

The Ames Astrogram

Communication for the Information Technology Age

September 2002

NASA implements integrated financial management

--Ames actively preparing for new system

Are you tired of keying the same data into several systems, simply because they can't 'talk' to one another? Have you had enough of digging through multiple reports to find all the data you need to make good financial

ment CF in October of this year. Ames will implement Core Financial in 'Wave 2,' along with JSC, KSC, and HQ. 'Wave 2' centers are scheduled to go live in February 2003. 'Wave 3' centers include SSC, LaRC, GSFC and DFRC. They are scheduled to implement Core Financial in July of 2003.

The Core Financial project team will be providing impacted users crucial information about how Core Financial will affect them. During August, the project team began introducing the Core Financial project to Ames through various presentations and meetings. In September, the project team will begin communicating high-level process impacts.

In October, impacted end users will participate in process walkthroughs, and have discussions with their supervisors about the new roles associated with the CF system and processes. In addition, the training schedule will be finalized and communicated. From mid-November until the end of January, impacted end users will attend training on the new system and processes.

In the next few months, you will learn more details about Core Financial and how it will impact you through the Core Financial Web site, posters, emails, meeting presentations and training. Stay tuned!

BY STEVEN MEIER ▲



decisions? Have you grown weary of waiting for financial data to be reconciled before you can use it? If so, then we have good news for you.

NASA is currently in the process of implementing the Integrated Financial Management Program (IFMP). IFMP seeks to modernize financial and administrative systems and procedures by implementing new software systems and processes, improving workflow and operational efficiencies and providing 'real-time' information for quicker decision making. IFMP is a progressive step towards the 'One NASA' concept currently underway within the agency.

IFMP consists of several projects, including: Core Financial, WebTADS, travel management, position description management, resume management, human resource management, integrated asset management, budget formulation and procurement management.

The Core Financial (CF) project will make improvements to the following process areas: budget execution, cost management, accounts payable, accounts receivable, purchasing and the standard general ledger. Improvements will be realized through the roll-out of the new agency standard processes and the new agency standard software, SAP R/3.

The new tools and processes will better support business-based decision making by providing timely financial information to management. Core Financial will also streamline processes, reduce duplication of data by providing a single point of data entry, reduce the need to reconcile financial data between procurement and finance systems and improve the timeliness of acquiring goods and services.

The Core Financial project will be rolled out in 'waves.' MSFC, as the pilot center, and GRC, as 'Wave 1' will be the first to roll out Core Financial. They are scheduled to imple-

Congresswoman Lofgren visits Ames



photo by Jonas Dino

Ames Center Director Dr. Henry McDonald (left), Congresswoman Zoe Lofgren (center) and Executive Assistant to the Center Director Jack Boyd (right) applaud the graduates of the first annual Carnegie Mellon Robotics Camp held at NASA Research Park through August.

Ames Freedom to Manage

Trying to hack your way through the red tape? Got a fresh approach to tackling a problem at Ames? Wondering where to start? Here's a way to cut the red tape.

Send your problems and/or suggestions to the Ames Freedom to Manage (AF2M) team at the new Web site at: <http://af2m.arc.nasa.gov>

NASA Administrator Sean O'Keefe reminded us that the heart of the President's Freedom to Manage effort is to call upon our staff to be creative and to find new ways to set aside bureaucratic obstacles.

When the NASA Headquarters Freedom to Manage site was initiated in February 2002, over 330 suggestions were received NASA-wide. And now, AF2M is ready to handle your suggestions to fix Ames problems.

Check out the AF2M Web site for a clear definition of the scope of AF2M, names of people who can assist you with AF2M, and--most importantly--the suggestion form for you to use.

Recognizing NASA leadership in scientific computing

Every year, NASA recognizes outstanding accomplishments of the agency's research community by presenting the NASA Software of the Year award. This year, the prestigious award was placed in the hands of the NASA Advanced Supercomputing (NAS) Division's Michael Aftosmis, John Melton of the Aerospace Directorate and Marsha Berger of the Courant Institute of New York University. The team was recognized for their long-time work on Cart3D, a design and analysis software package for complex aerospace vehicles.

Co-sponsored by NASA's chief information officer and NASA's Inventions and Contributions Board, the Software of the Year award is judged by the NASA Software Advisory Council. To meet eligibility requirements, software must be supported, adopted, sponsored or used by NASA; it must be significant to the NASA mission; and be of commercial grade. In addition to Cart3D, DAC, a Direct Simulation Monte Carlo software package from NASA Johnson was named co-winner of the annual award.

What sets Cart3D apart from other Cartesian mesh generation packages is its ability to accept geometry of arbitrary complexity and process it with guaranteed robustness, all in a fully automated manner. "The wildest ideas of designers can be translated into hard simulation numbers in just one afternoon,"

explains Melton. Reynaldo Gomez, the space shuttle aerodynamics subsystem manager at NASA Johnson, is especially pleased with the robustness of Cart3D. "The real power of Cart3D lies in its simplicity of use. Historically, computational fluid dynamics (CFD) codes required a lot of manual intervention and training to develop grid systems and run the flow solver. With Cart3D, I've actually taken a third-year Air Force cadet who had no background in CFD, no knowledge of UNIX or CAD systems, and within a period of about a week, he was able to generate grids, start running the flow solver, and begin post-processing results for Space Launch Initiative configurations."



photo by Michael Boswell

Michael Aftosmis, a researcher at Ames' NASA Advanced Supercomputing (NAS) Division (left), with Marsha Berger, Deputy Director, Courant Institute at New York University, and John Melton (not pictured), Aerospace Directorate, are co-winners of NASA's Software of the Year Award 2002. The team created Cart3D, a software package used to design and analyze complex aerospace vehicles like the Space Shuttle.

In addition to its applications in NASA programs such as the Space Launch Initiative, Cart3D has significant application in the commercial world. For example, a company based in Seattle, Wash., is using the grid generation software to investigate the American Airlines airbus crash of November 2001 off Long Island, N.Y. "This kind of a virtual flight capability allows people to do aero forensics on this kind of crash," explains Aftosmis. The airbus crash investigation includes estimation of aerodynamic loads imposed by the turbulence created by other aircraft in the area.

Cart3D's ease of use and automation now make it possible to carry out 'virtual flight,' where every permutation of a design is explored over the complete range of expected flight conditions. "Cart3D provides designers with the trend information they need in order to understand how their designs are going to operate, not just under a single condition, but over a wide range of flight conditions," explains Melton. "Cart3D makes the computational fluid dynamics process fast enough to replace lower-order design methods with high-fidelity techniques --the key to streamlining the design and analysis process of complex aerospace vehicles," adds Aftosmis.

The level of automation demonstrated by Cart3D has sparked international interest in Cartesian mesh generation. "It is very gratifying to see this line of research being picked up by other researchers worldwide," says Berger. The team hopes to continue generating interest in Cartesian meshes as they add new capabilities to their design and analysis tool, Cart3D. For additional information about Cart3D, contact Michael Aftosmis at aftosmis@nas.nasa.gov

BY HOLLY A. AMUNDSON

Partner with NASA in safety

-- Communications contractor communicates

Raytheon, one of the many contractors at Ames, believes communication is a key element in continuing their no-lost-record.

Raytheon provides Ames with support services for information systems development and maintenance; systems administration; network engineering; software development and testing for air traffic management systems; and support of human factors and development. They employ 250 workers supporting two contracts and have not had a lost-time incident in over three years. A recent event demonstrates why their safety record has been outstanding.

Raytheon has fully adopted the NASA Building Emergency Action Plan (BEAP) training and provides this training to all of their employees. Recently, in building 233, a smoky odor was detected in the building. Although they were aware of welding work in the basement that could produce such odors, they still placed a 911 call and evacuated the building as they had been taught to do in BEAP training. It was fortunate that they placed the 911 call. The odors they smelled were not just welding odors. The welders had, in fact, started a small fire in some insulation materials between the walls they were cutting. Because the 911 call was made, the fire department quickly responded and extinguished the smoldering insulation. Raytheon employees were able to return to a safe building a short time later.

It is easy to see why Raytheon believes in specific training for their employees. They strive to follow all NASA safety standards and fully participated in the VPP efforts at the center. In the example above, Raytheon's BEAP training proved its worth and taught everyone to always pay attention to the warning signs of an emergency situation--to go ahead and place the 911 call. Heeding that training kept a small problem from becoming a large and potentially dangerous one.

Raytheon's constant communications are being heard by all as we congratulate them on their outstanding no-lost-time record.

VPP STAR Tip:

Good team interviewers will know how to ask questions so that the employee has to answer out of his/her experience.

...Margaret Richardson, in Preparing for the Voluntary Protection Programs, Copyright © 1999 by John Wiley & Sons

NASA researcher honored with national award

Dr. Rudy M. Ortiz, a participant in NASA Ames' Graduate Student Research Program (GSRP) and a recent graduate of the University of California, Santa Cruz (UCSC), has received a Ford Foundation postdoctoral fellowship for minorities to begin a new study in hypertension and in recognition of his prior outstanding research.

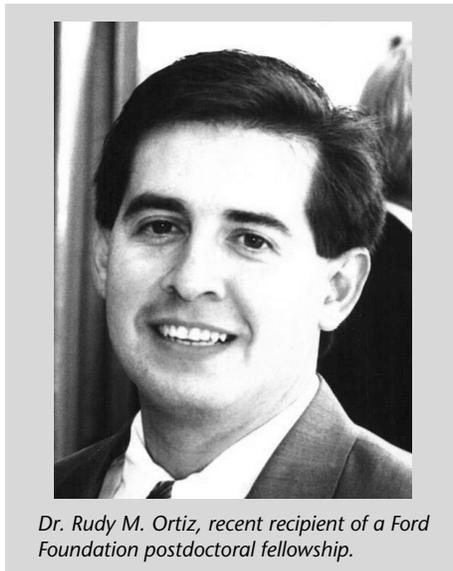
Starting next year, Ortiz will begin his proposed research in hypertension in rats at Tulane University Medical School in New Orleans. The research will be conducted in conjunction with the Department of Physiology and Tulane-Xavier University's Astrobiology Program, which will allow Ortiz to continue his interests in space-related research.

