

Astrogram

Communication for the Information Technology Age

Hubbard optimistic about future of NASA and Ames

As NASA undergoes a major transformation to meet the goals and objectives of the Vision for Space Exploration, Ames has a bright future, according to Center Director G. Scott Hubbard.

Addressing an 'all hands' meeting held Sept. 2 in the main auditorium and broadcast on the center's closed circuit

Hubbard said that when completed next year, the program-level SOFIA project will provide NASA with a unique astronomical observatory based at Ames. Hubbard praised Ames employees for their hard work to help meet several of SOFIA's milestones, including completion of the telescope's upper rigid cavity door; installation of SOFIA's first science instrument, the High-speed Imaging Photometer for Occultations (HIPO); and completing the first 'on-sky test' of the telescope, providing the first look at the stars.

"Our people stepped up to the plate and what they have done is nothing short of extraordinary," said Hubbard, referring to the completion of SOFIA's upper rigid cavity door

that was assembled at Ames. The door is a major component of the airborne observatory.

Concerning Project Columbia, Hubbard predicted that when the project is completed, the increased supercomputing capacity and capability will establish NASA and Ames as a major supercomputing power, among the best in the world. He especially praised the hard work of people at both the Information Science and Technology and the Center Operations directorates.

"This is truly an outstanding center," Hubbard continued. "We have a lot to be proud of."

Turning to the transformation, Hubbard said that Ames is reorienting its four program directorates to align better with the new Headquarters mission directorates, particularly the re-

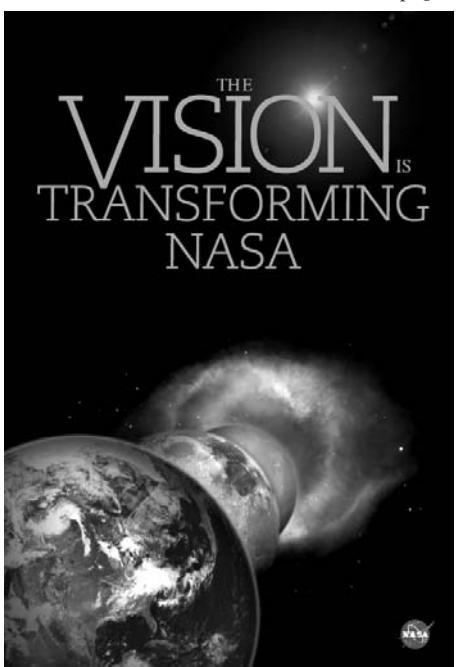
cently created Science Mission Directorate, Ames' new institutional program office. The 'new' directorates will be Aeronautics; Exploration Technology; Science; and Project Management and Engineering.

Concerning conversion of NASA's field centers into federally funded research and development centers (FFRDCs), perhaps the most controversial change being proposed, Hubbard said that the concept of converting field centers into FFRDCs will have to undergo substantial study before any final decisions are made. In addition, Congress will need to approve special legislation to facilitate the conversions.

This is the fourth time that similar concerns have been raised, dating back to the early 1970s. He said the reason the issue continues to be raised is a very practical one: the high cost of living in the Bay Area.

Pointing out that salaries for government employees range anywhere from 20 to 30 percent below what are paid by the private sector for comparable work, Hubbard said that under an FFRDC, salaries could be more competitive. He also said that by eliminating the constraints of the civil service system,

continued on page 2



NASA Ames Center Director G. Scott Hubbard during the recent 'all hands' meeting discusses the process of transforming NASA Ames to meet the goals of the Vision for Space Exploration.

television system, Hubbard vowed to try to make the process of transforming Ames to meet the goals of the Vision for Space Exploration as smooth and efficient as possible, while continuing to make adjustments in the center's job skill mix to meet its customer needs.

"I won't kid you, this could create some turbulence out there," Hubbard said. "However, I believe the future of the center is very bright and with all your help, we will make it happen."

Before discussing the agency's transformation, Hubbard cited a series of recent accomplishments made by the center, including several project milestones for the Stratospheric Observatory for Infrared Astronomy (SOFIA) and Project Columbia, a major effort to dramatically increase the agency's supercomputing capacity to meet critical national goals.

Ames celebrates completion of SOFIA's telescope cavity door

"So, Carol. Here is the upper-rigid cavity door. Let's go fly the closed door configuration and bring the plane home so Ames' talented team can finish it!"



NASA Ames Center Director G. Scott Hubbard at the recent celebration held to recognize the completion of the SOFIA upper-rigid cavity door.

With those words, Fred Martwick, co-manager of the complicated project, handed over the upper-rigid cavity door for NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) project to Carol Carroll, SOFIA program manager.

Completion of the door that protects SOFIA's telescope assembly aboard the airborne observatory is a major milestone for the project. Ames celebrated the event with a festive barbecue held in the N-211D hangar on Aug. 27, one day after finishing the door.

During the celebration ceremony, co-manager Dave Ackard presented a plaque to Carroll commemorating the completion of the project milestone.

"I don't deserve this, but it will be a great reminder of all the people who worked on this team," Carroll said. "You stepped up to the job and I just watched from the sidelines. I want to thank you from the bottom of my heart for your hard work and dedication to the team."

Ames Center Director G. Scott Hubbard also thanked project team members for their dedication to the project leading to its successful completion.

"There's nothing like hardware on the floor; this is the real stuff and you guys did it," Hubbard said. "I am very, very proud of you and the center is proud of you."

Eric Becklin, chief scientist for SOFIA, also expressed his gratitude to the team for completing the cavity door. "A key component of SOFIA is the telescope, but without the door, we've got nothing," Becklin said.

The project's 14-month march to completion followed a long and tortuous path, including recovering from a bankruptcy filing by a project contractor, Aircraft Engineering Corp., and several other technical challenges.

In June 2003, Ames received the door's assembly tools, which were only 75 percent complete, along with a mere 13 pounds of the door's required parts.

"Since the door's overall weight is 1,500 pounds, we had a long way to go," Martwick said.

During the course of the project, more than 13,800 hours were spent to assemble the door. Measuring 174 inches by 206 inches, the massive door comprises 4,500 separate parts and 255 part classifications. The job was so com-

plex, it required a 45-page assembly drawing for the team to follow to make sure everything fit together the way it was supposed to. Fortunately, despite the long hours and numerous challenges of the project, there was no time lost due to job-related injuries.

As the project finally neared completion, Martwick, along with co-managers Ackard and Bill Caldwell, gained the necessary certification of the door from the Federal Aviation Administration, a crucial step necessary to finish the project. They now are overseeing testing and final preparations to ship the door next month to Waco, Texas, where it will be installed on SOFIA to protect its sensitive telescope assembly.

The master craftsmen responsible for assembly of the door include Ron Hovland, Terry Bland, Tom Gilberston, Doug Krause, Phil Ugale, Alex Valdez and Marty Galinski. The quality assurance team members included Mike Henschke, John Torres and Jim Lesko. Adel Belous and Jim Baltz, design engineers, provided concurrent engineering services during the door assembly project.

BY MICHAEL MEWHINNEY

Hubbard optimistic about NASA's future

continued from front page

Ames would gain a more efficient way of doing business. "Imagine it only taking three days to get a contract approved, instead of six months to a year," Hubbard offered.

In the meantime, Hubbard said the agency is considering offering buyouts to employees. The goal of the buyout at Ames would be to continue the transition out of legacy core competencies into ones that will support our future business base, and to reduce the cost of doing business by reducing G&A. The buyout reflects the reality that we must make changes in our workforce. However, the buyouts, which are voluntary, have not yet been approved. He said he expects the buyout plan to be approved by NASA Headquarters by Thanksgiving and implemented by the end of January.

"If the buyout is not successful, we may find ourselves in a situation where hiring will be severely limited in 2005," Hubbard warned. Concerning NASA's

2006 fiscal year budget, while funding for space science, Earth science, biological and physical research and aeronautics appear to be relatively stable, Hubbard said the amount of funding for exploration systems is "the big unknown."

"The stated goal is to transform NASA's space research and technology development portfolio to better align the investments with the Vision for Space Exploration," Hubbard observed. Hubbard committed to keeping overhead rates stable and predictable, to reducing the cost of doing business at Ames, and to continuing to adjust the skill mix to meet customer needs. In keeping with the transformation, he added that Ames would be very proactive in advocating its capabilities to program managers at NASA Headquarters to ensure they are familiar with how Ames can help the agency meet its exploration objectives.

BY MICHAEL MEWHINNEY

NASA's loss is community's gain; Cheng honored

She is missed at NASA, that is sure. But since Pearl Cheng left NASA in 2000, after 19 years of service to the space agency, she has shined as her own star in the local community. The state of California took notice last March and named Cheng 'Woman of the Year.'

On Aug. 16, California Assemblywoman and Assistant Speaker Pro Tem Sally Lieber named Cheng 'Woman of the Year' for the 22nd Assembly District, which includes many of the cities that surround NASA Ames. Cheng spent almost two decades at Ames, in what Cheng describes as "a wonderful

set of positions" including project manager, line manager and by 2000, associate director of Ames. Since her departure, Cheng has taken her leadership skills and honorably applied them to her community, eventually earning several important roles: Santa Clara County School Board Association president; American Red Cross board member and United Way advisory council member.

"We took suggestions from local community groups and one name kept coming up," Leiber explained. "A number of folks who have known her say she is outstanding." Many of those come

from NASA Ames. Sid Sun of Code SL speaks fondly of his former coworker, saying "Pearl has an incredible ability to mix personal touch with strong leadership. She was a great manager at Ames and I am very happy for the community that they get to benefit from her. Nobody else could deserve this award more."

