NASA
National Aeronautics and Space Administration
Goddard Space Flight Center

Goddard News

Greenbelt, Maryland and Wallops Island, Virginia
Vol. 34 No. 6 June 1988

Ribbon Cutting and Community Day Kick Off Visitor Center Opening

PHOTO: R. FRISCH

***BALLOONS FILLED THE AIR*—Center Director Dr. John W. Townsend, Jr. (front left), Greenbelt Mayor Gil Weidenfeld (front center) and Robert Goddard Middle School Principal Karl Taschenberger (front right) cut the ribbon to the newly-renovated Greenbelt Visitor Center as children from the Goddard Child Development Center released balloons.**

The second half of the recently completed Greenbelt Visitor Center (VC) renovation was celebrated last month with a ribbon-cutting ceremony, employee open house, community day—and lots of balloons!

As Center Director Dr. John W. Townsend, Jr., Greenbelt Mayor Gil Weidenfeld and Robert Goddard Middle School Principal Karl Taschenberger cut the ribbon in front of the newly-renovated Visitor Center, the children of Goddard's Child Development Center released brightly-colored balloons into the air.

Dr. Townsend invited attending employees to a reception inside Greenbelt's newest attraction. Later that evening, employees returned to show off the new facility to families and friends. In addition, Goddard Geophysicist Dr. David Thompson presented "A Tour Through the Universe."

Community Day, held on May 22, was chock full of activities inside and out. Inside, visitors checked out exciting exhibits on how pictures are sent from space, how we study space science, how we use spacecraft, Goddard's role in researching the "Big Bang" theory of the expanding universe, and America's pioneering rocketeer, Dr. Robert H. Goddard.

One new attraction proved to be quite popular—a computer game that challenges you to design, test and launch your own satellite. Watch out for your budget, instruments and power source or you might not be cleared for launch!

Successful Launch

"Please pass it," said 13-year-old Larry Skeen from Rockville, MD, as he gripped the joy stick and poked the red button on the console operating the game.

When asked how his launch went, "Perfect," he said, "after I chose the Space Shuttle for my launch vehicle."

As Skeen savored a successful launch, other youngsters imagined they were in space or on the launch pad as they sat in a mockup of a Gemini spacecraft, replete with hundreds of switches.

On the other side of the VC, remodeled in 1986, adults and youngsters took a ride in the gyro chair and operated a simulated Manned Maneuvering Unit. They also learned what it's like living on the Space Shuttle and about the complexities of working in space.

Outside, participants and spectators grooved to the sounds of the Commodores, a U.S. Navy Band, as model rockets pierced the sky. The air was filled with the aroma of hot dogs and hamburgers on the grill. Parents basked in the sun as tots ran about with colorful, helium-filled balloons tied to their wrists.

See photos page 5.

INSIDE
Elva Bailey: "Matchmaker" at Work
Page 6

Talk from the Top

John W. Townsend Jr

Q: *Why does it seem that Marshall is getting responsibility for developing projects and Goddard responsibility for operating them (e.g. Hubble Space Telescope (HST), Advanced X-Ray Astrophysics Facility (AXAF))?*

A: This is a situation that worries me. The decisions on HST and AXAF were made a long, long time ago. I had nothing to do with them. However, I was concerned about the Hubble Space Telescope project being split between Marshall and Goddard when I was at Fairchild. I really don't know why Goddard either didn't bid on AXAF or wasn't selected. I'm in the middle of discussions now with Headquarters on what our role is going to be in the Great Observatories: AXAF, in particular, and later on, SIRTF. I am concerned about the situation and intend to get GSFC back in the act.

Q: *How long do you plan to stay at Goddard? Where will you go from here?*

A: I really have never been taken with career planning. I've never done it for myself. I've never seen it to be terribly effective with others because in high technology so much changes so quickly. I came back feeling I would spend around five years or something like that. I notice that there are a lot of interesting launches going on in 1992 and 1993 so that may give me some sort of objective! Also, you can't discriminate against age anymore!

Center Director Dr. John W. Townsend, Jr. wants to hear from you! Send your questions to: TALK FROM THE TOP, Code 130.

See your name in print!

Mail your story to the Goddard News (Code 130), or call the Editor at 286-8277.

Building 8 Pack Rats Clean Up Their Act

PHOTO: M. SMALL

A PACK RAT'S WORK IS NEVER DONE—**Karen Hagan, Code 250, sorts through a box of transparencies as part of the clean-up effort. Hagan helped organize the excess furniture and equipment pick-up.**

Building 8 residents came to work decked out in their finest designer jeans for a mass clean-up day on May 10. Their cleaning efforts produced over 5,000 pounds of recyclable paper and a 30-foot truck of furniture and equipment.