While at Ames, Ortiz conducted unique research on metabolism and kidney function in marine animals and in animals exposed to altered gravity, in conjunction with Ames' senior scientist Dr. Charles Wade of the Life Sciences Division. A majority of their collaborative research has focused on kidney and brain hormones that regulate water and salt balance.

Ortiz's dissertation research focused on kidney function in northern elephant seals, which are commonly found off the coast of California. "What makes these seals so interesting is their ability to endure a two-to-three-month fasting period after weaning, which is a natural component of their life history," he said. Approximately one month after birth, pups are weaned, at which time their body mass is comprised of about 46 percent body fat. During this fasting period, the seal pups do not exhibit the negative effects normally associated with the deprivation of food and water observed in other mammals. "This makes these animals a unique model for examining kidney function, obesity and other metabolic disorders simultaneously in a mammal naturally adapted to extreme conditions and environments," Ortiz said. He examined how the kidneys of these mammals responded to changes in blood volume and solutes, which provided insight on the role their kidneys play as seals go back and forth between water and land. "This is an important example of adaptation of living organisms to two different environments--land, with Earth's gravity, and water, with almost no gravity," he said.

This research is particularly important and interesting to NASA as it provides an Earth-based model for doing space research, since there is an analogy between the seals' change of environment and astronauts going from space back to Earth.

"Seals are good models for human-associated space research because they spend around 60 percent to 70 percent of their time each year in water, where they are essentially weightless, and then they emerge onto land, where they experience gravity. Such adaptation is natural to seals, while it is not natural to humans or rats," Ortiz said. "I am looking at how seals are able to adapt. Understanding this will hopefully allow humans to spend longer periods of time in



Dr. Rudy M. Ortiz, recent recipient of a Ford Foundation postdoctoral fellowship.

space someday," he said. "This is one of the objectives of the astrobiology program--to better understand adaptation of life in altered environments," he added.

"Elephant seals are interesting animals: they spend eight to nine months at sea and about four months on land. During their time on land, they neither drink nor eat. However, while in the ocean, they store water in their fat and use this water later on land," Wade explained. "Seals are very unique in that thousands of years before, they only lived in the ocean, and then in the process of evolution they have adapted to live in two different environments -- water and land -- and that is why seals are very interesting to NASA," Wade said.

Ortiz has been studying hormones in marine mammals for a number of years. He did his master's degree research looking at kidney function in West Indian manatees commonly found in Florida and that periodically go from fresh water to salt water--another example of animals adapting to two different environments. When he started his work at Ames, Wade presented Ortiz with the challenge of connecting marine animals to space exploration--one of the primary NASA missions. "It was quite challenging to find the link between marine mammals and space," Ortiz said. "In the process of my work, I realized that the biggest and most enlightening idea in space research is not to limit ourselves when trying to find alternative research models to space exploration," he said.

Ortiz received his bachelor's degree in biology in 1990 and his master's degree in wildlife and fisheries science in 1994, both from Texas A&M University. Ortiz has worked with Wade at Ames since 1995. He started as a research assistant with Lockheed-Martin and, in 1997, he received a NASA predoctoral fellowship through GSRP. After completing his doctorate in June 2001, Ortiz was awarded a University of California President's

Postdoctoral Fellowship to work with Dr. Frank Talamantes at UCSC.

The Ford Foundation postdoctoral fellowship, established by Dr. Bai Akridge in 1994, was presented to Ortiz by the National Academies, Washington, D.C. It is a yearly research competition administered by the National Academies, with only 24 Ford postdoctoral fellowships given annually. This award is given to researchers in the fields of science, engineering, medicine and technology. The evaluation is based on the applicant's proposed plan of study, previous achievements and potential benefit to the field.

Ortiz has extensive research experience, including working with NASA Ames and the departments of biology at UCSC and Texas A&M Universities, and teaching experience, including work as a graduate teaching assistant at UCSC and Texas A&M Universities. Ortiz has produced numerous refereed publications and conference presentations and has received a number of other honors and awards such as the American Physiological Society's Young Investigator Award.

By VERONIKA SOUKHOVITSKAYA ▲

Holton wins H. Julian Allen award

Dr. Emily Holton, winner of the 2001 H. Julian Allen Award, will give a presentation titled 'Space flight and bone turnover: Correlation with a new rat model of weightlessness' on Sept. 17 from 2 p.m. to 3:30 p.m. in the auditorium of building N245. The presentation will include a discussion of why ground-based 'in vivo' models are important, why and how the NASA rat model was developed, what we have learned from the model and our current research focus.

Designing a model to simulate space flight using rodents might seem simplistic, yet it took over five years from design concept to the model cage design used today, and almost ten years to produce sufficient data for approval of the standard operating procedure for use of the model by the Ames Institutional Care and Use Committee.

Holton's paper has been cited 266 times since it was published in 1979. A better indicator of the importance of the model is the 890 papers published using the model and the multiple laboratories throughout the world using this system to study the effect of unloading and/or reloading on multiple physiological systems. Holton's breakthrough work has shown that hindlimb unloading is an effective model of space flight for musculoskeletal changes. Further, it is proving useful for evaluating the cellular mechanisms that mediate the responses to unloading and reloading.

Center Briefs

Satellites reveal a mystery of large change in Earth's gravity field

Since 1998, satellite data had indicated that the bulge in the Earth's gravity field at the equator is growing, and scientists think that the oceans may hold the answer to the mystery of how the changes in the trend of Earth's gravity are occurring.

Before 1998, Earth's equatorial bulge in the gravity field was getting smaller because of the post-glacial rebound, or PGR, that occurred as a result of the melting of the ice sheets after the last ice age. When the ice sheets melted, land that was underneath the ice started rising. As the ground rebounded in this fashion, the gravity field changed.

"The Earth behaved much like putting your finger into a sponge ball and watching it slowly bounce back," said Christopher Cox, a research scientist supporting the Space Geodesy Branch at NASA's Goddard Space Flight Center, Greenbelt, Md.

Dwarf galaxies give universe a breath of fresh oxygen

Astronomers have discovered that a nearby dwarf galaxy is spewing oxygen and other 'heavy' elements into intergalactic space. This observation from NASA's Chandra X-ray Observatory supports the idea that dwarf galaxies might be responsible for most of the heavy elements between the galaxies.

Despite comprising only a very small fraction of the mass of the universe, so-called heavy elements--everything other than hydrogen and helium--are essential for the formation of planets and can greatly influence astronomical phenomena, including the rate at which galaxies form.

First images from NASA's Thermometer in the sky sizzle

The old adage that everyone complains about the weather, but no one does anything about it may soon fall by the wayside, thanks to the quality of data from NASA's new 'thermometer in the sky'--a suite of three advanced weather instruments aboard the Aqua spacecraft.

First images from the Atmospheric Infrared Sounder spectrometer and its two companion instruments, the advanced microwave sounding unit and the humidity sounder for Brazil are exceeding the expectations of the world meteorological community. The results will be substantially improved short-term weather-prediction accuracy and tracking of severe weather events like hurricanes, as well as advances in climate research.

"The three sounding instruments of the Atmospheric Infrared Sounder experiment system will comprehensively capture a continuous, detailed picture of Earth's atmosphere for use in global weather prediction and climate studies," said Dr. Moustafa Chahine, experiment science-team leader at NASA's Jet Propulsion Laboratory, Pasadena, Calif.

NASA summer students look 'SHARP' at graduation

Thirty outstanding local high school students culminated a summer of learning and adventure with some of the nation's best aerospace scientists and engineers when they graduated in mid August from the NASA Summer High School Apprenticeship Research Program (SHARP).

SHARP is a research-based mentorship program specifically designed to attract and increase underrepresented students' participation and success rates in mathematics and science related courses. SHARP also seeks to encourage career paths that help build a pool of underrepresented science and engineering professionals in the workplace. The eight-week intensive, hands-on science and engineering learning and work experience was held on the Ames campus.

"Over 90 percent of SHARP participants go on to complete a university degree, and many return to NASA as valued members of the agency's work force," said Dr. Ray Hill of Modern Tech Systems Inc., SHARP coordinator. "Most of the students are college bound, if not immediately, certainly after graduation from high school. Some are rising juniors/seniors and some are '02 graduates," he said.

"SHARP is different from other programs, as it provides students with a chance to work in an actual research environment," said SHARP student Kristina Hargraves. "By working at a NASA facility, we are given the chance to both learn new things, and to view how high school knowledge is applied to a real world environment." Each student in the program works with a mentor on a project of his or her interest.

Another student in the program, Ben Stewart, working with Lauren Fletcher of Lockheed Martin, enjoyed a different kind of summer experience. "I've been modeling the thermal cooling systems for the centrifuge accommodation module (CAM) in Microsoft Excel," he said. "I met with engineers to gather power consumption and

heat leak data, as well as equations to model these data into my model." He hopes the space station biological research project at Ames can use the model to compare CAM usage of water cooling lines to their international space station allocations.

SHARP is a program unlike any other, according to student Luis Pineda. "Here at NASA we're not treated like students, we're treated like an investment in everyone's time," Pineda said. "It is a constant learning environment with our mentors, other NASA employees, and college students." The program also provides a way for students to 'earn while they learn.'

SHARP was developed in 1980 to provide underrepresented high school students with research work experience. Students must be at least 16 years old when they begin the program, and live close enough to NASA Ames to commute easily. By establishing individual working relationships between students and active researchers, NASA hopes to create a resource pool of potential applicants for future NASA employment.

The students were selected from a competitive pool of applicants within a 50-mile radius of Ames based on their demonstrated enthusiasm and qualifications for a career in the fields of mathematics, science, engineering and technology.

SHARP is one of many educational programs offered by Ames for students from elementary school through college. Ames also offers an array of Internet-based and multimedia software for use in the classroom, as well as teacher education workshops and materials.

Further information is available at: <http://education.arc.nasa.gov/>

SHARP is sponsored by NASA's Education Division and participating NASA centers. Further information is available online at: <http://education.nasa.gov/sharp>

BY CARLY SCHNEIDER ▲

Congressional staffers visit Ames



photo by Jonas Dino

Meyya Meyyappan of Code AS (left), briefs staff members from Congresswoman Zoe Lofgren's office on nanotechnology during their visit to NASA Ames in late August.

