National Aeronautics and Space Administration, Ames Research Center, Moffett Field, CA
February 2006
Astrogram

Ames has good chance to overcome FY 07 budget problems

Although Ames is not out of the financial woods yet, the center has a good chance to overcome its budget crisis in the near future.

That was the message delivered by Ames Acting Center Director Marvin "Chris" Christensen during an all-hands meeting held Feb. 16 to discuss the impacts of severe budget cuts to Ames for Fiscal Year 2007.

"If we are reasonably successful in our strategic and programmatic actions, we can solve our unfunded problems going into FY07," Christensen ventured. "The downward trend we have experienced in budget and manpower since the end of FY04 will finally be abated. We see the light at the end of the tunnel."

Noting that Ames has "managed our way through an extremely difficult period," Christensen said the center is fundamentally sound. However, he warned that much work still needs to be done and that if the center isn't successful, there could be employee layoffs next year.

"If we can't solve our problems, then we won't do well and could face a RIF in March 2007," Christensen declared. Christensen, who worked for 11 years at Lockheed Martin before joining Ames last September, is serving as the interim center director until a new director is named to succeed G. Scott Hubbard.

"My job is to keep the ship stable and trim...until a new skipper comes onboard," Christensen quipped. He said he expects an announcement to be made by NASA Headquarters sometime in mid-March.

During his presentation in the main auditorium, Christensen said the center's budget has seen a downward spiral over the past few years.

Since FY 2004, Ames has seen its budget shrink by some $200 million. In FY04, Ames budget was $865 million; in FY 05, it dropped to $723 million, a loss of $133 million and in FY 06, the center's budget was $657 million, a loss of $66 million.

Ames has also seen its workforce grow smaller over the past two years. In FY04, there was a total of 1,458 full-time civil servants and 1,475 contractors employed at the center. In FY06, the number of full-time civil servants had dropped to 1,237 and the number of contractors to 851. He said unless additional funding is secured this year, some 288 employees could face a RIF next year.

NASA photo by Tom Trower

NASA Ames Research Center's Acting Center Director Marvin 'Chris' Christensen answers questions at the Feb. 16 all-hands NASA budget briefing at Ames.

In addition to potential downsizing of its workforce, the center also faces major cuts in several key science programs, particularly the Stratospheric Observatory for Infrared Astronomy (SOFIA), and astrobiology.

"SOFIA is in jeopardy," Christensen declared, noting that the current budget proposal provides reduced funding this year and no funding next year for the aerial observatory. "We certainly haven't given up on SOFIA, but it's going to be a hard fight," he observed.

Astrobiology faces major budget reductions this year and next. Funding for astrobiology has been slashed by 40 percent this year and potentially by 50 percent in FY07. Aeronautics also faces significant budget challenges, including the center's flight simulation facilities and also in human factors research.

To avoid the RIF, Christensen said center management has undertaken a series of strategic actions designed to improve the center's financial outlook.

First and foremost, said Christensen, is 'the return of the Phoenix," Ames historian Jack Boyd, to the administration building to work closely with senior management on the new strategic plan. Christensen said Ames needs to demonstrate its ability to provide strong leadership in project and program management in order to succeed.

Christensen said a new business council is being formed to coordinate all marketing and sales activities. He said the center also is forming a strategic management and integration function for center management that may include relocating the center's chief information officer and chief engineer to Building N-200 so they, too, can work closely with senior management.

Christensen said Ames will aggressively pursue the launching of new initiatives for the development of micro or small satellites for future space exploration. He said Bldg. N-240 may be converted into a small satellite center called the Center for Innovative Engineering that would utilize a "Skunk Works concept" to develop micro satellites.

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Ames - Google seminar series discusses high-end computing

High-end computing was the inaugural topic in the recently established NASA Ames - Google Joint Research Seminar Series. The first lecture was presented at the Google campus on Jan. 25 by Ames' Rupak Biswas and Christopher Henze, who described 'High-end computing with Columbia and scientific visualization in the NASA Advanced Supercomputing Division.'

NASA photo by Jon-Pierre Wiens

Amit Singhal, a Google distinguished engineer, presents the first Joint Ames-Google research seminar at Ames on Feb. 8 about the topic of 'Challenges in running a commercial search engine.'

Approximately 75 people attended, including a broad representation of Ames personnel, and a question-and-answer session followed the formal presentations.

The second seminar, entitled 'Challenges in running a commercial search engine,' was given at Ames on Feb. 8 by Amit Singhal, a Google distinguished engineer. More than 100 members of the Ames community attended, representing nearly all directorates and the NASA Research Park.

This seminar series was initiated by Steven Zornetzer, Ames' deputy director for research and acting deputy center director, and Peter Norvig, Google's director of research and former chief of the Computational Sciences Division at Ames (1998 -2001).

