NASA takes Google on journey into space

NASA Ames Research Center, located in the heart of California’s Silicon Valley, and Mountain View-based Google Inc., on Sept. 28 announced plans to collaborate on a variety of technology-focused research-and-development activities that will couple some of Earth’s most powerful technology resources.

NASA and Google signed a memorandum of understanding (MOU) that outlines plans for cooperation on a variety of areas, including large-scale data management, massively distributed computing, bio-info-nano convergence, and encouragement of the entrepreneurial space industry. The MOU also highlights plans for Google to develop up to one million square feet within the NASA Research Park at Moffett Field.

“Our planned partnership presents an enormous range of potential benefits to the space program,” said Ames Center Director G. Scott Hubbard. “Just a few examples are new sensors and materials from collaborations on bio-info-nano convergence, improved analysis of engineering problems, as well as earth, life and space science discoveries from supercomputing and data mining, and bringing entrepreneurs into the space program. While our joint efforts will benefit both organizations, the real win-

mon desire to bring a universe of information to people around the world,” said Eric Schmidt, Google chief executive officer. “Imagine having a wide selection of images from the Apollo space mission at your fingertips whenever you want it. That’s just one small example of how this collaboration could help broaden technology’s role in making the world a better place.”

“I’m thrilled that NASA Ames Research Center and Google, two of our region’s and our nation’s most valuable and innovative organizations, have formed a partnership,” said Rep. Anna G. Eshoo (CA - 14th District).

“As Silicon Valley continues to lead in developing technologies that will guide our nation’s economy in the 21st century, our region also has the potential to be a leader in supporting our nation’s space programs — and our partnership with NASA is an important step towards that goal.”

Hubbard outlines Ames’ strategies for future during NASA’s transformation

Over the past several weeks, Ames has made significant progress in meeting various challenges and changes as NASA undergoes a major transformation to implement the Vision for Space Exploration, according to Center Director G. Scott Hubbard.

“We’ve made a lot of progress, but we have a long way to go,” Hubbard told a capacity audience during an all-hands meeting held Oct. 12 in the main auditorium. “If we all work together, we can get through this.”

For the near term (Fiscal Year 2006 and Fiscal Year 2007), Hubbard said Ames is focusing on reducing its overhead by 17 percent, maintaining an investment account for new bids and proposals for internal research and development, reshaping its workforce, and
More than 1,100 San Francisco Bay Area girls, their parents and their teachers joined former NASA astronaut Sally Ride on a journey of scientific discovery on Oct. 2.

NASA Ames hosted the Sally Ride Science Festival. The educational event, designed for girls in grades 5-8, featured an inspirational talk by Ride (above left photo, standing at right of podium), the first American woman to fly in space; workshops given by female professionals in fields ranging from astrobiology to veterinary medicine; and an interactive street fair with experiments, food and music. Astronaut Janice Foss (left photo, standing at left of podium) who works at Ames as the Kepler science director in Code SSA, also spoke alongside Ride.

"It's an honor for Ames to host this exciting festival. We are truly pleased to contribute to Sally's quest to inspire young people, especially young girls, to get involved in science and engineering," said NASA Ames Center Director G. Scott Hubbard.

"Women make up only 25 percent of the science, engineering and technology workforce," said Ride, founder of Sally Ride Science™. "We are delighted to be working with NASA Ames to give Silicon Valley area girls a chance to explore and develop their potential in science at an age when many begin to drift away from their natural interest."

The festival is designed to encourage girls and young women to pursue careers in math, science and engineering.

Ride founded Sally Ride Science™ to support the large numbers of girls and young women who are, or might become, interested in science, math and technology. The company creates science experiences for girls that empower them, engage them and encourage their interests. Current programs include Sally Ride Science Festivals, Sally Ride Science Camps, TOYchallenge, and the Sally Ride Science Club.

For more information about the Sally Ride science festivals, visit the Web at http://www.sallyridefestivals.com/
Ames hosts university symposium

On Oct. 12, University of California professors who are receiving funding through the NASA Ames University Affiliated Research Center (UARC) presented the results of their research. The symposium, entitled ‘Aligned research program symposium: progress and prospects’ kicked off with introductions by Dr. Burney Le Boeuf, associate vice chancellor for research at the University of California at Santa Cruz, and by Dr. Steven Zornetzer, NASA Ames Deputy Director (Acting).

It was followed by 10-minute presentations by UC faculty in the general areas of aerospace, information technology, biotechnology, robotics/sensors, space science and nanoscience.

Hubbard outlines strategies for future during transformation

continued from front page

supporting the Vision for Space Exploration. In support of the Vision, Hubbard announced several appointments to key positions at Ames, as well as several appointments made by NASA Administrator Michael Griffin to key positions at NASA Headquarters.

Hubbard told employees that Ames will play a key role in the development of the space shuttle’s replacement, the Crew Exploration Vehicle (CEV). James Reuther will lead a multi-center team comprised of representatives from Ames, Johnson Space Center and Kennedy Space Center to develop a thermal protection system for the CEV.

In addition, Ames will design, develop and implement the launch missions systems and the command-and-control capability for the CEV and the new Crew Launch Vehicle (CLV). Ames will be part of a team that includes representatives from Johnson Space Center, Goddard Space Flight Center, Kennedy Space Center and the Jet Propulsion Laboratory.

Working with the Jet Propulsion Laboratory and Kennedy Space Center, Ames will design, develop and manage the integrated systems health management capability for the CEV’s ground processing and automation. The CEV command module will be designed to be reusable and will be refurbished after each flight.

Hubbard also noted that Ames will have a major role in defining and designing the ascent abort/crew escape capability for the CLV. He said the CLV will be a much safer vehicle than the space shuttle, and will have a 1/2000
Cal Poly students help NASA reduce aircraft noise

Thirteen aerospace engineering students from the California Polytechnic State University at San Luis Obispo (Cal Poly) spent a part of their summer on a lake. This is normal for many college students, but this lake was the Roger’s Dry Lake located in California’s Mojave Desert.

The students were participating in the C-17 flight noise mitigation study, a NASA experiment that may one day make the world a quieter place.