"I was blown away [by the award]," said Cheng. "Public service is not an area where you look for recognition, so to have recognition feels very wonderful."

BY ARIANE CORNELL

NASA LDP graduates for 2003-2004 honored

In July, the 19 members of the 2003-2004 Leadership Development Program (LDP) celebrated the completion of their developmental year with a ceremony at NASA Headquarters. The program participants, who represent nine centers,

take on a collaboration initiative, but rather they took what they learned about collaboration and infused it into existing initiatives and efforts such as 'One NASA,' the APPL curriculum and many other efforts. As a result of their project, the 2003-2004 class identified 75 collaboration best practices. A link to the full report of their findings and recommendations can be found on the Leadership Development Program home page at <http://ldp.nasa.gov/>.

Three participants from the class, Judy Robinson, Steven Goodman and Reginald Alexander, were elected to speak at the graduation to

outside leaders. Participants must be grades 13-15 and are competitively selected at the agency level.

Leadership Development Program graduates for 2003-2004

Dr. Jill J. Bauman, NASA Ames

Dr. Orlando Santos, NASA Ames

Brent R. Cobleigh, DFRC

Wei-Yen Hu, GRC

Scott R. Thomas, GRC

Gary L. Cox, GSFC

Jeffery M. Lupis, HQ

Dr. Judith L. Robinson, JSC

Gail A. Skowron, JSC

Dr. Orlando Melendez, KSC

Kathleen S. Potter, KSC

Melvin J. Ferebee, Jr., LaRC

Shawn T. Gallagher, LaRC

Laura A. O'Connor, LaRC

Elizabeth B. Plentovich, LaRC

Paul W. Roberts, LaRC

William L. Willshire, Jr., LaRC

Reginald A. Alexander, MSFC

Dr. Steven J. Goodman, MSFC



NASA's Leadership Development Program, class of 2003-2004, graduated in July at NASA Headquarters. The guest speaker was NASA Deputy Administrator Frederick D. Gregory (center). Two people from NASA Ames graduated with the class, Jill Bauman (left) and Orlando Santos (right).

were the first graduates of the NASA Leadership Development Program. The LDP replaced the NASA Professional Development Program in support of the agency's emphasis on improving leadership skills and effectiveness.

In his address to the graduates, Deputy Administrator Fred Gregory thanked the participants for the contributions they made to the agency as part of their developmental assignments. He also praised them on the completion of their class project 'Achieving Mission Success in the 21st Century through Collaboration.' Gregory stated that he was particularly thankful and impressed that the class did not recommend the agency

share their reflections of the year and their thoughts on leadership. All three acknowledged that, through the LDP, they became aware of how their personal vision and values aligned with NASA's vision, mission and values and how this alignment was key in helping strengthen their ability to be more effective leaders.

The vision of the LDP is to create powerful leaders who align with NASA's vision, mission and values and who create results that matter to the American people. Program elements include developmental assignments, a class project, individual coaching and training and briefings by NASA and

NASA Ames provides lifetime experiences for students

This summer, Ohlone College students Daniel Dzoan, Elton Kong, Jeremy Randolph and Jamie Zetterberg joined the team at NASA Ames. The program proved to be a tremendous success as mentors Rabindra Mehta, Terry Grant, Daniel Petroff and Nicholas Veronico provided the students with experiences that will last a lifetime.

Dzoan is an engineering student. This summer, he worked in the fluid mechanics lab conducting research on coal cars. He used a wind tunnel to observe and record aerodynamic drag on train cars while modifying the car. During his 10-week research internship, he found that reducing aerodynamic drag means increased fuel efficiency and the reduction of transportation costs. Dzoan worked with Mehta, the fluid mechanics operations manager.

Kong is an electrical engineering student. He worked with Lego Robotics this summer at Ames. Working at the Aerospace Encounter, he conducted research on possible applications for robotic missions to Mars. His mentor was Terry Grant, a research scientist at Ames.

Randolph is a computer science major and is attending UCSC this fall. During his internship this summer, Randolph worked with facilities engineer Petroff. Randolph put together a computerized system of checks and bal-

ances for the wastewater facility at NASA Ames. He took the current system and made it more efficient and easier to maintain and update.

Zetterberg, the author, is an industrial engineering student attending UCSD this fall. During her internship at NASA Ames, she worked in Code I. She helped design some of the Exploration Center exhibits for the NASA Advanced Supercomputing Division and the Human Factors Research and Technology

Division. Her mentor was Veronico, a NASA Ames employee contracted to assist in the Code I outreach efforts.

James Laub, former fluid mechanics operations manager, was instrumental in the organization and success of this program.

The students who participated in the Ohlone College internship program thank the entire staff of civil servants and contractors at NASA Ames for this incredible opportunity and experience.

BY JAMIE ZETTERBERG

Livermore Lab director visits Ames



Dr. Michael R. Anastasio, director, Lawrence Livermore National Laboratory (LLNL) presented a director's colloquium in August. He described the major accomplishments, challenges and future promise of the National Ignition Facility as an introduction to the Stockpile Stewardship Program.

NASA photo by Dominic Hart

Academy students present work



One of the NASA Academy students speaks at the recent ceremony at Ames.

The NASA Ames Academy students displayed their projects at a recent presentation ceremony at Ames.

The academy is designed to promote leadership and science among college juniors, seniors and first-year graduates from universities across the United States and Canada. Each student took 25 minutes to present their individual projects and the work on the group project.

The schedule and listing of all presentations can be found at: <http://academy.arc.nasa.gov/2004/calendar/FPSchedule.html>

Ames federal police officer dies at Fort Lewis, Wash.

Ames federal police officer Sigfredo (Fred) Pilipina, who was on military duty, died Sept. 15 after collapsing during training exercises. He was 34 years old.

Pilipina started his law enforcement career in Guam, where he was employed as a police officer before being recruited by the Sunnyvale Department of Public Safety in 2000. Pilipina left Sunnyvale Public Safety in 2001 and began working at Ames in February 2003.

In the fall of 2003, Pilipina elected to rejoin the Army Reserves and again became active in supporting his country. Pilipina received orders in July 2004 that he would be shipped out to the Middle East for up to 18 months.

Pilipina leaves behind his wife

Marilyn and two children, daughter Thea, age 6 and son Christian, age 2.

The Ames police and security officers have set up a fund to help Pilipina's family.

If you would like to help, please make your donation out to:

S. Pilipina Family Fund #240814

And mail it to:

S. Pilipina Family Fund
c/o Golden Bay Federal
Credit Union
P.O. Box 127
Moffett Field, CA 94035-0127

For further questions, contact Al Gonzalez at (925) 366-6213 or Kim Giovannini at (831) 869-1067.

NASA Academy inspires next generation of explorers

Summer brought many fresh young faces to Ames, including 13 students taking part in the NASA Academy at Ames (formerly known as the Astrobiology Academy). Participating students are from both the United States (12) and Canada (1). The Canadian Space Agency sponsors its NASA Academy participant. In 10 weeks, academy students are exposed to both research and leadership opportunities, learning how this interaction is essential to NASA and the space industry at large. The goal of all NASA-sponsored education programs is to inspire tomorrow's leaders and the academy is one component in a series of opportunities afforded to students.

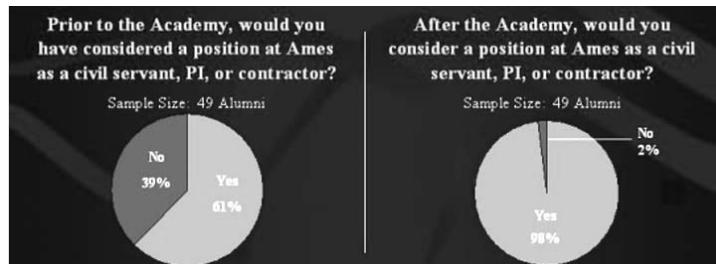
Yvonne Pendleton, of Code SST, and Douglas O'Handley, of Lockheed Martin, are the co-directors of the academy this year, in charge of research and leadership, respectively. Kelley Atkinson and Graylan Vincent, graduates of last year's Astrobiology Academy, are the current staff leaders, following the tradition that graduates return to lead the next year's program. The student selection process and matching with their principle investigator (PI) was conducted by Emily Holton, of Code SLR; Jennifer Dungan,

What makes the NASA Academy program unique are the additional activities that focus on leadership. The academy students attend leadership/management seminars and also travel to companies and other NASA centers (40 percent of the time) to explore the integration of science, engineering and management. This summer, the students had the opportunity to visit the Jet Propulsion Lab, Dryden Flight Research Center, Johnson Space Center, Desert Research Institute, Monterrey Bay

Aquarium Research Institute, Lick Observatory, Lawrence Livermore National Lab, SETI, Space Systems Loral and Stanford University.

Another aspect of the academy experience involves the selection and execution of a group project that will benefit NASA and the space program. During this project, the students learned valuable leadership and teamwork skills.

with the information needed to fully understand the impact and opportunities of the Vision for Space Exploration. The students also organized a campaign to write letters to local newspapers and popular science magazines promoting the vision. They enlisted the help of NASA Academy alumni and welcomed



participation from the entire community.

Students also participated in role-playing activities where they were put in different space-mission simulations and had to manage the simulation, react to the challenges and work together in order to succeed.

The academy appreciates the opportunity to be at Ames again this summer, marking eight consecutive years. The academy students were housed at the NASA Lodge with students from other Ames programs, allowing all students to benefit from interactions through daily living and working experiences. This interaction among students at different stages in their education, with interests in a wide variety of subject matters, has created a unique learning environment and unity within the NASA education programs.