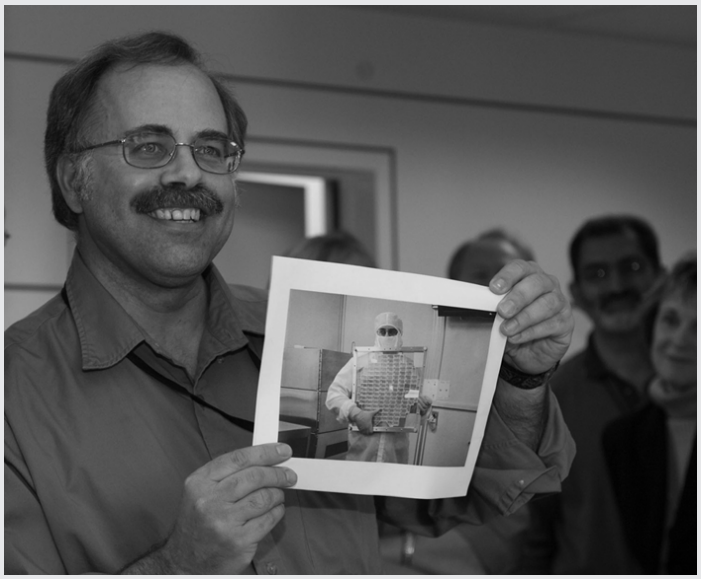
The next seminar will focus on Earth science and is tentatively scheduled for early March at Ames.

This seminar series provides a focal point for potential research collaborations between Ames scientists and engineers and their counterparts at Google. Meaningful research collaborations must begin at the 'grassroots' level, among researchers themselves. Management from both Google and Ames is eager to facilitate these research collaborations and supports them in whatever ways make the most sense.

If you have ideas for additional topics that might be of interest to explore with Google and for more information, check the 'seminars' section of the Ames New Business Office Web site at http://newbusiness.arc.nasa.gov or contact Laura.T.Iraci@nasa.gov or at ext. 4-0129.

BY LAURA IRACI

Employees recognized for their Stardust mission support



NASA photo by Dominic Hart

Ames astrophysicist Scott Sandford (above), a member of the Stardust mission science team, at a reception given by former Ames Center Director G. Scott Hubbard to recognize Ames staff members and management for their innovative "can-do" spirit, support and dedication to the Stardust mission, and congratulate them at a reception on Feb. 7 for a job well done. Sandford holds a photograph of himself holding the samples of the comet particles collected during the mission. "Stardust Sample Return is a great example of Ames' ability to confront the most difficult technical challenges, develop innovative technologies and enable an important success for the science community and for the agency," said Hubbard.

Ames 06 budget

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"It's a tremendous niche and we want to capitalize on it," Christensen said.

He also said Ames has a good shot at winning one or more contracts for a secondary payload for the Robotic Lunar Exploration Program's Lunar Reconnaissance Orbiter managed by NASA Goddard Space Flight Center. Finally, Christensen said Ames is striving to become the agency's lead center for commercial technology.

Christensen said the fact that NASA Administrator Michael Griffin has made a commitment to maintain 10 healthy field centers also bodes well for Ames. Included in that commitment is a pledge to direct work from the space flight centers to Ames and the other research centers. He said more than 100 jobs may come to Ames as a result.

"We still have a good 13 months before the RIF to solve our problems," Christensen said. "If that happens, we will be successful.

BY MICHAEL MEWHINNEY

Hubbard awarded honorary doctorate by University of Madrid

It's **Doctor** Hubbard now. Former NASA Ames Center Director G. Scott Hubbard has been awarded an honorary doctorate by the Polytechnic University of Madrid, Spain's largest engineering university.

Hubbard received the 'Doctor Honoris Causa' during a ceremony held Jan. 27 at the prestigious, 46,000-student university. Presentation of the honorary degree capped an elaborate graduation ceremony that lasted approximately three hours. Hubbard said he was deeply honored to receive the degree.

Former Ames Center Director G. Scott Hubbard wearing the academic robe he wore when he received an honorary doctorate from the Polytechnic University of Madrid in January.

"It was presented as a lifetime achievement award," Hubbard said. "This huge school only gives one Honoris Causa a year, so for them to give it to me as a foreigner is exceptional."

Hubbard received his honorary doctorate from Javier Uceda Antolin, president of the university, before an audience of several hundred students and university faculty members.

"The doctorate is steeped in tradition," Hubbard said. "In addition to the academic robes that have their roots in medieval times, the department chair who sponsored my nomination read a 'laudation,' which was a long narrative of all the accomplishments during my career." In addition to receiving a diploma, Hubbard said he also received "a ring of office, gloves of purity and a book of wisdom" from the university president.