Currently, a house within an airport’s flight path must have triple-pane windows, special doors and extra attic and wall insulation to keep aircraft noise out. Researchers from NASA Ames and Dryden Flight Research Center want to eliminate or at least reduce the need for these often-costly modifications.

To do so, NASA, through the Vehicle System Program, is working to reduce the noise footprint produced by aircraft. A key component of this plan is the development of extreme short-takeoff and landing (ESTOL) aircraft and procedures. The ultimate goal is to keep aircraft noise within an airport’s property.

On Sept. 10, NASA demonstrated that aircraft capable of ESTOL could concentrate aircraft noise to a narrow area.

Seventeen microphones, covering approximately 15 square miles, were positioned on the dry lakebed to record the noise footprint of the United States Air Force Test Center’s C-17 Globemaster III as it made various landing approaches. In addition to conventional straight-in approaches, a new type of landing approach was flown. This new approach is similar to a descending spiral over the landing site.

"Preliminary results indicate that the SNI approaches will concentrate the noise footprint into a narrow area," said John Zuk, NASA ESTOL vehicle sector manager at NASA Ames.

The tests also confirmed that curved approaches posed no significant safety concerns and provided current commercial aircraft ride quality.

"The landing approaches were simple and safe," said NASA research pilot Frank Batteas.

The successful tests were made possible by the extraordinary efforts and ingenuity of the team to meet the challenges of a limited budget and a shortened test schedule, according to Craig Hange, NASA Ames project manager and principle investigator for the C-17 study.

"The team came up with a totally new way of taking noise data over a large area that not only worked well, but was less expensive by using commercially available parts and software," said Hange. "They not only put in their ideas, but a lot of hard work made it a reality."

"The Dryden personnel did more than their share to make sure the C-17 was ready and the flights would happen," said Hange.

"The Cal Poly students and faculty also deserve a lot of credit for taking on this new task, doing most of the grunt work and sharing an enthusiasm that you can only get from students," Hange added.

"Involvement in this NASA research project has taken the students' class-
Ames transit subsidy saves employees commute money

In California, gasoline prices have risen dramatically - 45 percent between September 2004 and September 2005 - to a current average of $2.928 in Silicon Valley (California Energy Commission, Oct. 3, 2005). These increases have hit everyone in the pocketbook.

Furthermore, our fuel consumption threatens our environment and exacerbates global warming; the transportation sector accounts for 58 percent of California’s carbon dioxide emissions and 49 percent of California’s total greenhouse gas emissions. The combination of less fuel-efficient vehicles, energy shortages due to recent natural disasters, slow refinery growth and import difficulties imply that a significant price decrease is unlikely in the near future. With fuel costs estimated to run upward of $1,897 per year for the average Silicon Valley driver (and that’s for a non-SUV owner!), residents are beginning to consider alternative forms of transportation. Total cost is based on average price per gallon for gasoline in Silicon Valley ($2.928), average mile per gallon for California cars (20) and average miles driven by Californians per day (36). (Source: California’s Flex Your Power at the Pump campaign)

NASA Ames offers its employees an incentive to try transportation other than a single-occupant automobile. A monthly $100 transit subsidy is available to all civil servants - a dollar amount large enough to cover typical transportation costs for one month. Subsidies can be used on Caltrain, Altamont Commuter Express Service (ACE Train), Amtrak Capital Corridor train service, San Francisco Municipal Railway (Muni), Bay Area Rapid Transit (BART) and Valley Transportation Authority (VTA) buses and light rail service.

Using the subsidy is simple. Ames civil servants must first apply by bringing their badge to Amanda Dunham, Ames commute alternatives program manager, ext. 4-6896, at the motor pool building N-251. Once an employee’s application has been accepted, an e-mail goes out each month alerting them to ticket availability. Tickets can be reserved in advance, although a badge is required for pick-up.

Although the subsidy comes from civil service payroll, and thus is not available to Ames contractors, many Ames contracting companies such as the United States Army, Integrated Science Solutions Inc. (ISSi) and Planners Collaborative offer similar subsidies to their employees.

“We began offering a commute alternatives subsidy to encourage a less stressful commute to work for our employees, and to encourage environmental awareness since automobiles are the Bay Area’s most significant cause of pollution,” stated Ceil McCloy, ISSi’s CEO. “Now with gas prices at their current exorbitant levels, the subsidy also allows us to offer a cost-savings option for our employees’ daily commute.”

If you are employed by a NASA Ames contractor, contact your human resources department to find out if your company offers a commute alternatives program. If a program does not currently exist, encourage your company to adopt one.

We can all help increase our pocketbooks and decrease air pollution by making a personal decision to use alternative transportation.

To learn more about commute alternatives and find links to local transit agencies, visit the Ames Commute Alternatives Program Web site at jf.arc.nasa.gov/NASA_Only/acap/index.html.

Employee emergency contact data

In the event of an emergency, it is critical that employers, family and friends are able to stay in contact with those closest to them. In the wake of hurricane Katrina, there were more than 100 employees who could not be accounted for due to their emergency contact information not being up to date or complete. Seeing the need for emergency contact information first hand provides a tremendous opportunity for improvement at Ames.

Ames currently uses the Employee Emergency Contact System (EECS), which is designed to store all employees’ contact information in case of emergencies. Use of this system was needed recently when Ames was tasked with providing critical last-minute wind tunnel testing that enabled NASA managers to give the STS-114 crew the go-ahead to land without another repair EVA. Unfortunately, much of the needed information was missing.

To prevent these problems from occurring in another emergency at Ames, all Ames employees should log into EECS and verify that their emergency contact information is up to date. If you are unfamiliar with the EECS, a point of contact in each branch will assist you in completing the process.

To access the EECS, you will need your universal unique personal identification code (UUPIC) and PIN. To obtain your UUPIC, you can visit the Internet Web site at https://onenasa.ndc.nasa.gov/index.cfm. Type in your name and your UUPIC will appear. If you have forgotten your PIN, you may contact either Mary Perez at ext 4-6865 or e-mail Mary.E.Perez@nasa.gov or Desiree Barriontez at ext 4-5599 or e-mail at dbarriontez@mail.arc.nasa.gov.