Among the many NASA education programs are the Undergraduate Student Research Program (USRP), the Academy, the NASA Scholars and the Graduate Student Research Program (GSRP). The NASA Scholars program is a scholarship program for students attending Historically Black Colleges and Universities, Hispanic-serving institutions and tribal colleges. Taken together, each of these unique opportunities provides a continuum of programs for students as they progress through college and graduate school. The goal of this series of research experiences is to encourage students to pursue excellence in their space-related endeavors, such as attending the International Space University, working for NASA or find-

continued on page 13

Student Name	State/Country	PI	Project
Melissa Battler	Canada	Carol Stoker	Mars Analog Drilling: Searching for Life Underground
Marshal Blessing	Florida	Jeff Smith	Simulation Test Bed for Robotic Exploration of a Martian Surface
		Rich Boyle	
Jessica Culler	Oklahoma	Bill Borucki	Kepler Mission Educational Public Outreach
Shannon Dong	Massachusetts	Jeff Smith	Simulation Test Bed for Robotic Exploration of a Martian Surface
		Rich Boyle	
Megan Fuchs	Missouri	Tori Hoehler	The Biogeochemistry of Microbial Ecosystems
Starla Kiser	Tennessee	Ruth Globus	The Role of Beta1 Integrin in the Mechanosensing of Osteocytes
Joannah Metz	Illinois	David Morrison	Educational Activities in Astrobiology
Christian Rayburn	Nevada	Jennifer Dungan	Linking Pattern to Process Using Remotely Sensed Imagery of Vegetation Canopies
Jen Slater	Oregon	Nancy Searby	Hypergravity vs. Hydrostatic Pressure: Investigation into the Determining Factor of Increased Cell proliferation
		Eduardo Almeida	
David Smithbauer	West Virginia	Jeff Smith	Simulation Test Bed for Robotic Exploration of a Martian Surface
		Rich Boyle	
Sarah Sonnett	South Carolina	Tim Castellano	Transit Search: The Hunt for Extrasolar Planets
Jenni Sweeton	Kansas	Robert Welch	Adapting to Unusual Sensory Environments
Kakani Young	Washington	Paul Espinosa	The Advanced Animal Habitat Centrifuge Project: Background and ISS Water Supply Considerations

NASA Academy students, PIs and projects.

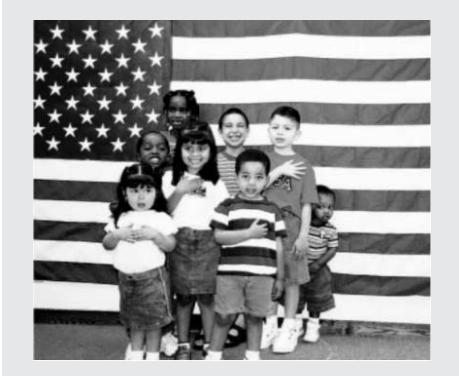
of Code SGE; Jen Heldmann, of Code SST, NASA Academy '99 alumna; and John Kaumeyer, of Lockheed Martin. Over the summer, each student worked with their PI on a research project (60 percent of the time) that will likely lead to a publication and/or conference presentation. The student projects and PIs are listed below.

This year's project was entitled 'Getting the message out: informing the public about the 'Vision for Space Exploration.'

The project focused on educating the public about the 'Vision for Space Exploration.' The students gathered facts and background information on the president's exploration initiative. They created a Web site to provide the public

Combined Federal Campaign kicks-off at Ames on Oct. 14

Oct. 14 marks the beginning of the Combined Federal Campaign (CFC) for 2004. The theme of this year's campaign is 'Compassion in action, every dollar can change a life.'



"The CFC is a great way for federal employees to support the causes that make a difference," said Joe De Maio, this year's CFC chair. It is a charitable network that provides employees with an opportunity to improve the quality of life in their home town, in their state, across the country and internationally. The CFC umbrella covers hundreds of local, state and national charities, including the Ames Childcare Center.

The campaign will continue until Nov. 5. During this time, a group of volunteers will distribute the brochures and collect the contributions from Ames employees in their organizations. "A successful CFC campaign draws support from the entire Ames community,"

said Chris Hlavka, CFC's deputy chair.

Ames' senior management encourages all civil servants to share with those in need and those who will be there to

about," said De Maio. "We are very fortunate to work here at Ames. Now is the time to give something back."



help us. "The Combined Federal Campaign is our chance to support our community by assisting organizations that work to improve our country and help those in need," said Ames' Deputy Center Director Stan Newberry.

The CFC is an effective way for people to contribute to specific organizations that they want to support. Whatever is important to you, there is an organization that shares your passion - from working with children to assisting the elderly and from improving air quality to providing a safe shelter for animals. The campaign is designed to provide an easy and convenient way to donate money by check, cash or payroll deduction. Even a small contribution will make a difference.

"We have a group of great people working as CFC coordinators, who will guide you through the process to make sure that your contributions will go toward supporting the cause you care

Author Wolverton visits Ames



NASA photo by Dominic Hart

Mark Wolverton, author of *'The Depths of Space: The Story of the Pioneer Planetary Probes'* is seen here at a recent book signing at Ames. The event was sponsored by the NASA Ames History Office. Copies of his book can be purchased by visiting the Web at: <http://www.nap.edu/catalog/10739.html>

Ames' Torrez awarded NASA Achievement Medal

In September, the Acquisition Division, Code JA, hosted a tea reception for recipients of two types of awards. Connie L. Cunningham, chief, Acquisition Division, presented certificates to the Contracting Officers' Technical Representatives (COTR) of the Year for FY04. With this award, each branch in the division recognizes an individual with whom they work closely and whose diligence makes a significant contribution to the successful acquisition of goods and services at NASA Ames. Those honored for their outstanding support were Stephanie Langhoff, of Code D; Maria Elena Lopez, of Code HR; James T. Heineck, of Code APS; Robert Fong, of Code AV; and Arsi Vaziri, of Code IN.

This year, in addition to the COTR awards, the division chief was pleased to announce that one of the Acquisition Division's staff members, Carlos Torrez, a lead contract specialist, was recognized by NASA Headquarters with a NASA Achievement Medal for Special Advocacy on Behalf of Minority Busi-

nesses. The winners of this medal are honored for their special advocacy on behalf of minority business in three categories. Torrez was selected in the pro-

curement category. He was presented with the medal by NASA Administrator Sean O'Keefe at a ceremony at NASA Headquarters on Sept. 9.

BY GRACE ANN WEILER



NASA photo by Daryl Wong

Carlos Torrez, lead contract specialist, third from left, receives a NASA Achievement Medal for Special Advocacy on Behalf of Minority Businesses on Sept. 9 from NASA Headquarters. Code J and JA managers from Ames congratulate him here at the center: Shown (left to right) are Charles W. Duff II, deputy director, Center Operations; Connie Cunningham, chief, Acquisition Division; Carlos Torrez; Lewis Braxton, director, Center Operations; and Marie Dorish, branch chief, Center Operations and Space.

Sixth annual Ames Safety Week events

This year's Safety Week is set for Oct. 18 to 21. It will be an action-packed week in recognition of Ames' commitment to assuring mission success through safety and environmental responsibility. The week-long celebration begins at 9 a.m. on Monday, Oct. 18 in the main auditorium, building N-201.

All Ames employees are encouraged to attend.

Special safety, health and environmental classes will be offered each day.

The following events are planned:

Monday, Oct. 18

- 9:00 a.m. -- The safety week kick-off meeting with introductory remarks given by Ames Center Director G. Scott Hubbard, followed by keynote speaker Gary Bradt, whose topic will be 'Change: Love it or Leave it.'

- The kid calendar contest will be displayed at the Ames Café until Wednesday.

Tuesday, Oct. 19

- 9:00 a.m. -- The contractor /COTR

training will be held in the main auditorium building N-201.

Wednesday, Oct. 20

- 9:00 a.m. -- Supervisor safety training in the main auditorium building N-201.

Thursday, Oct. 21

- 11 a.m. to 1:00 p.m. The safety week street fair on Durand Road. All center employees are encouraged to attend. There will be health and safety booths for flu shots, diabetes testing, computer glasses, VPP and ergonomics. There will be free cookies.

- Fall fun run and walk -- Will take place at 11:30 a.m. Everyone is welcome to participate. Registration is \$2 or free with purchase of a t-shirt. The starting point for the fall fun run and walk will be at DeFrance Avenue near Boyd Road.

For more information, contact Michael Hulet at ext 4-0268 or Jennifer Chan at ext 4-5602 or e-mail: jschan@mail.arc.nasa.gov or visit the Web at <http://q.arc.nasa.gov>

FPPS training set

Do you hire employees or request other personnel actions? Do you use reports of employee data? If so, you can learn how to use NASA's new personnel/payroll system at hands-on clinics here at Ames. Training began in September and continues through Dec. 8.

NASA switched to the Federal Personnel/Payroll System (FPPS) in August as part of a government-wide program to consolidate and automate federal payroll systems. The change has gone smoothly, with employees receiving their electronic funds transfer paychecks on time.

At Ames, personnel action requesters and report users are trained before they begin using the new system. They are first offered an overview of FPPS and given their user IDs for the system.

They may then attend one or more hands-on clinics, where trainers can help them input personnel actions or run queries of employee data. Trainers can also answer questions about personnel actions and queries.