After he received his honorary degree, Hubbard thanked the university for having conferred the honor on him. He then addressed the large audience of several hundred doctoral students and faculty members, tracing the highlights of his professional career that led to his receiving the honorary doctorate.

"I have loved the notion of space exploration all my life," Hubbard informed his audience. "I first glimpsed Mars through a two-inch refractor telescope and dreamed of sending spaceships there some day. I followed the Apollo program with amazement. And when I watched the first missions of Sputnik, Explorer and Echo 1, I knew I had found my life's work: space exploration."

Hubbard, who began his career at Lawrence Berkeley Laboratory in 1974 working with germanium crystal gamma ray detectors for ground and space applications and went on to found a small high-tech startup company in 1980, joined Ames in 1987.

During his career, Hubbard served as the NASA manager for the Lunar Prospector mission to the moon, a $63 million mission that had a development time of only 26 months.

"We looked for evidence of water, using radiation detection methods that had begun my career and we found strong evidence of water ice at both poles," Hubbard recalled. "If it was brought there over time through cometary impacts, as we believe, it may well provide a record of the history of the solar system."

Hubbard also was instrumental in creating the field of astrobiology, and formed the NASA Astrobiology Institute, where he served as its first director. The institute's first international partner was the Centro de Astrobiologia in Spain.

In 1999, Hubbard was called to NASA Headquarters to successfully restructure the Mars Exploration Program and, and in 2003, he served as the sole NASA representative on the Columbia Accident Investigation Board. Hubbard served as the director of NASA Ames from 2002 to February of this year, when he announced that he had accepted a new position as the Carl Sagan Chair for the Study of Life in the Universe at the SETI Institute.

"Throughout my career, I have balanced two seemingly opposite goals - be creative and innovative and at the same time, be organized and follow established principles and methods," Hubbard ventured. "In fact, I have come to believe that these two opposite approaches provide the perfect combination, the perfect balance needed to achieve great things. We need to be creative, to innovate, to think 'out of the box' in order to accomplish new things, explore new pathways, seek new worlds."

In closing, Hubbard congratulated his audience for "having taken on the challenge of careers in science and engineering. I hope it gives you as much satisfaction as it has me, and I would like to thank you again for giving me the title of 'Honoris Causa' from the Universidad Politecnica de Madrid. It is a great honor for me."

BY MICHAEL MEWHINNEY

President of Estonia visits Ames

President of Estonia Arnold Rüütel visited the NASA Ames Exploration Center Jan. 18.

NASA photo by Dominic Hart

New Digital Learning Network connects teachers with NASA

The Digital Learning Network (DLN) studio is Ames' newest way to connect NASA with students and teachers and introduces them to NASA's exploration mission. By using readily available teleconferencing equipment, DLN coordinator Greg Pitzer (Oklahoma State University) aims to involve teachers and classes from across the country as directly as possible in NASA research and missions.

NASA photo by Jon-Pierre Wiens

Ames researcher Jennifer Heldman (Oak Ridge Associated Universities) speaks to NASA Explorer School teachers about Mars analog field research and how this effort supports NASA's exploration mission. The teachers are participating in a week-long educators workshop at Yellowstone National Park called 'The Story of Winter.'

"The DLN will provide schools around the country an avenue by which to experience the work NASA performs at Ames Research Center. Students and teachers will be able to interact directly with researchers in their workplace, whether it be in a conference room, laboratory, out in the field at national parks, or even international sites. Ames Research Center also will support these schools via the DLN in the form of teacher workshops, career nights and school challenges," Pitzer said.

The DLN was initiated to provide support to NASA Explorer Schools (NES)that are encouraged to participate by having special opportunities for high-level involvement. In addition to teachers participating directly in professional development activities, NES students submit ideas to specially designed NASA challenges, and aerospace education specialists regularly visit the schools to support them in their efforts to incorporate NASA in their day-to-day curricula.

The DLN will add a significant component in bringing these schools - many of them located in rural and remote areas - to have more direct contact with NASA. Of the new DLN, Ames education chief (detailed) Mark Leon said, "It's Ames intent to become the long arm on the DLN. Ames has demonstrated the capability to connect NASA research - wherever it takes place, even the Arctic or Antarctic - directly to the education community. If NASA is doing field research in some locale, however distant, we want to connect the activity to students in ways that make sense. We want students and teachers across America to become deeply and thoroughly committed to excel in science and math and believe that a closer connection between NASA and our nation's education system is crucially important."

BY TOM CLAUSEN

'Rocketman' author presents at Ames

NASA photo by Dominic Hart

On Jan. 31, Nancy Conrad spoke at Ames at a lecture hosted by the NASA Research Park. Conrad is the wife of the late moonwalking astronaut Pete Conrad. During the lecture, she discussed Conrad's vision of Moon-Mars exploration and how it dovetails with NASA's current plans to land humans on the moon by 2018. Her lecture was filled with anecdotes about Pete Conrad's moon landing and space exploration in the 1970s. Conrad's talk covered the highlights of the Gemini-Apollo era, the commercialization of space and NASA's 21st century return to the moon and Mars.