Once you have your UUPIC and PIN, visit the Web at https://benefitstatement.nasa.gov/NEBS/EBS_Login.cfm Instructions on how to enter your contact data are available on this Web site. Your emergency information will become part of the NASA Employee Benefit System (NEBS) and you will be able to update it at any time.
A team of NASA Ames exobiology researchers recently revealed that organic chemicals, which play a crucial role in the chemistry of life, are common in space. "Our work shows a class of compounds that is critical to biochemistry is prevalent throughout the universe," said Douglas Hudgins, an astronomer at Ames. He is principal author of a study detailing the team’s findings that appeared in the Oct. 10 issue of the Astrophysical Journal.

"NASA’s Spitzer Space Telescope has shown complex organic molecules called polycyclic aromatic hydrocarbons (PAHs) are found in every nook and cranny of our galaxy. While this is important to astronomers, it has been of little interest to astrobiologists, scientists who search for life beyond Earth. Normal PAHs aren’t really important to biology," Hudgins said. "However, our work shows the lion’s share of the PAHs in space also carry nitrogen in their structures. That changes everything."

"Much of the chemistry of life, including DNA, requires organic molecules that contain nitrogen," said team member Louis Allamandola, an astrochemist at Ames. "Chlorophyll, the substance that enables photosynthesis in plants, is a good example of this class of compounds, called polycyclic aromatic nitrogen heterocycles, or PANHs. Ironically, PANHs are formed in abundance around dying stars. So even in death, the seeds of life are sewn," Allamandola said.

The Ames team studied the infrared "fingerprint" of PANHs in laboratory experiments and with computer simulations to learn more about infrared radiation that astronomers have detected coming from space.

"A desktop computer was used to simulate molecules that are currently impossible to make and study in a laboratory because of the extreme conditions in space," said team member Charles Bauschlicher, also of Ames. "We simulated the PANH molecules," he explained. Bauschlicher and colleagues found that these simulated PANH molecules precisely matched the radiation measurements taken of organic molecules in space.

The team used data from the European Space Agency’s Infrared Space Observatory satellite. For more information about this research on the Web, visit http://www.astrochem.org/PANHS.html

**NASA discovers life's building blocks are common in space**

**Ames hosts US Treasury visit**

Ames CFO Tom Moyles (second from left) recently hosted U.S. Treasury officials from the San Francisco Financial Center. Regional Director Philip Belsie and his staff visited Ames to begin planning the next Financial Center Customer Advisory Board meeting, which will be hosted by Ames next February. Moyles was appointed chairman of this board in June 2005.

**Ames Fire Department parade held**

Ames/Moffett fire fighters during the recent parade that passed through Ames, are seen here holding the fundraiser check. Left to right: Fire Captain Matthew Spark; firefighters Tim Frasch, Heather Turman, John Byrne, Brian Hutchinson, Leon Pennyman, Bobby Ott, Ed Henderson, Fire Captain Scott Dutro; firefighters Jaymes Smith and Robert Abrahamson

The NASA Ames Fire Department was the third stop in a parade featuring vehicles from several Bay Area fire departments in August. A check for $2,250 was presented from Ames to the Alisa Ann Ruch Burn Foundation. The Ames Fire Department holds several fundraisers throughout the year, including pancake breakfasts. The check is representative of the money raised at Ames throughout the year.
Under the Ames Safety Awards Program (ASAP) II, Ames recognized 67 employees for their outstanding accomplishments in improving health and safety during the 2nd 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 two individuals received the Tier Level 3 Team Award for this trimester. George Sutton and Nelson Hsu worked with the Restoration Electrical Distribution Systems (REDS) design team to permanently relocate all underground gas-filled electrical switches to a location above ground. A total of 32 underground switches were replaced with the above ground switches as part of the REDS construction of facilities project.

**Tier Level 3 - Team awards**
Relocation Of Underground Gas Filled Electrical Switches: George Sutton, Nelson Hsu

**Tier Level 3 - Individual awards**
Donald Mendoza

**Tier Level 2 - Team awards**
AED Team
Jackie Nielson, Terri Castrejon, Miriam Glazer, Jennifer Chan, Mark Tangey, Nancy Dunagan, Richard Kurkowski, John Burns, Justin Crone, Sergio Castellanos, Debra Narasaki, Lynne Engelbert, Don Dains, Kathleen Starmer, Dan Wilkins, Matt Linton, Iris Lubitz, Femy McGrath, Rho Christensen, Garrett Dang, Elizabeth Mulleda, Dan Gundo, Horacio Chavez

**European Modular Cultivation System Team:**
Robert Bowman, Araceli Maldonado

**Instrumentation Team:**
William Vanzuylen, Ron Payne

**Tier Level 2 - Individual awards**
My Trang, Art Joly, Richard Mogford, Cheryl Quinn, Orlando Santos, Nicholas Scott, Reginald Waddell, Elizabeth Mulleda, Max Sanchez, Nicole Rayl, Terry Reicher, Thomas Vahle, Thomas Clausen, Sergio Castellanos, and Richard Wisniewski

**Tier Level 1 - Team awards**
Construction Safety Group:
Monty Cassick, Peter Goldsmith, AC Mosher, Yung Nguyen, Clarence Smith, and George Williams

**Housekeeping Team**
Cathy Prudencio, Lita Dixon, Sally Shaw, Phyllis Reutzel, Tony Arroyo, Christine Johnson, Maurice Gray, Eleanor Monteleone, Della Ivey, Du Luu-Huynh, and Angelina Reguindin

**Tier Level 1 - Individual awards**
Lori McNeill, Earnestine Parker, Katrina Francis, Erlinda Fox, and Mario Perez

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.

---

A great time was had by all who attended this year’s 9th annual Ames Exchange chili cook-off held Oct. 6.

This year’s theme was Tropical Adventure. Free frozen fruit bars were available for all. Tropical Vibrations provided the music and free airbrush tattoos and a Polaroid photo booth were on hand for those who dared!