Personnel action requesters and report users who have not already attended an overview may attend one of the two remaining presentations: Oct. 25 at 10 a.m. to 11:30 a.m. and Nov. 9 at 2:00 p.m. to 3:30 p.m. The presentations will be held in the Building 245 auditorium.

Hands-on clinics are held in Building 241, Room 147. Remaining clinics will be held:

- Oct. 12, 9 to 11 a.m.
- Oct. 13, 1 to 3 p.m.
- Oct. 26, 9 to 11 a.m.
- Oct. 27, 1 to 3 p.m.
- Nov. 9, 9 to 11 a.m.
- Nov. 10, 1 to 3 p.m.
- Nov. 17, 9 to 11 a.m.
- Nov. 18, 1 to 3 p.m.
- Dec. 7, 9 to 11 a.m.
- Dec. 8, 1 to 3 p.m.

For more information about FPPS and training, visit the center's FPPS Web site: <http://ameshr.arc.nasa.gov/fpps/index.html>

Errata

On page two of the August edition of the Astrogram, the name of Louisa R. Beck was inadvertently missing under the category of 'Exceptional Achievement Medal.' We apologize for the error.

Mackie featured at student program celebration



NASA photo by Tom Trower

In August, the Office of Education, Human Capital Directorate, hosted a closing ceremony at Ames celebrating the successful completion of summer research activities conducted by student interns, faculty fellows and guest researchers. The theme of the ceremony was 'Inspiring the Next Generation of Explorers...as only NASA can.' Dr. Calvin Mackie, an associate professor of mechanical engineering at Tulane University (left), was the keynote speaker for this event.

Ask the 'export expert'

Question:

What exactly is 'fundamental research'?

Answer:

The International Traffic in Arms Regulations (ITAR) provide the following definition for fundamental research: "Basic and applied research in science and engineering where the resulting information is ordinarily published and shared broadly within the scientific community, as distinguished from research the results of which are restricted for proprietary reasons or specific U.S. government access and dissemination controls." The ITAR also specifies that "Univer-

sity research will not be considered 'fundamental research' if:

- 1) the University or its researchers accept other restrictions on publication of scientific and technical information resulting from the project or activity; or

- 2) the research is funded by the U.S. government and specific access and dissemination controls protecting information resulting from the research are applicable."

Do you have a question for the export expert? Send it care of kwall@mail.arc.nasa.gov. And, visit us on the Web at <http://jp.arc.nasa.gov/EC/EC.html>.

NASA band soars at San Jose Jazz Festival

The Ames Jazz Band, a club sponsored by the Ames Exchange, has served Ames by providing entertainment at various celebrations, dedications, parties, retirements and other events. However, this summer marks the first time our big band has performed offsite. The band was selected to perform at the 15th Annual Comcast San Jose Jazz Festival.

The San Jose Jazz Festival is big, attracting approximately 165,000 people, making it the largest free jazz festival in the country and occupying much of midtown San Jose. On Saturday, Aug. 7, the band led off the performances at the Big Band Stage near San Pedro square. Band members were understandably

nervous performing alongside professional musicians, many of whom were recruited from around the country. Stage jitters aside (or maybe because of them), the band soared to new heights. Under the baton of Rob Roman, the band kicked off with the jazz standard 'Blue Bossa' and concluded (an hour later) with a blistering 'Samba de Los Gatos.' The performance was marked by a number of outstanding solo performances by band members.

The band was graced with the addition of two guest artists: Modesto Briseno and Dennis Wilson. Briseno is a professional trumpet player from the Bay area, and he certainly complemented the band by both playing the arrangements and belting out a few solos. The other guest, Dennis Wilson, brought the magic of his trombone talent to the stage. Wilson, an alumnus of the Count Basie Orchestra and a recipient of a Grammy Award nomination, contributed two compositions to the performance and played several outstanding solos. Wilson also played a great trombone duet with our

own Richard Geven. In comments to a very responsive audience, Wilson remarked how proud he was to be playing



The NASA Ames Jazz Band plays at the recent 15th Annual Comcast San Jose Jazz Festival.

New bike lockers at Ames

A small, but passionate group of Ames employees ride their bikes to work each day. The Ames Commute Alternatives Program (ACAP) encourages bicycling as an alternative to automobiles and supports bicyclists by providing centerwide bike lockers. As a result, a total of 25 new bike lockers have been installed across the Ames campus, making the combined total of new and old bike lockers 170 storage units. Some lockers were replaced, while others were established in new locations based on employee feedback. For example, new lockers were placed near the Ellis Street gate for employees who take the light rail to work and would like to use their bicycles while on campus during the day.

The new bike lockers are a welcome campus addition for those in the Ames bicycling community. "I enjoy riding to work as often as my schedule permits, typically three to four times a week. The convenience of having use of one of the lockers here at Ames really encourages me to bring my bike instead of my car," said Ted Roush, space scientist, Planetary Systems Branch at Ames.

Offering bike lockers is one method of achieving ACAP's mission, which is to reduce the number of single occupant vehicles entering the center each day. By bicycling to work, employees collectively help to reduce contamination from the main cause of air pollution in the Bay area - motor vehicles.

To obtain a bike locker, contact Bo Casero, the ACAP program manager, at ext. 4-4581. If you are interested in connecting with others in the Ames bicycling community, e-mail Stacy St. Louis at sstlouis@mail.arc.nasa.gov. To learn more about ACAP, visit http://jf.arc.nasa.gov/NASA_Only/acap/index.html.

with these representatives of NASA. Of course, the band also was proud to be performing at such an event and in such great company.

If you are a musician interested in joining the Ames jazz band, you are very welcome. The club contains a wide range of expertise and can be a great learning experience. The band meets every Thursday at 5:30 p.m. at the old Navy recreation center. If you are interested in joining the band, stop by at a rehearsal or call Doreen Comerford at ext. 4-1508 or David Alfano at ext. 4-3409.

BY FRANK CARADONNA

Fall Fun Walk and Run set for Oct. 21

Sponsored by Safety, Health and Medical Services, Code QH, the two-mile, Fall Fun Walk and Run is just around the corner. It's scheduled for Thursday, Oct. 21, at 11:30 a.m. This year's theme is a silly hat contest, so wear a comical hat and come enjoy the fresh air, friends and some fantastic exercise by participating in this event.

Each participant will get a commemorative ribbon and some delicious cold refreshments at the finish line. Prizes will be given out to the top five folks wearing the best silly hat. Door prizes of various safety items also will be given out. The event will start at 11:30 a.m. on DeFrance near Boyd Road. Walkers and runners will be directed by the beautiful wetlands and eventually finish on Durand in front of building 218. Winner's certificates will be given to walker and runner categories.

Last fall, Ames placed first in both the NASA inter-center two mile fun walk and run competition (Goddard

placed second and Langley placed third) and the NASA inter-center 10K running competition (Goddard placed second and Langley placed third). The large number of walkers in last year's two-mile fun walk and run shuffled Ames to victory.

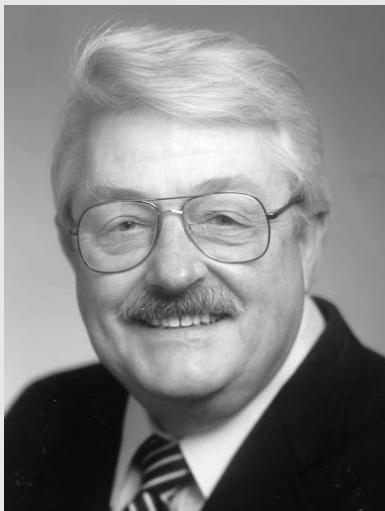
Free registration for the Fall Fun Walk and Run. T-shirts can be purchased for \$10. Pre-register with a fun walk and run coordinator (see posters displayed around the center) or at the Fitness Center before Oct. 15. On race day, registration will begin at 11:00 a.m. at the starting line. No rollerblades, please. Leisurely walkers are encouraged to join in.

Buildings N-220, N-218, N-219, TA16, N-226, N-227-C and N-227B may be affected by road closures or have limited parking on Oct. 21.

Contact the fitness coordinator, Nancy Dunagan, at ext. 4-5804 for additional information.

Leader in aviation technology development, Dick Carlson, dies

Richard 'Dick' Carlson, a loving husband and father and an acknowledged leader in the development of aviation technology for 50 years, died on July 12.



Richard M. Carlson

In a lifetime of technical achievement, few people have impacted the aerospace technology field in the triad of industry, government and academia as Carlson. His personal contributions to the field of rotorcraft technology have greatly advanced and benefited the domestic and international vertical take-off and landing (VTOL) community. His mentorship had a great impact on a legion of practicing engineers and aviation professionals.

Born in Preston, Idaho, Carlson graduated from the University of Washington. After completing naval service, he gained his initial experience in fixed-wing engineering at Convair and Douglas Aircraft, and in exploratory research at NASA Ames working in the 12-ft pressure tunnel. In 1950, he joined Hiller Aircraft Corporation, rising from a structures engineer, to manager, Aerostructures Department from 1956 to 1964. Concurrently, he attended Stanford University and received his PhD in engineering mechanics in 1960. The genesis of his deep involvement with rotary-wing aircraft was at Hiller. He was instrumental in providing technology and design contributions to a generation of helicopters, particularly in the early application of composite structures, and in developing unique aircraft configurations (tilting thrusters).

In 1964, he joined Lockheed-California Company in Burbank where he served as an advanced design division engineer, responsible for aerodynamics, dynamics, structures, and weights development analyses for the AH-56 compound helicopter. While continuing to encourage development and use

of composites in VTOL aircraft, Carlson was assigned by Lockheed to support on-going, fixed-wing projects (C-5A wing problems, L-1011 empennage, and SST development) and as a consultant to the Advanced Development Projects (ADP) activity.

