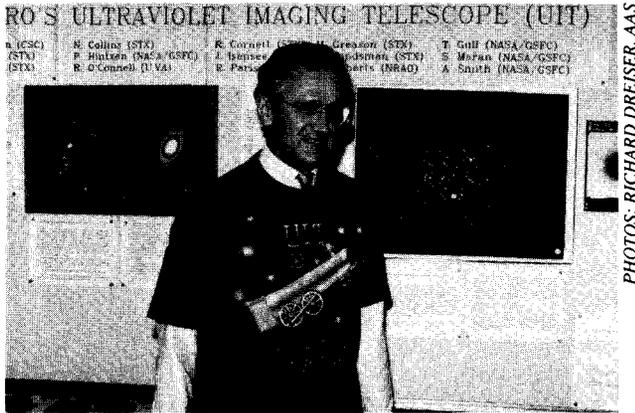


Goddard Plays Big Role at AAS Meeting

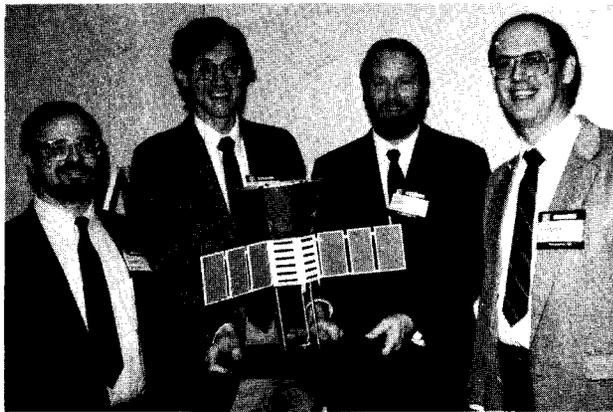


PHOTOS: RICHARD DREISER, AAS

FIRST IMAGES -- Sporting his "The Little Telescope that Could" tee-shirt, ASTRO-1's Ultraviolet Imaging Telescope (UIT) Principal Investigator Ted Stecher, Code 680, stands in front of two UIT results. The one on the left is a comparison of UIT and ground-based imaging of Spiral Galaxy M81. The image on the right is the UIT image of the center of Globular Cluster Omega



NEW SPECTRUM -- HST's Goddard High Resolution Spectrograph (GHRS) Co-principal Investigator Dr. Sally Heap, Code 681, displays the spectrum of Melnick 42 taken with the GHRS.



COBE TEAM -- Holding the COBE model is the team that presented the FIRAS findings, from left, Dr. Chuck Bennett, Code 685, COBE Project Scientist Dr. John Mather, Code 685, Dr. Ned Wright, UCLA and Dr. Rick Shafer, Code 685.



X-RAY EXPLANATION -- ASTRO-1's Broad Band X-ray Telescope's (BBXRT) Principal Investigator Dr. Peter Serlemitsos, Code 666, explains, during the ASTRO-1 press conference, about spectrum of an active galaxy, NGC 1068.

When more than 1,000 astronomers gathered in Philadelphia January 13-17 for the 177th meeting of the American Astronomical Society, Goddard was very well represented. Goddard and joint-Goddard teams gave more than 50 oral and written presentations throughout the event. Of the seven press conferences held to discuss new findings, four of them dealt directly with Goddard missions or instruments.

A Cosmic Background Explorer (COBE) team presented new all-sky surveys showing never before seen nitrogen and carbon atoms and dust particles in the

space between the stars in our galaxy. A team from the Hubble Space Telescope (HST) Goddard High Resolution Spectrograph (GHRS) obtained a spectrum of Melnick 42 a very hot, massive star that sheds gas at a very high rate, equivalent to our Sun, every 100,000 years. The ASTRO-1 mission had two Goddard Principal Investigators at its press conference. Ted Stecher, Code 680, principal investigator for the Ultraviolet Imaging Telescope (UIT) released the instrument's first images, including an image of Omega Centauri, a globular cluster. Dr. Peter Serlemitsos, Code 666,

principal investigator for the Broad Band X-Ray Telescope (BBXRT), presented sev-

(Continued on page 2)

Dolly Perkins:

At Home with any Challenge

Page 6

INSIDE



Directors' Dialogue

*This is the first column for **Directors' Dialogue**, a forum for employees with questions. Every month GSFC employees will have an opportunity to have their questions answered from the people who know -- the Executive Council.*

Q: Why are you using colored paper that cannot be recycled for the Goddard News, especially since GSFC has been emphasizing a recycling program?

A: Twice a year, in November and December, the Goddard News is printed using two-color ink, instead of the regular black ink on white paper. The paper, however, remains the same. According to Dawn Badolato, Code 553, of the Goddard Conservation Club, all issues of the Goddard News, including the two color issues, can be put in the white paper recycling bins. The type and color of the paper make the difference, not the color of the ink.