NASA PDP 2001-2002 graduates honored

This summer, 17 NASA employees celebrated their successful completion of the

class of their responsibility to mentor and share what they learned this past year. "Part

Center, who all shared their reflections of the year and their efforts to identify and move toward results. In her closing remarks, Chris Williams, the program director, noted that the effectiveness of the professional development program is determined by how well it enables participants to realize "measurable results that matter to the American people."

Participants in the NASA professional development program are competitively selected by their centers, and they engage in a year-long, intensive leadership development process that combines developmental work assignments, leadership development workshops, briefings by NASA's leadership, targeted training opportunities and individual coaching. The goal of the PDP is to provide future leaders with a broader perspective of both the agency and the impact of NASA programs.

This year's participant's included:

- ARC: Megan McCluer
- DFRC: John Childress
- GRC: Therese Griebel, Chan Kim
- GSFC: Thom Arceneaux, Rex Elliott and Bob Savage
- HQ: Linda Parish
- JSC: Faith Vilas
- KSC: Richard Kuhns and Adam West
- LaRC: Donna Blanding, Jennifer Comella and Odilyn Santa Maria
- MSFC: Dennis Griffith, George Myers and Andy Prince

of your leadership responsibility now is to bring the energy and enthusiasm you have to help others improve," O'Keefe said. He cited the framework of Secretary of Treasury, Paul O'Neil, and noted that NASA leaders need to 1) create an atmosphere of respect and professionalism; 2) give people the resources required to carry out their task, which means being honest with ourselves and making the tough judgment calls; and 3) notice and recognize employee's accomplishments, and, when people are not successful, help them learn from their mistakes.

This year's elected class speakers were

Linda Parish, NASA Headquarters; John Childress, Dryden Flight Research Center; and Robert Savage, Goddard Space Flight



photo by NASA/Bill Ingalls

Megan McCluer, of Ames' Code ARA, receiving the NASA professional development program (PDP) award from NASA Administrator Sean O'Keefe.

NASA professional development program (PDP). In his address to the graduates, NASA Administrator Sean O'Keefe reminded the

McDonald elected into IAA

Recently, Ames Center Director Dr. Henry McDonald was elected into the International Academy of Astronautics, located in France.



As a member of the Academy, McDonald will participate in one of the IAA commission meetings, program committees or study groups. Diplomas are traditionally presented to newly elected members into the Academy.

The International Academy of Astronautics (IAA) was founded in Stockholm in 1960. Since that time, the IAA has brought together the world's foremost experts in the disciplines of astronautics on a regular basis to recognize the accomplishments of their peers, to explore and discuss cutting-edge issues in space research and technology and to provide direction and guidance in the non-military uses of space and the ongoing exploration of the solar system. The purposes of the IAA, as stated in its statutes are:

- to foster the development of astronautics for peaceful purposes;
- to recognize individuals who have distinguished themselves in a branch of science or technology related to astronautics; and
- to provide a program through which the membership can contribute to international endeavors and cooperation in the advancement of aerospace science, in cooperation with national science or engineering academies.

Contractor council election results

On Aug. 7, the Ames Contractor Council (ACC) held elections for the new six-month term ending in February 2003.

The council's officers are now:

- NASA Co-Chair: Nancy Bingham, Deputy Center Director
- Contractor Co-Chair: Bob Javinsky, Enterprise Advisory Services
- Vice Chair: Dave Appling, Allied Aerospace Flight Systems Division
- Secretary: Marla Arcadi, ELORET, Inc.

The council was established in 1987 as a contractor-government forum to address common problems and increase contractors' ability to respond to the center's changing needs. Its regular monthly meetings are held in the Jack Boyd Committee Room of N-200, at 11:00 a.m. on the first Wednesday of each month. All resident contractors, subcontractors and grant administrators are urged to take part in the ACC's programs. Its next major activity will be the 13th Annual Contractor Excellence Awards, to be presented this fall.

Call Bob Javinsky at (650) 793-1036 for further information on the ACC and its activities.

NASA researchers discover winds in Titan's organic haze

Researchers from NASA and other institutions have developed an atmospheric model lending insights into decades-old mysteries surrounding Saturn's moon Titan that could shed light on the chemical processes that may have jump-started life on Earth.

These mysteries have especially intrigued astrobiologists, who view Titan as a model for the young Earth before life began. Other than Earth, Titan is the only other moon or planet in our solar system with a thick, nitrogen-dominated atmosphere. Its thick organic haze also appears very similar to smog on Earth.

"Titan is an interesting world. Its organic haze may be an example of the prebiotic organic chemistry that led to life on Earth," said Dr. Christopher McKay, of Code SST, and co-author of a research paper published recently in the journal *Nature* titled "A Wind Origin For Titan's Haze."

On Titan, methane and nitrogen molecules are thought to be converted into complex organic materials such as hydrocarbons and possibly amino acids, which are the building blocks of life on Earth. "We think similar processes once happened here, and life may have started that way," said McKay.

Titan has long puzzled scientists because of several unexplained features in its thick, hazy atmosphere, composed largely of solid organic materials. Voyager images taken in 1980, for example, show that the haze is much brighter at Titan's summer hemisphere than at its winter hemisphere. Earth-based observations also show that this difference in brightness changes with Titan's seasons. Each season on Titan lasts for four Earth years. Titan's haze also is much thicker near the polar caps than anywhere else. But perhaps most puzzling, a layer of the haze is detached from the rest of Titan's atmosphere, appearing like a ghostly shell floating in space.

The research outlined in the paper provides the first 'coupled' model, linking Titan's organic haze with atmospheric winds and with the sunlight that heats the haze. According to the group's model, sunlight heats the haze that drives the wind, which, in turn, carries the haze. The smallest haze particles also can be carried from one pole to the other within one Titan season. And according to the model, the detached haze arises because very small particles of haze formed high in Titan's atmosphere are blown to the pole before they can fall, becoming detached.

"We found that the main features of Titan's organic haze arise from a strong feedback loop between the haze, the sunlight and the wind," said McKay. "This is a critical new factor in understanding Titan."

The model is precursor research for a NASA/European Space Agency probe expected to enter Titan's atmosphere in January 2005. The Huygens probe, part of NASA's

Cassini mission, will take measurements and samples of Titan's haze. NASA's Jet Propulsion Laboratory, Pasadena, Calif., manages the Cassini-Huygens mission.

The lead author of the paper is Dr. Pascal Rannou of the University of Paris and the University of Versailles-St. Quentin. The other

co-author is Dr. Frederic Hourdin of the University of Paris.

Portions of the research were funded by NASA's Planetary Atmospheres Program.

For further information, go to <http://jpl.nasa.gov/> and select 'missions'

BY KATHLEEN BURTON ▲

Ames Astrobiology Academy students visit with NASA Administrator



photo by Timothy C. Marzullo, a member of the AAA

The Ames Astrobiology Academy students and staff with NASA Administrator, Sean O'Keefe, (center with tie), in Washington, D.C. in July.

Fifteen Ames Astrobiology Academy students and staff visited with NASA Administrator Sean O'Keefe in Washington, D.C., on July 18. The visit was sponsored by NASA, which has funded the academy for the past six years.

According to David Lamb, Ames' Astrobiology Academy associate director, the visit came about in a very interesting manner.

"We went to a House Subcommittee meeting on space and aeronautics where they were discussing the future direction of NASA. Administrator O'Keefe was one of the panel witnesses. Ken Murphy, one of the Goddard Academy staff, was able to get the word to him that we were there through one of his contacts," Lamb stated.

During the meeting, the Astrobiology Academy's presence was recognized by O'Keefe and Congressman Lampson. After the meeting, O'Keefe greeted each of the academy students and answered questions.

The academy students took video footage and a group photo with O'Keefe. The

academy's presence was well accepted at the hearing. During the subcommittee meeting, Lampson stated that there needs to be continued and accelerated support for educational programs like the Academy.

The NASA Astrobiology Academy is a unique summer institute of higher learning whose goal is to help guide future leaders of the U.S. space program by giving them a glimpse of how the whole system works.

The goal of the Academy is to provide insight into all of the elements that make NASA missions possible. Each student is assigned to an Ames researcher to contribute toward one of the missions. Academy members are selected by a series of panels, interviews and their own state's space grant consortium who selects and sponsors them.

This summer, 13 students and two staff personnel interested in life, space, Earth sciences, space technology and space engineering, came from all over the U.S. for the 10-week session.

BY MARY BETH BISCHOFF ▲

If life hands you lemons . . .

As I set out last Wednesday to meet with John Green, I knew nothing about the man. All I knew was that when I was assigned to

all the time?" Then he gave an answer. I'm sure he knew I would ask him the question sooner or later, but he answered bluntly, to save time, and the twists and turns that humans use to avoid being uncomfortable. This is what he said--and pay attention, it may be useful to you someday.

"Every morning, I wake up, and when I wake up, I realize that I am breathing. That is my first clue that things are going well. Then, I go outside and I pull some lemons off my tree, and I make a tall glass of fresh squeezed lemonade. Then, I go to work and start my day."

By now you may be thinking; "Is this like one of

he wrote, and shared with me, as he let me know that it affected his life profoundly.

"To smile genuinely is to muster pieces of positive energy from within, and when directed toward another, it briefly gives them a sense of belonging, hope and perhaps gives them the assurance that you've recognized them as being in part...Human!" he revealed. Green has been all over the world. He told me of his adventures in Italy and in Japan. He speaks Japanese and maintains his own Web page. As a young boy growing up in Century, Fla.; he knew that when he grew up he would travel all over to see if everyone was the same. "When I was growing up there was segregation everywhere, and it seemed like there was no love anywhere," Green said. "But when I traveled, I found out that everyone is not the same everywhere." The kindness that he encountered during his travels inspired him to be the person he is today.

As our conversation began to wind down, he said to me, "I suspect that I have always been lonely--or alone, and that keeps me right there knowing how anyone would feel in that situation, when they feel like they can't connect. I like to know how other people are feeling, even if they are desperate." I was left to myself with those words, and I spent the rest of the day feeling like something really special had happened.

