

Astrogram



'Return to Flight' stirs emotions, elicits support

By all reasonable yardsticks, NASA's STS-114 mission marking the agency's return to flight after a two-and-a-half-year hiatus was a remarkable success. Except for the continuing concern about foam shedding, a problem that has now led to the grounding of the shuttle fleet through March 2006, the flight of Discovery went off without a hitch. Tile dings on the shuttle were less than one-sixth those of previous flights, the crew successfully tested new on-orbit technologies designed to enhance safety, and NASA and the nation demonstrated America's continuing commitment to the human exploration of space.

But the technical and safety accomplishments of the mission, as important as they are, represent only one side of the RTF story. Just as significant was the tremendous interest and overwhelming outpouring of support that came from all corners - within NASA, and from the news media, the American public and around the world.

As most of you know, shuttle Discovery was set to land at the Kennedy Space Center in Florida very early in the morning on Monday, Aug. 8. Given the media's tremendous interest in the landing and believing that the public might want to be a part of the RTF mission, the Ames Public Affairs Office decided to open its NASA Exploration Center at 11 p.m. at night on Sunday, Aug. 7, even though the first opportunity for a landing would not occur until 1:46 a.m. Monday morning Pacific time.

The response, from all quarters, was amazing. Before the Exploration Center even opened, the parking lot was filling up, a line had formed at the door and

seven television crews - from San Jose, San Francisco and even Sacramento - had set up shop and were ready to roll. Nearly every member of the Public Affairs Office turned out to staff the event,

the crowd remained upbeat and hung in until the night's activities wound down some time close to 3 a.m. And they didn't leave frustrated and upset that they missed the landing. On the contrary,

they left announcing that they would be back the next night to do it all over again. And so they were.

On Monday night, over 100 brave soles turned out again, filling up the front portion of the theater by shortly after 11 p.m. One guest brought four large containers of coffee to keep everyone awake. It turned out to be a good thing, as we experienced two more wave offs at Kennedy due to bad weather. Finally, we learned of the decision to land at the back-up site at Dryden Flight Research Center when mission control asked Commander Eileen Collins, "how would you like to land on a cool, clear night in the desert." That was fine with an astronaut crew eager to get home, but the 5:11 a.m. Pacific landing was far too late to sustain public or media interest, we speculated. Our concerns turned out to be unfounded.

The staff, the media and the public all stayed put -- through the entire Discovery re-entry sequence, from the de-orbit burn at 4:06 a.m., to the landing at 5:11 a.m., the exit of the crew from the shuttle, and the interviews and news conference that followed. And everyone was in a terrific mood, including the media representatives eager to cover a feel-good story. People in the front three rows of theater seats did not move from 11 p.m. until nearly 6 a.m. the next morning. And the cheer when the shuttle

continued on next page



NASA Ames contributions to Return to Flight, STS-114 mission.

and it was a good thing they did. Well before midnight, the large screen theater was filled with close to 200 guests. Whole families showed up from as far away as Richmond and Modesto, just to see history made, first-hand. Members of the public even brought food for the staff, knowing of their sacrifice and the late night work assignment.

Despite two 'wave offs' at Kennedy due to low clouds and possible thunder storms, and NASA's subsequent decision to postpone the landing 24 hours,

‘Return to Flight’ stirs emotions, elicits support

continued from front page

touched down was reminiscent of the early days of the space program, harking back to a time when human space missions did not seem so matter of fact.

really thinks of what we do as an agency. Though it may be short-lived, the expression of public pride and the outpouring of support surrounding events



Visitors in the NASA Ames Exploration center looking at the exhibits while waiting for the Space Shuttle Discovery to land.



Local news media watched the landing of the Space Shuttle Discovery.

explore new frontiers in space. If we could keep that spirit going – both internally and externally – on a continuing basis, there’s no telling what NASA and

In the two-night sequence of events, NASA and Ames received great media coverage for the successful mission. And several members of Ames’ technical staff -- John Allmen, Dan Leiser, Joel Kearns and Chuck Smith – provided terrific support, staying late into the night to give interviews and talk to the public about the mission and Ames’ contributions.

It is in times of greatest challenge – in the course of success or the wake of tragedy – that NASA people typically show their mettle, pulling together as a group to do what needs to be done. And so it was with STS-114.

It is also at such times that we get our purest glimpse at what the public



Audience members waited pensively in the NASA Ames Exploration Center for the landing of the Space Shuttle Discovery. *NASA photos by Tom Trower*

like the shuttle’s return to flight is what sustains us through the challenges, the failures and even the successes. It is great to see that the American public still supports NASA and retains its desire to push back the boundaries and

America could accomplish as we implement our vision to explore the moon, Mars and beyond.

BY DAVID MORSE

New 'solar skin' may revitalize historic Hangar 1

A new 'solar skin' on Hangar 1 could make electricity, reduce pollution and even replace the corrugated metal that now covers this historic Silicon Valley landmark.

Hangar 1 is a San Francisco Bay Area regional icon and a planned cor-

building-integrated photovoltaics followed the U.S. Navy's stated plan to remove the metal skin or demolish the entire structure as early as 2006 to prevent toxic run-off.

The hangar's transformation into a world-class, interactive education and learning center of the future, to be called Space World Hangar One, is threatened by polychlorinated biphenyls (PCBs), lead and asbestos layered into its 800,000 square feet (74,322 square meters) of corrugated metal cladding.

Community action groups have asked the Navy to extend its time line and pro-



Hangar 1 with vintage military aircraft, circa 1934. (U.S. Navy photo)



Moffett Field, circa 1934. U.S. Naval Air Station, Sunnyvale, looking east. (U.S. Navy photo)

nerstone of the emerging NASA Research Park at NASA Ames.

Ames Facilities Management and Research Park divisions recently announced an opportunity for developers and renewable energy service providers to use the hangar's massive, complex steel frame to support a new and vibrant solar skin. The announcement can be found on the Web at <http://researchpark.arc.nasa.gov>, under the business opportunities link.

"Whoever would construct and install the solar materials on Hangar 1 would have the right to the electricity generated by them, and could sell the power to NASA or the surrounding community," said Sandy Olliges, deputy director of safety, environmental and mission assurance at NASA Ames.

Built in 1932 to house the 785-foot (239-meter) long dirigible airship Macon, gigantic Hangar 1 is listed on the National Register of Historic Places. Hangar 1 comprises eight acres of floor space, is 198 feet (60 meters) tall, 308 feet (94 meters) wide, and 1,140 feet (347 meters) long. The 'Announcement of Opportunity' to update the hangar with

vide a more detailed analysis of remediation options. That process is now underway.

The solar-skin option provides a window into both NASA's future and past. A solar skin could produce up to 5 megawatts of clean energy. It could power the proposed state-of-the-art SpaceWorld education and learning center and additional structures in the NASA Research Park, or it could be sold to external users.

NASA's exploration mission requirements catalyzed the earlier development of solar and fuel cell technologies. This project could demonstrate NASA's spin-off story.

Interested parties wishing to attend a Hangar 1 site visit on Sept. 6 should

reply to Keith Venter via e-mail Keith.Venter@nasa.gov at NASA Ames. Proposals are due by Oct. 14 to Venter. Please consult and follow the instructions on the formal Announcement of



The Dirigible U.S.S. Macon arriving at Hangar 1, Oct. 5, 1934, from Opalocka, Fl. (U.S. Navy photo)

Opportunity at the business opportunities link provided previously.