**Jan Ruff, Chief
Office of Public Affairs
Code 130**

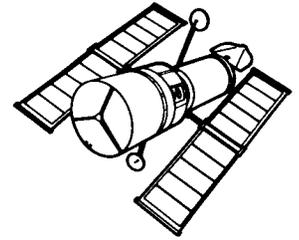
Let's Hear from You!

To have your questions answered, mail them in (no phone calls please) to:

**Directors' Dialogue
Code 130**



PHOTO: R. FRISCH



CLEAN CARRIER -- The Hubble Space Telescope (HST) Orbital Replacement Unit (ORU) carrier, bagged to protect it from contamination, was the first piece of equipment to be placed in the new clean room in Building 29.

First Item in New Clean Room is for Hubble's Future

by Susie Marucci

NASA's Hubble Space Telescope (HST) Orbital Replacement Unit (ORU) carrier made Goddard history in December when it was placed in the Spacecraft Systems Development and Integration Facility (SSDIF). It was the first piece of equipment to be housed in the SSDIF, the largest laminar-flow clean room in the free world. The SSDIF is a class 10,000 laminar-flow clean room. This means that in any cubic foot of air, no more than 10,000 particles of 0.5 microns or larger can be found. Particles, when dealing with clean rooms, are contaminants in the form of small solids or liquid droplets. The SSDIF particulate air cleanliness is maintained by a massive wall of High Efficiency Particulate Air (HEPA) filters. This filtration is essential to achieving the cleanliness levels on sensitive flight hardware. Bruce Milam, Code 716.2, is the HST carrier development manager for the ORU carrier. He is very glad to have the ORU carrier housed in the new clean room at Goddard. "Goddard has a reputation for having the cleanest clean rooms in the business," Milam said.

The ORU carrier is a device designed to carry the new instruments for the HST. It will fit in the shuttle cargo bay and will keep the new equipment safe. The ORU carrier is shaped like an upside-down horseshoe to fit snugly in the bay and provides for the storage and environmental protection for new units being sent to repair the

HST. The ORU carrier basic structure is a spacelab pallet. Usually these pallets are loaned when they are needed, but in this case, it was transferred to Goddard from Marshall, because of the 15-year lifespan of the HST. It also will have shelves, storage for crew toolboxes, and even a keel latch which will be used when the HST has to be reboosted in orbit, but that is not expected to be necessary with the first visit.

The ORU carrier arrived at the SSDIF on December 1 after a very slow trip from Kennedy Space Center. It was carried in the Payload Environmental Transportation System (PETS) which is a portable clean room that attaches to a tractor-trailer for the trip. The trip took four days, with a maximum speed in transit of 35 mph. Once the ORU carrier arrived at Goddard, the truck was backed into the area before the clean room. Then it was washed down, and the ORU carrier was very carefully transferred into the clean room. A slip at this point could have caused serious contamination, but the transfer went smoothly. For now, and until shortly before the launch, the ORU carrier will remain in the SSDIF, where work upon it will continue.

When the Space Shuttle Discovery launches for the HST revisit, STS-60, now planned for mid-1993, the ORU carrier will be making its first trip to space, but probably not its last.

Goddard at AAS Meeting

(Continued from page 1)

eral spectra, including a spectrum of NGC 1068, an active galaxy. A fourth Goddard-related press conference dealt with the German and United Kingdom's work with the Roentgen Satellite (ROSAT). American astronomers will begin obtaining 50 percent of all data starting in February.

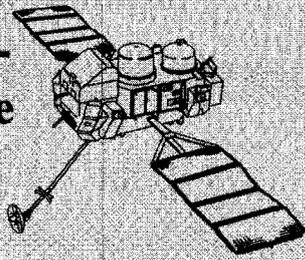
While Goddard managed the development and delivery of the High Resolution X-ray Imager, American astronomers will have use of both X-ray experiments installed on ROSAT.

In addition to the presentations and press conferences given NASA Headquarter's

Director of the Astrophysics Division, Dr. Charles J. Pellerin Jr. hosted a "Dialogue with NASA." Members of the AAS and attending press asked questions about NASA missions and the strategy behind choosing them.

Launch Update:

GRO - On the Move



The Gamma Ray Observatory (GRO) was the subject of a science briefing and a showing of the observatory at the Kennedy Space Center on January 29. Participating in the briefing were GRO Project Manager John Hrastar, Code 403, and GRO Project Scientist Dr. Donald Kniffen, Code 662. Also participating on the panel were members of the STS-37 flight crew: Steven R. Nagel, Commander; Kenneth D. Cameron, Pilot; and Mission Specialists Jay Apt, Linda M. Godwin, and Jerry L. Ross. At the time this issue of the Goddard News went to press, STS-37 was scheduled to launch in April 1991.