Thirteen teams vied for the top prize of the ‘Peoples Choice Award.’

This year’s winners were:
- **Peoples Choice 1st place:** Asani
- **Peoples Choice 2nd place:** Big Kahuna Willies Chili
- **Judges Choice 1st place:** Big Kahuna Willies Chili

**5-Alarm Chili**
Revenge of the Death Cult Chili

**Best Presentation**
Tessada #1

---

Chili cookoff is quite a crowd pleaser
NACA reunion attendees reminisce with former acquaintances

In 1915, the National Advisory Committee for Aeronautics (NACA) was founded to advise the United States government to coordinate aeronautics research, but it quickly became a leading research organization in aeronautics and the new field of astronautics. When President John F. Kennedy moved the nation into the ‘space race’ and proposed his bold vision of landing a man on the moon, NACA was the logical organization to form the foundation of a new space agency. On Oct. 1, 1958, NACA formally disbanded and the National Aeronautics and Space Administration was born.

Forty-seven years later, those who worked for the NACA continue to feel passionate about its successes and loyal to its memory. Recently, former employees and their spouses and children gathered for the eleventh NACA reunion to renew acquaintances and to reminisce about the past.

The three-day reunion, held Sept. 30 to Oct. 2, 2005, drew 320 people from 17 states and the District of Columbia. The event was hosted by NASA Ames, with attendees ranging in age from 70 to well beyond 90 and representing all of the former NACA centers. They participated in one or more of the eight group activities including a gala banquet and tours of NASA Ames and the Hiller Aviation Museum.

The 11th reunion held special significance, since 2005 marks the 90th anniversary of the formation of NACA. The great granddaughter of Orville and Wilbur Wright, Janette Davis Yoerg, was staying at the same hotel on the night of the buffet dinner and noticed the NACA gathering. She was invited to the dinner and her presence added to the event’s importance.

NASA Ames Center Director G. Scott Hubbard and his wife attended as special guests.

“We at Ames are very proud of our NACA heritage,” said Hubbard. He went on to praise the theoretical and experimental genius of the NACA scientists and engineers like Ames’ Harvey Allen, who saw blunt bodies as a safe way to re-enter Earth’s atmosphere.

America’s new crew exploration vehicle will use an improved blunt-body capsule, which will accommodate up to six people.

Hubbard said that genius was prevalent throughout NACA. The work of these geniuses led to breakthroughs in aeronautics and carries a legacy of excellence that continues today at NASA.

Hubbard concluded by saying, “You have been the giants on who I, and everyone in NASA, proudly stand.”

Throughout the reunion, a large poolside hospitality room, open from dawn to dusk, provided a venue for never-ending reminiscing about the good old days.

“There are so many good memories and lots of camaraderie,” said Jack Suddreth, a 33-year veteran of NACA and NASA at Lewis Flight Propulsion Laboratory, eventually renamed NASA Glenn Research Center. “Everybody can remember what they did, how things worked together and who did what to whom…” Suddreth also recalled how open houses at Lewis inspired him as a teenager and how the ‘air lab guys’ from Lewis mentored him before he joined NACA.

Ralph Hallett, who worked at Ames from 1946 to 1978, said he came to the reunion (with a chuckle) “to shoot the breeze with old guys and to record some of the things I did.” Hallett worked on string gauges and helped improve pressure cells used for electrical output during flight experiments.

“Of the many people I enjoyed seeing and talking about the good old days”, three young ladies stand out in my mind,” said Jack Boyd, Ames’ historian/ombudsman. “Helen Robinson, who used to arrange trips for Orville Wright to come from Dayton to Washington for NACA committee meetings, Jo Dibella who was the secretary to Hugh Dryden, director of NACA and first NASA deputy administrator, and Edie Watson, secretary to Harvey Allen and Hans Mark. They epitomized the strength and the vitality of NACA.”

The NACA reunion was the inspired creation of Dibella, who ended her career serving as the secretary of Hugh Dryden. The first NACA reunion was held in 1976. Since 1982, reunions have been held on a more or less regular basis. The next reunion will be hosted by NASA Langley Research Center and is planned for 2007.

For more information about the reunion with photos, visit the Web at: http://www.nasa.gov/centers/ames/multimedia/images/2005/nacareunion.html

BY JONAS DINO
Open house highlights NASA Research Park, CMU research

A very big thank you to NASA Research Park (NRP) partners, robotic teams, videographers, photographers and the jazz band that braved changing weather and even faster-changing plans to enjoy an exciting open house and ‘2005 Grand Challenge Racing for the Future’ lecture on Sept. 20.

The event highlighted NASA Research Park and Carnegie Mellon University (CMU) West’s advancing partnership in robotics research.

The lecture began with special guest Steve Wozniak, CEO of the Wheels of Zeus, generously praising NASA’s mission for inspiring students toward higher education. Woz introduced Dr. Red Whittaker, CMU professor of robotics and leader of the Red Team in the 2005 Grand Challenge. Whittaker described the challenges of racing vehicles that “see and think” to an enthusiastic audience. The event was hosted by Ames Deputy Director (Acting) Steve Zornetzer.

On Oct. 8 in the Mojave Desert race, Stanford University’s “Stanley” crossed the finish line approximately 7 minutes ahead of CMU’s Sandstorm, netting the Stanford team the $2 million DARPA prize.

NASA takes Google on journey into space

continued from front page

century, partnerships combining the best in public sector innovation with the cutting edge of private industry will serve as the gold standard in public-private partnerships for years to come. The technologies created by the partnership of Google and NASA Ames not only will enable and enhance further exploration of space, they will positively impact the daily lives of all Americans for generations to come,” Eshoo said.

“The City of Mountain View is excited that two of our community’s most innovative and dynamic organizations, Google and NASA Ames Research Center, are forming a new research-and-development partnership at Ames. This new collaboration will undoubtedly result in new research projects and endeavors with tremendous potential for innovation and far-reaching benefit,” said Mountain View Mayor Matt Neely.

