

Astrogram



Griffin visits Ames; answers questions about the future

NASA faces a tough year ahead as it copes with the possibility of a reduction in force (RIF) and not enough money to accomplish everything it would like to, according to NASA Administrator Mike Griffin during a recent visit to Ames.

Saying that it would be "our very last choice," Griffin warned that because of budget constraints, NASA may have to issue RIF notices in June of next year to those civil servants whose jobs remain unfunded as the agency undergoes transformation to meet the goals of the nation's Vision for Space Exploration.

"NASA has a certain amount of money and we have been asked by the president, and heavily supported by the Congress, to change some of the things

we have been doing," Griffin told Ames employees during an all-hands meeting held Dec. 6 in the main auditorium. "No one more than I would like to have a robust research and technology program, but we can't."

Griffin, who delivered a keynote address at the 2005 annual fall meeting of the American Geophysical Union in San Francisco,

took time out from the conference to visit Ames. In addition to the all-hands



NASA Administrator Mike Griffin responds to questions during his recent visit at NASA Ames.

NASA photo by Tom Trower

Ames celebrates its 66th birthday



NASA photos by Dominic Hart

A small celebration commemorating the 66th anniversary of Ames was held at the Mega Bites Ames cafeteria on Dec. 20. Ames employees were invited to have a slice of the cake pictured above.

meeting, Griffin also heard several technical presentations, met with Ames Center Director G. Scott Hubbard, and toured the Vertical Motion Simulator during his visit.

As is his preference when addressing employees, Griffin dispensed with a formal presentation, and instead spent more than an hour answering questions from the capacity audience. He told employees that when he last held an all-hands meeting at Ames, there were 2,000 civil servants in the agency whose jobs were unfunded.

"We now have that problem down to 850 people and we're working on it," Griffin said, adding that he will render a decision in June whether or not to implement a RIF, depending on how much unfunded capacity remains. "If it's still 700 people, then we'll have to send out a RIF notice," he cautioned.

During a frank exchange with employees, Griffin responded to a wide

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A Happy Holiday Season to All!

Cleave describes future of NASA science mission

NASA's science mission directorate will restructure, according to Mary Cleave, associate administrator, NASA Headquarters Science Mission Directorate, who recently spoke to Ames employees in the main auditorium.



NASA photo by Dominic Hart

Mary Cleave, associate administrator, NASA Headquarters Science Mission Directorate speaks to the audience during her recent visit to Ames.

In introducing Cleave, Center Director G. Scott Hubbard noted that 'Science' is Ames' biggest customer and provides more than 30 percent of the center's budget.

"We are going to take Earth science and the solar guys and we're going to separate them back out again," Cleave said in discussing the restructuring. Four divisions -- Astrophysics, Heliophysics, Planetary Science and Earth Science -- will comprise the Science Mission Directorate rather than the current three divisions.

NASA Administrator Mike Griffin has asked the directorate to deliver an executable science program for fiscal year 2008 with constrained resources, she said. Each division must solve its own problems, Cleave noted. "I don't want to decide whether Earth science is more important than astrophysics . . . We're going to be very hard (during) our mission confirmation reviews."

Cleave presented an overview of her directorate. "What we're trying to do . . . is build on the long legacy of science and science management," she said. Cleave mentioned that one of NASA's "great" accomplishments . . . "this year was the encounter with comet Tempel 1."

"The costs of these missions are growing," she said. A 40 percent increase planned for the Mars program will be reduced, she noted, adding that "Mars is important, but it's not the only thing we do."

"We have a lot going on," Cleave

concluded, adding that "With Katrina and everything else, we're going to be lucky to maintain the budget we have."

The full talk and all questions and answers can be viewed on the Web at: <http://vanseg-1.arc.nasa.gov/2005/AH051207-01.ram>

BY JOHN BLUCK

Porter shares aeronautics goals



NASA photo by Tom Trower

On Dec. 19-20, Dr. Lisa Porter, NASA's associate administrator for aeronautics visited Ames to discuss NASA's future goals in aeronautics. During the two-day visit, she held candid discussions with numerous groups including Ames center management, union representatives and aeronautics researchers. The highlight of the visit was her 'all-hands' address. To a packed auditorium, Porter said, "as far as ARMD (Aeronautics Research Mission Directorate) is concerned Ames has a very vital role in aeronautics going forward." She explained the three principles guiding the transformation of the directorate and stressed cooperative and collaborative research among government agencies, mission directorates and centers. She shared the aeronautics 10-year road map and the goals for the upcoming year. Porter ended by saying that her job as a manager is to create an environment that enables researchers to achieve technical excellence, technical truth and preserve their scientific integrity.

Blue Ribbon Task Force announces nanotechnology recommendations



NASA photo by Tom Trower

Left to right: Congressman Mike Honda, (CA-15); California State Controller Steve Westly; co-chairs of the Blue Ribbon Task Force on Nanotechnology and NASA Ames Research Center Director G. Scott Hubbard, the task force's working chair, announced the task force's recommendations during a news conference held Dec. 19 at NASA Ames. Westly and Honda created the Blue Ribbon Task Force on Nanotechnology in December 2004 to ensure California's leadership in the trillion-dollar industry and to maximize the accompanying economic and employment gains to the state. NASA's interests in nanotechnology are focused on the benefits to space exploration.