Hrastar commented that the GRO astronauts also completed a crew walk-around to check the observatory for sharp edges, because the astronauts could be called upon to perform an Extra-Vehicular Activity (EVA) in case any problem arises during the deployment of GRO from the Space Shuttle Atlantis. The crew manually could crank both the solar panels and the high gain antenna used for TDRS communication.

GRO, the heaviest NASA low Earth-orbiting satellite ever deployed from the Space Shuttle, weighing nearly 35,000 pounds, was rotated to the vertical position and placed in its transporter on January 30. GRO Deputy Project Manager Tom La Vigna, Code 403, said that "the verticated GRO is an impressive sight to behold."

NASA Trivia

He was the first millionaire to walk on the moon.

1. Name him. (Hint: As you might expect, he was also the first man to hit a golf ball on the moon.)
2. Name the mission.

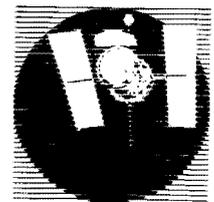
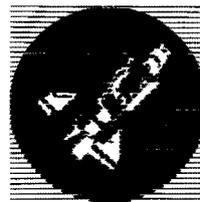
*2. Apollo 14
1. Alan B. Shepard Jr.
Trivia Answers*

NASA Pipeline

HEADQUARTERS, Washington, DC -- The Ohio State University's Center for Mapping, in Columbus, one of 16 NASA Centers for the Commercial Development of Space, has developed a system that will reduce the amount of time and money needed to gather information on highway conditions. Unreported deteriorating road conditions are believed to cost the United States \$16 billion a year in wasted fuel and excessive vehicle repairs. Currently, the center is fine-tuning a prototype vehicle equipped with television cameras and Global Positioning System equipment that automatically can map and record transportation systems.

AMES RESEARCH CENTER, Mountain View, CA -- NASA has selected nine scientists from around the country to participate as team members and interdisciplinary scientists in the Search for Extraterrestrial Intelligence (SETI) Microwave Observing Project, scheduled to begin in 1992. The selected investigators will form the core of the project science team headed by Project Scientist Dr. Jill C. Tarter from Ames and Deputy Project Scientist Dr. Sam Gulkis, of the Jet Propulsion Laboratory, Pasadena, CA. The SETI Microwave Observing Project will consist of two parts. The first is a targeted search which will perform the most sensitive search ever conducted of nearby (less than 80 light-years distant) solar-type stars. The second part, a sky survey, will scan a much larger area of the sky, so the signal will have to be stronger to be detected. This could detect signals coming from the vicinity of distant sun-like stars or from directions that might be overlooked if the search were limited to nearby solar-type stars.

LYNDON B. JOHNSON SPACE CENTER, Houston, Texas -- Astronaut William F. Fisher, M.D., resigned from NASA, effective January 31. He was a mission specialist on the 20th Space Shuttle mission in August 1985. In his 10 years with NASA, Dr. Fisher worked with high altitude research, extravehicular activities (EVA) procedures and development, support for shuttle mission STS-8 and the Manned Maneuvering Unit jet-powered backpack development team. His most recent assignment was to co-chair the External Maintenance Task Team for Space Station Freedom. Dr. Fisher will return to the practice of medicine full time.



Greenbelt Visitor Center Events for March

The Visitor Center is open to the public five days a week, Wednesday through Sunday from 10:00 a.m. to 4:00 p.m., closed all federal holidays. During this time of heightened security awareness, the Visitor Center is not conducting Goddard public tours. All other activities are scheduled as planned. For more information, call (301) 286-8981.

Launch Site Goddard -- Sunday, March 3 and 17, 1:00 p.m. Whether you've been launching model rockets for years, or this is your first time out, it's a great way to spend an afternoon. Anyone can come out to launch rockets, or just watch the fun. All launches are monitored for safety and take place on the Visitor Center grounds.

Saturday Videos -- Saturday, March 9, 1:00 p.m. View "Apollo 15: In the Moun-

tains of the Moon." This story of the highly successful fourth lunar landing mission includes the lunar surface scientific expeditions carried out with the Lunar Roving Vehicle.

Know and Tell -- Sunday, March 24, 1:00 p.m. "Using the Moon to Understand the Universe" -- Join the Instrument Scientist for the Gamma-Ray Spectrometer on the Mars Observer, Dr. Jack Trombka, of Goddard's Laboratory for Astronomy and Solar Physics, as he discusses how gamma-ray and X-ray spectrometers carried in the service modules of Apollo 15 and 16 were employed for compositional mapping of the lunar surface. Similar instruments of a more sophisticated nature will be on board the Gamma-Ray Observatory, scheduled for launch in April 1991.

Hitchhiker to Thumb Ride on Next Shuttle

by Dolores Beasley

The next space shuttle mission, STS-39, will be carrying the first Hitchhiker payload in five years.

