



National Aeronautics and Space Administration

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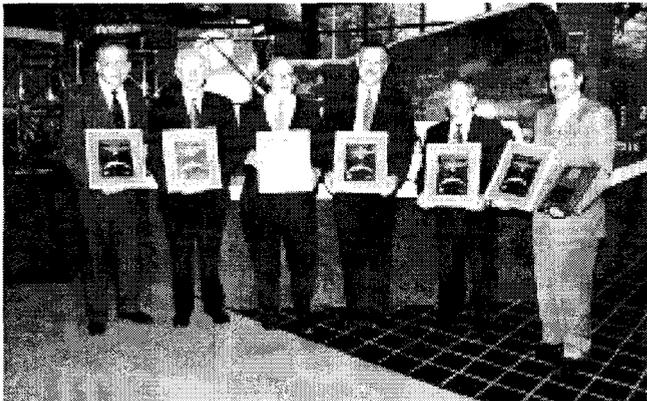
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## Goddard Celebrates 40 Years of Excellence

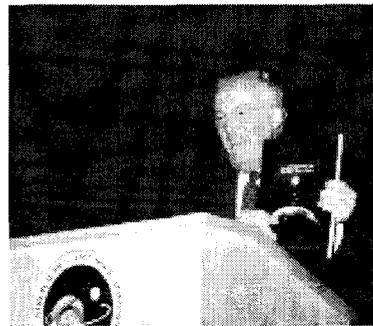
Goddard celebrated its 40<sup>th</sup> anniversary this week with a week-long celebration highlighted by remarks from members of Maryland's Congressional delegation and the NASA Administrator Dan Goldin at the 40<sup>th</sup> symposium. The Administrator's speech focused on his vision for the future of Earth Science and the significant role Goddard will play in turning that vision into reality. The complete text of the Administrator's speech can be found on the web at: <http://pao.gsfc.nasa.gov/gsfsc/40th/goldin.htm>



NASA Administrator Dan Goldin and Center Director Al Diaz present to Senator Barbara Mikulski a framed cover of the Goddard 40th Anniversary book. Goldin and members of the Maryland congressional delegation spoke to employees during the May 3 symposium.



Pictured here are individuals who have been Goddard Center Director over the past 40 years: Bob Cooper (far left), Tom Young, Dr. Jack Townsend, Dr. John Klineberg and current Director Al Diaz. Not pictured are former Center Directors Dr. Harry J. Goett, Dr. John C. Clark and Dr. Noel W. Hinners.



Senator Paul Sarbanes thanks Goddard employees for all their contributions to Maryland and the country over the past 40 years.



Author Lane Wallace autographs copies of her Goddard 40th anniversary book: *Dreams, Hopes, Realities for Explorer's Project Manager Jim Barrowman.*



Three of the five Goddard employees that were here when Goddard was created and are still working at the Center are shown above: John Berbert, Clarence Wade and Raymond Granata. Not shown are Richard Batchelder and Dr. Nino Bonavito.

## Alison McNally Named Deputy Director of Code 200

Goddard welcomed a new addition to its senior management staff this week with the appointment of Alison McNally as Deputy Director of the Management Operations Directorate (Code 200).

McNally, who began her federal career at Goddard in 1981 as a participant in the Presidential Management Intern program, comes to Goddard from NASA Headquarters, where she has served since October 1992 as the Executive Officer for Gen. John R. Daily, NASA's Associate Deputy Administrator. In this role, she served as a focal point and liaison for the NASA Associate Administrators and Center Directors in communicating their expectations and concerns in accomplishing the Agency mission.

Prior to that McNally served for six months as the Executive Officer for the NASA Administrator, supporting all aspects of the Administrator's activities including participation in meetings and engagements with Congressional members, international delegations

and the National Space Council. Her other positions as NASA Headquarters included a Program Planning Specialist in the Office of Aeronautics and Space Technology, and Assistant Director for Institutional Resources and Policy Analysis in that Office.

McNally will use her considerable management and organizational experience in the oversight of the institutional infrastructure and business management services necessary for the successful accomplishments of Goddard's scientific and technical missions.

McNally earned a bachelor of science degree in Human Development from the University of Connecticut in 1979, and a master of science degree in Social Work from Columbia University in 1981. She also has completed the Simmons College Graduate School of Management Program and the Harvard University, John F. Kennedy School of Government Program.

Visit Goddard News on the web at <http://pao.gsfc.nasa.gov/gsfsc/gnews/gnews.htm>

## Novel Procurement for Revolutionary Telescope Will Save Time, Money

NASA has challenged industry to help design a revolutionary space telescope able to peer into the furthest reaches of space—back in time to the “dark ages,” an unknown period in the early universe when stars and galaxies were first beginning to form.

And just as an extraordinary telescope will require technical innovation, getting the telescope built on time and on budget has challenged NASA to develop a novel procurement process that will save time and money.

NGST will feature the largest mirror ever used in a space observatory—a mirror with more than 10 times the light gathering power of the Hubble Space Telescope mirror.

The contracts are part of an innovative procurement process that strives to identify, develop and integrate new technology into a program under strict cost constraints,” said **Gifford Moak**, Goddard’s NGST Contracting Officer. “Developing the best procurement strategy for the NGST mission requires taking all phases of the mission into account, from concept and technology development through construction, launch and operations,” Moak said.