Ames supports fiery return of NASA's space dust cargo

In search of clues about the origin of life on our world and other secrets, a crew flying on a NASA DC-8 aircraft will take off from Ames to study the small, speeding Stardust space capsule

formed on Earth," Jenniskens said. "The carbon from the heat shield will react in the shockwave, making new molecules that would have seeded Earth at the time of the origin of life. The carbon in

at NASA Ames, will protect the priceless cargo of comet dust and interstellar grains. The carbon-based heat shield material is also a candidate for potential inclusion on NASA's next planned spaceship, the Crew Exploration Vehicle (CEV), NASA engineers say. This prospective future use is one reason they plan to study the Stardust capsule as it slams into Earth's atmosphere, and the shield rapidly heats due to friction with the air.

"Our main interest is the performance of the heat shield and the chemistry that takes place in it as it vaporizes and erodes during the descent and re-entry," said Dave Jordan, a NASA Ames engineer and project manager for the capsule observation mission.

During this blistering re-entry, the *continued on page 8*



as it returns to Earth on Jan. 15, 2006, at 2 a.m. PST. The landing zone is a restricted area - the Utah Test and Training Range, located southwest of Salt Lake City.

About two years ago, in January 2004, the Stardust spacecraft flew within 147 miles (236 kilometers) of the comet Wild 2 (VILT-TWO) and survived the high-speed impact of millions of dust particles and small rocks up to nearly two-tenths of an inch (one half centimeter) across. With its tennis-racket-shaped collector extended, Stardust captured thousands of comet particles in a super-lightweight solid called aerogel.

"It's a little bit like collecting BBs by shooting them into Styrofoam," said Scott Sandford, an astrophysicist at Ames and a Stardust mission co-investigator. "Some of the grains are likely to have exotic isotopic ratios that will give us an indication that we're looking at materials that aren't as old as the solar system, but are, in fact, older than the solar system," Sandford asserted.

The returning Stardust capsule will strike Earth's atmosphere at eight miles (12.8 kilometers) per second - more than 10 times faster than a speeding bullet. That is fast enough to go from San Francisco to Los Angeles in only one minute. The DC-8 crew will face the daunting task of tracking and observing the 101-pound (45.7 kilogram) conical object as it hurtles through the atmosphere and slows before the spacecraft finally parachutes down in a Utah desert.

"As the observer sees the approaching capsule, it will appear as a point of light," said Peter Jenniskens, principal investigator of the Stardust Sample Return Capsule Re-entry Observing Campaign. Jenniskens is a meteor astronomer at the SETI Institute in Mountain View.

"The capsule will be an artificial meteor that we can study for clues about how life's molecules may have first

comet dust could have done the same," Jenniskens ventured.

The mini, Apollo-like capsule will shoot down through the air at the highest spacecraft re-entry speed into Earth's atmosphere ever, generating extremely high temperatures. The capsule's special carbon-based heat shield, developed

NASA exhibit attracts crowds at supercomputing conference

Research and technology from five NASA centers (Ames, Glenn, Goddard, Langley and the Jet Propulsion Labora-

Supercomputing (NAS) Division, continuously saw heavy traffic from a large subset of the nearly 10,000 conference participants.



NASA photo by David G. Robertson

NASA's research exhibit at the Supercomputing Conference in Seattle, showcased work from each mission directorate and the NASA Engineering and Safety Center.

tory) were showcased at the 18th annual International Conference of High Performance Computing, Networking, and Storage (SC05) in Seattle's Washington State Convention and Trade Center in November.

This year's 1,600 square-foot exhibit, coordinated by the NASA Advanced

The NASA research exhibit at SC05 housed eight demonstration stations featuring science and technology from each mission directorate and the NASA Engineering and Safety Center (24 projects total). In addition, there was a presentation area dedicated to covering some of the science being made possible using the Columbia supercomputer, a fully operational

system currently ranked number four on the November 2005 TOP500 supercomputing list.

The NASA booth was one of only 10 selected (out of 265 booths total) as a stop on a VIP tour held during the first day of the exhibition. VIPs on the tour

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range of questions, including the effects of the budget cuts on Ames, concerns over full-cost accounting and full-cost recovery, and the future of the space shuttle, International Space Station and the Hubble Space Telescope.

Concerning research and technology, Griffin said that under its current budget, NASA can afford only about half of what it would like to do. Understandably, that has caused a lot of concern among employees, particularly those three field centers whose primary mission is dedicated to aeronautics research and technology. "Forty percent of our budget is not going to be spent on aeronautics research and technology," Griffin declared.