The Hitchhiker project is operated by Goddard and provides for accommodation of small payloads in the shuttle payload bay. The Hitchhiker payload for STS-39 is called Space Test Payload (STP)-1 and consists of a Hitchhiker cross-bay carrier with five experiments, one of which was developed at Goddard.

The Hitchhiker cross-bay carrier was designed and built in-house by Code 740, the electronics were built by Code 730, which also was responsible for payload integration. Hitchhiker payloads are operated from a Code 500 control center at Goddard during the mission. Theodore Goldsmith, Code 740, is STP-1 mission manager. Chuck Chidekel, Code 733, is the integration manager.

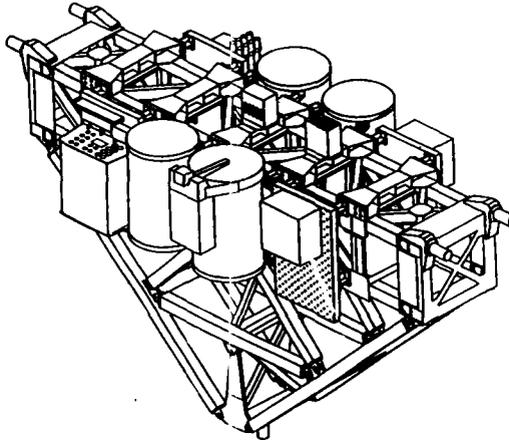
The GSFC experiment is the Data Systems Experiment (DSE). It consists of a computer, optical disk and other equipment mounted on a plate and will be used to evaluate performance of these new data system components under space environmental and radiation conditions. Principal Investigator is Danny Dalton, Code 735.

The other four experiments are:

* The Ultraviolet Limb Imaging Experiment (UVLIM), an instrument devel-

oped by the Naval Research Laboratory, to measure ultraviolet airglow in the upper atmosphere;

* The Spacecraft Kinetic Infrared Test (SKIRT), developed by the USAF Geophysical Laboratory. The SKIRT instruments will investigate the glow produced by the impact of residual atmosphere on



HH - M Carrier

the shuttle and telescope devices. Mike Mumma and Don Jennings, both Code 693, are also participating in the scientific development and operations of SKIRT;

* The Advance Liquid Feed Experiment (ALFE), developed by the USAF Aeronautics Laboratory. ALFE is designed

to investigate the zero gravity performance on various liquid tanks and pumps housed in two pressurized canisters;

* The Ascent Particle Monitor (APM), which will measure particle contamination present in orbiter payload bay during pre-launch and launch period. APM was developed by the USAF Space Systems Division.

There are two types of Hitchhiker carriers and both will be used in the upcoming mission: HH-G, a side-mount which carries up to three canisters or mounting plates and accommodates smaller payloads, and HH-M, an across-the-bay structure which accommodates up to eleven canisters or plates and can carry larger equipment. Hitchhikers go beyond the capabilities of a self-contained Get-Away Special (GAS) carrier, yet are not so extensive that they require a customized Spacelab pallet carrier.

The STP-1 payload is sponsored by the United States Air Force Space Systems Division. STS-39 is an unclassified Department of Defense flight on Space Shuttle Discovery. It is the next scheduled shuttle launch.

Currently, 19 Hitchhiker payloads are manifested. The last Hitchhiker mission was in 1986, and the next after STS-39 will be in August 1992, followed by another in October of that year.

Goddard GAS Experiment to Fly in May

by Dolores Beasley

How much or how little does a space shuttle in orbit move? That question will be studied later this year with the help of a Goddard experiment.

When the Space Shuttle Columbia takes off on mission STS-40 in May, one of the 12 Get Away Special (GAS) experiments will be the Orbiter Stability Experiment (OSE), developed at Goddard. The OSE will measure the orbiter's spectrum of small angular motions (or "jitter") produced by the operation of mechanical systems, thruster firings and man motions during normal crew activity.

The OSE was designed and built in-house by Code 680, using funds provided by the Director's Discretionary Fund and various components lent by Codes 700 and 800. The instrument manager is James Houston and the principal electronics technician is Thomas B. Plummer. Neal Barthlemme, Code 740, is technical manager.

Principal Investigator for the OSE is Werner M. Neupert, Code 685.

Originally, the measurements were needed for the design of an instrument to study the solar corona, which required a high degree of pointing stability, Neupert said. However, the shuttle instrument for which the data were needed was cancelled in 1985. "So when that fell through we thought about who else could use the observations," Neupert said. "This is a complex subject that is also important to experimenters needing the orbiter's low-gravity environment for their research," he said. "The real value is in making the data available for others to use."

The OSE will be able to observe for two to four hours during the mission. There will be two periods of observation; the first soon after the crew's sleep period and the second during an exercise period "when the orbiter will really be shaking," Neupert

said. "In this way we will be able to observe the effects of various levels of crew activity."

In addition to the vibration measurements that will be made, Goddard's GAS can also carry a passive experiment to test the effects of radiation on photographic film. That experiment was developed and provided by Dr. Ernest Hammond of Morgan State University, Baltimore, MD.