Because of the incredible feedback that Protective Services has received about Green's performance and attitude, he recently was presented with a bonus check. Sidney Johnson of Protective Services said, "We are truly impressed with his [Green's] performance, and we are blessed to have such a wonderful example for the other officers to emulate." As for what Green intends to do next, I have a feeling he'll continue to make lemonade.

For more info regarding the philosophy or life of John Green, visit: <http://members.aol.com/jgreen1443/>

BY CARLY SCHNEIDER ▲



photo by Jonas Dino

John Green, one of Ames' security guards, waves on incoming cars.

interview one of the gate guards of NASA Ames' secure entrances, I immediately knew which one.

Many haven't had the privilege of spending an afternoon by Green's side while he carries out his duties with extraordinary enthusiasm and vitality. As I sat down on the concrete platform of his station, the August heat was lulling and comfortable, and Green looked down at me humbly. I sat and watched him for a while. As employees approached the gate, he would give each one a patented smile and ask them questions. "Are you going to do your best today?" he would ask, leaning into their car window. "How are things going today?" he inquired if the people looked like they were having 'one of those days.' He knew many people by name. As I continued to observe him, I slowly began to experience a change in my attitude. Look how he made everyone feel so good, and it was so easy. A compliment here and a handshake there, and the man revolutionized the working environment.

After watching Green for a while, I asked him the first thing I could think of. It was an obvious question, but the answer was telling. "What do you like the best about your job?" I asked, eager for him to reveal his magic. I know so many people who complain about work; could there really be someone who is satisfied all the time?

"I don't want to be in a place where I can't have fun at work," he said. "If I ever found that it wasn't so, I would try to change it," he said meaningfully. I didn't have to ask him any more questions after that. He knew I was riveted already and he continued to speak for the next two hours while I listened quietly. He told me the question he is most commonly asked is, "Why are you so happy

those feel-good messages that show up in my inbox when I am not in the mood to be cheered up?" Maybe so, but nobody that I saw passing through that gate gave him the dagger eyes. Quite the opposite, in fact. Within the first half hour, he had already received two gifts from passing employees. One woman even leaned out of the window of her pick-up and said to me, "This man is beautiful, take care of him, he's beautiful," and she turned to him playfully. "You two timing me?" She laughed and sped off. As I began to develop a portrait of what this man was all about, he said something else that caught my attention. It was something that

Fitness center open house Sept. 18

The doors to the NASA Ames Fitness Center (building 221) will be open from 11:30 a.m. to 1:00 p.m. to anyone interested in checking out the facility on Sept. 18. Hors d'oeuvres and drinks will be available, plus the Fitness Center staff and instructors will be present to answer questions. Volunteers of the Fitness Center will be honored at 12:00 noon.

The Fitness Center offers 38 classes throughout the week, has a large variety of leading exercise equipment and has a highly qualified staff. Individualized exercise programs based on personal needs are available to all Fitness Center clients. Fitness evaluations that include measurements of blood pressure, resting heart rate, inch measurements, body fat percentage, cardiovascular endurance, grip strength, up-

per body strength, abdominal endurance and flexibility are also available. The Ames Fitness Center is the only NASA facility that has a training wall in case there really is a need to climb the wall after a drawn-out meeting.

All these free Fitness Center services are available to federal and contracted employees who turn in the required medical clearance form.

Contact the Fitness Center manager, Nancy Dunagan at ext. 4-5804 for additional information. Medical clearance forms may be downloaded for the Fitness Center at: <http://fitnesscenter.arc.nasa.gov/> or hard copies are available at the Health Unit (building 215) and the front door of the Fitness Center.

NASA develops 'Marsoweb' for future Mars exploration

"Marsoweb," an interactive Web site developed by NASA, is helping scientists select suitable landing sites for future missions to Mars.

Scientists preparing for NASA's next Mars mission, the twin Mars Exploration Rovers scheduled for launch in June and July 2003, are able to view more than 44,000 high-resolution images of Mars collected by the Mars Global Surveyor. Some show detail at less than three meters per pixel. These images are registered with context images and maps of thermal properties, rock abundance, slope roughness and geology acquired by the Viking and Global Surveyor orbiters and with altimeter and mineralogical data returned by Global Surveyor, which is still operating at Mars. The Web site provides scientists with special software tools to facilitate their interpretation of the data.

"The Center for Mars Exploration (CMEX), in collaboration with the NASA Advanced Supercomputing (NAS) Division at NASA Ames, created this Web site to make sure that future Mars lander projects can benefit fully from all the available remote-sensing data to allow them to select the best landing sites, namely those that combine scientific appeal and mission safety," explained Dr. Geoffrey Briggs, scientific director of CMEX, located NASA Ames.

Ames' CMEX planetary geologist and project lead Dr. Virginia Gulick of the SETI Institute and Glenn Deardorff, a visualization technologist in the NAS Division at Ames, who has an undergraduate degree in geophysics, developed Marsoweb over the past three years to make a significant contribution to the ongoing Mars exploration program.

"It is easy to be overwhelmed by the great variety of available data relating to a candidate landing site," said Gulick, who serves on a NASA committee guiding the landing site selection process. "By pulling everything together and adding advanced visualization and analysis tools, we've enabled people to focus on studying the candidate sites and not lose time worrying about how to display, manipulate and compare all the relevant but disparate data sets," she said.

"More than 100 sites on Mars have been considered by dozens of planetary scientists who are involved in analyzing candidate landing sites," said Deardorff. "Marsoweb provides a resource for them to increase their productivity as they wade through the available data."

The goal of the Mars Exploration Rover mission is to learn more about Mars' geologic and climate history, both of which are closely tied to the history of water on the red planet and to the possibility that life may have evolved there. Scientists are using orbital data to help them select landing sites of geological interest--where water was once available and the past environment may have been conducive for life. Orbital images reveal many regions that evidently have been shaped by water and the thermal emission spectrometer on Global Surveyor has identified a region where the mineral hematite, an

iron oxide sometimes formed in the presence of water, is abundant. Mars provides a wealth of exciting landing sites, but most of them present surface hazards to the current generation of landers.

"The main goal of Marsoweb has been to provide online analysis and visualization tools so the science community can interpret the highest resolution images in their regional context and with the benefit of the other remote-sensing information that is available," Gulick said. "We rely on those images to identify sites of highest science interest and we need data at multiple resolutions, as well as other data to identify sites that are relatively free of hazards," she said. "Providing the information in a user-friendly format is essential."

Marsoweb includes an interactive feature developed by Deardorff that allows scientists to view Mars' surface in perspective and from any angle to help assess prospective landing sites from a collection of more than 400 images. This Marsoweb software feature contains a Virtual Reality Modeling Language (VRML) component that provides a 3-D image of the surface of Mars. Using the VRML, users can enjoy zooming through the canyons and valleys of Mars or over its volcanoes and desert dunes. Another time-saving feature of the Web site allows scientists to rapidly superimpose high-precision elevation data from the Mars Orbiter Laser Altimeter (MOLA) on images of the surface.

In addition to its use by the science community, Deardorff said Marsoweb also has proven popular with the general public. "It's also becoming an effective public outreach vehicle for people wanting to know more about Mars," he said. "Since its inception in August 1999, Marsoweb has been viewed by more than 44,000 distinct users, resulting in more than 1,880,000 hits," he added.

Deardorff and Gulick said they are con-

tinuously updating and improving the Web site. They welcome suggestions for improvement from both the science community and the general public. In addition to integrating data from Global Surveyor, they also are planning to add Mars Odyssey data as they become available. Mars Odyssey is the other spacecraft currently in orbit around Mars and carries its own suite of unique remote-sensing instruments. Each mission incorporates new remote-sensing instruments that introduce new challenges for scientists to understand and to compare with what they already know about Mars, based on data taken from previous missions. Gulick said a goal of the Marsoweb effort is to remove the barriers that such new remote-sensing instruments typically impose on comparing data sets and allow the focus to be on science. In addition to incorporating all the latest spacecraft data, they also have plans to create an electronic notebook to enable scientists to collaborate with each other, store images, annotations and other data.

Deardorff said developing the Marsoweb is the culmination of a childhood dream. "Being able to develop a virtual presence of another planet has been the most satisfying part of the whole process," Deardorff said. "It's like projecting the eyes and ears of humans into another world."

The Marsoweb project is a joint collaboration between the NASA Ames Center for Mars Exploration, the NAS Exploratory Computing Environments Group at NASA Ames and the Mars Exploration Program Office at NASA's Jet Propulsion Laboratory, Pasadena, Calif. The project is funded by NASA's Office of Space Science through its Mars Data Analysis Program and through NASA Ames' Applied Information Systems Research Program.

For more information about Marsoweb, visit the project Web site located at: <http://marsoweb.nas.nasa.gov>

BY MICHAEL MEWHINNEY ▲

EIT and Section 508 meeting set

The Acquisition Division (Code JA) and the Chief Information Officer (Code JT) are offering another electronic and information technology (EIT) and Section 508 town hall meeting on Sept. 26 at 2 p.m. in the N245 Auditorium. This town hall meeting is for anyone who is acquiring electronic and information technology whether by purchase request (PR) or service request (SR), delivery orders or task orders. We will introduce concepts of electronic and information technology accessibility, demonstrate how the requester can incorporate these requirements into their acquisitions, and discuss the tools available to help requesters identify accessibility standards that are applicable.

Electronic information technology is defined as any equipment or interconnected

system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data information. This term also includes computers, software, firmware, and similar procedures, services (including support services) and related resources.

EIT includes, but is not limited to:

- telecommunication products (telephones, cell phones, pagers)
- information kiosks and transaction machines
- World Wide Web sites
- Multimedia and
- Office equipment (i.e. copiers and fax machines).

National pollution prevention week activities set

In recognition of National Pollution Prevention Week, which is Sept. 16-22, the Ames

Environmental Services Office, Code QE, will be hosting information tables at the Ames

Mega Bites Café about three programs you can participate in to immediately have an impact on preventing pollution.