Trash from the clean-up filled two dumpsters—one holding 20 cubic feet and the other 6 cubic feet, according to organizers Adrienne Brown, Building Manager for Building 8, and Sue Prevost, Facilities Operation Manager.

Code 230 provided the excess furniture and equipment pick-up, and Rich Stewart, Code 290.1, organized the trash pick-up. Contractor Pete Murphy picked up the recyclable paper.

Several offices won awards, based on the amount of trash they produced and the degree of improvement over their original states of cleanliness.

First prize went to the Graphics Storage Area, headed by Ron Moltere, Code 253.1. Liz Austin and Linda Bradford, Code 284.1, won second place for their clean-up efforts. Dee Cartier, Code 440, received third prize for the Space Telescope Xerox Room clean-up. Fourth place was awarded to Carl Poleskey, Code 201. Fifth place went to the Equal Opportunity Office, Code 120, and the sixth place award went to Ron Sandler, Code 204.

As part of the effort, windows throughout Building 8 were washed, and the snack bar was repainted and cleaned.

If your office would like to organize a recycling effort, contact Rich Stewart, x6-3683.

Coming soon: clean-up efforts in other buildings Centerwide.

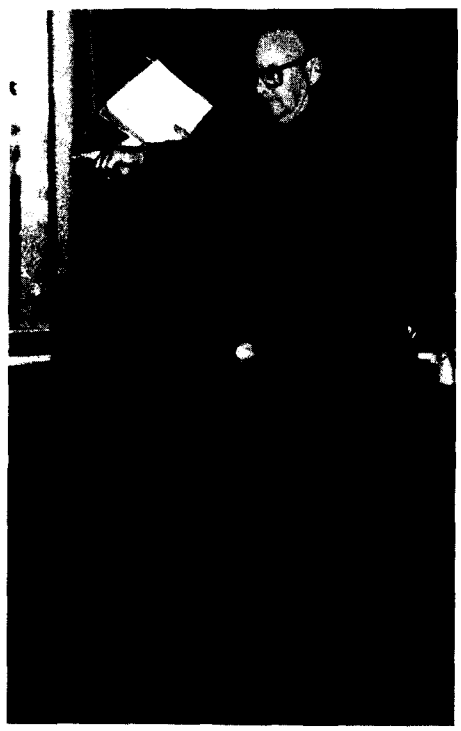


PHOTO: P. IZZO

HEAD PACK RAT—**Center Director Dr. John W. Townsend, Jr., "pitches in" on Building 8 Pack Rat Day. The clean-up effort produced over 5,000 pounds of recyclable paper and two dumpsters of trash.**

Preventive Medicine for Computer Viruses

by Carolynne White

Good news for Apple MacIntosh users at Goddard who are worried about the recent outbreak of computer "viruses." At least one kind of virus has been detected—and cured—on Center. A vaccine to detect it is now available, and an applications function probably already on your Mac can repair the damage.

The "Scores" virus, named after an invisible file it creates on infected MacIntosh computers, can create a "system bomb" by modifying the resources of application files, the "tools" of a computer's operating system.

For example, if the virus modifies the program the computer uses to locate files on the disk, the computer loses track of where the files are, and it can't save data; the computer gets confused, and a "system bomb" occurs—it stops whatever operation it is performing, for no apparent reason, and the screen flashes, or "garbage" characters appear.

This particular virus copies three different versions of itself into each of the four system files in the MacIntosh system. The user then inadvertently activates the virus when using these applications. All twelve copies of the virus must be eliminated to disinfect the system, and the virus can be transmitted through a computer network, bulletin board, or floppy disk.

"It's quite obnoxious," said Mike King, Code 613, who first detected the virus in his MacIntosh when the icons—little pictures representing various functions—on his computer were the wrong ones for the functions represented.

It took King and his colleagues, who also had infected computers, two days to discover and correct all the copies of the virus within their computer systems, with the help of a "vaccine" they received over the phone, through a device called a modem, from a commercial software distributor.

The vaccine is a control panel device, or "cdev," which, when installed on a MacIntosh, will display a warning message on the screen when a resource is about to be modified. With Resource Editor, a MacIntosh application, the user can individually edit and correct all the infected applications. However, Resource Editor is a powerful program, and an inexperienced user can easily damage the applications programs.

There is also a commercial program called "Ferret," which can locate and repair Scores-damaged software, available from commercial software distributors. (See box, page 4, for information on how to get these programs.)