Historic images of Hangar One can be found at: <http://www.nasa.gov/centers/ames/news/releases/2003/03images/hangar1/hangar1.html>

BY DIANE FARRAR

NASA drill will help search for life on Mars

Mars is desert-like and much colder than Earth's Antarctica. Nearly all the time, the temperature on Mars is far below zero. Its surface is much too frigid, and the martian air is too thin for liquid water to occur. Life as we know it requires liquid water.

A pair of NASA Voyager spacecraft landed on Mars in the 1970s to look for life. They scooped and tested the martian soil, but they did not find solid evidence of life. In addition, various



The 'Mars Drill' at Ames (above) brings subterranean 'core' samples to the surface that are 10 inches (25 centimeters) long and one inch in diameter (2.5 centimeters) while operating with low power and no drilling fluids. An automated core-and-sample handling facility extracts the cores from the drill, passing them to a suite of instruments on a 'Mars lander platform' for analysis.

spacecraft have observed clouds and dust devils in the very thin atmosphere that is mainly carbon dioxide.

What is more, spacecraft have seen empty riverbeds that indicate that water once flowed on the surface, according to many scientists. More recently, two NASA Mars Exploration Rovers (MERs) landed in early 2004 and found geologic evidence that liquid water had indeed existed long ago on Mars.

So, if there were life on Mars today, how would we find it? By drilling for it, according to Carol Stoker, a scientist at Ames and principal investigator for the

Mars Astrobiology Research and Technology Experiment (MARTE). Astrobiology is the study of life in the universe.

"Drilling deep below the martian surface offers the best opportunity to find evidence of current, living organisms on Mars because liquid water may exist there today," Stoker ventured.

"We can find evidence of ancient environments that may have hosted liquid water on the surface of Mars by exploring the surface with rovers, and that's what NASA is currently doing," Stoker said. "Liquid water environments on the ancient martian surface might have hosted living organisms, and it is possible that life may have left a fossil record that can be discovered on the martian surface."

"However, the current surface of Mars is really a very nasty place for living organisms. It's very cold, well below freezing. The atmosphere is very thin, and liquid water can't occur," Stoker explained.

In order to seek life in the martian subsurface, robotic drilling, extraterrestrial sample handling and life-detection technologies must be developed, according to Stoker. "Robotic drilling for Mars exploration is in its technological infancy, and key technologies have yet to be demonstrated even in a terrestrial environment," Stoker noted.

To advance the state of the art of robotic drilling technology, Stoker is overseeing development of a prototype drilling system. Using this newly developed drilling system, NASA researchers plan to simulate a Mars mission later in 2005 near the Rio Tinto, a river in southwestern Spain.

Marte is the Spanish word for Mars, and the Rio Tinto area in Spain is also where Stoker and her team earlier performed drilling experiments to search for subsurface life in a Mars analog environment—an environment that may well be similar to one within the martian subsurface. Researchers used these earlier experiments to guide development of technology for Mars drilling and for searching for life in subsurface samples.

Before returning to Spain, the team tested the new robotic drill and sample handling system for the first time in Bonny Doon, Calif., near Ames.

Describing the MARTE drill, Stoker

said, "I think it may be one of the most complex robotic devices ever built—certainly, the most complex robotic drilling system ever built."

The drill platform includes a suite of scientific instruments that is able to search for evidence of life in samples the robotic drill has extracted from below ground. The drill rig is about 8 feet (2.4 meters) tall and sits on a three-legged platform about 7 feet (2.1 meters) in diameter. The six-sided, hexagonal drill platform is in the shape of a Mars lander, much like the Phoenix lander that is scheduled to go to Mars in 2007.

"The drill uses less than 150 watts of power when it is drilling with carbide-diamond cutters, and the drill uses no drilling fluid," Stoker said. She also noted that the drill "makes core," plugs of rock that are about 8 inches (about 20 centimeters) long, and brings them to the surface.

"Other things mounted on the lander platform include a device called the core sample handling system," she continued. The system processes cores after the drill brings them to the surface, according to Stoker.

The drill's robotic machinery transfers each core to a clamp, which is mounted on a rail. "And the clamp, then, moves along the rail and runs the core under a set of instruments—cameras and spectrometers—that look at the core, examining it for interesting features that might indicate biological activity has occurred," explained Stoker.

A reflectance spectrometer is an instrument that measures reflected light from a given material to determine what that material is made of. Many spectrometers include a narrow slit that splits incoming light into its components, much like a prism splits white light into a rainbow of colors. Somewhat like a fingerprint that helps identify people, 'spectral data' from a rock can enable scientists to identify minerals that comprise it.

After the cameras and spectrometers gather data from the cores, the core sample handling mechanism stores the cores in a rack on top of the platform until scientists have a chance to examine the data in more detail and can decide what core material to examine more closely.

"The data can be transmitted to sci-

continued on next page

NASA drill will help search for life on Mars

continued from previous page

entists located in another site," Stoker explained. "If the drill rig were on Mars, those scientists would be located on Earth. They would look at those images and spectra and decide if there's anything interesting in those cores that warrants further sampling."

"If scientists decided that a location on a specific core was particularly interesting, that core would be retrieved from the rack, and then sub-sampled using a saw that would cut a piece out the core. That piece is next placed in a crusher that crushes the rock into powder," Stoker said.

"Then the powder is placed into another set of instruments that look for evidence of biological activity—signs of life. In fact, one such instrument is called the 'signs of life detector.' This automated life detection instrument can identify many kinds of biochemical compounds, microorganisms and their metabolic products," Stoker added.

"The subsurface of Mars might have abodes that life could be thriving in at the present time," Stoker explained. "There is quite a bit of evidence that liquid water exists in the subsurface of Mars, at least in some locations. And so, you have the best chance of finding extant life today by getting into that subsurface environment where there's liquid water," Stoker said.

Forms of life that might be beneath the surface of the planet would be shielded from harmful ultraviolet light that penetrates the thin martian atmosphere and bathes the martian surface, according to scientists. But, ultraviolet

light can kill life.

"On the Earth, we're shielded from ultraviolet light by the atmosphere, but on Mars there isn't enough atmosphere, and there isn't enough of the right kind of compounds in the atmosphere to shield the surface from very intense ultraviolet light. So the surface of Mars is not a nice place for life," Stoker noted.

Researchers also think that—as on Earth—microbial life on Mars may be able to exist underground, without the benefit of sunlight, by living off of chemi-

cal energy. There are such microbes deep inside Earth—life forms that scientists call 'extremeophiles' because they live in extreme environments of heat, cold, acidic or alkaline conditions.

The NASA Astrobiology Science and Technology for Exploring Planets program and the Centro de Astrobiología, Madrid, Spain, sponsor MARTE. More information about the project can be found on the Web at: <http://MARTE.arc.nasa.gov>

BY JOHN BLUCK

Women's Equality Day celebrated



NASA photo by Astrid Terlep

On Aug. 24, the newly reinstated Women's Advisory Committee (WAC) at Ames hosted an event to celebrate Women's Equality Day. Ames Center Director G. Scott Hubbard took time out of his hectic schedule to address the crowd, noting the value that women employees bring to NASA Ames and remarking on the caliber of the panelists. Panelists included Deb Feng, Laura Doty, Bonnie Dalton and Emily Holton, with Sally Mauldin serving as the moderator. The WAC is a voluntary advisory group that is organized and operated by Ames employees. The next meeting of the group will be held on Sept. 15.