He also served as a lecturer at Stanford University from 1958 into the 1970s as he commuted from southern California during his Lockheed years, and developed and taught a full helicopter curriculum, at the undergraduate and graduate levels, covering VTOL aerodynamics, dynamics, aeroelasticity and design.

Leaving industry, Carlson went to work for the US Army at NASA Ames in 1972. Beginning as chief, Advanced Systems Research Office, he rose to the position of director, US Army Air Mobility Research and Development Laboratories in 1976, managing all rotorcraft research activities for the Army. He was a leader and force behind such technology development programs as the Advanced Digital-Optical Control System, Advanced Rotorcraft Transmission and the Advanced Composite Airframe Program. His personal expertise and successful guidance of the R&D program for the XV-15 Tilt Rotor program is in no small part the foundation of the V-22 Osprey, a third type of VTOL aircraft (after the helicopter and jet lift) to attain production status. Carlson retired from the government in 1995, but continued his professional career serving as an Army emeritus volunteer and as a designated engineering representative

(structural) for the FAA (since 1952) until his death.

Carlson has a Presidential Rank Meritorious Executive Award and received 3 Army Meritorious Civilian Service Awards. An author of 25 technical papers on circular frames, helicopter rotor blade structural analysis and the application of composite material to rotorcraft structures, he is an Honorary Fellow of the American Helicopter Society (AHS) and is a recipient of its Alexander Klemin Award (for notable achievement in the advancement of rotary-wing aeronautics); the Paul E. Hauter Award (for significant contributions to the development of VTOL aircraft other than helicopters) and the Alexander Nikolsky Lectureship Award. He has served with distinction as a member of the original W-76, AIA, Committee on Commercial Aircraft Fatigue Strength Certification; the AIAA Technical Committee for VTOL Aircraft Design; the AHS Technical Council; the AGARD Structures and Materials Panel; and as a three term appointee to the Congressional Advisory Committee on Aeronautics. He also was a Fellow of the American Institute for Aeronautics and Astronautics (AIAA), a Fellow of the British Royal Aeronautical Society, a member of the Swedish Society of Aeronautics and Astronautics and a member of the National Academy of Engineering.

He leaves his wife Venis and three children: Judith, Jennifer and Richard Jr., and two grandchildren.

PSTI students explore planet 'Exotera'

Participants in Ames' Pre-Service Teacher Institute (PSTI) took two fourth-grade classes from Hellyer School in San Jose on an imaginary trip to the fictitious planet 'Exotera.' Ames' Education Office provided funding for the workshop



Pre-service teachers working with Hellyer School fourth graders. Students are designing the solar system as they know it.

NASA photos by Dominic Hart



Hellyer School fourth graders on their way to a far-off newly discovered planet. Later, they will explore the 'planet.'

in August through a grant to California State University, Fresno, and Integrated Space Technologies Inc. of Huntsville, Ala.

PSTI is a two-week program set up to increase knowledge, skills and competence in teaching mathematics and science using technology. College students were exposed to problem-based learning, mathematics and science enrichment activities. California State University, Fresno, provided extended education units for the prospective teachers, who took part in the enhancement program that featured NASA's exciting educational resources and Ames' unique facilities.

Purchase 'Energy Star' products to be more efficient

Do computers cause air pollution? Well, not directly. But the energy used by computers and other office equipment creates a power demand that adds



to the pollution load from power plants. The U.S. Environmental Protection Agency (EPA) estimates that computers and other office equipment account for 11 percent of all commercial sector electricity usage. You may think that 11 percent is reasonable, after all, we have to use our computers. However, much of the power consumption is wasted on idle equipment. According to research by the Lawrence Berkeley National Laboratory, nearly 60 percent of office computers are left powered on during non-business hours and on weekends.

What's 'Energy Star'?

To reduce this wasted electricity usage, the EPA created an energy standard for electronic equipment called Energy Star®. Manufacturers meeting these standards have been selling equipment with the familiar Energy Star® logo (see above logo) for years. Energy Star®-qualified computers, for example, reduce energy usage 70 percent, as compared to a conventional system, by entering a low-power mode after being idle for 15 minutes. An average laser printer that has earned the Energy Star® uses 57 percent less electricity and is in the low-power mode for eight hours of a typical 9.5-hour business day.

What does ENERGY STAR® have to do with me?

NASA and all federal agencies are required to purchase Energy Star®-qualified equipment according to Federal Acquisition Regulation (FAR) 23.203 - Energy-efficient products. If you are due for a printer or desktop system upgrade, request that the unit meets Energy Star® standards.

Office equipment that qualifies for Energy Star® does not cost more than equipment without the power management feature. In fact, the electric bill savings for an office with 100 people

using Energy Star® equipment (100 computers, 10 printers, four copiers, four fax machines and two scanners) is approximately \$5,000 per year.

Check your desktop system for the Energy Star® logo. If you have a monitor with the logo, you should have noticed the power-down 'sleep' mode by now (a dark screen is hard to miss). If not, ask your IT support person to make sure the power-down feature is enabled. Screen savers are not an energy savings feature.

Is there any need to turn off my computer with Energy Star®?

'Sleep' or low-power mode still requires energy. Your monitor should always be turned off when you leave for the day. Printers and copiers can also be turned off. Check with your IT administrator before turning off your computer. Typically, systems on a network are on a back-up program that requires the computer to remain on. Also, turn-

ing computers off and on frequently can affect the processor.

Standby power mode

Standby power is the amount of power used after a device is turned off. Most electronics consume power even after turning the unit off, for example ink jet printers with external power supplies, or cordless phones with a charger base. Executive Order 13221 energy efficient standby devices requires federal agencies when purchasing commercially available, off-the-shelf products that use external standby power devices, or that contain an internal standby power function, to purchase products that use 1 watt or less when in standby mode. The Federal Energy Management Program (FEMP) has a database of equipment that meets this standard <http://oahu.lbl.gov/>.

If you have questions about Energy Star®, contact Christel VanArsdale at ext. 4-1175 or the author at ext. 4-1406.

BY MARK LACY

Hubbard receives ASC membership

The NASA Ames Sailing Club (ASC) presented NASA Ames Center Director G. Scott Hubbard recently with an honorary Sailing Club membership. The award was made by Paul Birch, the ASC director and Jeff Smith, the ASC membership director and past president.



NASA photo by Tom Trower

Paul Birch, Ames Sailing Club director (far left) and Jeff Smith, Ames Sailing Club membership director and past-president (second from left) present NASA Ames Center Director G. Scott Hubbard (right) with an honorary Sailing Club membership recently.

The Ames Sailing Club was founded in 1997 by Greg Sherwood, who had a vision to provide Moffett Field employees and their families an opportunity to enjoy the art and sport of sailing. Today, for locals ready to take a sail and enjoy brisk sea breezes, the Ames Sailing Club provides access to the best sailing and

most dramatic backdrops on the California coast. The Ames Sailing Club organizes regular sails out of local marinas in Redwood City, Santa Cruz, Monterey, Coyote Point, Oakland and San Francisco. Events range from relaxing 'attitude adjustment' sails, day sails on the bay, weekend cruises along the coast and recreational racing. Instructional opportunities also are available.

Monthly meetings are held on the second Thursday of each month during the lunch hour and include famous Bay area sailors as well as presentations on exotic Caribbean cruising destinations, racing, navigation and much more. Join us at our next meeting featuring Stan Honey, experienced off-shore racer and world-record holder. The meeting will be held in the N-245 auditorium on Oct. 14 at 12:00 p.m.

The Ames Sailing club is sponsored by the NASA Ames Exchange and is open to all NASA employees, contractors, students and their guests. No previous sailing experience is required, so come aboard and enjoy clear skies, bright sun, cool breezes and spectacular views that make San Francisco Bay one of the best sailing locations. New member dues are \$35 and include one free sail. Renewal dues are only \$10 per year. Contact membership director Jeff Smith at ext. 4-2586, or e-mail him at jdsmit@mail.arc.nasa.gov or contact the Ames Sailing Club president Becky Hooey at ext. 4-2399 or e-mail bhooey@mail.arc.nasa.gov for more information.

Code IC outreach team garners many communications awards

Silver, Bronze, Aurora, Beacon, 'Site of the Day' and Telly are words and names related to almost a dozen medals and honors Code IC's outreach team won for excellence in communications during the last 12 months.

The animated 'Destination: International Space Station (ISS)' flash Web site recently was selected by Macromedia, Inc. for 'Site of the Day' honors. The site is an interactive overview of the space station, with a focus on technologies that people from Ames' Computational Sciences Division (Code IC) have developed.

Some of these developments include the Personal Satellite Assistant (PSA), a ball-shaped robot that may someday fly within the space station and help astronauts; Clarissa, voice recognition software that enables human beings and robots to converse; the Strider computer program, which scientists designed to diagnose some software used on ISS; and a space station computer application that provides 3D design and analysis. The ISS 'flash' site is located at: <http://compsci.arc.nasa.gov/destination/iss/flash/index.html>.

The team also won another 'Site of the Day' award for production of the 'Destination: Mars' Web site. This flash animation Web page can be seen at: http://ic.arc.nasa.gov/destination/mars/mars_flash.

