Al Diaz continued:

First, the Associate Administrator for Earth Science intends to expand the Code Y organization at NASA HQ to assume cross-Enterprise budget and program integration activities currently performed within Code 170. Positions at HQ for Program Executives, resources management, and information systems will be filled by Code Y.

Second, as described to you in my earlier message last spring, the staff of the Goddard Associate Director, Mary Kicza, will have the responsibilities for program formulation and program integration for Earth Science Programs and Space Science Programs assigned to Goddard. Implementation of Goddard programs will be carried out by program managers assigned primarily to the Flight Projects Directorate and the Suborbital Projects and Operations Directorate. Program Managers will report to me through the Goddard Program Management Council, led by Goddard Deputy Director, Bill Townsend.

Consequently, Codes 170 and 180 will be disestablished. Some restructuring within the Flight Projects Directorate will also result so that our program and project relationships are consistent with the Agency guidelines contained in the NASA Program/Project Management Handbook, 7120.5.

We expect that with positions to be established in Code Y, additional positions in the new program formulation/integration group reporting to Mary, and program implementation roles in Code 400, there will be an appropriate position assignment identified for every affected employee. In addition, some positions may be competitively advertised, providing additional opportunities for affected employees as well as other GSFC employees. However, we will at a minimum assure that all employees in Codes 170 and 180 are assigned to meaningful positions with no loss in grade or pay.

I think these changes will strengthen our contributions to the Earth Science activities, provide a clearer understanding of Center and Enterprise roles, and improve our relationship with NASA Headquarters and the other Centers involved in the Earth Science Enterprise.

We have received preliminary approval by NASA HQ to process the request for these changes and will be submitting the necessary proposal for official approval. Additionally, we will coordinate the implementation of these changes with the Goddard Engineers, Scientists, and Technicians Association (GESTA).

As I stated here before, I plan to continue to share with you information on important issues as soon I can.

GSFC Security Awareness

All Goddard employees, civil servant and contractor, are encouraged to join members of the GSFC Security Office on November 2 (Monday) and/or November 18 (Wednesday) as they host a full day of Security Awareness Briefings in the Building 8 Auditorium from 9:00 a.m. to 4:00 p.m.

Further information may be found on the Security Office's Homepage at **http://gsfc-aphrodite.gsfc.nasa.gov/205/sesohome.htm** or direct your questions to the GSFC Security office at 301-286-SAFE (7233). Come and get your posters, stickers, ice scrapers and handouts.

Agenda:

0900	WELCOME AND OPENING REMARKS David Moulton, GSFC Security Director
0915	TECHNOLOGY COLLECTION TRENDS Kevin Walsh, FBI Special Agent
1000	CHINESE ACQUISITION AND APPLICATION OF ADVANCED TECHNOLOGY Lou Anne Demattei, DIA Intelligence Analyst
1100	THE FUTURE OF TERRORISM, A TECHNOLOGY PERSPECTIVE Robert Bray, NSA
1200	LUNCH
1300	"GSFC" INFORMATION TECHNOLOGY SECURITY TRENDS Hank Middleton, GSFC
1330	TECHNOLOGY TRANSFER DO's AND DON'Ts Dr. George Alcorn, Code 750, GSFC
1400	INFORMATION TECHNOLOGY EXPORT CONTROLS J.R. Hedgepeth, Code 234, GSFC
1430	RELEASE OF INFORMATION TO INTERNATIONAL PARTNERS Susan Hart, Code 253, GSFC
1500	COORDINATION OF FOREIGN NATIONALS AT GSFC AND FOREIGN TRAVEL Marie Stubbs, Code 100, GSFC

November is Native American History Month

Agenda and theme for the month is listed below.

"Wisdom from the Past, Courage for the Future"

Activity	Date	Time	Bldg./Room
*"The Nations of the Northeast"	11/3/98	11:30	8/Aud.
Native American Cuisine	11/4/98	Lunch	1 & 21 Cafe
Native American Month Prgm. Material Culture Display, Creation of Clay Pots with Traditinal Techniques, and Native American Traditional Dances and stories with Chief Bushyhead & L.A. Greyfox Traditional Jewelry Sale	11/5/98	9:00am -1:00	3/Aud.
*"The Tribal People of the Northwest"	11/10/98	11:30	8/235
*"The People of the Great Plains"	11/17/98	11:30	8/235
*"The Tribes of the Southeast" & "The Natives of the Southwest"	11/25/98	11:00	8/235

*BBLVS - Brown Bag Lunch Video Series

For more information contact Wanda David 6-1091.

Visit NASA's The Native Peoples / Native Homelands Climate Change Workshop website at **http://www.earth.nasa.gov/native/**

Waste Watchers

By Darlene Walter, Safety and Environmental Office

The Management Operations Directorate (MOD) has entered into a partnership with the U.S. Environmental Protection Agency voluntary partnership program called WasteWise. WasteWise is a solid waste reduction program in which partners set goals in three areas in order to reduce solid waste. Those three areas are waste reduction, recycling and purchasing of recycled products.

Mary McKaig, Green Team Member,(l) Darlene Walter, Green Team Coordinator (r) at EPA's Wastewise National Forum

A brief definition of solid waste is items that employees throw in their trash cans which goes into dumpsters with the final stop at the landfill. Not only does reducing waste have environmental benefits but it also reduces operational cost to the Center. In order to examine ways to bring waste reduction awareness and activities to offices on the center a MOD Green Team has been established with participants from various offices and functions in Code 200. These employees are team leaders in their individual offices to encourage fellow employees to integrate waste prevention, recycling and ordering supply products containing recycled content.

When it comes to waste watching, the first priority is not to have as much in waste products to throw away, the second is to find ways to reuse products, the third is to recycle all the products that we can and the fourth is to buy products containing recycled content to keep the recycling loop circling. Look for more information on this at the America Recycles Day celebration that will be held in bldg. 1, off the cafeteria on Thurs., November 19, 1998 from 11 a.m. to 2 p.m.

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