- Tuesday, Sept. 17, Ames Chemical Exchange (ACE)

This is a program that provides the opportunity for the use of excess chemicals by on-site researchers and other personnel for free. For more information on this, visit <http://q.arc.nasa.gov/qe/p2/ace/> for more information.

- Wednesday, Sept. 18, Recycling at Ames (Co-hosted by Code JFS)

Questions about how to recycle different commodities at Ames will be answered. For more information, visit the Web site at: <http://q.arc.nasa.gov/qe/p2/Recycling/RecycleFactSheet.php>.

- Thursday, Sept. 19, Greening Your Office Paper

Gain paper use reduction ideas that not only prevent pollution but also save money, as well as information about Ames' participation in a pilot program to purchase paper that is made from 100 percent post-consumer material and is processed chlorine free. Visit the Web site at: <http://www.federalsustainability.org/> for more information.

For more information on National Pollution Week activities at Ames, contact Tammy Helmski at ext. 4-1406.



Guest researcher speaks at Ames

In August, Dr. L. Jean Palmer-Moloney, ASEE Faculty Fellow/State University of New York at Oneonta, assistant professor in the Department of Geography, visited Ames to speak about the 'Wetlands of the South Bay--Past, Present and Future.' The event

She is co-author of a National Council for Geographic Education PATHWAYS publication (in progress) for high school and undergraduate college education on the use of remotely sensed images across the academic disciplines.



photo by Tom Trower

Dr. L. Jean Palmer-Moloney, ASEE Faculty Fellow/State University of New York at Oneonta, assistant professor in the Department of Geography, visited Ames to speak about the 'Wetlands of the South Bay--Past, Present and Future.'

was sponsored by the Environmental Services Office. This summer she brought her expertise in geographic information systems (GIS) technology, remote sensing and education outreach to the center.

Her previous wetlands work was on the Colorado River--'Rewriting the 1922 Colorado River Compact: Allocating an Over-Allocated Resource.'

develop a plan of how NASA can contribute to the restoration effort.

Ames' Ecosystems Science and Technology Branch (Code SGE) has a 20-year history of working with the aquatic ecosystem and salt ponds of South San Francisco Bay near Moffett Field. Drawing on extant SGE research and using NASA Earth science technology and GIS, an environmental database

This summer's work became a chapter entitled 'The Wetlands of South San Francisco Bay: Geography from an ecological perspective.'

Currently, she is leading the research team examining the ecological response to the conversion of South San Francisco Bay evaporation ponds to restored tidal marsh wetlands.

She has spearheaded many meetings among NASA branches--Code QE, SGE, and DXE--and among government agencies to

Computer History Museum presents

A public lecture entitled: 'Pioneers of Venture Capital,' will be presented on Sept. 30, at 7:30 p.m. in the Moffett Training and Conference Center, in Bldg. 3.

The panelists will be Bill Draper, Pitch Johnson, Burt McMurtry, Tom Perkins, Arthur Rock and Don Valentine. The moderator will be Gordy Davidson. RSVPs are required.

For more information, visit the Computer History Museum Web site at: <http://www.computerhistory.org/> or call ext. 4-2579.

If you ever wondered about the following: How did the venture capital industry get started in Silicon Valley? Why here and not elsewhere? What were the key milestones? The big obstacles? then you should plan to attend.

is being developed to make relevant information from various NASA branches and divisions (Code SGE and other branches in Division SG, Code QE, the Environmental Services Division, and Code DXE, Education--GLOBE) available to those involved in the South Bay restoration project. The database will be used to establish baseline environmental conditions of the South Bay evaporation ponds prior to restoration, and to monitor conditions of the ponds during the restoration process.

The aquatic ecosystem and salt ponds of the South San Francisco Bay area are on the brink of change. This seminar offered an overview of the area's history, the present conditions and possible future habitat restoration.

NASA, local agency, help students achieve dreams

Four California minority students are on their way to achieving their dreams of attending college, thanks to a collaboration between NASA and the Foundation for a College Education (FCE).

The students from East Palo Alto, some of them the first in their families to attend college, spent the summer engaged in cutting-edge research at NASA Ames. NASA's Airspace Systems Program sponsored the interns, who worked in the areas of physiology, space and aviation. The internships exposed the students to a serious scientific environment, enabled them to operate sophisticated technical equipment and involved them in exciting research projects.

"Our collaboration with NASA Ames has been extraordinary--the entire agency has been an advocate for FCE and our students for the past two-and-a-half years," said Stephanie Wick, FCE's executive director. "The internships set up for our students have been such rich and valuable experiences for them--truly transforming! We look forward to building on the successes of our strong cross-agency partnership," she said.

FCE is a non-profit organization that aims to increase the number of students of color entering four-year colleges and universities. The foundation believes that high expectations lead to high achievement. FCE encourages students to pursue advanced academic courses to ensure they are prepared to attend the nation's best colleges and universities. FCE offers its students free tutoring, college coaching, financial aid guidance, academic planning and advising, career exposure and various cultural events and activities.

NASA embraces FCE's mission to promote college access for students who traditionally have been underrepresented in higher education. "NASA's involvement in programs to provide students with the opportunity for higher education is the right thing to do," said Frank J. Aguilera, deputy director of NASA's Airspace Systems Program. "It is to our advantage to bring students here now, as they will be more apt to help us in the future because they have already been to NASA. We obviously are interested in them coming back to us," he said. "And the students' work is always of good quality."

"I really liked my summer internship at Ames because I learned how actual researchers go about their daily work," said FCE intern Ajayi Lawrence, who works in the psychophysiology laboratory of Dr. Patricia Cowings. "I also learned what it takes to be a researcher, which is what I would like to be one day. I believe this internship will help me to succeed in college. But even more significant is that I learned the importance of being well-rounded," he said. Lawrence noted that one highlight of his internship was the opportunity to meet former astronaut Dr. Mae Jemison, the first African-American woman to fly in space.

"I liked working at Ames because I learned new things and met new people," said FCE student Paulina Hernandez, who works with

NASA Ames' Wendy Holforty developing air traffic management decision support tools. "My experience at Ames will enhance my college application and will help me succeed in receiving a higher education," she said.

FCE interns Travis Perkins and Kevin Jones have participated in simulations in NASA Ames' Airspace Operations Lab since April. Perkins, who has been involved with FCE for more than three years, will enter San José State University this fall, concentrating on aviation and aeronautics. He will continue with FCE by mentoring younger students.

The Airspace Systems Program at NASA Ames is a leading developer of cutting-edge technology to modernize and improve capacity and mobility within the national airspace system. The program works to reduce flight delays, improve human performance, and to develop new aircraft systems and air traffic management tools.

Founded in 1995, FCE graduated its first high school students in 1999 and now has 37 students enrolled in college. Currently, there

are 38 students in the high school program. "There are several factors that make FCE unique. We actively involve parents, which is an absolutely essential part of the equation. By giving entire families the tools to access higher education, we believe we can help build the capacity of an entire community," said Wick. "We set high expectations for academic success and push our students to challenge themselves beyond what they might perceive as their limits. Finally, FCE considers the educational pipeline--the importance of early outreach, sustained support throughout secondary school, and perhaps most importantly, retention in higher education. It's not enough to get our kids to college--FCE is committed to making sure they graduate."

For additional information about NASA Ames' airspace systems program, visit: <http://www.asc.nasa.gov>

For information about FCE, visit: www.collegefoundation.org

BY VERONIKA SOUKHOVITSKAYA ▲

Contractor awards ceremony set

On Monday, Oct. 21, the Ames Contractor Council (ACC) will hold its 13th annual Contractor Excellence awards ceremony. The council's NASA co-chair, Deputy Center Director Nancy Bingham, will join contractor co-chair Bob Javinsky in honoring both individuals and teams for their outstanding contributions to the center's mission during fiscal year 2002. All are invited to the ceremony, which will be held in the Moffett Training and Conference Center ballroom at 2:00 p.m.

Nomination forms and instructions were emailed to resident site managers (prime and sub) and grant administrators

during the week of Sept. 3. If you should have received the instructions and did not, then contact the council secretary Marla Arcadi at ext. 4-2924 or email her at marcadi@mail.arc.nasa.gov as soon as possible. Deadline for nominations, which must have COTR concurrence, is Sept. 25.

The council was established in 1987 as a contractor-government forum to address common problems and increase contractors' ability to respond to the center's changing needs. For more information on the award ceremony, contact Anita Fogtman at (408) 749-1416.

Position description management goes live at Ames!

On Aug. 19, the Position Description Management (PDM) project module was implemented and Ames is now 'live.' PDM is one of several project modules that is being implemented agencywide in the overall effort to modernize systems and to standardize the way NASA does business. PDM is a classification system created and customized for NASA by Avue Technologies, Inc. This IFMP pathfinder project will enable supervisors, managers, and human resource specialists to create properly classified position description documents in a consistent and faster manner.

During PDM implementation at Ames, briefings were held for supervisors and human resource specialists that included short demos of the system.

Human resource specialists will continue as consultants to their organizations. Human resources will hold training on PDM in September and October. Supervisors should contact Barbara Chenier via e-mail at: bchenier@mail.arc.nasa.gov to schedule one of the following training sessions:

Wednesday, September 25

Session 1, 9:00 a.m. - 11:00 a.m.

Session 2, 2:00 p.m. - 4:00 p.m.

Thursday, October 24

Session 1, 9:00 a.m. - 11:00 a.m.

Session 2, 2:00 a.m. - 4:00 p.m.

For more information about PDM, visit the Web site at: <http://ifmp.arc.nasa.gov>

Sarah Moody helped hundreds with NASA technology

The Hampton, Va., native who sought out NASA to help her nephew lead a more normal life passed away in August at the age of 63.

In 1987, Sarah "Tootsie" Moody began what would become the nationwide Hypohidrotic Ectodermal Dysplasia (HED) Foundation by calling NASA Langley Research Center, looking for answers from "the people that put man on the moon."

Her nephew, Stevie Roper of Waynesville, N.C., had had a life-threatening episode while visiting her family in Hampton that hot summer. Stevie, eight at the time, was born with no sweat glands. His body temperature rose to 105 degrees while riding with one of Sarah's daughters in a non-air conditioned car. Alarmed, Sarah's daughter stopped the car, grabbed a hose from a lady watering her lawn and wet Stevie down to cool him off. Sarah learned that this sudden need to cool down occurred often, which made his life difficult.