Abrego, Shaw named 'Top Minorities in Science'

Two Ames scientists have been honored by a leading science publication for their work. Science Spectrum magazine named Anita Abrego, an aerospace engineer in the Aeromechanics Branch of the Flight Vehicle Research and Technology Division, and Tianna Shaw, manager of the Facilities Utilization Office in the Life Sciences Division, as among their Top Minorities in Science for 2005.

Abrego was astounded to find out about the accolade. "To be recognized alongside the many others receiving

this award, including my friend and co-worker (Shaw), is definitely an honor," she said. She hopes the recognition of minorities in science will inspire more of them to work and study in the field.

"To inspire others to achieve is worth much more than the recognition of an individual's efforts. Role models are important when inspiring young students from minority communities," she reflected. "Often times I am asked to speak to middle school, high school and college students about

my education and career path. And, this award can be viewed as one of the many opportunities of achievement."

The honor, as selected by the magazine's editors, comes as an added bonus for winner Shaw, who is currently on maternity leave after giving birth to a baby boy, Nicolas, on June 26 of this year.

Abrego and Shaw will be feted at the Minorities in Research Science Conference, Sept. 16 - 17, in Baltimore, MD.

BY KELLY GARCIA

A tribute to Dori from her many friends at Ames

Dori Furman, former secretary to the deputy center director, passed away on July 1, 2005, three years to the day after she retired from NASA Ames. Tributes have been pouring in from colleagues and friends ever since.

Dori began her federal service in May 1959 and worked through April 1967 at the Naval Air Test Facility at NAS Lakehurst, NJ. Then, after much persuasion, her husband Joe convinced Dori to move to California. He had been discharged from the Navy in San Francisco in the late 1940s and, having fallen in love with California, always wanted to return.

So, in 1967, Dori came to work at NASA Ames where she made lasting impressions on everyone she worked with. In the words of Hal Sandler, her supervisor in the Biomedical Research Division from 1972 until his retirement in 1989, "she was bright, loyal, steadfast, kind and willing to listen." Her loyalty to her 'beloved' IBM Selectric typewriter ended only when he literally moved and hid the machine one night, and was the recipient of her "choice words" the next day. Sal Rositano describes her as "the anchor in the storm for us in those fun and crazy days." Mal Cohen says of Dori, "she was really someone special, and I am most sorry to hear of her passing."

Ken Souza 'enticed' Dori to work for him in the Space Life Sciences Payloads Office in 1989 where he described her as an excellent listener, known for her interpersonal skills. Ken said, "it was a pleasure to have known and worked with Dori; I'll never forget her." Joan Vernikos, who worked with her in the Physiology Branch, described her as a "breath of fresh air," and someone who "took care of me." Few people realized the worry Dori was going through at that time as her son, Bruce, had gone off to Vietnam. "Back then, she told Joan that, as much as she enjoyed working with her, 'not to get any ideas because she would never work for a woman!' And she stuck to that promise through her entire career.

Joanie Jaynes, secretary to more than one center director, said of Dori, "she was still the 'trooper' that we all remember her as being – a good woman and



Dori Furman with her granddaughter Aleta Furman.

excellent secretary and friend." Bonnie Dalton, deputy director of Science, commented that she "loved Dori's sense of humor and her wonderful skills and attention to detail."

Ken Christensen worked with Dori in the Director's office from 1998-2000 and remarked that, "she had a way of mentoring people, even if you did not want to be mentored. She treated me like a son; the world would be better off with more Dori's."

Sid Sun of the Life Sciences Division said "I adored Dori and admired her spirit and spunk. Her death leaves a big void in the world." Dani Goldwater wrote, "I always thought of Dori kicking up those high-spiked heels and having fun in retirement."

To Linda Franklin, who was in the Life Sciences Division with Dori, she was as a "kind teacher and a good friend." To David Morse, assistant director for External Relations and Development, "Dori was a sweetheart."

Working in the same room with Dori was an education in itself for Donna Lacy when they were in the Science Directorate. "She was always the true professional, extremely loyal to everyone she worked for and with. She was the champion to 'her' secretaries and wouldn't hear of anyone taking advantage of them. She was the best darn proofreader I ever knew, and our outgoing correspondence bled from her ever-present red correction pen! But, the thing that I will miss the most is my friend's great sense of humor."

Dori's long-time friend, Jean Nozaki, wrote "When I first came to Ames, Dori was my mentor and she helped me learn the Ames system. We compared notes on our elderly parents and she felt like one of the family. She will be missed."

To Larry Manning, whom she worked with in the Science Directorate, "Dori was a delight to work with, and cared for the people she worked with. She also carried a pretty sharp pin and kept one from getting too full of themselves."

When Bill Berry returned to Ames from NASA Headquarters in 1994, Dori was ready to train her new boss. "She shaped me up immediately," he said, "and made it clear who was in charge. From then until I retired, she made my day-to-day work life so much more bearable for which I will be forever grateful."

Among Dori's numerous awards, the NASA Honor Award in the form of the Exceptional Service Medal presented in 1999 may have been the one she valued most.

Dori is survived by her son, Bruce, his wife, Tammy, and grandchildren Joey (15), Aleta (25), Jadon (24) and Sarah (22). Dori moved to Vermont in March of 2004 to be near them. Bruce gave his Mom probably the best tribute of all when he wrote, "It was an honor and a privilege to have Dori Furman as my mother."

Logistics team and Diane Farrar receive sustainability awards

The Environmental Services office (Code QE) recently presented the Ames Sustainability Award to the Logistics Management Team and to Diane Farrar for their individual efforts to promote sustainability in Ames operations. Each year, Code QE selects an individual or team nominated to receive the award for an activity or project that helps Ames to improve efficiency of resource use and reduce pollution.

The Logistics Branch, through their contract with Tessada and Associates, has successfully improved Ames purchasing practices for environmentally preferable (EP) or 'green' products. The primary services that the Logistics contract provides to the Center are: transportation and fleet maintenance, the on-site AIB supply store, janitorial services, refuse removal and the recycling program. Logistics has done more than any other organization on-site to institutionalize the purchase of EP products. Buying 'green' products is now standard operating practice for the support services that Logistics provides.

Specifically, Logistics instituted a practice to issue 100 percent post-consumer content (PCC) copier paper to support the Center's goal to have at least 10 percent of all its copier paper purchases (approximately 900 cases) meet the 100 percent PCC by 2005. Logistics exceeded this goal when they purchased over 3,000 cases of the Boise Cascade Aspen 100 paper last year. In addition to the copier paper, some of the EP products Logistics procured in 2004 while delivering their services are:

- Biodiesel 20 for diesel vehicles and backup power generators 31,440 gallons
- Re-refined motor oil for vehicle maintenance 330 gallons
- Plastic garbage liners with at least 10 percent PCC plastic
- Sanitary tissue with 10 percent to 40 percent PCC paper 1,184 cases

Earlier this year, the Logistics Management Team was nominated for the White House Closing the Circle Award for their EP purchasing practices. One

focus of the nomination was the janitorial services contract that became part of the prime service contract supporting the Logistics organization when renewed in 2004. The scope of the contract was modified to add janitorial services as a new component of the contract to be managed by the Logistics organization. The Logistics Management Team wrote contract specifications that required the contractor to purchase supplies containing recovered materials and products with ingredients that are either non-toxic or environmentally preferable. In accordance with these specifications, Tessada is providing 'green' cleaning products. The two cleaning products used most regularly by the janitorial staff are an all purpose cleaner, which is a water-based detergent used for bathroom and general cleaning, and a floor finish product containing diethylene glycol monoethyl ether. The ingredients in these products fall in the lowest health hazard category for janitorial products as determined using the Janitorial Product Pollution Prevention Project (JP4) evaluation tool. The JP4 tool was developed under a grant sponsored by US Environmental Protection Agency, the California Department of Toxic Substances Control and the Santa Clara County Pollution Prevention Program, to evaluate the health risks of janitorial products. The JP4 tool is available online at <http://www.wrppn.org/Janitorial/jp4.cfm>.