At one point during the questioning, Griffin refused to be drawn into a debate with a persistent questioner over the issue of whether or not to continue conducting research that doesn't meet the goals of the Vision for Space Exploration. "I need to close the gap between what people at NASA would like to do, and what we're being asked to do by our president," Griffin asserted. "There is no entitlement; there is a sense of entitlement and it needs to go away."

In response to another questioner, Griffin pledged to fly the space shuttle "as expeditiously as we can" when NASA returns to flight. He said that over the past 25 years, NASA has flown an average of 4.56 flights per year. "If we can maintain that flight rate for the next five or six years, then we'll just barely finish the International Space Station and complete one Hubble servicing mission," Griffin said.

He said that Ames will play a key role in future space exploration, including management of the Robotic Lunar Exploration Program, and designing the entry thermal protection systems and health monitoring systems for the new Crew Exploration Vehicle that is envisioned to replace the space shuttle after it is retired in 2010.

Commenting on future space exploration, Griffin said that according to a recent Gallup poll, NASA enjoys broad support across the country. "The Gallup Poll said that three-fourths of the popu-

lation supports or strongly supports the goals of the Vision for Space Exploration," Griffin observed. "That kind of support for a government initiative is incredible; by any rational measure, we enjoy broad support."

And, while international partners will continue to help NASA conquer the

remaining frontiers of space, the United States will lead the effort. "No nation but the United States has the capability to put together a transportation system to take us to the moon or with multiple launches to Mars," he said.

BY MICHAEL MEWHINNEY

NASA exhibit attracts crowds at supercomputing conference

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included executives from Microsoft and Dell and several high-ranking officials from both the Department of Defense and the Department of Energy. During this tour, NASA staff briefed the group about some of Columbia's high-level applications using the interactive hyperwall visualization tool.

Some of the research featured at the NASA booth included: development of important engineering analysis tools that can be used to quickly assess viability of orbiter heat shield survival through re-entry, thus enhancing safe flight of the space shuttle orbiter; utilization of advanced supercomputing technologies to enable "real-time" prediction of Atlantic tropical cyclones and other meteorological events (the resulting research models have provided real-time guidance to forecasters through major events, including hurricanes Katrina and Rita;) and development of cutting-edge nanosensors vital to several NASA missions, including the monitoring of astronaut health during space missions, detection and identification of extraterrestrial organisms, and revealing underlying genetic mechanisms of various diseases.

In addition to having a research booth at the conference, NASA personnel were heavily involved in the conference program, participating on panels, and contributing to technical paper, tutorial, and workshop sessions. Two of

the four papers nominated for the prestigious Best Paper Award at SC05 were authored by NAS researchers; and one of these NAS-authored papers tied for the award. The winning paper, 'High Resolution Aerospace Applications Using the NASA Columbia Supercomputer,' written by Dimitri J. Maviplis (University of Wyoming); Michael J. Aftosmis (NAS Division); and Marsha Berger (Courant Institute, New York University), presented two important NASA applications that achieve near-perfect scalability on more than 4,000 processors of massively parallel supercomputers like Columbia.

The four nominated papers were selected from a pool of 62 accepted papers, which was in turn, chosen from 260 submissions. The other NAS-authored paper nominated for the best paper award 'An Application-Based Performance Characterization of the Columbia Supercluster,' was written by Rupak Biswas, M. Jahed Djomehri, Robert Hood, Hoqiang Jin and Subhash Saini, all of the NAS Division.

The SC05 conference provides attending scientists and engineers with an opportunity to inform NASA management, external colleagues and the public about NASA accomplishments that leverage high-performance computing, with the hopes of increasing support for supercomputing at NASA.

BY HOLLY A. AMUNDSON

A Latino legacy: World War II - 60 years later

Recently, the Hispanic Advisory Committee for Employees (HACE) teamed up with Evergreen Valley College to co-sponsor a panel discussion with Latino World War II (WWII) veterans.

During WWII, Latinos joined every branch of military service and fought bravely, often on the front lines. Thousands of young Latino soldiers died or were wounded defending freedoms that were denied to them and only 12 received the Medal of Honor.

The Latino WWII veterans are now in their 70s and 80s and on Oct. 13, a group of local veterans had their stories captured in 'mini-documentaries.'

In 1998, the Digital Clubhouse Network (DCN) began helping hundreds of veterans preserve their stories for generations to come. In 2004, the DCN was the first to submit stories on Latino veterans across the nation to the Smithsonian Institution and the Library of Congress to forever be a part of America's memory.

Although the short stories can only give you a glimpse of what these men experienced during the war, they are powerful reminders of how much these individuals were willing to sacrifice for their country. Their stories will remind us that the struggle for full acceptance as American citizens continues to this day for many Latinos.

Teen on a Mission

The founder of the idea to honor Latino WWII veterans was a 17 year old by the name of Robert Corpus. Corpus, a senior at San Jose High Academy, has given himself a personal mission to capture and save the stories of California Latino veterans.

Corpus, who has interviewed more than 50 veterans thus far, has a goal to interview 30 more by the end of 2005. So far, only five of Corpus' interviews were with Latinos.