Like her daughter that day, Sarah, a life-long civic activist, took matters into her own hands until her death, working to help Stevie and other kids born with a condition known as hypohidrotic ectodermal dysplasia (HED). Other symptoms include little hair, few and imperfect teeth, and abnormal skin and nails.

In Sarah's mind, NASA would just naturally know what to do. Upon calling NASA Langley, she was directed to John Samos, then head of the technology utilization and applications office. Samos took the challenge and, soon, assistant Thayer Sheets had matched a NASA technology with Sarah's need.

The NASA Ames technology was highlighted in an issue of NASA Spinoff magazine, and showed a young Dale Earnhardt wearing a cooling vest. The NASCAR driver relied on the vest, a special application of NASA space suit technology, to keep from overheating during his grueling stock car races.

Sarah contacted the manufacturer of the vest and persuaded them to make a child-sized version for Stevie. Upon receiving the vest, Stevie's life was changed overnight. Now he could go outside and safely play in the daytime for up to two hours at a time. It worked so well for Stevie that Sarah took a giant step. She made a personal commitment to provide as many of the vests as possible to the several thousand kids with HED in this country. Over the next several years, through television appearances and corporate and individual sponsorships, she raised money and provided vests, free of charge, to hundreds of 'her kids,' personally travelling to present each in the child's hometown.

In time, Sarah learned that the cooling vest technology could also help children with other conditions, and her work expanded.

In one major new effort, Sarah teamed

with the NASA Johnson Space Center commercialization office to guide the development of a new type of cooling suit--a suit that would cool and protect sensitive skin from ultraviolet rays from the sun. The suit included a hood that covered the face and head, gloves and full-length pants that totally blocked the sun. While wearing the suit and seeing through the built-in visor would not make normal children happy, children fitted with the suit were delighted with their new-found freedom to go outside during the day.

Ironically, it was cancer that took Sarah's left eye, shortly after her foundation was expanded with the new suits to protect

children vulnerable to skin cancer. Sarah won her personal bout with cancer, and proudly wore an attractive artificial eye. But a new cancer struck suddenly this summer, and she is now gone.

Her daughter, Kimberly Urquhart of New Orleans, has taken over the leadership of the HED Foundation. For more information about the HED Foundation, visit their Web site at: www.hedfoundation.org.

BY H. KEITH HENRY 

Editors Note: The author works in the Langley Office of Public Affairs and is a HED Foundation board member.

SOLAR available for NASA training

SOLAR, the 'Site for On-line Learning And Resources,' is up and running and available for training centers to design, host, and deliver training courses. There are currently 90 courses hosted in the following disciplines: ethics, export control, financial and resource management, information technology security, occupational health, and safety and mission assurance. Mandatory courses, such as ITS for Managers 2002, are also available. Other courses are in development and will become available in the next couple of months.

An upgrade to the system's architecture allows the system to accommodate up to 100,000 learners simultaneously. The SOLAR Release 1.5 this month implements multiple-user related improvements to the functional portions of SOLAR as they relate to the database, usability and user-friendliness. This will be primarily accomplished through database redesign activities as well as a rede-

sign of several SOLAR Web pages.

If you are in the process of developing a training course or thinking about developing new courses, consider the benefits of Web-based delivery and contact SOLAR.

For information about SOLAR training needs, contact:

Tony Lopez (858) 495-0508
Joe McElwee (202) 358-2158

For content development assistance, contact:

Sheila Fogle (256) 544-5638
Hector Garcia (256) 544-8301

For system help, contact:
Help Desk (256) 544-7600
Toll Free (866) 419-6297
Email: solar.support@msfc.nasa.gov

Visit SOLAR's Web site at: <https://solar.msfc.nasa.gov>

'NASAPeople' Web page debuts

Have you ever wanted to know about NASA's Fellowship Program? Ever wondered what the differences are between the Federal Employees Group Life Insurance (FEGLI) and the NASA Employee Benefit Association (NEBA)? Or, do you know where to find the latest developments in the Federal Long-Term Health Care Insurance Program?

A new Web site developed by NASA Headquarters' Office of Human Resources and Education is now available for you to find those answers, and the answers to many other questions you may have. The new site, NASAPeople, has been developed to serve as the agency's online gateway to its human resources, training and education information.

At this Web site located at: [http://](http://nasapeople.nasa.gov)

nasapeople.nasa.gov, you will find resources and Web-based tools useful for NASA's civil servant employees, its managers and supervisors, the families of employees and NASA retirees. Some of these features include the automated benefits and annuitant calculators, education programs information, and the NASA training schedule. You can also check out the Employee Express Online, Thrift Savings Plan (TSP) Web site, and explore the many aspects of NASAJobs.

A demonstration of this new site will be held in the Ames Café on Sept. 17, from 11 a.m. to 1 p.m. Stop by the display table, view the site and see how easy it is for people to use NASAPeople.

If you have questions, send an e-mail to: nasapeople@mail.arc.nasa.gov.

Exchange sixth annual chili cook-off set for Oct. 10

The Ames Exchange is pleased to announce the Sixth Annual Chili Cook-off to be held on Thursday, Oct. 10, from 11 a.m. until 1 p.m.

The Exchange has always provided financial support for this popular employee event, but has now enthusiastically assumed leadership responsibility for organizing and conducting the event with support from a number of Ames organizations.

The Chili Cook-off has proven to be wildly popular and successful in the past. We expect it to be no different this year, and even more popular in the future with the addition of some new wrinkles and entertainment. We are always open to suggestions from employees on what they would like to see added.

All Ames personnel are invited to form teams, try out their special chili recipes, and compete for trophies in each of six categories. The Exchange will provide a total of \$50

per officially-entered team (to a maximum of 20 teams) to help defray the costs of preparing adequate supplies of your recipes to feed small samples to the potentially hundreds of expected attendees. Teams are encouraged to exercise creativity in recipes, presentation, condiments, team naming and other, related areas. For information about entering the contest and to submit the required paperwork, contact Julia Horner at: jhorner@mail.arc.nasa.gov, or ext. 4-4017.

This year's event will also include a country western/swing band, the California Cowboys, line dancing in the street in front of the Ames Café Mega Bites, and a genuine rodeo roper. In addition, for a modest fee (and a signed waiver of responsibility), attendees will have the opportunity to ride a mechanical bull or dunk one of their favorite Ames 'personalities' in one of two dunk tanks that will be set up on site.

To add a little additional spice to the dunk

tank event, the Exchange will be conducting voting for those whom the Ames community would like to see as dunk tank participants. The voting will take place at Mega Bites through September 30. There is no requirement for requested participants to take part, but we will make every effort to seek their involvement as volunteers. So, stop by and cast your vote for who you would like to see in the dunk tanks.

At the event, chili sampling is free for all NASA employees, contractors and other on-site personnel and visitors. Each taster will be given the chance to cast their vote for the 'Peoples Choice' award. The other five category winners will be chosen by a select panel of judges. Trophies will be presented to the winning team in each of the five categories, plus the 'People's Choice' overall winner. Prizes are in the form of trophies only; there are no cash prizes for this event.

Ames fire department participates in firefighter burn relay

The morning calm of Ames Research Center was recently broken by the piercing sound of nearly two dozen fire service and

event, we are giving back to the community especially to those who need it the most--the children," said Engineer Frasch. "We received many compliments for hosting the start or the relay and would be glad to host this every year."

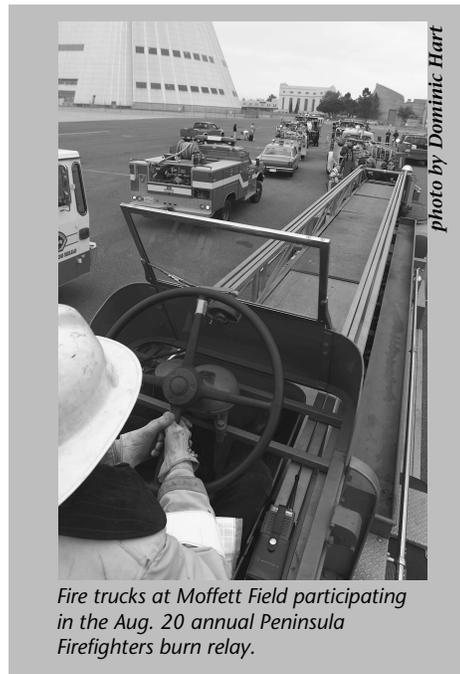
The relay began at the Moffett Field Fire Station and ended at the SFFD training cen-

ter visiting sixteen other fire services facilities along the peninsula to pick up donations and more trucks and engines. Truck 6, the flagship of the department, represented NASA and Moffett Field on the relay.

The Moffett Station started off the donations with a check for \$1,000. At the end of the relay, the burn foundation was presented a total of \$155,000. "With the word getting out to the Ames community, we raised \$1,000 on very short notice with two pancake breakfasts. This year we would like to do more by getting this community more involved throughout the year so we can support this event and other worthy causes," said Captain Bonin. Ideas for possible fundraisers this year include more pancake breakfasts, a golf tournament and a fireman's ball.

To volunteer for fund-raising events and planning efforts for next year's burn relay, contact Captain Bonin or Engineer Farsch at ext. 3-8592. For more information on the Alisa Ann Ruch Burn Foundation's Champ Camp, visit their Web site at: <http://www.aarbf.org/>

BY JONAS DINO ▲



Fire trucks at Moffett Field participating in the Aug. 20 annual Peninsula Firefighters burn relay.

photo by Dominic Hart

highway patrol vehicles. But instead of being a call of alarm, it was the proud proclamation of the beginning of an annual mission of good.

On Aug. 22, Moffett Field hosted the start of the annual Peninsula Firefighters burn relay to benefit the Alisa Ann Ruch Burn Foundation's Champ Camp. The week-long camp provides children a supportive environment to help sooth the emotional and physical pain caused by burn injuries.