Farrar has been active helping Ames be a leader in environmental stewardship. Farrar has advanced several renewable energy studies recently including commissioning the National Renew-

able Energy Lab to study the feasibility of installing a photovoltaic array on Hangar 1, and working with NASA to



Michael Dudley, director, Safety, Environmental and Mission Assurance Office, Code Q, presents the 2004 Ames Sustainability Award to Diane Farrar, Code ED, for promoting sustainable operations at Ames by securing world-renowned environmentalist/architect Wm. P. McDonough for an Ames speaking engagement and for initiating a study of the feasibility of using building-integrated photovoltaics on Hangar

lease roof-top or other space for private development of a solar thermal system that generates electricity and captures process heat for HVAC heating. Farrar presented an update of her Ames projects at the December 2004 Federal Network for Sustainability meeting hosted at Ames.

In addition to her solar projects, Farrar worked for three years to have Bill McDonough, a world-renowned environmentalist/architect, to speak at NASA Ames. McDonough presents his vision of "cradle-to-cradle" industrial design to motivate institutions to change how they design and operate. The Ford Motor Company chose McDonough to re-design its Ford Rouge Dearborn truck plant in Michigan. One of its many green features is a 10-acre living roof, the largest of its kind in the world, expected to retain half the annual rainfall that falls on its surface as well as provide habitat and reduce energy costs. In 1996, McDonough became the first individual to receive the Presidential Award for Sustainable Development, the nation's highest environmental honor. He was

continued on page 8

Ames' LGBT Advisory group celebrates LGBT Pride Month

Every June, gays and lesbians across the globe celebrate diversity as well as civil liberties and rights for all during LGBT Pride Month. Charter members of Ames' newly-formed Lesbian, Gay, Bisexual and Transgender Advisory

that comprises American society, even in the Bible belt.

Jana Marcus, a professional photographer with over 20 years of experience, presented a slide show of her current work. "Transfigurations: The Making of

world's most accomplished transsexual advocates and educators, spoke about gender variance and diversity.

During six weeks starting in February of 2004, the mayor of San Francisco suddenly ordered that same-sex marriage licenses be issued. The events of that month were captured by filmmakers Geoff Callan and Mike Shaw in Pursuit of Equality. This emotionally charged documentary film puts a face on American citizens who strive for equality, and confront the struggles associated with their homosexuality and their desire for their marriages to be accepted by the rest of the nation. Pursuit of Equality won the Audience Award for Best Documentary at the 2005 San Francisco International Film Festival. Filmmakers answered audience questions and attended a reception following the screening.

The San Francisco Pride celebration is one of the world's largest gay pride events. This year's pride parade featured members of Ames' LGBT advisory group, their families and supporters. The Ames group is one of the few federal agencies to have marched in the parade.

LGBTAG members meet on a monthly basis. All friends and supporters are welcome to attend. E-mail Guadalupe.M.Armendariz@nasa.gov for more information, and/or to be placed on the group's confidential mailing list.

BY JULIA BULKOWSKI



NASA Ames Research Center LGBT Advisory Group members, family and friends at the beginning of the parade route at the San Francisco Pride Parade on June 26, 2005.

Group organized and carried out several events in celebration of LGBT pride, to help cultivate a community of LGBT employees and supporters and to promote the acceptance of LGBT employees at Ames.

The group sponsored a showing of a documentary on the struggle for LGBT civil rights in middle America called 'Shades of Gray,' a photography slideshow and lecture on female-to-male transsexuals, a showing of 'Pursuit of Equality', a feature-length documentary on San Francisco's endorsement of same-sex marriages in 2004 and group members marched in the 35th annual San Francisco LGBT Pride Parade.

Shades of Gray is a short documentary film that focuses on the small community of Lawrence, Ka. When the Lawrence City Council is approached with a proposal to add the words 'sexual orientation' to its nondiscrimination policies, a struggle ensues between the citizens of Lawrence, outside anti-gay influences, religious organizations and activists. Despite the odds, Shades of Gray ends on a positive note, illustrating how homosexual women and men are very much a part of the moral fiber

a Man' which explores female-to-male transsexuals and their notions of masculinity, as well as pre- and post-surgery body transformations. It was included in the prestigious 'Best Photos of the Year 2004 and 2005' by Photo District News, as well as in The Center for Photographic Arts Award Exhibition 2004. Marcus spoke about her art and gave a slide show presentation of her photographs. Jamison Green, one of the

Sustainability awards presented

continued from page 7

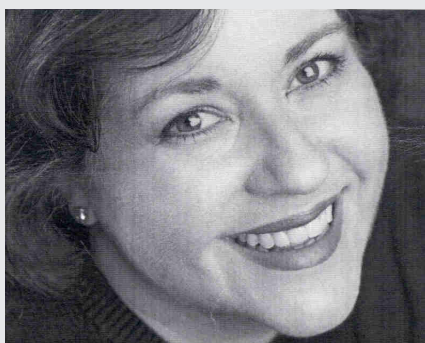
also winner of the nation's Green Chemistry Award under the Bush Administration. McDonough waved his regular speaker fee of \$20K as a result of Farrar's efforts. McDonough spoke to a full house at the N-201 auditorium, attracting many members from the surrounding communities and businesses.

Who's next? You may be working on something right now that has envi-

ronmental benefits, whether by intention or as a result of a 'non-environmental' activity; for example, a project to reduce your group's operating costs. If so, you or someone you know could be the next recipient of the Ames Sustainability Award. Code QE will accept nominations for the award any time. Forms are available on the Web at <http://q.arc.nasa.gov/qe/p2/>.

Dianne Derby - A celebration of life

Ames lost a former employee and a uniquely bright star on Aug. 11, 2005.



Dianne Derby

Dianne Derby, 43, died after a three-year battle with lung cancer.

As a graduate student in the field of organizational psychology, Dianne

joined the Human Resources Development Branch in 1988. She quickly earned an Agency reputation for her superior work in management and organizational development. Ames friends and colleagues who encountered Dianne will remember her enthusiasm, competence and memorable sense of humor.

Dianne met her husband, Kevan Garrett while working at Ames. After leaving Ames in 1998, she began her own consulting firm known as Atrium Consulting as a business coach and organizational development consultant. She was extremely successful and worked with a variety of companies, both in private industry and government.

When she was diagnosed with lung cancer, she took the news, not as a set

back, but rather a challenge and opportunity to teach others about her experience. She volunteered to be interviewed by the American Cancer Society in a yet-to-be-released documentary. This teaching tool will help both patient and family better understand the disease and how to deal with the impacts of cancer and its effects.