"An easier, but safer, way to cure the virus is to use brute force, and simply throw away the infected applications disks and copy new ones from the Master Disks," said King.

Center Computer Security Official Bill Olden, Code 205.1, said that this is the

Continued on page 4

NASA Pipeline

JET PROPULSION LABORATORY, Pasadena, CA—Newly-processed radar pictures of the surface of Venus show what may be geologically-recent volcanic activity and impact cratering, including possible volcanic mountains and broad lava flows and fields like those which make up the Hawaiian Islands, according to scientists at NASA's Jet Propulsion Laboratory. Bright rings, seen in highland regions on Venus, are believed to be material thrown out from below the surface by volcanoes or by meteor impacts.

KENNEDY SPACE CENTER, Kennedy Space Center, FL—Officials at KSC and the Florida Division of the American Cancer Society announced recently a joint project involving a search for ways to improve laboratory identification and monitoring of cancer cells. The project name is "Evolution in Flow Cytometry: Application, Design and Testing of a New Advanced System." In the cytometry process, specimen cells are marked with a fluorescent dye, suspended in a liquid solution, and identified or measured with the use of sophisticated lasers and multiple photometers. Researchers involved in the study hope to develop an advanced flow cytometry instrument that could support biomedical experiments aboard the Space Station while advancing medical knowledge in cancer detection and treatment. Overall management of the collaboration process will be provided by the KSC Technology Utilization Office.

HEADQUARTERS, Washington, DC—Negotiators from NASA and the Government of Japan have reached agreement in substance on the text of a Memorandum of Understanding (MOU) for cooperation in the detailed design, development, operation and utilization of the permanently-manned civil Space Station. The Japanese Science and Technology Agency will serve as NASA's counterpart in implementing this MOU. In addition to the MOU, the participating governments have nearly reached agreement in substance on a multilateral Intergovernmental Agreement (IGA) which will provide a policy and legal framework for the MOU.

LEWIS RESEARCH CENTER, Cleveland, OH—NASA and the Department of Commerce have awarded the first U.S. Government Contract for commercial launch transportation services, as directed in the President's recent National Space Policy. The Lewis-managed contract, a $200 million contract for expendable launch vehicle (ELV) services, was awarded to General Dynamics Space Systems Division, San Diego, CA, for the National Oceanic and Atmospheric Administration (NOAA)'s new family of Geostationary Operational Environmental Satellites (GOES) I, J, and K, with an option for GOES L and M.

LANGLEY RESEARCH CENTER, Hampton, VA NASA has announced the results of an 18-month study showing that growth in trans-Pacific air travel would justify designing and building a new supersonic passenger airliner and placing it into service sometime between the years 2000 and 2010. According to studies sponsored by Langley, the world's next generation commercial supersonic transport would be markedly different from the Concorde, which currently links North America with Europe. A flight from Los Angeles to Tokyo in a conventional subsonic jet takes more than 11 hours. In a Mach 2.7 aircraft, for example, the same trip would take less than 4 hours. The studies indicate that, by the year 2000, a fleet of 1,200 large subsonic aircraft would be needed to carry the estimated world-wide long range traffic of 315,000 passengers per day. By comparison, less than 800 supersonic transports, each carrying 247 passengers as far as 5,000 miles, could serve the same market.

New Facility Adds Movie-Making as a Valuable Research Tool

by Michael Braukus

Only the shouts of "Lights! Camera! Action!" will be missing from the movie-making studio developed by the Space and Earth Sciences Directorate's Computer Systems Research Facility (CSRF) located in Building 28.

James R. Fischer, head of the CSRF, said, "The equipment in this new studio permits us to take sequences of computer-generated images and within a few minutes produce movies in support of what we call visualization of scientific data. This process gives researchers the ability to see scientific data in multiple dimensions."

The CSRF was created approximately 10 years ago to process atmospheric and oceanographic information. Although the name has changed, the facility has the same purpose: taking image data collected by Earth-orbiting satellites and analyzing them to extract more information.

Explaining one motivation behind developing the specialized studio, Fischer said, "Imagine a researcher who has acquired a stack of pictures of rainfall patterns taken by a NASA satellite. When he looks at them separately, he might not discover anything significant. But when he looks at them in rapid succession, he will see the rainfall patterns change before his eyes. The same images he was looking at before now might enable him to discover some new scientific phenomena."

The idea to make movies from computer images is not new to the CSRF's personnel. "Previously we improvised a Matrix camera to make a 16mm movie about rainfall parameters from data originating from one of our satellites," Fischer explained. "Although this camera is made to take still shots and really is not made to make movies, we were impressed by how the resulting movie showed scientific information. It was the success of this project that encouraged us to develop the movie production studio," he said.