"It was our pleasure to participate in this

Congressman Honda at Ames



Congressman Mike Honda visited Ames recently to tour the center aviation and aerospace facilities and hear briefings on air traffic management and aviation security.

photo by Dominic Hart

Former Ames employee Chuck Smith honored

Dr. Charles A. Smith, a former NASA Ames employee, recently received the 2002 Aerospace Engineer of the Year Award from the American Institute of Aeronautics and Astronautics (AIAA). Smith currently is manager of the Systems Engineering and Integration Office for NASA's Space Launch Initiative (SLI), at Marshall Space Flight Center, Huntsville, Ala.

The award recognizes an individual who has demonstrated extraordinary technical skill and leadership in the aerospace engineering profession. Smith received the award from the Alabama-Mississippi section of the AIAA. Smith began his NASA career at Ames

in 1980, conducting helicopter noise and vibration research. He held a variety of technical and management positions, including acting chief of the Aeronautical Technologies Divisions, assistant director of Aerophysics for facilities, and executive assistant to the center director. He joined Marshall in 1999, where he served as deputy manager of the Systems Engineering and Integration Office for the Space Launch Initiative prior to being named manager.

"I always respected Chuck for his technical and managerial expertise in the systems analysis area and for his leadership in several management positions," said James Arnold,

chief of Ames' Space Technology Division (Code AS). Smith's involvement with the SLI reportedly has "led to great opportunities for the center in the advanced engineering environment area, in which Ames Codes AS and AP are participating," Arnold said.

Smith received his bachelor's degree in aerospace engineering from the University of Michigan in Ann Arbor in 1967, and earned master and doctoral degrees in aeronautics and astronautics from Stanford University. A native of Detroit, Smith now lives in Huntsville with his wife, another former Ames employee and now an independent contractor, Annette Rodrigues.

Teachers become certified GLOBE trainers at Ames

Teachers and college faculty from around the United States became certified trainers for the GLOBE (Global Learning and Observations to Benefit the Environment) program at a workshop held at NASA Ames. NASA is the lead agency for this research and education effort which teaches K-12 students to carefully observe the world around them, collect and analyze scientific information according to specific protocols, and submit that data to GLOBE's worldwide data archive. The graduates of this workshop will train teachers in their own communities to conduct these protocols and implement the GLOBE program in their classrooms.

The GLOBE program studies hydrology, atmosphere, land cover and soils. Field work was part of each day's agenda, spent at local sites including Shoreline at Mountain View and the Palo Alto Baylands Nature Preserve.

NASA Ames manages a GLOBE partnership through its Education Office and conducts workshops for local teachers. "This event will bring new life to the GLOBE program in the Bay Area and beyond," said Bonnie Samuelson, who coordinates the local GLOBE program. "Collaborating with Hartnell College in Salinas, we'll be able to offer both professional development and mentoring for the many teachers here and on the central coast who are interested in participating in this program." Samuelson also notes that teachers traveled from Los Angeles and Bakersfield to attend her weekend workshop in April on GLOBE's soil investigations.

Two speakers from the Earth Science Division were featured during the workshop. Dr. Jean Palmer-Moloney, a NASA/ASEE summer faculty fellow, provided a local environmental context for the workshop by presenting her research on the baylands around Moffett

Field. Dr. Jay Skiles, of the Ecosystem Science and Technology Branch impressed participants with some of the fascinating projects conducted by Ames researchers. "The GLOBE

Train-the-Trainer workshops are an opportunity to showcase NASA capabilities and techniques in remote sensing of the Earth system," stated Dr. Skiles. "Such workshops are also a way of using NASA data in ways that will encourage educators and their students to explore data sets in the classroom that would otherwise appear too formidable to analyze."

shared many ideas that they can take back to their communities which will maximize the educational benefit of GLOBE while also contributing to the scientific research. One of



Educators conduct GLOBE soil studies at 'Shoreline' in Mountain View.



photos by Pat Helton

Bay Area teachers study hydrology as they become trainers for the NASA Ames GLOBE partnership.

the program's goals is to inspire the next generation of explorers. "The GLOBE program is an excellent way to teach science to students and to make teaching and doing science less intimidating for teachers," offered one participant. "Exposing GLOBE trainers to NASA data offers a means of non-traditional outreach to the public. NASA benefits from increased use of data and imagery, interest by the public in the agency, and potential recruitment of Earth scientists," said Dr. Skiles.

BY GLOBE PROGRAM COORDINATOR 

GLOBE colleagues from Michigan to Texas and from Mississippi to Washington state

NASA Ames to celebrate Hispanic heritage

This year, NASA Ames will commemorate National Hispanic Heritage Month by focusing on the many contributions and extraordinary accomplishments that men and women of Spanish and Latin American descent have made, and continue to make, as part of an important component of our workforce.

The center will pay special tribute to these individuals for their continued leadership, dedication, and outstanding service in the fields of science, education, business, politics and the arts.

Hispanic Americans are an important part of our history, politics and culture. Spanish-speaking people have lived in North America for over 500 years and have helped shape our laws and strengthen our democracy. Dennis Chavez, who served for nearly 30 years as our first Hispanic U.S. Senator; Federico Pena, former mayor of Denver, who was appointed Secretary of Transportation in 1992; Nydia Velazquez, who became first Puerto Rican woman elected to the U.S. House of Representatives in 1992; Cesar Chavez who spent much of his life working to improve health, wages and housing conditions for farm workers in Arizona and California; Louis Alvarez Nobel Prize winner, physics; Severo Ochoa Nobel Prize winner, physiology and medicine; and Ellen Ochoa NASA astronaut and former NASA Ames branch chief, are only a few of many prominent Hispanic Americans in public service, science and space exploration programs.

This year's theme for National Hispanic Heritage Month is 'Hispanic Americans: Strength in unity, faith and diversity.' A series of events are being sponsored by the Hispanic Advisory Committee for Employees (HACE) at Ames and the ARC Education Office in collaboration with the San José Tech Museum of Innovation.

On Sept. 17, Latin Folkloric dancers will perform between 12:00 noon and 1:00 p.m. in the Ames Mega Bites Café patio area.

Folkloric Ballet dance performances are a Mexican tradition, exhibiting indigenous ritual community settings that reflect Euro-

pean influences. Come and enjoy the performance. Admission is free.

On Sept. 27, the First Annual Hispanic Heritage Golf Tournament will be held at the Moffett Golf Course. Registration will be at 8:00 am, tee off is at 9:00 am and the format is best ball.

If you are a golf enthusiast, please come and join the fun! There are still tee times available. Admission is \$55. Contact Eric Kristich at ext. 4-5137.

Hispanic employee outreach

The Hispanic Advisory Committee for Employees (HACE) is one of several employee advisory groups to the Equal Opportunity (EO) Programs Office at NASA Ames. It was founded in 1974. Its objective is to assist Ames management in meeting Hispanic recruitment and retention goals, providing community support for Hispanics as well as promoting activities that educate and demonstrate how Hispanics can enrich the workplace.

One of the outreach programs is the Edison-McNair NASA Rocket Club, which was initiated by Mark Leon in 1990 at the request of NASA Ames in response to heavy gang and drug-related violence. It has been sponsored by HACE and various technical organizations from Ames for 10 out of 13 years. Many of the HACE members mentor the students throughout the year. It focuses on teaching middle school students the fundamentals of rocketry. Students move through five levels of advancement by building rockets from kits and raw materials. The students are paid NASA 'Rocket Bucks' for answering NASA questions correctly. These Rocket Bucks are then used to buy rocket kits, engines and other supplies need to build their rockets. Typically, a few students actually enter into science competitions. To date, over 300 students have participated in the NASA rocket club in East Palo Alto.

Members from HACE are active participants in community outreach programs, minority organizations, college recruiting activities, and other activities. Membership is open to any Ames employee. Meetings are usually held the first Thursday of the month in Bldg. N255, room 101C. Everyone interested is welcome to attend.



Above: Edison-McNair NASA rocket club student Juan José, (second from left), demonstrates a model of the space shuttle. A fellow student (left) looks on, along with Chad Fishbein, (third from left) of the Education Associates Program and Mark Leon of Code D (far right).



Juan José demonstrates a flight model of the space shuttle.

Fitness Center Monthly 5K Run or 2 Mile Walk/Run: September 17, meet outside the Fitness Center (building 221) before the 12:00 noon start. No cost. POC: Nancy Dunagen, ext. 4-5804.

Fall Exchange sale at Ames

The Ames Exchange is holding an inventory reduction sale during the month of September for its two gift shops, Beyond Galileo (Bldg. N235) and the Visitor Center (Bldg. 223). Some of the special savings you will find include 40 percent off all jewelry and polo shirts. Additional special sales can be found at each location. This sale applies to stock on hand only.

The gift shop hours at Beyond Galileo are from 8:00 a.m. to 2:00 p.m., Monday-Friday. At the Visitor Center, the hours are from 10:00 a.m. to 4:00 p.m., Monday-Friday.

Event 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 meet Tuesdays. Begin classes start at 6:15 p.m. Higher-level class meets at 5:15 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang, hhwang@dm1.arc.nasa.gov.

Ames Bowling League, Palo Alto Bowl on Tuesday nights. Seeking full-time bowlers and substitutes. Pre-league meeting at Palo Alto Bowl on Tues, August 28 at 6 p.m. 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://accrc.arc.nasa.gov>), 12 noon to 2 p.m., N-269, Rm. 201. POC: Joan Walton, ext 4-2005.

Ames Contractor Council Mtg, first Weds ea. mon, 11 a.m., N-200, Comm. Rm. POC: Paul Chaplin, ext. 4-3262.

Ames Diabetics (AAD), 1st & 3rd Weds, 12 noon to 1 p.m., at Ames Mega Bites, Sun rm. Support group discusses news affecting diabetics. POC: Bob Mohlenhoff, ext. 4-2523/email 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. 19, Rm 1042. Info: <http://www.afeu.org>. POC: Marianne, ext. 4-4055.

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 each month, 11.30 a.m. -1 p.m. POC: Diane Purcell ext.4-3232. Check Web site for monthly calender of events, <http://sail.arc.nasa.gov>

Environmental, Health and Safety Information Forum, first Thursday of each month, 8:30 a.m. to 9:30 a.m., Bldg. 19/ Rm 1040. URL: <http://q.arc.nasa.gov/qe/events/EHSseries/> POC: Julie Quanz at ext. 4-6810.