On Aug. 19, a celebration of her life was held at the World Trade Club in San Francisco and hosted by Kevan, family and friends. The following organizations were close to Dianne's heart. Donations may be made in honor of Dianne Derby. The Lance Armstrong Foundation, www.livestrong.org; the American Cancer Society, www.cancer.org; and the American Lung Association, www.lungusa.org

NRP lecture highlights robot 'Grand Challenge' race

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Carnegie Mellon
RED TEAM
www.redteam.org

NASA Research Park
Exploration Lecture Series

In partnership with Carnegie Mellon University presents
an outdoor lecture on

The 2005 Grand Challenge
RACING FOR THE FUTURE

September 20, 2005 @ 7:00 pm

Come Early! Exhibits and Historic District Open House
4:00 - 6:00 p.m., Refreshments Served

NASA Ames Research Center
The Parade Ground at Shenandoah Plaza
Moffett Field Exit off Hwy 101
Open to the Public • Free Admission

NASA: Explore. Discover. Understand.
www.nasa.gov
www.researchpark.arc.nasa.gov

Featuring Dr. William "Red" Whittaker
Professor of Robotics at Carnegie Mellon University
Red Team Leader
<http://www.redteamracing.org/>
Poster signing afterwards

Dr. William "Red" Whittaker, a leader in the field of autonomous robotics, will discuss 'Grand Challenge 2005,' a desert race of robots for a \$2 million prize, on Sept. 20 at NASA Ames.

The free lecture, sponsored by NASA Research Park and Carnegie Mellon University, will take place outdoors on the parade ground in the historic Shenandoah Plaza at NASA Ames from 7 p.m. to 9 p.m. Please bring a jacket or sweater.

All Ames employees and their families are welcome to attend. The public is invited from 4 p.m. to 6 p.m. to enjoy exhibits and a Historic District Open House. Refreshments will be served. The Ames Jazz Ensemble will play at 5:45 p.m.

The NRP Exploration Lecture Series is co-sponsored by the SETI Institute. For more information, visit www.researchpark.arc.nasa.gov or call ext. 4-1286. For more information about the Grand Challenge 2005, visit the Internet site at: <http://www.redteamracing.org/index.cfm?method=members.view&memberid=59>.

Multi-generational families at Ames

"If you ask 'what do you bring to a project like Columbia or your early work on IRAS and Spitzer?' I'd have to say it would be a passion for projects and the team environment" grinned Walt Brooks, chief of the Advanced Supercomputing Division. He takes



Walt Brooks and his grandchildren in front of the Columbia supercomputer at NASA Ames.

great pride in leading the team that created the Columbia super computer, calling it the highlight of his 27-year career at Ames. "It seemed like for the first time all the things I'd learned came together (the technology, the politics, and the connections) and that enabled the highly capable and high energy NAS team to do what they'd been training to do for 20 years."

"I wanted to do something that contributed to society, improve the environment," said Vanessa Brooks Genovese, a research scientist in the Ecosystem Science and Technology Branch "originally, to be a field scientist traveling to the Amazon, but then I think about my sensitive skin and my fear of spiders . . ." Genovese smiles. "Still, a part of me thinks it would be fun." Genovese is a contractor with CSU-Monterey Bay working on an Internet Mapping Service (IMS) called CQUEST to make environmental data available to a wide range of interested parties.

Brooks and Genovese, a father and daughter with different interests, but career paths that have led both to NASA Ames. Brooks' BS in physics from Rutgers University in New Jersey led to an MS and PhD in low temperature physics from Stevens Institute of Technology in New York. "It was an accident that I even interviewed with Ames,"

confesses Brooks. Needing help in cryogenics on IRAS back in 1976, an Ames manager went to Brookhaven National Laboratory to interview a post-doctoral candidate. The intended interviewee had already accepted a position and suggested the manager speak with Brooks

who was there working on his PhD thesis. "I kept on working while we talked," Brooks said. "I'm reviewing data, shuffling card decks - computer time was scarce and I had work to do!" An offer came in the spring of 1977 for a job in California. "My brother

was at Davis, and would send pictures of him by the pool, riding bikes . . . I wanted to go to California! It was the Garden of Eden!" Brooks, along with his wife Bernie and their two young daughters, headed west, settling in Mountain View and then Cupertino.

After IRAS, Brooks became the project manager on SIRTf. When SIRTf transferred to JPL in 1989 (known as the Spitzer Space Telescope after its 2003 launch), Brooks attended Stanford University on a Sloan Fellowship, obtaining his MBA. Returning to Ames, he was asked to go to NASA Headquarters to serve on the Space Station redesign team. After two years, he returned to Ames, and then retired in 2000 to pursue a career in wine making. In February 2003, he returned to Ames on an IPA as chief of the Supercomputing Division.

Genovese attended De Anza College and then UCSC, majoring in environmental studies with a near-minor in computer science. "I didn't have a passion for computer science, but I did a lot of it," she states. Following up on a suggestion from a professor, Genovese obtained an internship in the Earth Sciences Division in the summer of '95, and again in '96 after she graduated. "They needed someone who was familiar with GIS (geographical information systems) and the ArchInfo program." That and

her efforts to form relationships with co-workers led to a Johnson Controls contract position in the fall of 1996. She now works as part of the CSU-Monterey Bay cooperative agreement. She remembers getting the feeling from watching her dad that Ames was an impressive and stable place to work. "The idea of NASA sounds so glamorous," she states. "People are impressed" when she tells them she works here. "It's a good job to have on your resume."

Genovese says she thinks about getting her master's degree and admits that it'll be harder now that she's waited. Brooks echoes the sentiment: "I guess I kind of pushed her to get her master's, so of course she didn't," he laughs. "I got married, and had kids," she counters. "I'll take my grandkids over her master's any day," Brooks concedes. Devin is five and will start kindergarten in the fall; Angelina just turned two.

While she can get fully focused on an individual research activity, Genovese enjoys working as part of a team. She felt excited the first time a paper she co-authored was published. "It's great to be able to Google her and say 'that's my daughter!'" bragged Walt.

"One of the interesting things," adds Brooks, "is watching and hearing about her life at Ames as a contractor, experiencing NASA in a different way [than I did]." It's given him better insight into the concerns and treatment of contractors at Ames, and he hopes it helps him run a balanced team in his own area, to ensure everyone feels valued.

Brooks has put his pursuit of AA degrees in oenology, viticulture and wine marketing at Napa Community College on hold while leading the Advanced Super Computing Division. Last year's bottling from his vineyard included 'Columbia Cabernet,' with a super computer clearly displayed on the label.

This is the first in a potential series of articles about parents and children who both work (or have worked) at Ames as full-time, permanent employees (civil service or contractor). If you know of any other such relationships, contact Larry Manning at lmanning@mail.arc.nasa.gov.

BY LARRY MANNING AND VALERIE ADAMSKI

ASAP II first trimester safety awards presented

Under the Ames Safety Awards Program (ASAP) II, Ames recognized 32 employees for their outstanding accomplishments in improving health and safety during the 1st Trimester in 2005. ASAP II was established to recognize employee actions, behavior and/or job performance that result in improved health and safety conditions at the Center.

There are four levels of awards, tier four being the highest level of achievement. The ASAP II board evaluates each nomination and selects the tier level that most represents the actions and accomplishments of that nomination.

A team of 23 individuals and a team of four individuals received the highest team awards for this trimester.

The Emergency Response and Damage Utility Control team has a charter to respond in case of natural disasters, environmental emergencies and threats to homeland security. They participate in over 100 hours of additional training annually.