To date, 55 GAS cans have flown on 15 missions. The GAS program, which began in 1982, provides individuals and organizations an opportunity to send scientific research and development experiments aboard a space shuttle for a modest fee on a space-available basis. Goddard experiments can be flown in the GAS program at virtually no cost, said Larry Thomas, GAS technical liaison officer, Code 745.2. For more information, contact Thomas at x6-6760.

Five Honored as Goddard Senior Fellows

A few minutes on stage. A shake of Center Director Dr. John Klineberg's hand. In some cases that is the end of the story. For the five employees who were selected as the 1990 Goddard Senior Fellows, this was just the beginning. Dr. Mario Acuna, Code 695; Dr. Barney Conrath, Code 693.2; Henry Hoffman, Code 712; Dr. William K. Lau, Code 913 and Dr. Samuel H. Moseley,

Each Goddard Senior Fellow receives \$2,500 a year in travel funds. Senior Fellow positions are open for employees up through mid-management level. Division level employees and above are not eligible. Currently, only 10 Senior Fellows will serve at one time, plus Goddard members of the National Academies of Engineering and Science. Last year the first six senior fellows were chosen, but one retired and one was



PHOTOS: D. MCCALLUM

Center Director Dr. John M. Klineberg presents a framed certificate to new Goddard Senior Fellow Dr. William K. Lau, Code 913...



...and Henry Hoffman, Code 712...



...and Dr. Samuel H. Moseley, Code 685...



...and Dr. Barney Conrath, Code 693.2...



...and Dr. Mario Acuna, Code 695.

Code 685 were formally presented as the new Goddard Senior Fellows during a brief ceremony January 11 at the Scientific Colloquium. In addition to their regular assignments, during their five-year appointments, Goddard Senior Fellows recommend to the Center director allocations of the Director's Discretionary Fund, monitor the progress of its activities and advise the Center director on issues related to research policy and the improvement of the research and development environment.

promoted out of the program. The 1989 Goddard senior fellows are: Dr. Leonard J. Burlaga, Code 692; Dr. Carl E. Fichtel, Code 662; Dr. Rudolph Hanel (retired); John Mangus, Code 717 (promoted); Dr. Joanne Simpson, Code 900 and Dr. Compton J. Tucker, Code 923. The Goddard Senior Fellows program recognizes Goddard's most distinguished research workers for their outstanding accomplishments and contributions to the Nation's space program.

Superbowl Uses NASA Technology Spinoff

by Cheryl Madison

The huge television Jumbotron screen that tracked the hotly-contested Superbowl XXV game in Florida at Tampa Stadium on January 27 kept its cool, thanks to a NASA technology spinoff.

Sensors, originally designed as ingestible capsules to monitor core body temperatures of human patients, were used to monitor potentially damaging heat build-up in electronic circuits of the Jumbotron.

The sensor and receiver in the jumbo screen were the result of a collaborative development effort between the GSFC and the Johns Hopkins University Applied Physics Laboratory. The sensor originally was developed as a research tool under NASA's Technology Utilization's Applications Engineering program. The sensor has been used for research in the areas of hypo- and hyper-thermia, sleep disorders and sports medicine.

"The industrial temperature sensor is a good example of the diversity of applications that can result from NASA's Technology Utilization Program," said Donald Friedman, Code 702, Chief of the Office of Commercial Programs at Goddard. "We are very gratified about the interest manufacturers have shown in this simple device and are excited about the potential new uses. One area in which the sensor already has been used is honey production through the monitoring of bee-hive temperature."

The huge television Jumbotrons used at National Football League sports stadiums and also at Times Square in New York City, are built by the Sony Corporation and range from 8 feet x 10 feet to 33 feet x 110 feet.

The industrial temperature sensor is manufactured by HTI, Inc. in St. Petersburg, FL, the developer of the sensor's telemetry system and control panel. The sensor's extreme accuracy, up to temperatures of 260 degrees Fahrenheit, and its flexibility in download and recording of data has interested food processors, the pharmaceutical industry and manufacturing processors. Because the system uses an inductive magnetic telemetry link, it allows sensors to be used in new situations in which hard wiring is not possible or appropriate, such as in the Jumbotrons.

This NASA technology spinoff made it possible for spectators at Tampa Stadium to know what was going on down to the last second as the New York Giants managed to hold on to their slim lead and won the Superbowl, 20-19, despite the Buffalo Bills' valiant attempt at a lengthy field goal in the last seconds of the exciting game.