He mainly travels through southern California to veteran's homes since there are more veterans to be found around that area. Oceanside and Camp Pendleton is a great place to find Navy and Marine veterans as he so discovered.

Corpus, who wants to become a doctor and regularly volunteers at Kaiser Hospital Santa Clara, grew an interest in World War II when he heard stories from patients who were proud to be veterans. From this interest he started interviewing veterans and formed a Stories of Service club at San Jose High Academy, which now has 20 members.

Along with traveling to find veterans to interview, he also travels around the state teaching other youths how to use digital cameras and what to ask during interviews. Some like to joke and say that Corpus is "an 80-year-old man in a 17-year-old body." Others look at him as a role model for

today's youth.

The Hispanic Advisory Committee



Left to right: Eric Kristich, HACE co chair; Tommy Cortes, WWII veteran; Tommy Cortes Jr.; and David Crosson, president of the History of San Jose.

for Employees (HACE) takes great pride in honoring Latino heroes of today and acknowledges/commends young Latinos such as Corpus who bridge generations together in remembrance of the sacrifices many have given.

BY ERIC KRISTICH

Cops Care Cancer Foundation holds holiday event at Ames



NASA photo by T J Forsyth

The Ames Airfield Management Office hosted the Cops Care Cancer Foundation when it held its annual Fantasy Flight event for children. The policemen formed a receiving line and applauded the kids as they entered the hangar. The Fantasy Flight event is held for local Bay Area families who have a child that is stricken with cancer or any other life-threatening illness. The families enjoyed games and visited with special guests, including Winnie the Pooh, Tigger and Scooby Doo. The San Jose Police Department (SJPD) had several officers from the K-9, motorcycle and bicycle units on hand to answer questions. Santa Claus arrived via SJPD police helicopter and delivered gifts to each child.

Eileen Collins featured at Return to Flight dinner

Lockheed Martin Space Systems Company (LMSSC) 'Return To Flight Night' with NASA shuttle commander Eileen Collins, was recently hosted by the LMSSC Bay Area Leadership Association Chapter of the National Management Association (NMA).

Commander Collins was very popular with the crowd, which stood in line to meet and receive her autograph and hear her talk about her recent shuttle mission. The prestigious Silver Knight of Management Award, the highest award an NMA chapter can give (presented since 1960) went to Len Kwiatkowski, vice president and general manager, Military Space.



Charles Smith, chief, Space Technology Division is seen here with space shuttle commander Eileen Collins at the recent Return- to-Flight dinner hosted by Lockheed.

Ames artists recognized for safety calendar art submissions

An ice cream party provided the refreshments for 97 young artists and their families who gathered at Ames on



NASA photo by Dominic Hart

Artists getting ice cream at the recent ice cream party provided for the participants of the 2006 Ames Safety Calendar contest.



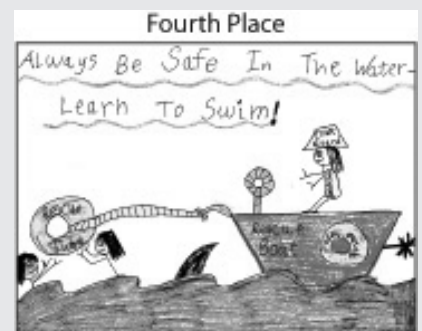
Name: Michelle Mansour Age: 14



Name: Nicole Dudley Age: 15



Name: Karina Kono Age: 11



Name: Shareef Mahmoud Age: 7

Dec. 12. The artists, all between the ages of three and 18, were each recognized for their contribution to the 2006 Ames Safety Calendar.

An Ames employee sponsored each artist, and each piece of artwork was designed to promote safe behavior at work and at home.

This is the second consecutive year

children have provided the artwork for the Health and Safety calendar.

During Safety Week in October, all artwork was displayed in the Ames Cafe. Employees were able to vote for their favorite picture in each of three age groups. The pictures receiving the most votes are on the top row of both sides of

the calendars and the top four are seen here above.

Each artist's picture is featured on one of three 2006 Ames safety calendars. One of these calendars featuring 36 pieces of artwork was distributed to each employee centerwide in mid-December.

BY SHELEEN LOMAS

NASA Ames proves to be a superhero at CFC 2005

Congratulations on a very successful 2005 Combined Federal Campaign (CFC). Thank you to the Ames commu-



nity for its generosity and to the entire CFC team, captains and keyworkers for their stalwart efforts. When our dona-

tions lagged short of the goal at the initial close date of the campaign, we were sure by extending the date the generous nature of the Ames community would kick into high gear and launch into a final effort to meet the goal.

And indeed the CFC campaign proved successful! There was some



Top donors to CFC 2005 at NASA Ames, left to right: Mary Walsh, Joseph Conley, Shawn Wolfe and Donald Chuck, are pictured with Ames Center Director G. Scott Hubbard; Ames campaign chairperson, Larry Lasher; deputy chairperson, Andy Hocker; and Don Durston, Ames representative for the CFC Bay Area Board.