The Emergency Evacuation Assessment team assessed the strengths, weaknesses and successes of the divisions response to emergency evacuations. The outcome of the analysis was shared with employees during BEAP training as a tool to increase awareness of knowing and following emergency procedures.

Tier Level 3 – Individual awards

Marilyn Vasques
Shelleen Lomas

Tier Level 2 – Individual awards

Erlinda Fox
Marissa Travers

Tier Level 2 – Team awards

Emergency Evacuation Assessment

Beverly Davis
Earnestine Parker
Josefina Serrano
Sandra Glass

Emergency Response and Damage Utility Control

Jill Moudy
Matt Clapp
Lee Bradford
Randy Layne
Carman Morey

Ian Knott
Simcoe Walmsley
Danny Garo
William Gomez
Michael Baisely
Jesse Ugto
Daniel Mendolla
Rich Pattison
Ken Goodman
Chad Sanchez
Ian Vines
Andres Angeles
Rafael Bustamante
Carol Johnson

Ray Ellis
Mike Bishop
Tim Cetera
Ismael Garza

Tier Level 1 – Individual awards

Earnestine Parker

Each of these employees and teams was nominated by their colleagues for their outstanding actions and accomplishments in improving health and safety conditions at Ames.

León receives Diversity Award

The Hispanic Engineer National Achievement Awards Corporation (HENAAC) and TECHNICA magazine

academia. The selection committee was chaired by the dean of the College of Engineering, Computer Science, and



Mark León (left), chief, Education Division, is seen here with NASA Ames Center Director G. Scott Hubbard presenting him with the HENAAC 2005 Diversity award nomination certificate. The candidate for this award must have demonstrated that he or she has made a difference in an organization's approach to Hispanic advancement in education, job promotion, business development and community activities.

recently announced the HENAAC's 2005 award winners. Mark León, chief, Education Division was selected for the Santiago Rodriguez Diversity Award.

Winners in various categories are among this nation's best and brightest engineers and scientists. Winners are selected by the HENAAC selection committee, which is an independent group of representatives from industry, government including military and

Technology at the California State University, Los Angeles.

This year's awards will be presented on Oct. 7 in Anaheim, Calif., during the HENAAC's 17th Annual Awards conference. NASA Ames Center Director, G. Scott Hubbard has been invited to present the award to León. This is the second HENAAC award presented to an Ames employee in HENAAC's 17-year history.

BY LUPITA ARMENDARIZ

Make business more profitable - use laws of nature as example

What has mother nature done for us lately? Quite a lot, according to Gil Friend, president and CEO of the consulting firm Natural Logic.

In July, the NASA Ames Environmental Services Office hosted Friend for his presentation titled 'Risk, Strategy and the Laws of Nature.' During his talk, Friend outlined the business case for protecting the environment. He described how understanding the inputs (materials, energy and water) and outputs (products and wastes) that travel through a workplace provide powerful insights into opportunities to be more efficient and strategic.

Drawing on examples from companies as diverse as Dupont, Hewlett Packard and Odwalla, Friend made the connection between how businesses can actually create profit out of what would otherwise be considered "waste." He made this case by using the processes within nature as an example. Over 3.8 billion years, nature has learned, through trial and error, how to operate in a way that can be sustained indefinitely - and

that provides a model for human society. At one food processor client, for example, Natural Logic found that 75 percent of the company's output went down the drain - literally - in the form of wastewater. From a traditional management perspective, this loss was not a problem for a company generating \$60 million per year. The company was in compliance and the treatment costs were small at less than \$15,000 per month. Using his framework, Friend's team mapped out a business opportunity to replace that \$15,000 per month cost with a new, multi-million dollar revenue stream, by using that waste water to feed an aquaculture business, and produce tertiary quality water as a by-product.

The U.S. economy in general has enormous potential for waste reduction. When Friend asked the audience what percentage of the economy's physical output becomes product, and what percent is non-product or "waste," the audience was surprised by the answer. A mere six percent of the economy's physi-

cal output is product, and 94 percent is waste. Building on that point, he said that 80 percent of the product ends up in the landfill within 6 months.

The business challenge for organizations, according to Friend, is to figure out how to create more value by using less stuff. One instructive aspect of nature's sustainability lies in the fact that there is no waste thrown away. In nature, waste from one process becomes food for another.

How do Friend's concepts apply to NASA then? He asked the audience to answer that question by taking his theories and applying them to scientific invention and business design strategies in order to create better quality products and services, better economic performance, and better environmental health. He challenged the audience to look for innovative ways to operate NASA more sustainably by asserting that "NASA is full of people doing things that have never been done before. You understand innovation."

BY JUSTINE BURT

Environmental Services Office announcements

Are you the kind of person who pulls non-recyclable items out of the recycling bin or turns off lights when no one is in the room? Do you have ideas about how NASA Ames can reduce its environmental impact? Then the sustainability staff of the Environmental Services Office would like to meet you.

The Environmental Services Office is hosting two upcoming events. The first event will be held on Sept. 7, at 1:30 p.m. in the ballroom of the NASA Ames Conference Center, in Bldg. 3.

Janine Benyus, author of 'BioMimicry' will be presenting her theory on the concept of biomimicry, a new science that studies nature's models and then imitates or takes inspiration from these designs and processes to solve human problems, e.g., a solar cell inspired by a leaf.

The second event is a sustainability lunch discussion group, to be held Sept. 15, at 12 noon in the N-221 conference room.

Ames already has many excellent pollution prevention programs in place but there is more we can do. The best way to develop new programs is to learn from people working in each of the branches. Bring your lunch and join in the discussion.

If you have further questions, e-mail Justine Burt in Code QE at jburt@mail.arc.nasa.gov. For more information, visit <http://q/qe/events/BB/>

Save trees and lower operating costs

Did you know every ton of paper recycled saves 17 trees? By simply throwing your used paper into the recycling bin, rather than the garbage can, you can make a significant impact on the environment.

Recycling has an additional benefit of reducing our waste disposal expenses at NASA Ames, which helps lower the Center's operating costs. And of course, recycling helps preserve natural resources.

With this in mind, we are distributing new desk-side recycling con-

tainers to make recycling at work easier for you. To obtain your desk-side recycling container, please contact Mark Lacy at ext. 4-1406.

If you would like to learn more about the recycling program, read through the question and answer sheet located online at <http://q/qe/p2/Recycling/index.php#faq>.

Recycling container locations within each building can be found online at http://q/qe/p2/Recycling/recycling_locations.php.

Lessons learned in project management, systems engineering

The following is a summary of a lessons learned describing the importance of having an adequate suite of engineering data instrumentation on space flight missions and the challenge of maintaining this adequacy in the face of pressures to maximize science data. The importance of engineering data can not be understated since this information is critical for understanding the status of a spacecraft's condition and enables the mission to be managed such that its science goals are insured. In addition, the engineering data obtained from current missions is vital to the design of those in the future.

Several senior engineers shared the following lessons concerning the lack of sufficient engineering data on flight projects. First, insufficient engineering data does not allow active missions to effectively manage off-plan events (hazards or opportunities) such that a spacecraft's health and its critical science data acquisitions may be jeopardized.

Second, insufficient engineering data does not allow new missions to be confidently designed by analogy so NASA must start over each time and/or continue to use what may be unnecessarily high design margins. Worse, post mission analysis does not have sufficient data to determine the factors contributing to either the mission's success or failure, meaning lessons learned and knowledge capture is inadequate.