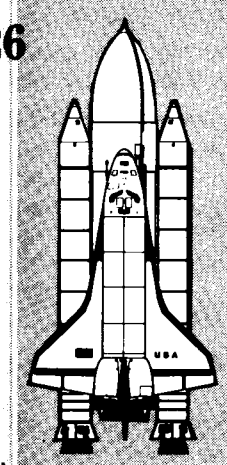
Although the CSRF still produces high quality 16mm films, the new studio is gearing toward producing television broadcast quality video on either analog optical disk or video tape. Fischer said, "The value of the video format is that the user can see the results immediately, without the usual delay of a day or more caused by sending the 16mm film out for processing.

"Besides the savings in time and money, another benefit of the video tape production will be that researchers can take advantage of the fast turn-around time if they plan to present their product at a conference," Fischer explained.

With the new movie-making equipment now operational, all of Goddard's scientific laboratories will be potential users of the Building 28 facility.

We expect many of the Center's laboratories to begin using our facility," Fischer said. "Visualizing scientific data is another tool Goddard scientists now can employ to analyze their research."

Launch Update: STS-26



An imaginary Space Shuttle blasted off after a countdown simulation at Kennedy Space Center (KSC) on Tuesday, June 7, 1988, rated "excellent" by Captain Robert L. Crippen, National Space Transportation System Deputy Director.

The rehearsal was designed to test the coordination of functions between the management team and the launch, flight, and support teams during launch.

The simulation, the most extensive such exercise since Challenger's destruction in January 1986, began at 6:30 a.m. and ended about five hours later with an imaginary emergency shuttle landing at Kennedy Space Center. This simulated "Return-to-Launch-Site-Abort" was included to exercise the teams.

Goddard personnel played an important role in the launch, not only through the Merritt Island Tracking Station which supported pad activities throughout the prelaunch countdown, but also through the Network Engineering Support Team, which was on hand to provide technical assistance in the tracking during the simulation. Goddard's NASA Communications (NASCOM) facility provided the intercenter communications among Johnson Space Center, (JSC), KSC, and Goddard.

Earlier, in May, the astronauts and members of the orbiter close-out crews participated in a simulated emergency egress exercise on the 195-foot level of the launch pad at KSC's Complex 39B. This simulated exercise was performed to familiarize astronauts, members of the launch team, fire/rescue team, ice team, and the close-out crew with evacuation routes, emergency equipment and procedures.

The emergency exercises were conducted to check recent upgrades to the launch pad's emergency escape system and new procedures developed in preparation for space shuttle mission STS-26, scheduled for August 1988.

Preventive Medicine

Continued from page 3

only virus incident reported on Center this year. "But that doesn't mean there haven't been others, only that they haven't been reported."

If you suspect that a virus has invaded your personal computer, contact Bill Olden, or Hank Middleton, at the Security Office, x6-7233.

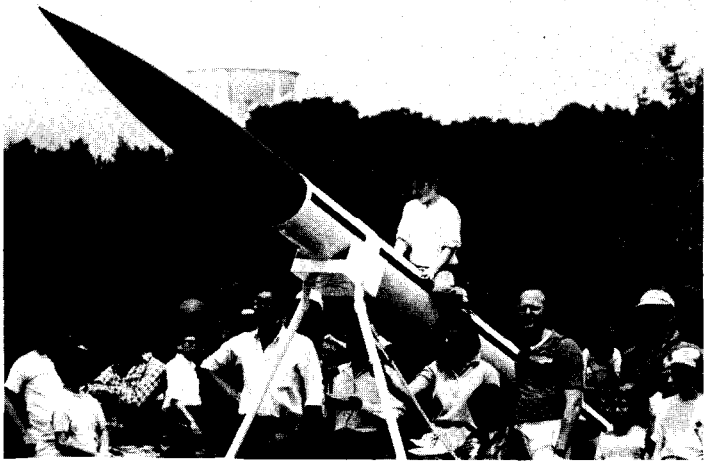
Meanwhile, back up files regularly to minimize the damage if a virus does invade your personal computer.