"I think that there are three key elements to our success," said Brett Casadonte, outreach manager for ASANI Solutions LLC at Code IC. "First, we have an incredibly talented team. Video, graphics, content, web development, you name it - our guys are second to none. Next, we have a great work environment. Plain and simple, NASA is just an incredibly cool place to work. How many people get to come to work every day and work with rocket scientists? The third element is the content. We are really fortunate to be able to talk about some of the most cutting-edge technologies anywhere on the planet. The research being done here in the Computational Sciences Division is just amazing," Casadonte said.

"The great thing about what we've done so far is that we have been able to do work up to par with the professional world of design. That's why we are getting recognition," said Andres Conde, a graphics expert who designed the winning flash sites and also made some of the graphics for an IC video about autonomous rotorcraft.

"Our designs are based on the target audience and the information that we are trying to convey," Conde said. "We are given a topic -- in this case it's Code IC's contributions to the Mars Exploration Rover (MER) mission and to the ISS mission," explained Conde.

"Basically, for both of these missions, there's a specific feel that we want to convey. Both of them are borderline

sci-fi. Most people - when they think of NASA - they think of things that are almost impossible to achieve. And then we basically take that mood and sci-fi feel and give our audience a glimpse of the reality of how far humanity really is going," Conde detailed.

The team garnered numerous awards for video production - seven Telly awards, one Aurora award and one Beacon award. "Our team has won four Telly silver awards (the highest awarded) and three finalist

awards," reported Casadonte. More information about Telly awards is on the Web at: <http://www.telly.com>.

"We realize that audiences nowadays are extremely sophisticated," said Mark Romo, the Code IC video producer and director. "Everyone watches broadcast and cable and the high-quality media generated by these guys is what viewers have become accustomed to. Our competition is the networks and cable stations with their refined looks. Anything less - and we lose the attention of an audience, and if that happens, we're not doing our job," Romo continued.

Two of the Silver awards were for 'trade show vignettes' used during conventions.

One Silver award was for 'Going to Mars,' a video that highlights Code IC's contributions to the ongoing MER mission.

The videos were shot in DVCPAL, a professional, broadcast-quality video format. The team edited the program in 'Final Cut Pro,' an Apple application that some companies in Hollywood also use to cut feature-length productions.

The second Silver award was for the 'Always On' video, made for Dan Clancy's presentation at the 'Always On Conference,' which took place at Stanford University. Bay area executives attended the conference to exchange ideas. 'Semantic Organizer' earned a third Silver award. Code IC produced this video to highlight the Division's Semantic Organizer software for NASA's 2003 Software of the Year competition. Semantic Organizer is a Web-based, distributed knowledge management system. It allows scientists, researchers and investigators to work together from anywhere in the world.

The fourth Silver winner is 'Botball

2003.' The team filmed the regional 'botball' student robot competition at Santa Clara University. The NASA connection to the competition is that NASA



One of the Ames' Code ICs' Internet pages at the animated 'Destination International Space Station' flash Web site.

researchers serve as mentors for Bay area Botball teams.

The first Telly Bronze medal was awarded for 'Lessons in Inspiration,' about Carnegie Mellon University's robot camp for students that took place in summer of 2003. The video was provided to all the students who attended the camp and to Carnegie Mellon officials. The outreach team is working with KCSM-TV (PBS), San Mateo, to air the 'Lessons' video and other Code IC productions.

'Smart Approach,' a video about intelligent flight control software - which NASA is developing to help pilots land crippled or malfunctioning aircraft - won a second Telly Bronze. The third Bronze winner is a video that the team made for the Autonomous Rotorcraft Project, called 'ARP.' The goals of the project are to explore ways that helicopters might take off, fly and land on their own.

The IC team also won an Aurora award for the 'ARP' video. Aurora awards are international competitions that acknowledge excellence in film and video productions - non-national commercials, regional or special interest entertainment and corporate sponsored films and videos. Details about the Aurora awards are on the Web at: <http://www.auroraawards.com>.

In addition, the Code IC video, 'Smart Approach,' was a finalist in the 'best storytelling' category of the Beacon awards. These awards honor individual and agency-wide achievements in government communications and access television operations.

More information about these awards is on the Internet at: <http://www.beaconaward.com>.

NASA Ames Honor Awards for 2004 ceremony held

The Ames Honor awardees received their awards at a ceremony held at Ames on Sept. 15. Congratulations to these deserving employees.

Administrative Professional

Deborah E. Glass
David R. Morse
Fredric R. Van Wert

Best First Paper at Ames

Ann M. Fridlind
Steven J. Landry

Commercialization/ Tech Transfer Award

William M. Chan
David A. Maluf

Community Service/Volunteer

Raymond T. Gilstrap

Contractor Employee

Bradley J. Betts, QSS Group, Inc.
Nancy A. Dunagan,
PAI Corporation
David N. Ferguson,
Planner's Collaborative
R. Lee Hayward,
Muniz Technologies, Inc.
Dinesh K. Prabhu,
ELORET
Rheda A. Rapada,
Raytheon ITSS
Cynthia L. Schmidt,
San Jose State University
Tana D. Windhorst,
Ames Exchange

Craftsman/Technician

Antonio A. Trias

EEO

Lewis S. Braxton III



NASA Ames Honor Award participants and recipients enjoy a light moment at the reception held after the recent honor award ceremony at Ames.

Engineer

Michael J. Fletcher

Safety and Environment

A C Mosher

Group/Team

Advanced Air Transportation Technologies (AATT) Project Office Team
Arc Jet Complex Contractor Staff
Joint Ames/Langley DAG-TM Simulation Team
NASA Ames Educational Technology Team
Regional Metering Team
Small Payloads Team

Scientist/Researcher

Louisa R. Beck

Mentor

Ronnee R. Gonzalez
Nancy M. Smith and
Vern Battiste (co-winners)
Mark B. Tischler

Secretary/Administrative Support

Reynaldo Pasion

Student

Michelle N. Lee

Supervisor/Manager

Michelle M. Eshow
Barry T. Sullivan

Technical Support

Robert M. Padilla

NASA Employee

Michael J. Kurylo

Project Manager

Daniel R. Andrews
James E. Kennon

Technology Development

Ernesto Moralez III

Ames supports Engineering and Safety Center with key personnel

-- employees, contractors have direct communication line

Two Ames employees fill critical positions in the relatively new NASA Engineering and Safety Center (NESC) formed in response to the space shuttle Columbia incident to address engineering concerns.

Michael Freeman, formerly the Ames primary representative to the NASA Software Working Group and leader of its Engineering Process Group, is now one of 10 NESC chief engineers. Cynthia Null, formerly a scientist in the Human Factors Division and deputy program manager of the Space Human Factors Engineering Project at Ames, is one of 12 NESC discipline experts. While the NESC is located at NASA Langley Research Center, both Freeman and Null remain at NASA Ames.

In order to stay informed about pertinent issues in his or her field of expertise and to continue support of center projects and institutions, NESC chief engineers and discipline experts support the NESC from their home centers.

The NESC chief engineer at each NASA center ensures that there is a strong link between that center and the NESC.

When a concern is brought to the chief engineer's attention, it is his responsibility to evaluate the technical decisions made by the relevant center program office and to notify the NESC if an independent technical review is warranted or requested. NESC chief engineers also are voting members of the NESC review board.

As the NESC discipline expert for human factors, Null adds technical depth and leadership to NESC program assessments. When conducting an NESC assessment, she reports directly to NESC leadership to maintain the independence of NESC investigations.

NESC discipline experts establish super problem resolution teams for each discipline using experts from the agency and industry, academia and other government agencies. They also assemble catalogs of resources and facilities available for their area of study.

NESC discipline experts include employees from various centers. Frank Bauer, guidance/navigation and control; Robert Kichak, power/avionics; and Steven Scott for software are at Goddard Space Flight Center. Residing at Johnson Space Center are Julie Kramer-White for mechanical analysis; Steven Labbe for flight sciences; John McManamen for mechanical systems; and Henry Rotter for fluids/life support. At Langley Research Center are Edward Generazio for

nondestructive evaluation; Robert Piascik for materials; and Ivatury Raju for structures. Located at Marshall Space Flight Center is George Hopson in jet propulsion.

Ames also has put in place two technical assistant positions to work with the NESC chief engineer and the NESC discipline expert for human factors. These are six-month details at Ames with the goal of providing Ames people an in-depth understanding of the functioning of the NESC and how it can benefit the center. The first selectees for these NCE and NDE technical assistant positions are Wei Lin and Rudy Aquilina, respectively.

NESC employs approximately 40 full-time employees and has immediate access to another 200-250 'ready experts' spread throughout the country. Since its official kickoff in November 2003, it has received 63 requests. The NESC has most recently assisted Hubble Space Telescope and shuttle return-to-flight

programs. The NESC can provide programs with independent technical assessments, consultations, support and/or inspections. Twelve requests have been completed with 39 either in progress or under review.

Requests for NESC involvement, so far, have come mostly from engineering and scientific organizations, the NESC or program management. Individual employees and contractors are encouraged to contact the NESC if they have an engineering or safety concern about a NASA program.

Individuals may contact the NESC through their center NESC chief engineer at NESC@arc.nasa.gov, by e-mail at NESC@nasa.gov or anonymously by writing to NESC, NASA Langley Research Center, Mail Stop 118, Hampton, VA 23681.

For more information about the NESC on the Web, visit <http://www.nesc.nasa.gov>.

NASA Academy

continued from page 5

ing employment in the private space sector.

Through sponsorship of education programs, NASA has the potential to gain valuable employees who have experienced first-hand the inspiration in exploration that only NASA can provide. In the case of the NASA Academy at Ames, students get the most exposure to our facility and many may choose to return to Ames and continue their work. The graph (on page 5) shows a survey of academy alumni that demonstrates that the academy experience is successful in bringing people to work for NASA who might otherwise not have considered a career in government.