INSIDE

Dolly Perkins: At Home with any Challenge

by Cheryl Madison

Dolly Perkins, Code 510, is versed at more than one keyboard. The associate division chief of the Missions Operations Division spends her day dealing with computer keyboards, but her evening focus is on an ivory keyboard. Being an adult piano student allows Perkins to fill her spare time with the challenge and balance that she believes are necessary in her life. Perkin's eyes sparkle as she waxes enthusiastic about her life's credo, reflected in a chinese calligraphy on her desk, "Crisis as opportunity!" "Challenge is what motivates me," she explains, "always pushing up against the limits of my ability." Whether Perkins is finding that challenge in her job or her hobbies, her attitude is positive, contagious and "can-do."

Perkins spent the first 21 years of her life in Massachusetts. Raised in Easthampton, she graduated from Wellesley College, Wellesley, MA, in 1970 with a B.A. in Mathematics. Although her favorite subjects were music and history, she gravitated toward mathematics, a subject she describes as "one in which you get an answer and feel a sense of closure."

Peace Corps Life

Perkins embarked for The Gambia, West Africa, after graduation for a stint in the Peace Corps. She spent two years in a rural village as a math teacher in the equivalent of a junior high school. Perkins enjoyed the challenge and the country and decided to stay a third year (always her life events seem to run in series of threes) in cultural archives--gathering oral histories and artifacts from the griots, who played instruments and sang and spoke history. Again, her interest in music surfaced!

After her three years in the Peace Corps, Perkins spent six months traveling across Africa in whatever local transport was available. She muses, "The vehicles wouldn't depart until they were crammed with people and animals, sometimes six hours after the first goat and person boarded."

Perkins describes her African sojourn as "so interesting, it influences my life even today, observing and seeking to understand the cultural differences in attitudes, beliefs, and values of other countries and within our own country--learning how people live and make decisions, learning what makes people tick--that's what fascinates me."

When Perkins returned to the States in 1974 she began her career and her involvement with NASA at Computer Sciences Corporation in Silver Spring, MD, where she worked first as an analyst--in photo analysis and data interpretation of the LANDSAT data--and later as a programmer supporting Earth Sciences Directorate Systems. While she was working on a NASA-initiated project, the Transportable Application Executive (TAE) software program, she was asked to come to Goddard.

Perkins joined Goddard in 1981 as the project manager for TAE at the Center. She says, "It was the job I wanted to do--a challenge I could learn from and a job I had something to offer." Three years later, in

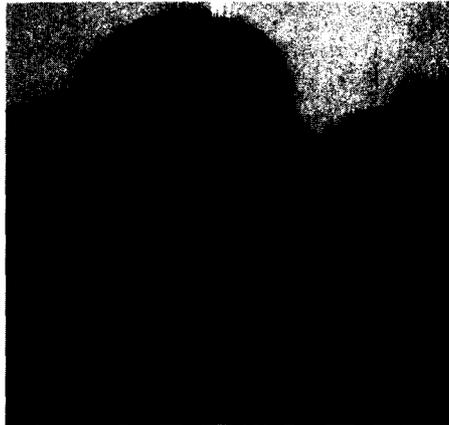


PHOTO: L. NOVAK

Dolly Perkins, Code 510, always wanted to play the piano. Perkins reflects, "My first recital was scarier than my first presentation before the upper echelons of NASA and helped everything else in my life fall into a different perspective!"

1984, she was promoted to section head for the Software Engineering Section for Code 500's Data Systems Technology Division. She sparkles, "That was a research and development environment I really enjoyed, because I like information; I soak it up."

Perkins's next promotion came (again) three years later, in 1987, when she was appointed branch head for the Software and Automation Systems Branch, and continued broadening her management skills. She explains, "My major area of interest is user interface technology. Applying technology is what excites me, and NASA has the most interesting applications."

In 1990, Perkins was appointed to her present job--planning for the development,

testing and operation of the spacecraft control center systems at Goddard. She is once more "climbing a large learning curve and tackling another environment, that of operations."

Perkins' division developed the payload control centers for the Cosmic Background Explorer, the Hubble Space Telescope, the Gamma-Ray Observatory, the Upper Atmosphere Research Satellite, the Extreme Ultraviolet Explorer, plus many others. She oversees all work--planning, strategy, scheduling, budget, new starts and negotiations with the flight projects. Perkins explains, "The flight projects are our customers, and we support all the projects run out of Goddard." Perkins' background is primarily in software technology. She comments, "I like to work on new ways of doing things."

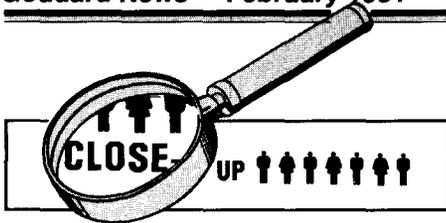
Perkins met her husband, Larry Novak, when he, too, worked at Goddard. They married in 1989. He is now a manager at Century Computing, a systems integration firm in Laurel. They share a love for animals--three English setters, one nice mutt, and two cats. Perkins smiles, "Not an insignificant amount of time and energy is involved in caring for pets!" Perkins reflects that although she is in charge of her own destiny, her husband is "her balance and her anchor."