For a full-text version of this release, go to: <ftp://pao.gsfc.nasa.gov/pub/PAO/Releases/1999/99-055.htm>

## Goddard Working to Improve Crime Scene Technologies

NASA scientists are developing promising new software technologies and instruments to help law enforcement agencies catch criminals.

Goddard personnel are working with the National Institute of Justice (NIJ) to develop remote crime-scene analysis. Together, Goddard and NIJ will study how remote-sensing technology—used to study everything from crops on Earth to galaxies millions of light-years away—might allow investigators in a central location to study a distant crime scene.

Criminologists may be able to identify everything from fingerprints to gunpowder residue without disturbing a crime scene, preserving the chain of evidence while saving time and money.

In the Goddard study, a group of forensic scientists and law enforcement specialists will use instruments from NASA’s Near Earth Asteroid Rendezvous spacecraft to scan a crime scene. The data can then be transferred to a remote location, allowing crime experts to study a crime scene from anywhere in the world.

For a full-text version of this release, go to: <ftp://pao.gsfc.nasa.gov/pub/pao/releases/1999/H99-54.txt>

## Goddard’s History Book Available from GPO

Lane Wallace’s book, “Dreams, Hopes and Realities: NASA Goddard’s First Forty Years,” which celebrates 40 years of excellence at Goddard was provided to every civil servant at Goddard.

Additional copies of the book may be ordered from the Superintendent of Documents at the Government Printing Office. Call 202-512-1800 for more information. Or you can order the book online at: [www.access.gpo.gov/su\\_docs](http://www.access.gpo.gov/su_docs)

The prices are \$33.00 for a soft cover or \$41.00 for a hard cover.

## ISO 9001

### Goddard’s Quality Policy

With customer satisfaction as our primary goal:

- GSFC is committed to meeting or exceeding our customer’s requirements.

- We achieve excellence in all of our efforts.



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## Twinkling Starshine Satellite to Teach Students Earth Science

A small, optically reflective spherical “STARSHINE” student spacecraft has been built by the Naval Research Laboratory in Washington, D.C.

The spacecraft will be mounted in a Goddard built Get Away Special canister with a Hitchhiker ejection system and deployed from the Space Shuttle Discovery during a mission scheduled for May 20.

Eleven hundred sets of aluminum mirror blanks were machined by Utah technology students and shipped in kits by project officials to schools around the world for polishing by teams of elementary, middle and high school students.

After deployment from the Shuttle, the twinkling satellite will be visible to the naked-eye for about six months during recurring morning and evening twilight periods to student observers around the world.

Students will track the satellite and make note of the times that it passes between selected pairs of targeted stars. Throughout the mission, students will measure the daily change in the time it takes Starshine to circle the Earth. They will use this information to calculate the density of the Earth’s upper atmosphere, look at daily solar images on the Starshine website and count the sunspots on the solar surface. Students also will plot the daily numbers of sunspots against the rate of change of Starshines’s orbital period and learn how solar storms heat and expand the Earth’s upper atmosphere.

More information about the Project Starshine is available on the web at: <http://www.azinet.com/starshine>

## Magnetic Stripes Preserve Record of Ancient Mars

NASA’s Mars Global Surveyor has discovered surprising evidence of past movement of the Martian crust, further evidence that ancient Mars was a more dynamic, Earth-like planet than it is today.

Scientists using the spacecraft’s magnetometer have discovered banded patterns of magnetic fields on the Martian surface. The adjacent magnetic bands point in opposite directions, giving these invisible stripes a striking similarity to patterns seen in the crust of Earth’s sea floors. On the Earth, the sea floor spreads apart slowly at mid-oceanic ridges as new crust flows up from Earth’s hot interior. Meanwhile, the direction of Earth’s magnetic field reverses occasionally, resulting in alternating stripes in the new crust that carry a fossil record of the past hundreds of million years of Earth’s magnetic history, a finding that validated the once-controversial theory of plate tectonics.

“The discovery of this pattern on Mars could revolutionize current thinking of the red planet’s evolution,” said Goddard’s Dr. **Jack Connerney** an investigator on the Global Surveyor’s magnetometer team. “If the bands on Mars are an imprint of crustal spreading, they are a relic of an early era of plate tectonics on Mars. However, unlike on Earth, the implied plate tectonic activity on Mars is most likely extinct.”

The mission’s map of Martian magnetic regions may help solve another mystery—the origin of a striking difference in appearance between the smooth, sparsely cratered northern lowlands of Mars and the heavily cratered southern highlands. The map reveals that the northern regions are largely free of magnetism, indicating the northern crust formed after the dynamo died.

The full text version of the press release is on the Web at: <ftp://pao.gsfc.nasa.gov/pub/pao/releases/1999/99-053.htm>

### Staff

Executive Editor: James Sahli  
Managing Editor: Susan Hendrix  
Contributing Editor: Nancy Neal  
Senior Photographer: Mark DeBord  
Submission deadline: Friday each week  
Submissions subject to editing.  
For additional information contact:  
Susan Hendrix 301•286•7745

Subscription Information:  
GSFC & WFF Mailing List  
Offsite Commercial Subscriptions  
Retiree Subscriptions

Contact:  
Gweny Durrah, Code 239  
Jim Sahli, Code 130  
Bob Wilson 301•422•8334