Goddard Space Flight Center, Marshall Space Flight Center and Dryden Flight Research Center have also hosted academies in the past. Goddard is also hosting an academy this summer, and both the Ames and Goddard academies have enjoyed interactions on field trips such as that to the Johnson Space Center.

More information about the program can be obtained on the Web at <http://academy.arc.nasa.gov>.

BY KELLEY ATKINSON

Students celebrate



Ames summer students relax at a recent pool party hosted for them by the AAAG and NAAC.

The African-American Advisory Group (AAAG) and the Native American Advisory Council (NAAC) co-hosted a pool party in July for the summer students at the NASA Exchange pool. It was a great summer day with plenty of food and fun for all the participants.

The music for the event was provided by Joe Sheilds. Many took advantage of the warm weather in the pool: diving, relaxing in inner-tubes, swimming laps and a type of water-based 'basketball' game. Others played cards and dominos or simply enjoyed good conversation.

Ames' new Deputy Center Director, Stan Newberry, was present at the event and talked with many of the students were in attendance.

Events Calendar

Ames Amateur Radio Club, third Thursday of each month, 12 noon, N-T28 (across from N-255). POC: Michael Wright, KG6BFK, at ext. 4-6262.

Ames Ballroom Dance Club. Classes on Tuesdays. Beginning classes meet at 5:15 p.m. Higher-level class meets at 5:30 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang at helen.hwang@nasa.gov, ext. 4-1368.

Ames Bowling League, Palo Alto Bowl on Tuesday nights. Seeking full-time bowlers and substitutes. Questions to sign up: Mike Liu at ext. 4-1132.

Ames Child Care Center Board of Directors Mtg, every other Thursday (check Web site for meeting dates: <http://acc.carc.nasa.gov>), 12 noon to 1:30 p.m., N-210, Rm. 205. POC: Cheryl Quinn, ext 4-5793.

Ames Contractor Council Mtg, first Wednesday each month, 11 a.m., N-200, Comm. Rm. POC: Anita Fogtman, ext. 4-4432.

Ames Diabetics (AAD), 1st & 3rd Weds, 12 noon to 1 p.m., at Ames Mega Bites, Sun room. Support

group discusses news affecting diabetics. POC: Bob Mohlenhoff, ext. 4-2523/e-mail at: bmohlenhoff@mail.arc.nasa.gov.

Ames Federal Employees Union (AFEU) Mtg, third Wednesday of ea. month, 12 p.m. to 1 p.m., Bldg. 221, Rm 104. Guests welcome. Info at: <http://www.afeu.org>. POC: Marianne Mosher, ext. 4-4055.

Ames Mac Support Group Mtg, third Tuesday of ea. month, 11:30 a.m. to 1 p.m., Bldg. N262, Rm 180. POC: Julie ext. 4-4694 or Tony ext. 4-0340.

Ames Model Aircraft Club, flying radio-controlled aircraft at the north end of Parsons Ave. on weekend mornings. POC: Mark Sumich, ext. 4-6193.

Ames Sailing Club Mtg, second Thursday of ea. month (Feb through Nov), from 11:30 a.m. - 1 p.m. in the special events room in the Ames Visitor Center in N-223. All are welcome. POC: Jeff Smith, ext. 4-2586.

Special Event: Thursday, Oct. 14, 12 noon to 1 pm, N-245 auditorium. Guest speaker Stan Honey, offshore racer and navigator, will discuss his transatlantic speed records and his experiences aboard Pyewacket. All are welcome. POC: Jeff Smith, 4-2586.

Environmental, Health and Safety Information Forum, first Thursday of each month, 8:30 a.m. to 9:30 a.m., Bldg. 221/Rm 155. URL: <http://qarc.nasa.gov/qe/events/EHSseries/> POC: Stacy St. Louis at ext. 4-6810.

The Hispanic Advisory Committee for Excellence HACE Mtg, first Thurs of month in N255 room 101C from 11:45 a.m. to 12:45 p.m. POC: Eric Kristich at ext. 4-5137 and Mark Leon at ext. 4-6498.

Jetstream Toastmasters, Mondays, 12 p.m. to 1 p.m., N-269/Rm.179. POC: Becky Brondos at ext. 4-1959, bbbrondos@mail.arc.nasa.gov or Bob Hilton at ext. 4-1783, bhilton@mail.arc.nasa.gov.

Nat'l Association of Retired Federal Employees, (NARFE). Former and current federal employees. Your only contact with Congress. Join to protect your federal retirement. Chptr #50 meets the first Fri. of each month at HomeTown Buffet, 2670 El Camino (at Kiely), S. Clara, 11 a.m. lunch. POC Earl Keener (408) 241-4459 or NARFE 1-800-627-3394.

Native American Advisory Committee Mtg, fourth Tues each month, 12 noon to 1 p.m., Bldg. 19, Rm 1096. POC: Mike Liu at ext. 4-1132.

Building 943 revitalized into offices and conference center

After several months of planning, design and remodeling, the Public Affairs Division finally moved into Building 943 in April. Prior to the move, the division was separated into four different buildings across Ames making it very difficult to handle the daily operations of the busy organization. Building 943 was seen as the perfect location for Public Affairs. As the communications liaison for Ames, the division location right outside the main gate makes it convenient for access to the public and news media.

Plans to bring the division back together began with the need for a face-lift of the new location. Building 943 has had a long and rich history at Ames as a Navy facility, Chief Petty Officers club and Space Camp. In October 1994, the Navy officially transferred its Moffett Field base to NASA.

Many layers of history were revealed underneath the old paint and wallpaper. The building had five renovations over the years, and each one seemed to wrestle with the previous rendition. A 1960s Colonial style and 1970s metallic and avocado color reveal images of an earlier time. The bright red, blue and yellow, introduced in the Space Camp era, created a somewhat whimsical interior. Three space-themed, wall-sized murals were preserved and given a touch-up. Breathing life back into an older building is often a labor of love and requires a vision that says, "What can it be?" What it has become is home to the division as well as a conference center and lecture hall, and it also provides a location for a gift shop.

The proximity to the new Exploration Center, managed by the Public Affairs Division, was another reason for selecting Bldg. 943. In 1996, the sprung tent was erected for Space Camp and hundreds of young students came each

summer to experience the rigors of studying space science. Space Camp eventually closed the facility and the tent and building stood empty for three years. The tent was reopened to a packed crowd on Dec. 29, 2003, just in time for the Mars Exploration Rovers, Spirit and Opportunity, to land on Mars. Since then, more than 130,000 people have visited the new Exploration Center that will remain open as a visitor center. The old visitor center has been closed.

The new Exploration Center will display current mission exhibits, information about space science and several models, including working rovers. There also is a unique 36' x 15' curved immersive theater where mission highlights are shown, as well as various educational programs and media events.

Media events, VIP tours and the Speaker's Bureau all are managed by the Public Affairs Division. Three large lecture halls welcome Ames events, public lectures, workshops and conferences. The three rooms can accommodate small groups or up to 350 people. Future plans include bringing the commercial

kitchen back on-line for catered events.

The rooms are available by reservation only. To schedule an event, contact Sheila Johnson at ext. 4-5054.

BY OLA MARRA COOK

Student poster session held



NASA photo by Tom Truver

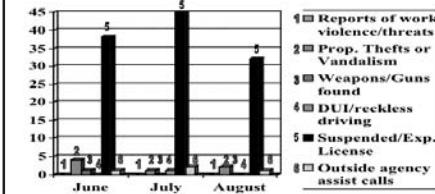
NASA Ames' annual poster presentation was held in August. Posters from over 100 interns were available for viewing relating to the students' research at Ames.

Protective Services monthly activity

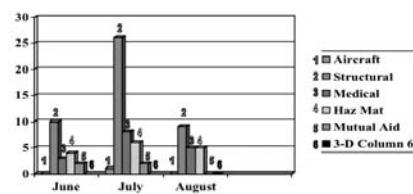
A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire

Protection Services units for the month of August 2004 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



Ames Classifieds

Ads for the next issue should be sent to astrogram@mail.arc.nasa.gov and must be resubmitted for each issue. Ads must involve personal needs or items; (no commercial/third-party ads) and will run on a space-available basis only. First-time ads are given priority. Ads must include home phone numbers; Ames extensions and email addresses will be accepted for carpool and lost and found ads only. Due to the volume of material received, we are unable to verify the accuracy of the statements made in the ads. Caveat emptor!

Housing

Cozy 3 bd/2 ba home for rent in Alviso/North San Jose. Electric kitchen, hook ups for washer/gas dryer. Utils. average \$200/mo. Very large gated lot w/flower gardens, patio area. \$1,300 plus dep. Avail. Sept 14. Danice (408) 262-5044.

Large room in 4 bd/2 ba home exc., quiet Mtn View area close to Ames. W/D, microw, wired for cable modem. Tidy person, N/S. Easy access to Ames, 85, 237, & 101. \$475 plus dep. and share utils. Avail. Oct. 1. Call (650) 964-1900.

Sunnyvale, 3 bd/2ba apartment for rent. Newly painted, W/D, carport, near downtown. Rent \$1,550/mo. Call (408) 736-6147, see Web site: <http://www.craigslist.org/sby/apa/3995525.html>

Shared housing room for rent in exc., quiet Los Altos area near Ames. Share house w/profl males/females. Large house, yard w/gardener. W/D, partly furnished, N/S/pets, \$540/mo plus dep. and 1/4 utils. Call (650) 964-2913 or (408) 243-7750.