NASA photos by Tom Trower

Members of the Combined Federal Campaign (CFC) team stand by the CFC thermometer. Left to right: Don Durston, Ames representative for the CFC Bay Area board; deputy chairperson, Andy Hocker; and Ames campaign chairperson, Larry Lasher.

\$232,000 raised in the regular CFC campaign (97 percent of the goal) and over \$5,000 disbursed on a fast track for emergency relief efforts for the CFC Katrina disaster relief campaign. If the special campaign were added to

the regular campaign, the CFC percentage would be 99 percent. Once again, NASA Ames has distinguished itself as a leading charitable giver in the Bay Area.

Despite the past year's uncertainties in the work market and donor fatigue that inevitably must occur after responding to the tsunamis, the Gulf hurricane and earthquake tragedies, the Ames community proved to be a superhero and rise to the occasion.

BY LARRY LASHER
2005 CFC CHAIRPERSON

'After oil - transition to a clean energy economy' talk set

On Jan. 24, 2006, at 2 p.m., Professor Daniel M. Kammen will present a talk at Ames to explore the evolution of the United States' fossil fuel economy and to identify the times and opportunities where there have been significant levels of innovation and change.

He will also look at current technology policies, as well as what may come in the future to initiate and develop a low-carbon economy. This talk will cover scientific, technical and policy aspects of our evolving energy

system, and will make the case that 'tipping points' and opportunities for change are plentiful, should we choose to take action. The location of this event will be in Building 943, the NASA Ames Public Affairs building, outside of the main gate.

Kammen is a professor at the University of California Berkeley, specifically in the Energy and Resources Group, the Goldman School of Public Policy and the Department of Nuclear Engineering. He is also the founding

director of the Renewable and Appropriate Energy Laboratory, and the co-director of the Berkeley Institute of the Environment. His work spans the science and engineering of renewable energy systems, risk analysis and energy policy.

Kammen's publications and current projects can be found online at: <http://socrates.berkeley.edu/~kammen> and also <http://socrates.berkeley.edu/~rael>

BY STACY ST. LOUIS

The NASA Shared Services Center to open March 1, 2006

NASA is implementing a shared services center that consolidates selected activities in financial management, procurement, information technology and human resources (HR) into one new center, The NASA Shared Services Center (NSSC), which opens March 1, 2006 at Stennis Space Center in Mississippi.

The NSSC's vision is to provide 'unparalleled service,' which will be measured and reported to all customers. NSSC will work collaboratively with centers to meet all service needs via a customer contact center (CCC) and center liaisons located at each center.

Employees from all centers participated in important steps necessary to bring this vision to fruition. The transition of activities to the NSSC is scheduled over a three-year period, including both inherently governmental and commercial activities.

By consolidating services and optimizing processes, centers can redirect resources to provide additional support to their core mission. Because the NSSC will provide NASA with a unified process for obtaining transactional, administrative and support functions, there will not be any duplication of functions between the centers and NSSC. The

NSSC is designed to achieve:

- Efficient and effective service
- Improved data quality;
- Standardized processes;
- Leveraged skills and investments; and
- Economies of scale

Finally, implementation of NSSC supports meeting NASA strategic busi-

ness and mission efforts with limited resources because there are greater demands to utilize resources - people, time, dollars - to best support NASA's core mission.

The NSSC will improve quality and service, increasing efficiency and effectiveness of transactional support, which will provide for customer-oriented, consistent, high-quality, easily accessible and timely services. It also directly supports the president's management agenda for improved government performance and the OneNASA vision.

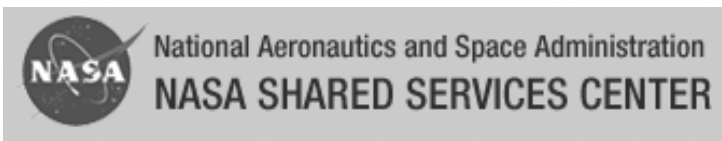
Consolidation of activities in financial management, procurement, information technology and human resources helps direct the agency's focus toward operating as one team that better leverages its skills and resources.

Hurricane Katrina, understandably, resulted in a decision to delay the Oct. 1, 2005 NSSC original opening date to March 1, 2006. The NSSC will begin relocating its staff to the Gulf Coast region beginning Jan. 3, 2006. The NSSC will be operating from an interim facility at SSC until the permanent facility, provided by the state of Mississippi, is available.

NASA would like to encourage the members of the NASA family to apply for civil servant positions with the NSSC. This is a tremendous opportunity to implement an important agency initiative, to make a significant contribution to the Mississippi/Louisiana Gulf Coast economies and to have a positive effect on the impacted communities.

The NSSC is proud to support the NASA community and excited to open their doors on March 1, 2006. For more information about recent NSSC activities or opportunities, please visit their Web site at: <http://nssc.nasa.gov/>.