The Hispanic Advisory Committee for Excellence HACE Mtg, every first Thursday of the 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, N-269/Rm. 179. POC: Cathy Payne at ext. 4-0003.

Model HO/Hon3 Railroad Train Club at Moffett Field, Bldg. 126, across from south end of Hangar One. Work nights: usually Friday nights, 7:30 p.m. to 9:30 p.m. Play time: Sundays, 2 p.m. - 4 p.m. John Donovan (408) 735-4954 (W) or (408) 281-2899 (H).

Nat'l Association of Retired Federal Employees, (NARFE), 1st Fri. of ea. month. Join to protect your fed. retirement. Sept. 6, S. J. Chptr #50. HomeTown Buffet, 2670 El Camino, S. Clara, 11 a.m. lunch \$6.70, 12 noon sprk on "Rep's of League of Women Voters will explain Nov. Ballot." 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.

Ames Classifieds

Ads for the next issue should be sent to astrogram@mail.arc.nasa.gov by the first Friday following publication of the present issue 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

Wanted: French research scientist being assigned to work at Ames for a year around Sept. 1. He, his wife and two small children need 2 (pref. 3) bdrms w/some open area for the children, convenient to Ames & shopping. Limit \$1,800/mo. Irv (650) 960-6003 or (650) 966-1364.

Wonderful coastal listing in Moss Beach, Ca. 3 bd/ 2ba, large family room loft w/built in bookshelves and lots of storage. Coastal bike, horse trail nearby. Beautiful hrdwood floors, wood burning stove, huge master bdrm, gd size other bdrms. Large laundry rm. Large corner lot close to 1/4 acre all flat. His/her garages. 21 mls south of San Francisco. \$734,000. Sandy (408) 499-2708.

For rent: 4 bd/2ba house, W. San José, \$2,089/mo. 1063 Willmington Way. Quiet street. Fruit trees. Near schools, outdoor track & sports, shopping facilities. Interest on security deposit. Avail 8/1. Call (408) 788-9770 or (408) 996-0837 or email conradg@sprynet.com.

I'm looking for rent/or rent-to-own 3 bdrm house in Mtn. View area. Email: falcon7777_2000@yahoo.com

Northern California Retirement Living under Mount Lassen: 15+ acres of pines and cedar, approx. 3,000 ft. elevation, 1,700+ sq ft house plus Grandpa house, shop, deeded 4 miner,s inches of water, trout pond, and much more. Call (530) 474-1050 or (530) 474-1176.

Share 2bd/2ba condo in Mtn. View, with single employed female (owner). 1.5 miles from Cal train. Nice architecture and garden, W/D, pool, spa. \$600/mo. includes utilities (except long distance phone calls). Bonnie at bharvey873@aol.com or at (650) 968-6685.

For rent: spacious, cozy 2 bd/1ba dplx in the Moorland school area of w. San José. Close to Westgate, nice family neighbhrd, 1 car garage, fenced yard, convenient to HW 280 and 85. Owner occupied, newly renovated, security system, new dishwasher, W/D, high speed internet access incl. \$1,395/mo. First and last; no deposit; no pets, N/S. Avail. 10/31. Call (408) 517-1054.

Miscellaneous

Baby bed for sale. Asking \$150 mattress included. Excellent condition. Call (408) 859-2812.

Graco Play and Pac w/bassinnet, navy/white, like new, \$60. Also, Graco Jumper Bumper, like new, \$30. Call (408) 734-3477.

Black Honda civic LX 1997, excellent condition, automatic, includes A/C, CD, approx. 52K mls, Retail SP: 10,600. Asking for 9,500 or B/O. Call (408) 772-5121.

Looking for Mandarin speaking person for part time after school care, M-F, for 3 elementary school children, Sept 2002-June 2003. Must have car. Call (650) 906-8223.

San José Sharks tickets available for many games. If interested, call (408) 735-0524.

Maple futon frame folds in half in sofa position, slides down into double bed. Curved arm rests. Perfect for den/ guest room. Includes free futon! \$75 or B/O. Elizabeth (650) 218-7673.

Water dispenser, 2 spigots: room temp and ice cold. \$40. Men's golf club set w/bag and cart. \$75. Men's golf shoes, black, size 12B. \$10. Call (650) 968-4624.

Twin bed including black, metal headboard, bed frame and box spring. In excellent condition. Call for pics. \$45. Call (408) 295-2160 .

Newer Healthrider model aerobics machine in excellent condition. \$30. Call (650) 938-6546.

Rattan medium brown color dining table set w/oval glass table top (65 x 42 3/8" thick) and four cushioned swivel chairs w/arms. \$250 or B/O. Shirley (408) 777-0277.

Wooden swing and detached fort, slide and rope ladder play structure with many hours of play time left in them. Free. Dave (650) 588-5692.

Tanning beds, exc. condition. Vee (408) 923-5138.

Sailboat 1/4 partnership. 25' Pacific Seacraft in Fort Mason marina (San Francisco). \$3,500 or B/O. Email silvanopc@yahoo.com or (415) 826-3041.

Credenza/hutch, 20in x 30in x 46in, beautiful honey-laquer finish, exc. condition, \$350, Call (650) 473-0604.

Wanted: Ping-Pong table in good condition. Deanna (408) 260-1180.

Baby Trend Caravan Light tandem double stroller. Dark blue with white dot print. Complete with canopies and attachments for baby carrier. Very good condition. \$100 or B/O. Call (650) 255-3377.

House-sitting services available for Moffett/South Bay area. \$20/day. Pets, plants, mail, etc., included. Reliable, experienced, 29 year-old female. Call (650) 248-5755.

Transportation

'85 CRX Honda 5 speed, excellent condition, \$1,900 only. Vee (408) 923-5138.

'87 Corolla Toyota, automatic, excellent condition, \$1,600 only. Vee (408) 923-5138.

Mini motor-home, self-contained. 109K mls on '87 Ford Econoline engine. \$8,900 or B/O. Runs great. Nds some body work. silvanopc@yahoo.com or call (415) 826-3041.

'91 Ford F150, Fuel Injected 4.9L, 6 cylinder. Short bed, manual transmission. Good cond. Excellent mechanical cond. 3,800. Mike (408) 530-0647.

'91 Jeep Wrangler, 4.0 6cyl, drk blue, Rancho suspension lift, Mickey Thompson tires, chrome bumpers, flow master exhaust, 77K mls, CD, CB radio, proximity alarm, cover, exc. cond. \$7,500. Tim (408) 406-8242.

'93 Saturn SL1 4 Dr, 95K mls, 5-speed, AC, sun-roof, driver-side airbag, recent tires, CD player, green. Perfect student car. \$2,600 or B/O. Tom (650) 326-5337.

'95 Audio 90 sports sedan, forest green, looks good with 160K mls, CD changer, power moon roof, auto trans, \$4,500 or B/O. Dave (415) 759-5248.

'99 Explorer XLT, Loaded, 4dr 4WD, one owner, 100K mls, extended warranty, recent 60K service, 60K mostly highway, \$16.9K or B/O. Call (650) 906-5994.

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-223
(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. Sept. 8, Mamma Mia; Sept. 28, SF Giants

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, and more. Equipped. Summer rates. Call (650) 968-4155, DBMcKellar@aol.com

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

Vacation rental, Bass Lake CA 14 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 lovely canyon setting. Fully eqpd kitchen. Access to priv. beach. Tub in patio gdn. Halfway between Carmel & Big Sur. \$175/night for 2; \$225 for 4 and \$250 for more, plus \$150 cleaning dep. Call (650) 328-4427.

Incline Village: Forest Pines, Lake Tahoe condo, 3 bd/2 ba, sleeps 8. Fireplc, TV/VCR, MW, W/D, jacuzzi, sauna, pool. \$120/night low season; \$155/night high season. \$90 cleaning fee and 12% Nevada room tax. Charlie (650) 366-1873.

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

Astronomy lecture series kick off

SILICON VALLEY ASTRONOMY LECTURE SERIES

The Making of the Milky Way: Survival of the Fittest

Sponsored by:
 NASA Ames Research Center
 Foothill College
 The Astronomical Society of the Pacific
 The SETI Institute

**Wednesday
 October 9, 2002
 7:00pm - 8:30pm**

An illustrated non-technical program discussing how our Milky Way Galaxy formed by "eating" – like a hungry cannibal – nearby groupings of stars and cosmic raw material.

Speaker:
Dr. Leo Blitz
 University of California, Berkeley

Smithwick Theater
Foothill College
 Los Altos Hills, CA

Admission is free
 and open to the public

Please bring \$2 with you
 for the parking meters

**Call 650-949-7888
 for more information**



NASA Ames, Foothill College, the SETI Institute and the Astronomical Society of the Pacific will kick-off the fourth season of the popular Astronomy Lecture Series with a non-technical program on October 9 featuring Dr. Leo Blitz, UC Berkeley, discussing the formation of our Milky Way Galaxy. It formed, Blitz will reveal, by 'cannibalizing' nearby stars and cosmic raw material. The talk begins at 7 p.m. at Foothill's Smithwick Auditorium. Admission is free, but attendees are advised to bring eight quarters for parking. Five additional lectures will occur in this year's series.

OPM establishes disability web site

The Office of Personnel Management (OPM) has recently established a new disability employment Web site. The site will facilitate implementation of President Bush's 'New freedom initiative,' increasing opportunities for people with disabilities in all areas. Additionally, it will be a tremendous resource for applicants, managers and human resource professionals.

NASA's Office of Equal Opportunity Programs (OEOP) will be establishing a link on the OEOP home page to the OPM Web site; sharing information with various disability organizations and educational institutions in OEOP research and internship programs; and including an announcement on NASA Television. The site is located at: <http://www.opm.gov/disability>

Ames Public Radio & Phone

1700 KHz AM radio -- information announcements and emergency instructions, when appropriate, for Ames employees. The emergency information phone number for Ames is (650) 604-9999.

Astrogram deadlines

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.

<i>Deadline:</i>	<i>Publication:</i>
Sept. 25	Oct. 2002
Oct. 30	Nov. 2002



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