Located on property at Ames, NASA Research Park is being developed into a world-class, shared-use educational and R&D campus. As part of a comprehensive plan for this area, new laboratories, offices, classrooms, housing, auditoriums, museums, a training and conference center, open space, parking and limited retail facilities are envisioned. The plan calls for NASA to partner with local communities, academia, private industry, non-profit organizations and other government agencies in support of NASA’s mission to conduct research and develop new technologies.

Google’s innovative search technologies connect millions of people around the world with information every day. Founded in 1998 by Stanford doctoral students Larry Page and Sergey Brin, Google today is a top Web property in all major global markets. Google’s targeted advertising program provides businesses of all sizes with measurable results, while enhancing the overall Web experience for users. Google is headquartered in Silicon Valley with offices throughout the Americas, Europe and Asia. For more information, visit www.google.com.
Former Ames employee Randal N. Hitchens passes on

Randal N. Hitchens, age 70, passed away on Sept. 17, 2005 at his home in Santa Clara, Utah, of pancreatic cancer. Hitchens grew up in Wilmington and Claymont, Newcastle, Delaware. After 14 years of formal education, he served 10 years in the U.S. Navy and 16 years in the U.S. Army Reserves.

Hitchens was employed as a facility manager at NASA Ames for 30 years. He retired in 1997 and worked as a contractor with DMJM and Cambria Consulting Inc. until February 2001. Hitchens was instrumental in the implementation of the new fuel management system at Ames. He always gave his best effort and was proud of the work he did at Ames. His many friends recall that he loved to fish, boat, fly, golf and bowl.

After leaving Ames, he married Darlene Hatcher on March 8, 2001 in El Dorado, Calif. Prior to his death, Hitchens and Darlene made a list of all of the things they wanted to do in their remaining years. The most recent of these were skydiving and a trip to Australia. Hitchens was an active member of The Church of Jesus Christ of Latter Day Saints, serving in many capacities, including that of an ordinance worker in the St. George Temple.

Hitchens is survived by his wife Darlene; daughter, Donna; sons, Wayne and Kelley; stepsons, Timothy and Randal; eight grandchildren; four great grandchildren; and six sisters.

by John D. Wilson

College interns display their work

Mutant frogs, robotics education, heat shield testing, human factors research, autonomous rotocraft project... what's not to enjoy? More than 80 interns with the Foothill-De Anza Community College District NASA Ames Internship Program presented their work in these areas and more in August at the 2nd Annual intern poster display session. With 135 guests representing Ames employees, family, friends and the press, the enthusiasm and energy was palpable. Guests were wowed by the breadth and depth of the interns' efforts.

“I’m very honored to be one of the interns and I truly believe that the internship program has provided a variety of unique learning environments for all of the students. Thanks for creating the warm and friendly environment to showcase our work,” enthused De Anza student Joanne Li, research assistant intern in the Human Factors Division.

“We had no idea how many Foothill-De Anza students there are [working at NASA Ames]! It was a delight to witness the enthusiasm of this essential part of our work force,” commented Bernadette Luna, associate director for management operations.

For 35 years, almost 3,500 Foothill-De Anza interns have made significant contributions to NASA Ames.

by Jonas Dino

Students help NASA

continued from page 4

The Ames team included:
John Zuk - ESTOL vehicle sector manager
Craig Hange - project manager and flight principle investigator
Doug Wardwell - ground test conductor and ESTOL deputy vehicle sector manager
Clif Horne - principal acoustician, ground team line supervisor
Cahit Kitaplioglu - acoustician, noise modeling, and ground team line supervisor
Tim Naumowicz - test support and coordination
Stephen Walker - ground test support
Dave Yaste - ground test support
Ames contractors - Aerospace Computing Inc.:
Nate Burnside - developer/integrator noise measurement system, ground team line supervisor
Bruce Storms - data system programming and ground test support
Bryan Reiner - ground test support

For more information about the NASA Vehicle Systems Program, visit the Internet Web site at http://www.aeronautics.nasa.gov/vsp/

by John D. Wilson
On July 11, 2005, the 31 members of the 2004-2005 Leadership Development Program (LDP) celebrated the completion of their developmental year with a ceremony at NASA Headquarters.

The program participants, who represented nine centers, were the second graduating class of the NASA Leadership Development Program. The LDP replaced the NASA Professional Development Program in support of the agency’s emphasis on improving leadership skills and the ability of leaders to produce measurable results.

In his address to the graduates, Associate Administrator for Program Analysis and Evaluation Dr. Scott Pace thanked the participants for the contributions they made to the agency as part of their developmental assignments. He also praised them on the completion of their class project, ‘Enabling Effective Collaboration and Competition.’

This project involved the creation of an easy-to-understand business model that details how and where work is being done within programs and projects across the agency and a set of tools to be used in developing a business case.

The class also conducted a series of surveys and interviews to complete the collaboration study initiated by the 2003-2004 class and created a NASA collaboration handbook.

A link to the class’ full report and the collaboration handbook can be found on the Leadership Development Program home page on the Web at http://ldp.nasa.gov/.

Class attendees Vicki Zanoni of Stennis Space Center; Bill Green from Marshall Space Flight Center; and Steve Craft from Langley were elected to speak at the graduation to share their reflections of the year and their thoughts on leadership.

All three spoke of how through the LDP they became aware of how their personal vision and values aligned with NASA’s vision, mission and values and how this alignment was key in helping to strengthen their ability to be more effective leaders.

The vision of the LDP is to create powerful leaders who align with NASA’s vision, mission and values and who create results that matter to the American people.

Program elements include developmental assignments, a class project, individual coaching, training and briefings by NASA and outside leaders. Participants must be grades 13-15 and are competitively selected at the agency level.

America Recycles Day coming

Join the Ames Environmental Services Office at the Mega Bites Cafe for a celebration!
Date: Nov. 15, 2005
Time: 11 a.m. - 1 p.m.
For more recycling information, visit the Web at: www.americarecyclesday.org
Multi-generational families working at NASA Ames

Nina Scheller, Code PMX, recently discovered that she was a third generation Ames employee. Her grandfather, Charles Scheller, sold his farm in Michigan (he got tired of the weather and farming) and by way of Indiana and Camino, Calif. (lumber mill) found his way to Mountain View in 1943. He took a job at the NACA Ames Research Center as a janitor in the Aircraft Modifications Branch. He worked in that facility for 12 years until his death at the age of 80.