BY ELENA MARTINEZ



Ames supports fiery return of NASA's space dust cargo

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DC-8 crew will take surface-temperature and shock-radiation measurements of the heat shield as part of it burns away. Shock radiation is light emitted from extremely hot air. Scientists will study this light to learn how hot the capsule gets and what chemical reactions are taking place. These chemical reactions will result from the violent breakup of air molecules that collide with vapor in front of the speeding capsule.

According to scientists, observers using the naked eye will likely see the capsule as a very bright pinpoint of pink-white light. This color is the signature of excited atoms and molecules in the shock wave formed as the capsule strikes the atmosphere, according to George Raiche of Ames.

Once the capsule has parachuted to a landing in Utah, researchers will collect debris from the surface of the shield and study how much of the heat shield

was lost during re-entry. "This is called an ablative heat shield," said Michael J. Wright of Ames, another scientist working on the project. "By vaporizing some of the material from its surface, the heat shield vapor carries some of the heat from friction away from the capsule, keeping the payload cool," Wright explained.

Scientists will transport the space dust to a laboratory at NASA Johnson Space Center, Houston, for analysis.

"There'll be a small team of us at Johnson Space Center who will assess what we actually got back from the comet so we can verify we did get a useful sample," Sandford said. "A small portion of the samples will then be used to make a preliminary study of the returned material. After the preliminary examination is complete, all the samples will be made available to the general scientific community for more detailed study. My guess is people will be asking for

and working on these samples for decades to come."

Besides NASA Ames and the SETI Institute, several other institutions are partners in the NASA DC-8 airborne study: the University of Alaska at Fairbanks; the University of Utah at Logan; Sandia National Laboratories; Los Alamos National Laboratories; the Aerospace Corporation; the U.S. Air Force Academy; Kobe University, Japan; and Stuttgart University, Germany. The University of North Dakota operates the DC-8 aircraft for NASA.

More information about the Stardust observation campaign is on the Web at: <http://reentry.arc.nasa.gov/>

The Stardust spacecraft was launched on Feb. 7, 1999, from Cape Canaveral Air Station, Fla., aboard a Delta II rocket.

BY JOHN BLUCK

Ames Diversity Leadership Course students graduate

Ames embarked upon its first Diversity Leadership Course under partnership with Cultural Solutions, Inc. There were 30 employees who graduated and have committed to embrace the concept of diversity in the work environment and promote the diversity leadership philosophy and management practice at Ames.

Employees participating in the course completed four phases of instruction: (1) diversity awareness; (2) assessment/comprehension of cultural competencies for diversity; (3) application of diversity concepts and philosophies; and (4) the transition of diversity into the workforce. Participants in this thought-provoking and highly interactive course reviewed and discussed diversity issues, developed a business case and mission statement for diversity, and completed a variety of other group projects.

The Office of Diversity and Equal Opportunity (ODEO) has determined that Ames, similar to other successful technical and scientific institutions, must consider organizational changes in order to continue to attract and maintain quality employees. The center acknowledges the challenge and understands that addressing diversity in the workforce is far beyond compliance and representation, it has become an organizational success issue. The ODEO initiated this course to provide Ames with an opportunity to establish a long-range process for change that will:

- increase morale,
- promote diversity,
- initiate organizational culture change,
- enhance opportunities for career advancement,
- and ensure success for the future.

This course directly supports the mission of the ODEO to advise management, ensure identification of systemic bias or barriers that may hinder the diversification of the workforce, assist in the elimination of identified bias or barriers, and provide professional diversity services to enable employees to attain their professional and organizational goals.

BY BARBARA MILLER



The AM session graduates of the Diversity Leadership Course, back row, from left to right: Leticha Hawkins, Daryl Wong, Ronnee Gonzalez, Nina Scheller, Jon Talbot, Eric Kristich and Brett Vu. Front row from left to right: Barbara Miller (coordinator), Byron Kunisawa (instructor), Jill Willard, Aida Villagracia, Mary Ellen Eglington, Maricela Davis and Adriana Cardenas (ODEO director). Not present for photo: Rick Serrano. The Diversity Leadership Award winners were: Jill Willard and Leticha Hawkins.



The PM session graduates of the Diversity Leadership Course, back row, left to right: Diane Farrar, Eugene Miya, John Marmie, George Sutton, Paul Fung, Kevin Jones, Orlando Santos and Mike Liu. Front row from left to right: Vern Vanderbilt, Rhonda Baker, Linda McCahon, Ed Goolish, Carolina Blake, Dana Bolles, Barbara Miller (coordinator), Adriana Cardenas (ODEO director), Earnestine Parker and Byron Kunisawa (instructor). Not present for photo: Dr. Parimal Kopardekar, Shon Grabbe and Gaye Graves. The Diversity Leadership Award winners were Dana Bolles and Orlando Santos.

Bicycling Club forms at Ames

The recently formed Ames Bicycling Club will hold its inaugural meeting on Jan. 18, 2006 in Bldg. 245, Room 215, from 11:00 a.m. to 12:00 p.m.