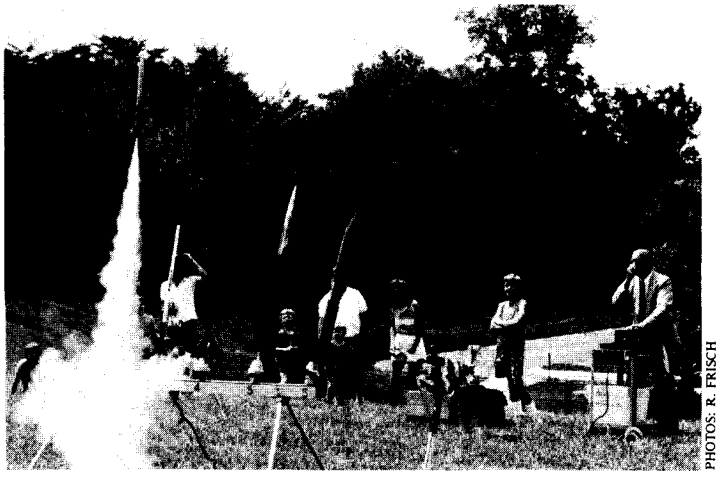
How to Save Your Mac from Virus Attack

A copy of the Control Panel Device (CDev) vaccine, and the Resource Editor program, is available from Bill Olden in the Security Office, x6-7233.

The National Bureau of Standards has a bulletin board which provides information about viruses and some sample software intended to protect systems. The bulletin board number is (301) 948-5717, or (301) 948-5718.

Community Day Features New Visitor Center Exhibit Area

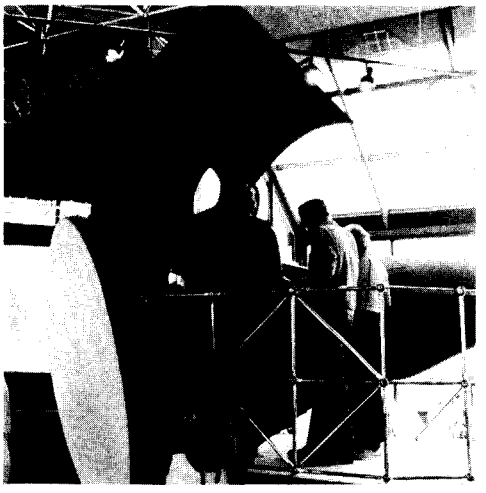




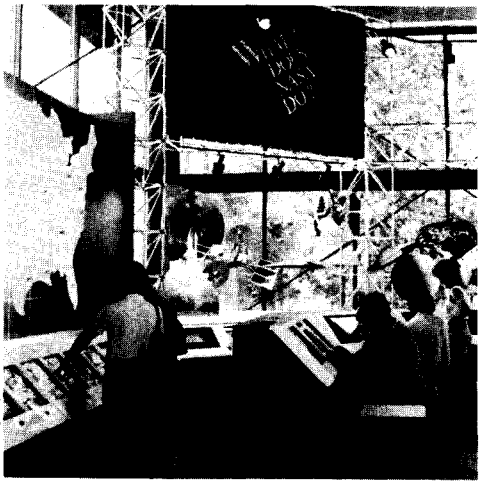
PHOTOS: R. FRISCH

COMMUNITY DAY COUNTDOWN—A crowd gathered to watch the model rocket launch, a highlight at the Visitor Center's Community Day. The rockets, some of which are models of sounding rockets like those launched at Goddard's Wallops Flight Facility, range in size from one to six feet high, and reach flight altitudes of up to 1,500 feet.

TO FLY!—Guests at the newly-renovated Visitor Center can sit in a full-scale mockup of a Gemini spacecraft and imagine what early manned flight was like. The actual Gemini-11 spacecraft, which flew in November 1966, sits alongside the mockup and provides more fuel for the imagination.



HOW WE STUDY SPACE SCIENCE—GSFC operates six scientific laboratories in which specialists design flight instruments and conduct basic research on astronomy, the Earth and the space environment. Their expert knowledge of all the radiation forms, including x-ray, gamma ray, infrared and ultraviolet, helps foster a better understanding of our place in the universe. A new exhibit on How We Study Space Science explains some of these programs.



SPACECRAFT VIDEO GAME—A popular new attraction allows visitors to design, test and launch a spacecraft. Throughout the game, players must make crucial decisions about the types of experiments and equipment to use. The computer then "tests" the spacecraft to see if it can withstand the launch environment. If conditions are right—it's blastoff time!

Elva Bailey: Goddard's "Matchmaker" at Work

by Randee Exler

Talking with Elva Bailey, Chief of Goddard's Educational Program Office, is as intoxicating as slow-sipping bourbon on a porch in his native Kentucky. One can't help but relax listening to his slow southern drawl. As he speaks with pride about the students with whom he's worked, one can't help but feel warm inside.

Bailey has been running a "matchmaking service" at Goddard since 1963. About 150 youngsters a year experience NASA career-oriented work experience thanks to Bailey's careful pairing of students and mentors. With 25 years of experience, this translates into 2,750 "matches."