Nina’s father, Charlie, graduated from the Mountain View High School in 1949 and went to work for Pan Am at the San Francisco Airport. He enlisted in the Navy in 1951, during the Korean War conflict, and was discharged in 1955 as a petty officer, aviation machinist mate. He decided to come to Ames instead of going back to Pan Am and was hired as a NACA civil servant—beginning first as a gardener and then transitioning to the Aircraft Modifications Branch, becoming a tool crib attendant. Within six months, he was working on test instrument installations under Al Pucchinelli and studying at night to get his power plant and airframe licenses, which he earned in 1956 and 1958, respectively.

Reorganization is not a new phenomenon at Ames, and in the early 1960s, he was transferred to the Simulator Systems Services Branch, working on a team that built the six-degree-of-freedom simulator and the midcourse navigation simulator. Both of these facilities were critical to the success of the Apollo space program. (Note: These facilities are shown on pages 430 and 431 respectively in Adventures in Research: A History of Ames Research Center 1940–1965.) One of the highlights during this time period was working with astronauts Gordon Cooper and Wally Schirra.

In 1966, he moved to the 40-foot-by-80-foot wind tunnel, working on the shuttle, the X-15, helicopters, etc. Charlie remembers that in those days, the 40-foot-by-80-foot tunnel was very much in demand, running two shifts each day. The Outdoor Aerodynamic Research Facility (OARF), affectionately known to the mechanics as “the tomato patch,” was used as an adjunct of the 40-foot-by-80-foot tunnel. Models were checked for instrumentation and engine performance prior to installation into the tunnel, thus keeping tunnel downtime to a minimum. Charlie retired in 1981 as the lead aircraft mechanic for the 40-foot-by-80-foot wind tunnel.

Scheller’s first remembered experience of Ames is coming here, at the age of three with her father, for a Christmas party at Hangar N-211 and going off on her own to explore the base. She promptly got lost. But that didn’t stop her from returning in 1975 as a high school intern working in the Thermal Protection Branch for Dan Leiser on the shuttle tiles. After she graduated from SJSU with a BS in aeronautics, having also earned her single-engine pilot’s license, she spent six months traveling around the world and exploring other opportunities.

In 1983, Scheller followed in her father’s footsteps and began her career at Ames as a verification test engineer on a subcontract in the 40-foot-by-80-foot operations branch. Two years later, she was hired as an Army civil servant working for NASA under the NASA Army Joint Agreement. These were very busy years for the staff of the 40-foot-by-80-foot wind tunnel. With the addition of the 80-foot-by-120-foot test section, dedicated in 1987, the facility became known as the National Full-Scale Aerodynamics Complex (NFAC).

By 1989, it was time to move on to new opportunities. Scheller joined the Facility Planning Office, headed by Chuck Castellano, and discovered that the NFAC was not the center of the universe. She worked closely with Dick Brown and her years in the planning office gave her access to all areas of both Ames and Dryden. A series of rotational assignments followed, including that of aviation liaison officer to the Secretary of the Army for R&D in the Pentagon; chief of the research support division of the Army Aero Flight Dynamics Directorate and so on. In 1997, she transferred from the Army to NASA and returned to the Construction of Facilities Office (CoF) at Ames. She then moved to spaceflight hardware projects, working first on the SSBRP as laboratory support equipment lead and then with the Stratospheric Observatory for Infrared Astronomy division.

Scheller has always been interested in aeronautics and saw Ames as a magical place to work. Her time in CoF gave her an opportunity to see almost all of Ames and what goes on here. It also gave her the opportunity to learn to negotiate priorities and work to achieve win-win situations for those involved. "The best thing about working for Ames has been the feeling that you are part of something greater than yourself—expanding man’s knowledge of the universe.”

This is the second in a 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**
Feeding wildlife at NASA Ames is prohibited

NASA Ames provides habitat for a wide variety of wildlife. Most of these animals, such as the California clapper rail, least tern, salt marsh harvest mouse and western burrowing owl, occur naturally in the San Francisco Bay ecosystem and are thus considered ‘native.’ However, NASA Ames also plays host to a variety of ‘non-native’ species, which often upset the natural balance and sometimes have harmful effects on our native species.

A non-native animal of particular concern is the feral cat, which may have been initially released by humans, and has subsequently reverted to the wild. The numbers of feral cats can proliferate when aided by supplementary food provided by well-meaning humans.

While it may seem kind to feed these cats and other wild animals, doing so poses serious problems. First and foremost, it compromises the health and safety of our employees and their children, tenants and visitors. Specifically, the risk of disease transmission, bites and fleas dramatically increases because wild animals are attracted to populated areas of the center, including the Child Care Center. Besides attracting the targeted species, feeding stations invite other wild animals such as skunks, raccoons and opossums, which exacerbate the problem. In addition, the animals become dependant upon humans for food. When humans are not available to provide food, feral cats will often jump into open garbage dumpsters to find food and end up eating harmful items instead.

In addition to these health and safety issues, feeding wild animal predators, particularly non-native animals, disrupts the natural balance of NASA Ames’ ecosystem. Published scientific studies indicate that a ready food supply does not decrease the predatory behavior of these animals but rather increases their numbers and strength at the expense of native species, some of which are endangered. Because of this detrimental impact, the United States Fish and Wildlife Service (FWS) has stated that feeding non-native species on public installations in the region is a violation of the Endangered Species Act. Anybody placing food out for feral cats would be in violation of the act, and could be subject to prosecution by FWS.

Because NASA Ames is committed to protecting its employees’ health and the environment, as well as complying with applicable laws, it established a policy in January 1997 prohibiting the feeding of non-native animals onsite. The Environmental Services Office would like to reiterate this policy and ask for your full cooperation in its implementation.

If you have any questions about this policy, contact NASA Ames’ wildlife biologist Chris Alderete at ext. 4-3532 or calderete@mail.arc.nasa.gov.