The featured speaker will be Robert Cormia, who will discuss bicycle touring, safety and between tune-up maintenance. Cormia (shown in the picture to the right) is owner of Calabazas Cyclery and, as a result of his previous work, holds five patents in thin-film technology, with the results of his work used in CD technology today. After Cormia's presentation, a short discussion will occur to define the date for electing officers of the Ames Bicycling Club.

The Ames Bicycling Club was formed to promote the use of bicycles for health, recreation and commuting while providing the cycling community with information on bicycle maintenance and safety. The club will also work to increase the awareness of the need for a



Robert Cormia

safe bicycling environment and promote the practice of safe bicycling techniques.

By-laws of Ames Bicycling Club can be found at: <http://zen.arc.nasa.gov>.

Events Calendar

Ames Amateur Radio Club, third Thursday of each month, 12 noon, N-T28 (across from N-255). POC: Michael Wright, KG6BPK, 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 Bicycling Club Inaugural meeting on Jan. 18, 2006 in Bldg. 245, Room 215, 11:00 a.m. to 12:00 p.m. Thereafter every 3rd Wednesday of the month 11:00 a.m. to 12:00 p.m. in Building 245 auditorium. POC: Julie Nottage at jnottage@mail.arc.nasa.gov or ext. 4-3711. By-laws of Ames Bicycling Club can be found at: <http://zen.arc.nasa.gov>, the link is under the picture.

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: Tony ext. 4-0340.

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

Ames Sailing Club Mtg, second Thursday of ea. month (Feb through Nov), from 12:00 p.m. -1:00 p.m. in Bldg. N-262, Rm 100. URL: <http://sail.arc.nasa.gov/>. POC: Becky Hooley, 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/EHSseries/> POC: Stacy St. Louis at ext. 4-6810.

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

Jetstream Toastmasters, Mondays, 12 p.m. to 1 p.m., N-269/Rm.179. POC: Bob Hilton at ext. 4-2909, bhilton@mail.arc.nasa.gov.

National 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.

Co-Discoverer of 'Tenth Planet' featured at astronomy lecture

The Silicon Valley Astronomy Lecture Series presents a Second Century Lecture co-sponsored by the American Astronomical Society:

Astronomer Michael Brown of Caltech will give a non-technical, illustrated talk entitled, 'Beyond Pluto: The Discovery of the '10th Planet.' Details below:

Date: Jan. 25, 2006

Time: 7 p.m.

Place: Smithwick Theater
Foothill College,
El Monte Road and
Freeway 280,
in Los Altos Hills.

Cost: Free and open to the public.
Parking on campus costs \$2.

Call the series hot-line at (650) 949-7888 for more information and driving directions.

In this rare Northern California appearance, Brown will discuss how he and his coworkers recently found an object larger than the planet Pluto with an orbit at least twice as large. He will fill us in on the latest thoughts about whether this new object (and Pluto) are planets or not. And he will explain how astronomers are continuing to find larger (and smaller) bodies in the outskirts of our solar system.

No background in science will be required for this talk.

Brown, professor of planetary astronomy at the California Institute of Technology, is co-discoverer of what some people are calling the 'tenth planet'

and also of the intriguing objects Quaoar, Orcus and Sedna. He received his PhD from the University of California at Berkeley in 1994. He specializes in the discovery and analysis of the faintest and most distant parts of our solar system and says he spends most of his time "wondering where even bigger planets are hiding."

The event is co-sponsored by NASA

Ames, the Foothill College Astronomy Program, the SETI Institute and the Astronomical Society of the Pacific.

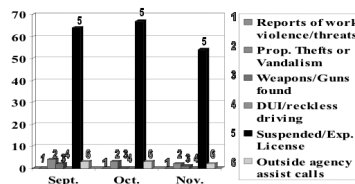
The Second Century Lectures celebrate the centennial of the American Astronomical Society, the main body of professional astronomers in the U.S. They feature talks by noted astronomers covering the most exciting new research about the universe.

Protective Services monthly activity

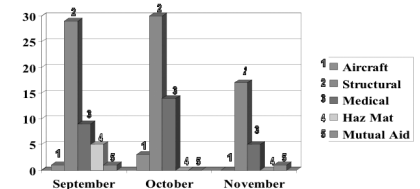
A statistical summary of activities of the Protective Services Division's Security/Law Enforcement

and Fire Protection Services units for the month of Nov 2005 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



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Ames Classifieds

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

Housing

Room available for rent in house in mid town Palo Alto, with kitchen, laundry, and pool, \$500 plus \$50 toward utils, for a quiet, neat, stable and conscientious person or couple. E-mail jims@eos.arc.nasa.gov; ham call wb6yoy.

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.

Pioneer 6-disc CD player with (8) extra changer cartridges. Black finish, works perfectly, \$35. Call (408) 295-2160.

Jet performance chip state 1 part #294055 for 1994 Chev Truck/SUV. Ray (408) 246-4428.

Combi Savvy travel stroller (new cond.), \$25; 2 Cenelli 66 road bike handlebars, 44 and 42 cm, \$8 ea.; Bontrager Ti mountainbike handlebar (118g) w/BERTS, \$15; Campy front derailleur, \$5; Various Harken, Schaefer, Servo sailing cleats and blocks; Kris (408) 243-3348.