Third, the most common reasons for the lack of sufficient engineering data instrumentation on flight projects stems from the fact that mission managers are resistant to include it since it cuts into their weight, power and complexity budgets which are biased towards scientific data collection and the fact that, prior to the Agency's new vision, the engineering data needs of future missions had either not been defined or coordinated across organizations/missions and thus were not requirements on previous spacecraft.

Based on the experience of the individuals interviewed, the following four recommendations were made. First, all projects should develop a list of instrumentation priorities (including a mini-

mum instrumentation set for launch and operations) and a process to manage them that is integrated with their risk management processes. Prior to eliminating any engineering instrumentation, a risk assessment should be accomplished to determine the potential impacts the reduced suite of instruments could have on trouble-shooting the current mission and the design of those in the future.

Second, all projects should be required to document how their mission will feed engineering data and lessons learned into future missions, this should be included in project or mission plan

and verified during all major life cycle gate reviews. Finally, an Agency-wide technology needs and transition map that is supportive of the vision should be developed. In addition, each lower organization down to the project/mission level should have their own plan for how their own instrumentation requirements will support this map.

This lessons learned and many others like it that address Ames' specific projects and missions can be read in their entirety on the System Management Office (SMO) Web site at <http://smo.arc.nasa.gov/>.

BY DONALD MENDOZA

Ames/UARC loses valuable employee

The NASA Ames/UCSC University Affiliated Research Center (UARC) tragically lost one of its key staff mem-

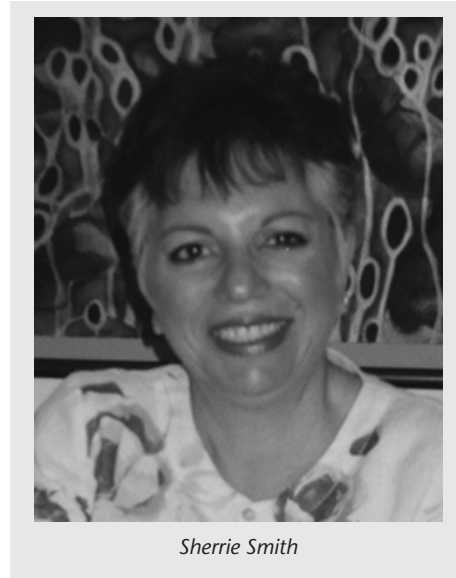
instrumental in helping the UARC grow smoothly to its present staff of 115.

Not only a skilled manager of human resources, Smith's artistry in watercolors and pastels have been exhibited in galleries on the east and west coasts, including solo shows in San Francisco at the University of California, San Francisco, Faculty Alumni House. In addition, she has participated in group shows at The Courtyard Gallery and Galleria Luna in Half Moon Bay, the Collage Gallery in San Francisco and Artworks Gallery in Charlottesville, Va.

She received a BFA from Moore College of Art in Philadelphia, Pa. Her work is included in several private collections throughout the United States and abroad. Smith was remembered in a service on July 28 at the Miller-Dutra Coastside Chapel, at 645 Kelly Avenue in Half Moon Bay not far from her home and sources of artistic inspiration. She is survived by her parents and sister, all of whom reside in Charlottesville, Va. One of her proudest gifts to her sister was a NASA Return to Flight wrist band. She is deeply missed by all who knew her and the team she helped build at Ames.

Family members have asked that contributions in Smith's memory be made to the Marine Mammal Center. For more information, visit http://www.marinemammalcenter.org/get_involved/donate/memory.asp

BY WILLIAM BERRY



Sherrie Smith

bers in a recent traffic accident. Sherrie Smith, UARC Human Resources Manager, died of injuries sustained in an auto accident on July 20 near her Half Moon Bay home on Highway One; she was 56.

Smith had worked for the past one and one-half years as a key member of the management research team of the UCSC-managed UARC from its headquarters offices in Building 19 of the NASA Research Park. Prior to joining the UARC team, she worked for 12 years at UC San Francisco. Her efforts were

Events Calendar

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

Ames Ballroom Dance Club. Classes on Tuesdays. Beginning classes meet at 5:15 p.m. Higher-level class meets at 5:50 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang at helen.hwang@nasa.gov, ext. 4-1368.

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

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

Ames Contractor Council Mtg, first Wednesday each month, 11 a.m., N-200, Comm. Rm. POC: Linda McCahon, ext. 4-1891.

Ames Diabetics (AAD), 1st & 3rd Weds, 12 noon to 1 p.m., at Ames Mega Bites, Sun room. Support group discusses news affecting diabetics. POC: Bob Mohlenhoff, ext. 4-2523/e-mail at: bmohlenhoff@mail.arc.nasa.gov.

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

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

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

Ames Sailing Club Mtg, second Thursday of ea. month (Feb through Nov), from 12:00 p.m. -1:00 p.m. in Bldg. N-262, Rm 100. URL: <http://sail.arc.nasa.gov/>. POC: Becky Hooey, ext. 4-2399.

Environmental Forum, first Thursday of each month, 8:30 a.m. to 9:30 a.m., Bldg. 221/Rm 155. URL: <http://>

q.arc.nasa.gov/qe/events/EHSeries/ POC: Stacy St. Louis at ext. 4-6810.

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

Jetstream Toastmasters, Mondays, 12 p.m. to 1 p.m., N-269/Rm.179. POC: Becky Brondos at ext. 4-1959, bbrondos@mail.arc.nasa.gov or Bob Hilton at ext. 4-1500, bhilton@mail.arc.nasa.gov.

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

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

Annual Chili Cook-Off set for Oct. 6

The Ames Exchange is pleased to announce the 9th Annual Chili Cook-Off to be held on Thursday, Oct. 6 from 11 a.m. until 1 p.m. This year's theme is 'Tropical Adventure.'

The Chili Cook-off has proven to be very popular and successful in the past. It's expected to be no different this year.

At this event, chili sampling is free for all NASA employees, contrac-

tors and other on-site personnel and visitors. Each taster will be given the chance to cast his or her vote for the 'peoples choice' award. A select panel of judges will choose the other categories.

Trophies will be presented to the winning team in each category. Prizes are in the form of trophies only; there are no cash prizes for this event.

Safety Data

NASA-Ames Occupational Illness-Injury Data for Calendar Year-to-Date 2005 Jan. 1, 2005 – July 31, 2005

	Civil Servants	Contractors
First aid cases	21	12
Lost-time cases	0	5
Recordable cases	3	10
Lost workdays	0	125
Restricted duty days	0	60

Above data is as of 8/12/05. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

ACAP to survey Ames commuters

Together with the Regional Rideshare Program (operated by the Ames employees and identify key transportation needs.



Metropolitan Transportation Commission), the Ames Commute Alternatives Program (ACAP), Code J, will be conducting a survey this fall.

This quick online survey will help gather valuable information about the commute patterns of NASA

NASA hopes to use the results of this survey to enhance transportation alternatives here at Ames.

To learn more about ACAP, visit: http://jf.arc.nasa.gov/NASA_Only/acap/index.html.

Ames emergency announcements

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

Ames Classifieds

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

Miscellaneous

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

General Electric 31" color television. \$45. Call (408) 295-2160.

Starter PC: Windows2000, 333MHz, 164MRAM, 15GB HD, 52x CD-ROM, USB, keyboard, mouse and speakers (no monitor). Perfect for first computer. \$75. Call (408) 295-2160.