Hands-On Hobbies

Perkins has been singing since grade school, has taken part in MAD productions at Goddard, and is active in the Masterworks Chorus of Montgomery County. She also enjoys gardening, knitting, crocheting, and beading. She makes afghans, scarves, hats and sweaters. The wall beside her desk is decorated with intriguing patterns for full-length sweaters and unusual decorative pillows she is would like to make.

"As I progress through my career, I do more and more handwork. The farther I go in the management chain and the less I produce tangible results at work, the more I compensate with handwork, so that I will have a balance in my life."

Balancing her artistic wall, there is an award for technical and managerial contribution in data systems engineering and technology development in support of spaceflight projects and another award that honors her TAE contribution.



Congratulations to **DR. FRANCO EINAUDI**, previously the Associate Chief of the Laboratory for Hydrospheric Processes, now Chief of the Laboratory for Atmospheres, Code 910...**WILLIAM J. CAMPBELL**, now Head of the National Space Science Data Center's Data Management Systems Facility, Code 934.



PHOTO: D. MCCALLUM



PHOTO: M. SMALL

EINAUDI

CAMPBELL

Congratulations to the many employees who received Director's Discretionary Fund (DDF) awards. The typical project funded under the DDF awards is completed in one-to-two years and receives less than \$50,000. The following are the project leaders, their codes and the abbreviated titles for projects that received funding for 1991:

NEW AWARDS

James B. Abshire, Code 924; **Robin Bell**, Code 922; **Robert Boyle**, Code 713.4; **Benjamin Fong Chao**, Code 921; **E. James Chern**, Code 313.4; **Gordon Chin**, Code 693.1; **Joe Dallas**, Code 726; **Jillian Y. Evans**, Code 311.2; **William M. Farrell**, Code 695; **Kathrine Forrest**, Code 726; **James B. Garvin**, Code 921; **Thomas R. Glesne**, Code 726; **Sally Heap**, Code 681; **J.R. Heirtzler**, Code 922; **Donald E. Jennings**, Code 693; **Demosthenes Kanzas**, Code 665; **Chet Koblinsky**, Code 926; **Anthony J. Martino**, Code 726; **Ronald M. Muller**, Code 402; **R. Steven Nerem**, Code 926; **Lola Olsen**, Code 934; **Janet Ormes**, Code 252; **Robert Petre**, Code 666; **J.A.R. Rall**, Code 726; **Bernard D. Seery**, Code 726; **Mark Selker**, Code 726; **Andrew M. Smith**, Code 681; **Robert Spagnuolo**, Code 841.3 (Wallops); **Walt Truskowski**, Code 522.3; **Stephen Volz**, Code 713.4; **John Vranish**, Code 714.1; **Bruce Woodgate**, Code 681; **P.S. Yeh**, Code 728; **Steven T. Zalesak**, Code 930.1.

RENEWALS

Christine Allen, Code 724.1; **John E. Allen**, Code 691; **Charles Engler**, Code 714; **Inez Fung**, Code 940 (GISS); **N. Gehrels**, Code 660; **Colleen Hartman**, Code 735.1; **Lonny Kauder**,



FOR A JOB WELL DONE --Astronaut Colonel Frederick D. Gregory, left, presents an award during the awards reception held December 28, 1990 at the Goddard Visitor Center to Herman M. Hines, Bendix Field Engineering Corp., Code 562.7, a senior systems engineer, for his work in coordinating the CAREER program. Hines was instrumental in coordinating support for the program which was co-sponsored by Goddard and the Anacostia Museum-Smithsonian Institution. CAREER, which stands for Children and Research Engineers Enjoy Rockets, exposed children ranging in age from 6 to 14 years, to the fun and scientific awareness that comes from building and launching a model rocket. Mentors, provided by the Goddard Black History Club, were instrumental in serving as role models for the children who took part in the program which ran for five consecutive Saturdays starting in late October of last year.

Retirees

Congratulations to the following employees who recently retired!

Name	Code	Years
Esther H. Ackerman	313	30
Joseph W. Bentley	712.2	30
Helen Bonk	562.1	33
Lucille L. Bourdeau	301	30
Jane Carpino	231	31
Chris J. Christie	501	30
Jimmie C. Elswick	542.1	30
Floyd Ford	400	32
Kenneth L. Hanlin	553.2	31
Edmund Hartzell	541.1	28
Sheng Yen Lee	313.2	21
Goldie E. Lusby	211.2	28
Claybourne Magee	703	25
George A. Matzner	110.3	38
Donald M. Phillips	542.1	39
Charles G. Stouffer	430	25
William G. Stroud	400	41
Joseph F. Turtill	704	18

Code 732; **Chet Koblinsky**, Code 926; **C. Laurence Korb**, Code 917; **S.H. Melfi**, Code 917; **Bruce Milam**, Code 716.4; **Michael J. Mumma**, Code 693; **Douglas Ross**, Code 728; **Geary Schwemmer**, Code 917; **Aristides Serlemitsos**, Code 713.1 and **Perry R. Wagner**, Code 731.1.