Cambridge Soundworks and Polk audio PC sound system. Powered subwoofer with volume control and Polk Audio satellites. \$20. Call (408) 295-2160.

Waterbed - King size, Universal, canopy, pedestal with drawers - beautiful, large, wood frame waterbed, with newish wave free mattress. Moving sale. \$1,000 or B/O. Barry Cunningham (510) 93-4457, e-mail EZrdrdad@comcast.net

Automobiles

'68 Mustang, project car. New parts, \$1,500 B/O. Call (408) 246-4428.

'93 GMC Sierra 1500, 1/2 ton, regular cab, 6 1/2-ft bed. Excellent. Loaded. 136K mls. 5.0 liter (305 cu in) V-8. Cruise control, pwr windows, pwr locks. A/C. Camper shell with sky lights and screens. Carpet kit. Custom bumpers. Tow hitch. Alpine AM/FM/CD. JBL amplifier. Kicker subwoofer. IPOD hookup. New: BF Goodrich tires, brakes, belt, oil, transmission filter and fluid, differential lube. Paint protection. Hood protector. Embroidered cab carpet. Sliding rear cab window. Performance muffler. Flow Master dual exhaust pipes. Maintenance records. \$4,995. Bill (408) 203-3132.

'00 Jamboree motor home - Class C recreation vehicle. Low mileage, great condition, sleeps 4-6. Chevy fuel injected Vortex engine, auto trans w/OD, PW, PL, trailer hitch, and full length awning. Call (408) 971-6398.

'02 Chevy Tahoe LS Vortec 5.3L V8, 285HP, 2WD pewter w/tan leather, 3rd row leather seats, 2WD, roof rack, \$19,500. Great stereo also. Alpine 9820XM deck, Polk audio door speakers, kicker sub, Kenwood 350 watt amp. XM satellite contract thru 1/1/06. Clean record, no accidents. 67,500 mls. E-mail for pics: jc_blum@hotmail.com or call Jon (510) 206-9704.

'04 Ford Expedition, Eddie Bauer, 4WD, loaded, clean, still under warranty. Power folding 3rd seat. DVD player, roof rack, 28,000 mls, exc. cond. Call (650) 369-0578.

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.

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 p.m. to 7 p.m. Seasonal recreation swim; swim lessons. Locker rooms w/sauna and shower 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 Townhouse, 3bd/2ba. View of slopes, close to lifts. Per night: \$250, plus \$145 cleaning fee. Two night minimum. Includes linens, propane fireplace, fully equipped. Call (650) 968-4155, DBMcKellar@aol.com

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

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.

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, 5 nights available to be scheduled either together or individually, \$125 per night. Call Barry Cunningham (510) 793-4457 or e-mail EZrdrdad@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) 983-9514.

Monterey Bay vacation rental at Pajaro Dunes, 20 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/wkend, \$200/addl night, including cleaning by the maid service when you depart. Call (408) 252-7260.

Lake Tahoe cabin rental in Agate Bay, North Shore. 4bd/3ba tri-level, AEK, cable TVs, fireplace, BBQ, deck, sleeps 10. Closest skiing is Northstar, Alpine and Squaw. Rates are \$375 a weekend, \$1,000 a week. Call (408) 867-4656.

Astrogram deadlines

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. 4-3347.

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.

NASA to conduct Project Management Challenge 2006

NASA's PM Challenge 2006, the agency's third annual project management conference, will be held March 21-22, 2006 in Galveston, Texas near the

agement practices. By sharing ideas, project practitioners increase their knowledge and enhance mission success with more effective, efficient and innovative ways to manage programs

and projects.

PM Challenge 2006 is open to NASA employees and contractors. Find out more on the Internet at: <http://pmchallenge.gsfc.nasa.gov>



NRP lecture series scheduled

The NASA Research Park Exploration Lecture Series presents 'Rocketman: Return to the moon, Mars and beyond,' featuring Nancy Conrad, author of 'Rocketman.'

to the moon and Mars. For more information, visit the Web at www.nasa.gov or www.researchpark.arc.nasa.gov

Date: Jan. 31, 2006
 Time: 7 p.m. to 9 p.m.
 Place: Bldg. 943, Eagle Room
 Cost: Free admission
 Open to the public

Conrad, wife of moon-walking astronaut Pete Conrad, will discuss Conrad's vision of moon-Mars exploration and how it dovetails with NASA's current plans to land humans on the moon by 2018.

Rich with anecdotes about Pete Conrad's moon landing and space exploration in the 1970s, Conrad's talk will cover the highlights of the Gemini-Apollo era, the commercialization of space and NASA's 21st century return



Johnson Space Center. The theme for the 2006 conference is 'Putting ideas into action.'

As a mission-driven organization, NASA must continuously strive for improvement in program and project man-




National Aeronautics and Space Administration

Ames Research Center
 Moffett Field, CA 94035-1000



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