Canon Rebel 2000 EOS 35MM camera, Canon EF zoom 28-98, Sigma zoom 70-300, Canon Speedlite 420 flash. All for \$250. Call (408) 455-2939.

Kenwood home theater A/V receiver, Dolby Digital 5.1; 100 [w/ch]. \$75. Call (408) 295-2160.

Wedding dress; pearls and satin. size 8. \$45 or B/O. Call (408) 234-0025.

Suburban house, floral print love seat (68" wide). Exc. cond. \$299. Oval oak dining table (52" x 88") extends further with 2 leaves; includes pads and 6 chairs. \$399. Call (650) 965-8470.

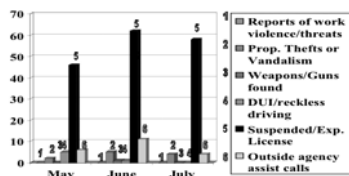
Car Pool

Looking for car-pool members: Oakland to Ames, work 8 a.m. - 5 p.m., share driving. Call ext. 4-2646 or e-mail smjohnson@mail.arc.nasa.gov

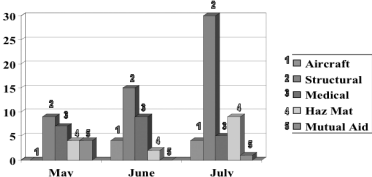
Protective Services monthly activity

A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire Protection Services units for the month of July 2005 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



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.

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

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

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

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

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

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

NASA Lodge (N-19) 603-7100

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

Vacation Opportunities

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

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

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

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

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

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

Incline Village: Forest Pines, Lake Tahoe condo, 3 bd/2ba, sleeps 8. Fireplace, TV/VCR/DVD, MW, W/D, jacuzzi, sauna, pool. Walk to Lake, close to ski areas. Visit Web page for pictures: <http://www.ACruiseStore.com>. \$120/night low season, \$155/night high season (holidays higher) plus \$156 cleaning fee and 12% Nevada room tax. Charlie (650) 366-1873.

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

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

New York, 5th Ave. One fully furnished bedroom in 24 hour security bldg. overlooking Washington Square Park, \$1,000/wk or \$3,000/mo. negotiable. Call (650) 349-0238.

Paris/France: Fully furnished studio, 5th Arr, Latin Quarter, Notre Dame and Ile-St. Louis., \$1,400/wk. negotiable. Call (650) 349-0238.

Santa Cruz townhouse, 2 bedrooms plus study, 2 baths, decks, totally furnished, 3 blocks from beach, available July, August, September; \$1,600 per month. Call (831) 423-5777 (H) or (831) 277-8476 (C).

West Maui vacation at Kahana Falls, across street from beach. Thanksgiving week 19-26 Nov 05, \$630/wk. 1bd/2 ba, w/d, fk. For 2 adults, 0 to 2 kids. Call (650) 962-1314 after Aug 7.

San Francisco, Donatello Hotel, small, deluxe hotel, one block from Union Square, 4 nights available to be scheduled either together or individually, \$150 per night. Call Barry Cunningham (510) 793-4457 or e-mail Ezrdrdad@comcast.net

Transportation

'95 Suzuki RF600. 14K mls. Just had full service with valve adjustment in March '05. New rear tire. Never been down. Includes: Arai Signet helmet, Shoci Elite RF 700 helmet, Lockhart wheel stand, half bra. Fun to ride, handles great, great on gas mileage. \$3,200 or B/O. Call (650) 400-3738.

2005 Federal Employee Night

Federal Employee Night at the Park is set for Friday, Sept. 16, at 7:05 p.m. The San Francisco Giants vs. the LA Dodgers. Contact Gail Castaneda at (510) 637-6104 or e-mail her at gail.castaneda@gsa.gov to order tickets, which will be mailed in September.

Astrogram deadlines

Submit articles and photographs to astrogram@mail.arc.nasa.gov no later than the 10th of each month. If this falls on the weekend or holiday, then the following business day becomes the deadline. If you want a photographer to cover an event you're sponsoring, it's very important that you submit a service request to the Video and Photographic Services Group at least 5 days in advance of the activity. Every effort will be made to accommodate your request whenever it's submitted, but please understand that photographers may not be available for last-minute requests, so best to plan ahead! For Astrogram questions, contact Astrid Terlep at the aforementioned e-mail address or ext. 4-3347. For information about photography or video services, contact Ed Schilling at e-mail Edward.M.Schilling@nasa.gov or ext. 4-1307.

Safety Week events fast approaching

Annual Safety Week celebrations are set for Sept. 19 through Sept. 22. The focus of this week is to reinforce awareness that your personal safety is vital to mission success.

Safety Week will begin at 10:30 a.m. on Monday, Sept. 19 with a ceremony at



which Occupational Safety and Health Administration (OSHA) will present our new VPP STAR. The VPP STAR is OSHA's award to organizations that have demonstrated excellence in worker safety and health. All employees are welcome to attend this ceremony and hear comments from Center management, the Ames Federal Employees Union and OSHA about the benefits of an exemplary safety program.

On Tuesday, Sept. 20, there will be a mandatory supervisor's meeting. This will be held in the main auditorium in building N-201. At this meeting, a safety briefing and new safety accountability

handbooks will be given to supervisors.

On Wednesday, Sept. 21 at 9:00 a.m., there will be a safety update for contracting officers, COTRs and contractor site managers. OSHA personnel will be here to provide training on revised OSHA record keeping rules.

On Thursday, Sept. 22, there will be a 'mini street fair' in the Ames Café patio room. There you can browse health and safety related booths to learn about the services offered by the Ames Health Unit, the Ames Safety Committee, Protective Services and others. At approximately 11 a.m. the Fun Run will start.

Throughout the week, seven different safety training classes will be offered for those needing to catch up on their training needs. Each day, entries for the Kids Health and Safety Calendar will be displayed in the Ames Café.

For more information, contact Jennifer Chan at ext 4-5602 or e-mail her at jschan@mail.arc.nasa.gov. You can also contact Linda Vollenweider at ext 4-5007 or by e-mail at lvollenweider@mail.arc.nasa.gov. In addition, you can visit the Web at: <http://q.arc.nasa.gov/qh/> and click on 'Safety Week 2005.'

Hubbard addresses planetary probe workshop held in Greece



NASA Ames Center Director G. Scott Hubbard (left) addressed researchers gathered for the Third International Planetary Probe Workshop held June 27-July 1, 2005, at Anavyssos, Attica, Greece. Seven Ames researchers and 11 students from the United States took this opportunity to discuss topics such as planetary probe engineering implementation, probe technologies, current and emerging instrumentation and sensors for science and technology, and the context of planetary entry probe missions (past, present, and future). The first workshop was held in 2003 in Lisbon, Portugal, and the second was hosted here at Ames in August 2004.



National Aeronautics and Space Administration

**Ames Research Center
Moffett Field, CA 94035-1000**

Official Business
Penalty for Private Use



FIRST CLASS MAIL
POSTAGE & FEES PAID
NASA
Permit No. G-27



The Ames Astrogram is an official publication of Ames Research Center, National Aeronautics and Space Administration.

Editor-in-Chief..... Gregory Gibbs
Managing Editor..... Ann Sullivan
Editor, Layout and Design..... Astrid Terlep

You can reach the Astrogram Office at:
astrogram@mail.arc.nasa.gov or by phone at
(650) 604-3347.



PLEASE RECYCLE
Printed on recycled and recyclable paper with vegetable-based ink.