OOPS...

In the January 1991 issue an error was made in the "Solar X-Ray Project" article appearing on page 8. Pennsylvania State University (PSU) will provide the cubic instrument for the Argentine SAC-B mission, not the University of Pennsylvania.

CENTER SIDE Lines

THIRTY CANNED HAMS, 23 BOXES OF PANCAKE MIX, 32 CANS OF BAKED BEANS, 64 LARGE CANS OF FRUIT COCKTAIL, ONE CASE OF PEANUT BUTTER -- The list takes up four pages and includes 114 different food products. The food's destination was Russia; its mission was to feed 12 Goddard scientists. The scientists from the Total Ozone Mapping Spectrometer (TOMS) team went to the Soviet Union in September to integrate a TOMS instrument aboard a Soviet Meteor-3 spacecraft. Steve Gianacopolos, Canteen Corporation, Code 033.0, director of Dining Services at Goddard, created the menu to keep the scientists well-fed during their visit.

Gianacopolos put together a menu that was restricted by the total weight of the supplies, special diets of the scientists and practically no refrigeration. The menu contained canned and dried foods, but nothing that needed to be kept cold. The milk was powdered, so were the soups.

Using his regular contractor and Safeway, Gianacopolos created a menu that was extensive and nutritious for the scientists and satisfying for him. Gianacopolos, who spends his days overseeing the Building 21 cafeteria, found that creating the menu was a challenge, but enjoyable. "I had fun. It was a change of pace for me," he said.

WAR MAKES CHANGES AT GODDARD -- Increased security has changed the way some things are done at Goddard. Badges must be shown upon arriving at the Center, and all civil service and contract employees are encouraged to wear or display their NASA/GSFC ID badges while on Center. All visitors must be announced and vouched for before they are allowed on Center. For a short while, the Visitor Center was closed. In the last issue of the Goddard News, note was made in the front page story that this year there would be two Community Days. However, because of the added security, the first of the two Community Days, planned for April, has been cancelled. The second Community Day is currently scheduled for September.

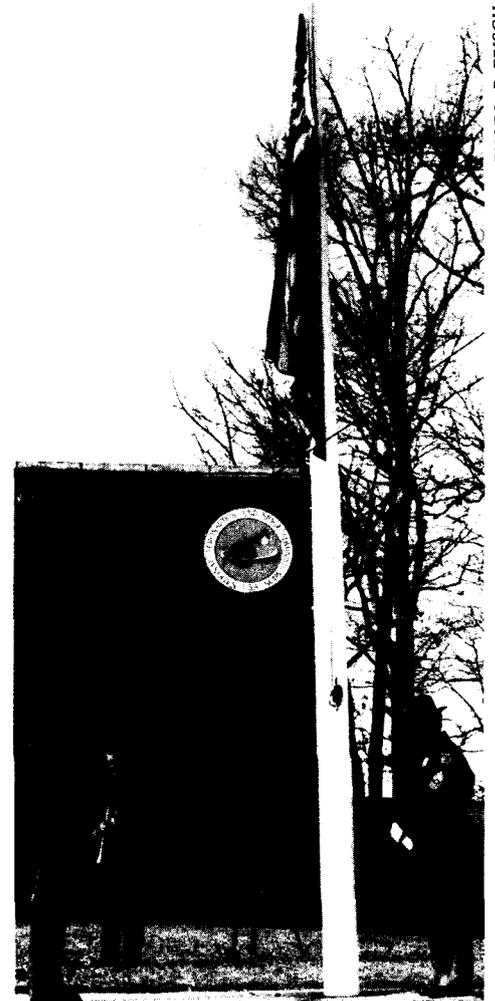


PHOTO: R. FRISCH

IN MEMORIAM -- Goddard employees took time out from their schedules to attend the memorial service for the crew of the Space Shuttle Challenger who lost their lives January 28, 1986. The solemn service took place at the Visitor Center at 11:38 a.m., January 28, 1991 exactly five years after what has come to be known as the "Challenger Accident." An American flag was lowered by City Wide Security Officers, James Jackson, left, and Sgt. Flenoria Scaggs, right, both Code 205.1, while Kenneth Kersey Jr., Code 727.1, center, played "Taps". Once the flag was lowered, 73 seconds of silence was observed. That was the length of the ill-fated STS-51L flight.

NASA
National Aeronautics and
Space Administration
Goddard Space Flight Center

Goddard News

The GODDARD NEWS is published monthly by the Office of Public Affairs,
Goddard Space Flight Center, Greenbelt, MD 20771.

Deadline for submitted material is the fifteenth of each month. For additional information contact Code 130, (301) 286-7504.

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286-NEWS