Fine Sunnyvale home about 10 mins from Ames with 4 (or 5) bdrms, 3 baths, large heated swimming pool, fruit trees, rose garden, etc. Gardner, pool service provided. Need very reliable house sitters during the time periods we go to our 'other home' in Kailua-Kona, Hawaii. We usually go for two or three months at a time. N/S, no pets, no wild parties, exc. references req'd. Call (408) 720-1210.

House for rent, Almaden Valley, \$1,900/mo., dep. req'd, 3 bd/2 ba, living room w/fireplace. Large back, front yard, one-car garage plus carport. Fresh paint, outside and inside. Small pets o.k. Wardell (510) 471-2570.

Miscellaneous

The Ames Cat Network needs help finding homes for cats trapped at Moffett. They range from feral to abandoned/lost pets. Tested, altered and inoculated. Call Iris at ext. 4-5824 if you or someone you know are interested in fostering or adopting a cat.

Cyclist looking for pledges/donations for 100 mile charity bicycle event to support the MS Society of Northern California. Waves to Wine Ride weekend is Sept 18-19. If interested, please contact Angela at 408-746-9067 or email amortega@pacbell.net for details or go to www.nationalmssociety.com/CAN.

Beautiful, unused, wedding dress, satin and lace, size 8. \$100. Call (408) 234-0025.

Aluminum stepladder, 6 foot, like new. Call (650) 960-6827.

Crate & Barrel pine kitchen table with fold-down sides & four chairs w/wicker seats. Call for pics. Great condition. \$200. Call (408) 295-2160.

Swivel rocker recliner. All leather, light-grey. \$100. Call (408) 234-0025.

Looking for tilling machine for my back yard and white, front storm/screen safety door, the type that you look out of but can't see in. E-mail: falcon777_2000@yahoo.com

Clothes washer, good working condition. Double bed frame on wheels, no headboard (never used) Both no charge. Donna (408) 238-6681.

Larvad danish workbench with accessories. Exc. cond. Call (650) 960-6827.

Adams trail-a-bike folding model. Like new. Retail \$180., selling for \$95 or B/O. Pete (408) 605-9661.

'01 Marin 13" mtn. bike, blue. Deore, XT, clipless Shimano, Titec climbing extensions. Vetta computer, wtr bottle cage, seat pouch. Road skins, mt. bike skins included. Exc. cond., \$800 or B/O. Deb (650) 269-8150.

Astrogram

Transportation

'00 Toyota Avalon XLS , pearl colored, 4 dr Sedan w/ 69,400 mls. Recently had 60K mls, dealer tune up. Gd cond. Sliding sun roof, A/C, leather multi CD-changer, pwr steering, windows, locks. Asking \$16,200. Call (650) 867-7644.

'85 Mazda RX-7 GSL, mint condition, not a scratch on it! White w/maroon leather. Power everything, cruise, A/C down to lighted door lock. 155,000 mls, \$9,995. Charles (925) 447-2542.

'82 classy, burgundy Jaguar XJ6 w/tan interior. Good commuter vehicle, dependable, smog certified, w/ new tires, front rotors/pads, a front-end alignment and AM/FM radio cass. player w/6-CD changer. \$8,300 or B/O. E-mail David dalrympl@gmail.com or call (408) 366-1055.

Safety Data

	Civil Servants	Contractors
Not recordable first aid cases	1	0
Recordable no lost time cases	0	1
Lost time cases*	0	0
Restricted duty days	0	0
Lost work days	0	0

Data above is as of 08/27/04. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

Note: Under new OSHA rules, lost time is defined as lost work days, restricted duty or job transfer.

Astrogram deadlines

Deadline:	Publication:
Sept. 24	Oct 2004
Oct. 22	Nov 2004
Nov. 22	Dec 2004

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram*. When submitting stories or ads for publication, submit your material, along with any questions, in MS word by e-mail to: astrogram@mail.arc.nasa.gov on or before the deadline.

Ames emergency announcements

To hear the centerwide status recording, call (650) 604-9999 for information announcements and emergency instructions for Ames employees. You can also listen to 1700 KHz AM radio for the same information.

Exchange Information

Information about products, services and opportunities provided to the employee and contractor community by the Ames Exchange Council. Visit the web site at: <http://exchange.arc.nasa.gov>

Beyond Galileo N-235 (8 a.m. to 2 p.m.) ext. 4-6873

Ask about NASA customized gifts for special occasions. Make your reservations for Chase Park

Mega Bites N-235 (6 a.m. to 2 p.m.) ext. 4-5969

See daily menu at: <http://exchange.arc.nasa.gov>

Visitor Center Gift Shop N-943 (10 a.m. to 4:00 p.m.) ext. 4-5412

NASA logo merchandise, souvenirs, toys, gifts and educational items.

Tickets, etc... (N-235, 8 a.m. to 2 p.m.) ext. 4-6873

Check web site for discounts to local attractions, <http://exchange.arc.nasa.gov> and click on tickets.

NASA Lodge (N-19) 603-7100

Open 7 days a week, 7:00 a.m. to 10 p.m. Rates from \$40 - \$50.

Vacation Opportunities

Lake Tahoe-Squaw Valley Townhse, 3bd/2ba, balcony view, horseback riding, hiking, biking, golf, river rafting, tennis, ice skating, Equipped and more. Summer rates. Call (650) 968-4155, DBMcKellar@aol.com

South Lake Tahoe cottage w/wood fireplace, hot tub. Rates \$50 to \$130 per night. Call (650) 967-7659 or (650) 704-7732.

Vacation rental, Bass Lake, 4 mls south of Yosemite. 3bd/1.5 ba, TV, VCR, MW, frplc, BBQ, priv. boat dock. Sleeps 8. \$1,050/wk. Call (559) 642-3600 or (650) 390-9668.

Big Sur vacation rental, secluded 4bd/2ba house in canyon setting. Fully eqpd kitchen. Access to priv. beach. Tub in patio gdn. Halfway between Carmel and Big Sur. \$175/night for 2; \$225 for 4 and \$250 for more, plus \$150 cleaning dep. Call (650) 328-4427.

Tahoe Donner vacation home, 2 bd/2ba. trees, deck, sun, fun. Access to pools, spa, golf, horseback riding, \$280 wknd, \$650 week. Call (408) 739-9134.

Pine Mountain Lake vacation home. Access to golf, tennis, lake, swimming, horseback riding, walk to beach. Three bedrooms/sleeps 10. \$100/night. Call (408) 799-4052 or (831) 623-4054.

Incline Village: Forest Pines, Lake Tahoe condo, 3 bd/2ba, sleeps 8. Fireplace, TV/VCR/DVD, MW, W/D, jacuzzi, sauna, pool. Walk to Lake, close to ski areas. Visit Web page for pictures: <http://www.ACruiseStore.com>. \$120/night low season, \$155/night high season (holidays higher) plus \$156 cleaning fee and 12% Nevada room tax. Charlie (650) 355-1873.

Disneyland area vacation rental home, 2 bd/1ba. Nearing completion completely remodeled w/ new furniture. Sleeps 6 (queen bed, bunk beds, sleeper sofa). Air hockey and football tables. Introductory rate \$600/wk, once completed rate will be \$1000/wk. Security deposit and \$100 cleaning fee required. Call (925) 846-2781.

Ski Park City Utah, NASA Ski Week XIV, Feb 5 - 12, 2005. Space is limited. For more info, e-mail Steve at e-mail exnasa@sbcglobal.net or call (408) 432-0135.

Lost and Found

Found: Silver earring near cafeteria; call ext. 4-0712.

Mars images viewed at FFC open house



NASA photo by Tom Trower

In August, FutureFlight Central opened its doors for Ames staff to view images from the Mars Exploration Rover (MER) mission. FutureFlight Central's 360-degree panoramic viewing format provided unique perspectives of the Endurance and Bonneville craters and other sites, including stereo viewing with 3D glasses.

Science lecture set for Oct. 28

Christopher McKay will be the highlighted speaker for the Ames Library 'Speaking of Science' lecture series. This lecture will be held on Oct. 28 at 11:00 a.m. in the Space Sciences auditorium. The title of the lecture will be 'Human Exploration, Biology and the Future of Mars.'

In his role as planetary scientist with the Space Science Division,

McKay has been involved in planning for future Mars missions, including human settlements.

The question of bringing life to Mars also raises the broader question of what the future of life on Earth will be.

Join us to explore these exciting and thought provoking ideas. All Ames employees are cordially invited to attend.

Replacing retiree badges

NASA retiree badges must be replaced with a new standardized NASA retired ID card. Security began issuing the new card Sept. 1.

To obtain the new card, the bearer must take the old badge to the Employee Badge Office (EBO) located in building 15. EBO is at the corner of South Akron and McCord Avenue.

Hours of operation for EBO are 8:00 a.m. to 4:00 p.m., Monday – Friday, excluding holidays.

If you have any questions concerning this issue, call Wende Hower at ext. 4-5401 or Donna Cetera at ext. 4-1627.

On your mark . . .

Two upcoming Fitness Center events are scheduled:

- the Two Mile Fall Fun Walk and Run set for Oct. 21, at 11:30 a.m. at DeFrance near Boyd Road. No cost.

- 10K Fall Run is set for Oct. 26, at 11:30 a.m. at the Fitness Center. No cost.

See page 8 for more details or contact the fitness coordinator, Nancy Dunagan, at ext. 4-5804.



National Aeronautics and Space Administration

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