Kid in a Candy Store

Bailey says that his job is a rewarding vocation.

"I feel like a kid in a candy store with the freedom to sample all of the products!" the former biochemistry teacher remarked. "We have around 1,000 engineers and 600 Ph. D. scientists at Goddard, and they're all doing interesting work.

"It's exciting to mesh some of these people with the students. After all, someday these kids may be their replacements!"

He acknowledges that his role would not be possible without the cooperation of the many Goddard employees who accept the student interns and affect their lives.

"Behind each of the many students is a dedicated mentor who makes a major contribution to helping meet our country's critical need for more and better qualified technical professionals," he explained.

Teaching Background

Bailey started teaching at Lincoln College, Lincoln, IL, in 1949. After three years, he became Dean. His open door policy with the students on campus kept him "in the know."

"I always knew what was going on," the good-natured Bailey recalls about his relationship with the Lincoln students. "I even knew about panty raids before they happened!"

Bailey maintains a line of communication with the students at Goddard. "Even though the students' strongest bonds develop with the mentors I place them with, a lot of them stop by to talk," he said.

"Over the years," he continued, "we've gotten to know a lot of kids and their families personally. This has kept our oars in the water.

"We can do something here that will improve their lives. We accomplish this by trying to do what teachers are supposed to do—teach some subject matter and try to teach about living as well.

"This job has the same rewards as the classroom."

After five years as Dean of Lincoln College and four years as a science supervisor in the Livonia, MI, school system, Bailey joined NASA's School Visit Program in November 1961 and has been spreading NASA Gospel to interested students and teachers ever since.

Rewarding Program

Most of Goddard's students participate in gifted and talented programs sponsored by the NASA-wide Summer High School Apprenticeship Program (SHARP) and organizations such as the National Space Club, the Research Science Institute, and the Maryland State Department of Education.

One of Bailey's favorite programs brought a different group of youngsters to Goddard—vocational special education students. "This was a very satisfying experience for us," the Bowie resident recalled.

The students were given a clean slate and a chance to make something of themselves at Goddard. "We got kids who couldn't read very well and got them here without having their counselors tell our skill people about their individual problems," the two-time winner of Goddard's Equal Opportunity Award said.

PHOTO: R. EXLER

"If you've lived as long as I have you have an opinion on everything unless you've been asleep."

"We had seven or eight kids trained to be heliarc welders which is a very special skill," Bailey boasted with the pride of a parent. "They passed a test given by an outside contractor with specs by the Air Force and NASA."

"We got a lot of pleasure from getting those kids paired up with someone committed to improving their way of life."

Teacher Involvement

In addition to matching students and mentors, Bailey and his staff conduct school visits and run teacher workshops. One of Bailey's favorite summer workshops has been conducted at Goddard for elementary level teachers for the last 20 years. Perhaps this is because Bailey's wife, Ruth, teaches first grade in the Prince George's County School System.

"Elementary teachers have less science training than secondary teachers," he explained. "We try to get them more acquainted and friendly with science."

"I always thought science teachers had an advantage over everyone else," he commented. "All of the things that kids are interested in are what science teachers know about—what makes things work, the wiggly things, the mechanical things.

"I've always taken the approach that if kids don't enjoy what you're doing, then you must be doing something wrong!"

An Engineer at Heart

When he's away from Goddard, Bailey can be found working on a 1930 Ford Model A that he's been tinkering with for the last 15 years. It's finished mechanically but needs body work.

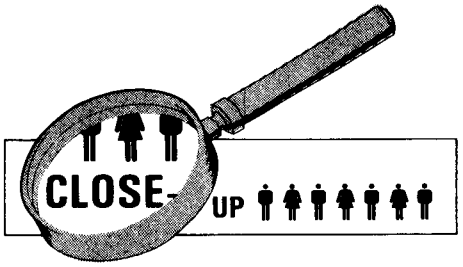
"I was raised on a farm and used to marvel how my father could fix anything," he explained. "I guess working on this car brings out the engineer in me."

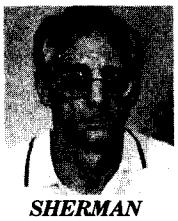
Bailey also collects antique straight razors, a hobby which he admits "doesn't appeal to a lot of people."

Philosophy on Life

"If you've lived as long as I have you have an opinion about everything unless you've been asleep," the 63-year-old educator said behind a grin.

"My whole life's been an education," Bailey said of himself. "Always a teacher, always a student."