By Stacy St. Louis

It takes a village to protect NASA information and computing technology investments

Virtually every aspect of the NASA mission is dependent upon information technology resources to provide essential support in accomplishing the agency’s operational, research and management objectives. The value of NASA’s information and computing resources and their importance to NASA missions creates a need for those resources to be adequately protected to assure confidentiality, integrity and availability of NASA information as it is processed, stored and moved within NASA information systems and applications.

Here at Ames, several teams of information technology (IT) security professionals are responsible for the oversight of information security practices at the center. Their role is to develop, maintain and operate the programs that help Ames meet its information security objectives and the federally mandated requirements of the Federal Information Security Management Act (FISMA).

The teams span a variety of center-wide functions, including IT security management and operations, counter intelligence, information assurance and export control, organizational security official and CIO council representation, Ames public key infrastructure (PKI) operations and organizational certified system administration.

By Helen Stewart
Events Calendar

Ames Amateur Radio Club, third Thursday of each month, 12 noon, N-218 (across from N-255). POC: Michael Wright, KG6BFK, at ext. 4-6262.

Ames Ballroom Dance Club. Classes on Tuesdays. Beginning classes meet at 5:15 p.m. Higher-level class meets at 5:30 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang at helen.hwang@nasa.gov, ext. 4-3368.

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://accc.arc.nasa.gov), 12 noon to 1:30 p.m., N-210, every other Thursday (check Web site for meeting dates: http://accc.arc.nasa.gov), 12 noon to 1:30 p.m., N-210.

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

Ames Dianetics (AADO), 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 Thursday 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, 8:30 a.m. to 9:30 a.m., Bldg. 221/Rm 155. URL: http://sail.arc.nasa.gov/.

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/.

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: Bob Hilton at ext. 4-2909, 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), 5 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.

Environmental Data

A statistical summary of activities regarding an existing case. Event of a new case or new information, visit the Web at http://worldwind.arc.nasa.gov.

Leveraging Landsat satellite imagery and shuttle radar topography mission data, World Wind lets each user experience Earth terrain in visually rich 3D. World Wind is a program that allows the user to zoom from satellite altitude into any place on Earth. Leveraging Landsat satellite imagery and shuttle radar topography mission data, World Wind lets each user experience Earth terrain in visually rich 3D. Hogan will discuss how this technology can help us better appreciate the environmental concept of climate change using World Wind imagery. For more information, visit the Web at http://worldwind.arc.nasa.gov.

Safety Data

NASA Ames Occupational Illness-Injury Data for Calendar Year-to-Date 2005

<table>
<thead>
<tr>
<th></th>
<th>Civil Servants</th>
<th>Contractors</th>
</tr>
</thead>
<tbody>
<tr>
<td>First aid cases</td>
<td>22</td>
<td>16</td>
</tr>
<tr>
<td>Lost-time cases</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Recordable cases</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Lost workdays</td>
<td>0</td>
<td>158</td>
</tr>
<tr>
<td>Restricted duty days</td>
<td>0</td>
<td>88</td>
</tr>
</tbody>
</table>

Above data is as of 10/05/05. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

For All Your Supply Needs On Installation

NASA Ames Supply Store • Building N255 • DeFrance Ave. (North Side)

- Office Products
- Paper
- Paper Products
- Janitorial & Cleaning Supplies
- Computer Accessories
- Furniture & Tools

AIB Express
Federal Supply Centers
Retail Store 850-604-6801 • Fax 650-604-6602
On-Line www.aibexpress.com

Brown Bag Series

The Environmental Services Office is hosting the following brown bag event:

Subject: World Wind Project
Date: Nov. 17
Time: 12:00 - 1:00 p.m.
Place: Building 221, Room 155
Bring your lunch!
Speaker: Patrick Hogan

The Ames Environmental Services Office will host Patrick Hogan, program manager of the World Wind Project, NASA Ames Learning Technologies Program, in a discussion of the NASA World Wind project as it relates to the environment. World Wind is a program that allows the user to zoom from satellite altitude into any place on Earth. Leveraging Landsat satellite imagery and shuttle radar topography mission data, World Wind lets each user experience Earth terrain in visually rich 3D. Hogan will discuss how this technology can help us better appreciate the environmental concept of climate change using World Wind imagery. For more information, visit the Web at http://worldwind.arc.nasa.gov.

Environmental forum

Subject: How bad is polluted storm water run off?
Date: Nov. 3
Time: 8:30 a.m. - 9:30 a.m.
Place: Building 221, Room 155
Speakers: Christy Ray-Hagenau, Environmental Compliance Specialist, Issi and Kran Kilpatrick, NASA

Learn about how storm water pollution occurs and how it ultimately impacts water end points, such as local beaches.
Astrogram headlines

Please submit articles, calendar and classified advertisements 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.

For Astrogram questions, contact Astrid Terlep at the aforementioned e-mail address or ext. 4-3547.

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

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


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) 486-2781.

Ski Park City Utah, NASA Ski Week XIV, Feb 5 - 12, 2005. Space limited. E-mail Steve at e-mail exnasahsb@cglobal.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 Artr, 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 (o) 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, 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 Ez2rid@comcast.net.

Vacation rental. Ferndale - The Victorian Village. Victorian home on Main Street a short stroll to the Village which has been designated as a state historical landmark. Enjoy the many holiday activities which include a Christmas parade and lighting of America's tallest living Christmas tree. Four bedrooms (sleeps approx. six), two full baths, large kitchen, dining room, parlor w/fireplace, enclosed desk w/hot tub. For info call (707) 983-951.

Monterey Bay vacation rental at Pajaro Dunes, 2 miles south of Santa Cruz, 3bd/2ba beach house with distinctive architecture. Beautiful ocean and valley views, only 150 ft from the beach, first-class tennis courts. $500/week, $200/addl night, including cleaning by the maid service when you depart. Call (408) 252-7260.

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 1700KHz AM radio for the same information.

Astrogram

October 2005

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 e-mail 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

Room available for rent in house in mid town Palo Alto, with kitchen, laundry, and pool, $500 plus $50 toward utilities, for a quiet, neat, stable and conscientious person or couple.