SHERMAN

Dr. ALLAN SHERMAN, formerly Associate Chief of the Space Technology Division, was appointed Chief of the Space Technology Division, Code 710. He will provide leadership for the planning, implementing, directing, and coordinating of a comprehensive program which includes research in the space technology disciplines, development of instrument and spacecraft components and subsystems, and technical support to the Center's flight projects and advanced studies.

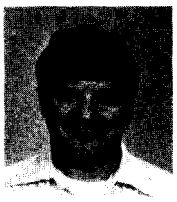
JOHN A. HOAG, JR., Code 831.2, has been designated Goddard's Aviation Safety Officer. Hoag's extensive military and civilian background in rotary, fixed wing, turboprop, and jet aircraft will come in handy in the performance of his new duties, which include responsibility for aviation safety throughout the Center.

PYLE

EVERETT J. PYLE was was named Associate Chief of the Space Technology Division, Code 710. He assists the Chief of the Space Technology Division in planning, implementing, directing, and coordinating research and development activities and technical support to flight projects and advanced studies. Pyle was formerly Head of the Instrument Electronic Systems Branch.

Congratulations to **HENRY W. PRICE, JR.**, formerly Chief of the Instrument Diision, who was appointed to the newly-established position of Chief Engineer for Code 700. His new responsibilities include initiating, leading and directing technical activities to improve engineering design and development and to develop new concepts and approaches for future engineering requirements.

Former Deputy Director for Engineering **WILLIAM H. MEYER** was named Chief of the Instrument Division, Code 720, where he is responsible for planning, implementing, directing, and coordinating a comprehensive program designed to provide the Center with management for scientific and application instruments and engineering support for instrument development, flight implementation, and ground operation.


HUBER

Chief of the Space Technology Division **THOMAS E. HUBER** was appointed Deputy Director for Engineering, Code 700. Huber assists the Director of Engineering in managing the directorate's broad program of technological research and development in support of space applications and science programs.

Small Business Promoted

The largest Small and Small Disadvantaged Business Conference at Goddard in 15 years was held on Thursday, May 26, in the Building 8 Auditorium. Approximately 500 business representatives attended the event.

During the conference, Eugene D. Rosen, Director of NASA's Office of Small and Disadvantaged Business Utilization presented a plaque to Associate Director, Dr. Frank McDonald, in recognition of Goddard's support for the agency's socio-economic programs.

Throughout the conference, Goddard personnel provided scientific, technical, and administrative counseling for the small and disadvantaged businesses.

Blood Donors

Following is a list of Goddard donors who were cited by the American Red Cross with gallon pins at the bloodmobile on June 1, 1988:

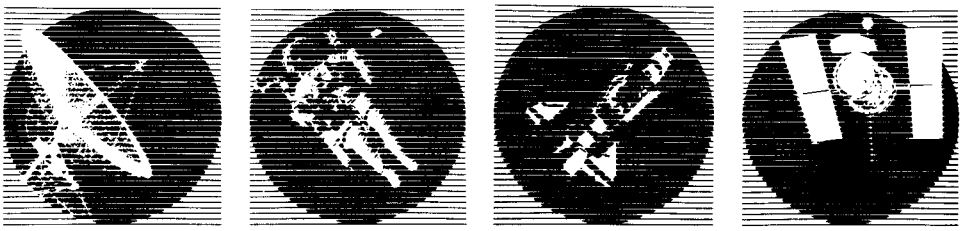
NAME	GALLONS
Martin Davis	10
Irven Errera	11
Andre S. Fortin	1
Robert M. Frederickson	1
Trina L. Haffelfinger	1
Larry Hilliard	2
Ned Horning	2
Jacqui Izumi	1
Anthony Pierro	2
Robert J. Schoelkopf	1
Marilyn J. Seppi	1
Wendy Shoan	4

The next bloodmobile visit will be on August 3, from 8:30 a.m. to 1:30 p.m. in the Building 8 Auditorium. Thank you, Goddard, for your continued support of the program!

Retirees

Farewell and best of luck to the following retirees who left Goddard recently!

	CODE	YEARS
Chandler, Arthur	303	23
Croft, George E.	743	30
Demas, George	513	30
Duffy, Charles F.	240	32
Hirschfield, Julius	754.2	32
Meilleur, Theodore G.	610.1	21
Smigocki, Edmund A.	751	37



Visitor Center—July Calendar

July 3–
Model Rocket Launch–1:00 p.m.

July 9 & 10
NASA Film Series–1:00 p.m.
"Space Shuttle–Mission to the Future"
"Space Shuttle: 'A Remarkable Flying Machine' "

July 17–
Model Rocket Contest–10:00 a.m.

July 24–
Public Program–1:00 p.m.
"The Space Shuttle–Its Ancestry and Its Promise for the 1990s"

For more information, call the Visitor Center at 286-8981.
The Visitor Center is open Wednesday through Sunday, from 10:00 a.m. to 4 p.m.

Computer "Smarts" Displayed at GSFC

The 32 booths of posters, papers and presentations exhibited on May 24 at the 1988 Goddard Conference on Space Applications of Artificial Intelligence (AI) gave this year's conference a festive air. The topics presented demonstrated that computers may be getting as smart as the people who program them.

Approximately 500 university, industry and government representatives could be seen milling about the Building 8 Auditorium learning about topics such as machine vision, intelligent user interface, fault isolation and knowledge-based systems.

This year's format maximized the possibilities for more direct interaction between conference attendees and the investigators whose work was being presented, according to Conference Co-Chairmen James Rash, Code 531.1, and Peter Hughes, Code 522. Attendees could see presentations relevant to their own interests, and demonstrations were easily accommodated.

Awards were presented for best paper and best presentation by Center Director Dr. John W. Townsend, Jr. "An Intelligent Training System for Space Shuttle Flight Controllers" by R. Bowen Loftin, University of Houston for the Johnson Space Center, won the Best Paper Award. The Best Presentation Award went to Amy Geoffroy and Dan Britt, Marietta Information and Communications Systems, for "Contingency Rescheduling of Spacecraft Operations."

Make Traveling a Breeze!

As the warm summer weather lures personal travelers out of their homes, Ask Mr. Foster, Goddard's contract travel agency, will be busier than ever scheduling vacations, in addition to processing official travel for Goddard's Travel Office.

Whether you're traveling on government orders to a conference in Seattle, or using Ask Mr. Foster to plan your summer vacation, keep these guidelines in mind to expedite your travel.

Before You Travel

First, it is important to remember that Ask Mr. Foster is a separate entity from the Imprest Fund, and the newly co-located Travel Section, both in Building 1. When these offices are closed for lunch (from 11:30 a.m. to 12:30 p.m. daily), Ask Mr. Foster is not authorized to disburse funds, or perform other functions of these offices. However, Ask Mr. Foster will accept travel orders from travelers who need to submit these to this office.

Also, Ask Mr. Foster usually prints tickets two working days before travel is scheduled to begin. If you want to pick up your tickets earlier, you can call Ask Mr. Foster and ask to have your tickets printed earlier.

"Seating arrangements seem to be a prime concern of most travelers," said Gigi Bellucci of Ask Mr. Foster. "Travelers don't realize that airlines only designate a certain percentage of seats to be preassigned; the rest will not be assigned until airport check-in." For travelers, this means that if Ask Mr. Foster is unable to reserve the seat you want, you can request it again at airport check-in.

Also, Ask Mr. Foster will print boarding passes for you, to avoid time-consuming airport check-in, unless you are flying overseas, or it is within 24 hours of departure time. Most airlines will not permit travel agents to issue boarding passes in these cirucmstances.

After You Return

The most common voucher problems which slow processing are simple oversights, according to Mary Watts of Goddard's Travel Section, Code 151.2.

"People forget to sign, or have their supervisor sign, the voucher. It's very important to include the full itinerary—times and places—because per diem rates are calculated according to time and city where Temporary Duty (TDY) is performed."

Other frequent omissions include car rental information, origin and destination of official telephone calls, taxi fares between hotel and TDY station, vicinity driving if using a privately-owned automobile, annual leave, registration fees and employee number. And, if you sign your travel voucher in blue ball point pen, it will be easier for the travel personnel to distinguish the original!

Also, it is important to have any deviations from the original travel orders post-approved by the authorizing official who signed your original order. This means that if you were supposed to fly into Rome, and you ended up having the meeting in Venice, you must prepare a statement on the voucher justifying this change, and have it signed by your supervisor and the authorizing official before sending it to accounting.

These suggestions should help you travel more smoothly, whether you're taking a vacation to California or planning a conference at Cape Canaveral.

If you have any questions—before or after you travel—call the Travel Section (x6-5138) or Ask Mr. Foster (x6-9097).

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 for people like:

Deadline for submitted material is the first of each month. For additional information, contact Code 130, 286-7277.
The GODDARD NEWS staff is:

Managing Editor
Randee Exler
Assistant Managing Editor
Carolynne White
Senior Editors
Michael Braukus, Carter Dove, Jim Elliott and Joyce Milliner

DIAL 286-NEWS

Feeling out of touch? Out of the news mainstream? Dial 286-NEWS. This is the new number for the Office of Public Affairs code-a-phone. Dial in for up-to-the-minute information on Goddard and related events.