Brand new, never-occupied 2 bd/2 ba condo for rent at the new Villa Cortina on Winchester Blvd. in San Jose near Santana Row. Amenities include: marble countertops, redwood decks, designer cabinetry and fixtures, hardwood floor and Berber carpet, soaker bathtub, built-in linen closet, W/D, pre-wired for HD television and CAT-5, high speed internet connectivity to 3 MBPS, secure parking, fitness center, 12-month lease, $2,000 month (includes garbage). $1,500 deposit. Call for viewing (408) 515-8134. View photos at www.villacortina.com.

Need house 3 bedroom house to rent in Mountain View for myself and my two children. Have one dog and two cats. Please call (650) 279-4084.

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 or if you or someone you know are interested in fostering or adopting a cat.

Women's casual shoes size 8.5, perfect condition. $25. Call (408) 234-0025.

Super feet Gore-Tex black both lace up. $15 ea. Call (408) 371-1487.

Do you like spending your hard-earned money on fitness? We are unable to verify the accuracy of the statements made in the ads. Caveat emptor!

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 Blits N-235 (6 a.m. to 2 p.m.) ext. 4-8369

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

Visitor Center Gift Shop N-933 (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-139) 603-7150

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

Ames Swim Center (N-109) 603-8025

Ames Swim Center, 25 meter swimming pool open and heated year round. (80-82 degrees) Lap swim: Mon, Weds, Fri, 10 a.m. to 1 p.m. and 3-6 Tues to Thurs 10 a.m. to 1 p.m. and 4 to 7 p.m. Seasonal recreation swim; swim lessons. Locker rooms w/shower and sauna facility. Open to all civil servants and contractors.

Location: Bldg. 109 across the street from the tennis courts. Fees vary depending on activity. POC: Tana Windhorst, ext. 3-8025; e-mail: tw4lsb@aol.com.

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.

Big Sur vacation rental, secluded 4bd/2ba house in Big Sur, sleeps 8. $1,050/wk. Call (559) 642-3600 or (650) 390-0248.

Sleeps 8. $1,050/wk. Call (650) 301-3487.

DBMcKellar@aol.com

Lake Tahoe - Squaw Valley Townhouse, 3 bd/2 ba 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.

Vacation rental. Flat, 3 miles south of Yosemite. 3bd/1.5 ba, TV, VCR, MW, Frp/BBQ, private 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 egged kitchen. Access to priv. beach. Tub in patio gdn. Halfway between Carmel and Big Sur. $75/night for 2; $225 for 4 and $250 for more, plus $150 cleaning dep. Call (650) 328-4427.

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

Visit Web page for pictures: http://www.ACruiseStore.com. $120/night low season, $180/night high season (holidays higher) plus $156 cleaning fee and 12% Nevada room tax. Charlie (650) 366-1873.
Hubbard outlines strategies for future during transformation

continued from page 3

probability of loss of crew, compared
with a 1/220 probability of loss of crew
for the space shuttle.

Hubbard said Ames has been
assigned the program office for the new
Robotic Lunar Exploration Program,
whose goal is to prepare for humans to
return to the moon. Ames will use the
expertise gained from the Lunar Pros-
ppector mission that operated from Janu-
ary 1998 to September 1999 in support of
the new lunar exploration program and
its first mission, the Lunar Reconnais-
sance Orbiter, scheduled to launch in
2008.

Ames will be a member of a lunar
lander team led by Marshall Space Flight
Center that will operate in the moon’s
south polar region for up to 12 months.
Hubbard said Ames’ contributions
might include mission operations sup-
port, science instruments, autonomy,
robotics, reliable software and integrated
systems health management.

Although Ames is making good
progress, Hubbard also warned that
some of the effects of the transformation
process will be painful for the Center. In
order to meet the requirements of the
transformation process, Hubbard said
Ames is continuing to reshape its
workforce.

“We have come a long way from
Feb. 7, and our uncovered capacity has
been reduced, thanks to a lot of hard
work,” Hubbard said. However, warned
Hubbard, “there is still a long way to
go.” Based on current budget projec-
tions, new business opportunities and a
potential buyout, from zero to 240 civil
servant positions and from 220 to 315
contractor positions may be unfunded
in this fiscal year. Positions that remain
unfunded could be at risk for a reduc-
tion in force (RIF) or layoff.

Hubbard said Ames will make ev-
ery effort to reduce contractor layoffs
and avoid a reduction in force of civil
servants. “The goal is no RIF,” vowed
Hubbard. He urged employees to coop-
erate with the Center’s workforce trans-
ition team that is helping to find work
for transition employees. He also told
employees that NASA is requesting an-
other buyout authority and encouraged
those who are eligible to take the buyout
should it be approved.

“Managing our way through FY 06
without major damage to our core com-
petencies or our strategic future may
well be the greatest challenge in the
history of the Center,” Hubbard de-
clared.

BY MIKE MEWHINNEY

Ames Health Unit offers flu shot

The NASA Ames Health Unit will
be offering flu vaccine in the Health
Unit (Building 215) on the following
dates and times:

- Nov. 7, 1:30 p.m. to 3:30 p.m.
- Nov. 8, 9:00 a.m. to 11 a.m.
- Nov. 15, 1:30 p.m. to 3:30 p.m.
- Nov. 17, 1:30 p.m. to 3:30 p.m.

It is not necessary to make an ap-
pointment. Additional clinics may be
scheduled in the future pending vac-
cine availability.

Flu Clinic Procedures:

1. Please wear short or loose fitting
sleeves to eliminate the need for pri-
vacy.

2. The information sheet and con-
sent forms will be available at the Health
Unit or on line at http://q/qh/health.
Follow the link to the Influenza vaccine
information sheet and Influenza vac-
cine consent form. You can print out
these forms, complete them and bring
them with you to the flu clinic.

3. Please arrive a few minutes early
to allow yourself enough time to read
and sign the forms if you will be com-
pleting them at the Health Unit.

For more information, contact the Health
Unit at ext. 4-5287.