NASA engineer helps nation's air traffic flow smoothly

At any given time, there can be as many as 7,000 aircraft flying in the skies above the United States. In the next 20 years, that number is predicted to double, putting a strain on the National Airspace System.

Fortunately, a visionary scientist at NASA is working on the solution. 'Visionary' is a strong adjective but it fits NASA senior scientist Dr. Heinz Erzberger.

Long before Congress passed legislation to create the Next Generation Air Transportation System by 2025, Erzberger was quietly building a research base and developing groundbreaking technologies designed to transform air traffic control operations and increase aircraft safety and efficiency.

After joining NASA Ames in 1965, he provided the fundamental vision for advancing the science of air traffic control. Using the increasing power and sophistication of computers, Erzberger began to create the center terminal radar approach control automation system, a growing suite of decision-support tools. These tools are designed to help air traffic controllers manage traffic flow, by providing them timely information about aircraft in the system, including predictions and advice on sequencing aircraft and avoiding conflicts.

The automation tools include the Traffic Management Advisor that aids in managing aircraft approaching their destinations. Tools such as Direct-to and Conflict Detection help with the routing of aircraft to their destinations. These tools are designed to automate certain functions that controllers had to previously estimate manually. The automation gives controllers increased options that allow aircraft to fly the most efficient routes and to prevent traffic congestion around airports.

Various automation tools have been adopted by the Federal Aviation Administration and installed at some of the nation's busiest airports. At Dallas / Fort Worth International Airport, for example, operational data have shown up to a 25 percent reduction in reported delays. National deployment of the Traffic Management Advisor will soon be complete. Another tool, Direct-To, in trial deployments has demonstrated potential flight-time saving of 1,000 minutes per day in the Fort Worth airspace.

Saving a few minutes from a single flight or reducing taxi times at the airport may seem minor, but multiplied by the thousands of flights per year, the economic benefits are substantial.

Dr. Heinz Erzberger

It is estimated that full implementation of the decision-support tools developed under Erzberger's leadership can save several hundred million dollars in fuel savings, aircraft wear and tear and reduced delays for airline passengers annually.

Not surprisingly, Erzberger is a recognized leader in the field, garnering an international reputation for scientific and engineering excellence and outstanding technical leadership. He is a much sought-out speaker at technical and industry events and has been recognized by NASA and technical organizations, such as the American Institute for Aeronautics and Astronautics and the American Society of Mechanical Engineers with numerous awards and honors.

Recently, Erzberger received the 2005 Distinguished Presidential Rank Award. Each year, the president of the United States honors a small group of federal employees for their exceptional long-term accomplishments. Award winners are chosen through a rigorous selection process. They are nominated by their government agency, evaluated by boards of private citizens and approved by the president. The evaluation criteria focus on leadership and results.

Although Erzberger is retiring from NASA after 41 years of service, he plans to continue his research to develop cutting-edge technologies to improve the safety and efficiency of air travel for Americans as an Ames Associate. Because of Erzberger's work, NASA is recognized as a world leader in air traffic management technology.

BY JONAS DINO

McKay named Fellow of AGU

Renowned Ames researcher Christopher P. McKay is among a group of 45 scientists recently elected Fellows of the American Geophysical Union (AGU). The AGU bestowed the honor on two other NASA scientists, Melvyn Goldstein and Michael King, both from NASA Goddard Space Flight Center.

Chris McKay

Each year, no more than 0.1 percent of the AGU membership is named as Fellows. Based in Washington, the AGU is an international scientific society dedicated to the advancement of geophysics and a greater understanding of the Earth and space sciences.

"I appreciate most that several of my colleagues spent their time writing letters of support without me even knowing it. Their nomination is more meaningful to me than the award itself," McKay said.

As a noted planetary scientist, McKay is recognized as a leading expert on Titan, the largest of Saturn's moons and the focus of the joint NASA / European Space Agency mission, the Cassini-Huygens Probe, conducted in 2004 and 2005. McKay served as a co-investigator on one of the experiments that probed Titan's thick atmosphere, the only other atmosphere in the solar system besides Earth to be rich in nitrogen.

McKay's other scientific research delves into the relationship between the chemical and physical evolution of the solar system and the origin of life. To conduct research in Mars analog environments, McKay has traveled to the world's extreme climate spots, such as Siberia, Chile's Atacama Desert and regions in the Arctic and Antarctic. McKay also serves as the Robotic Lunar Exploration Program (RLEP) scientist.

According to Butler Hine, deputy manager of the RLEP, McKay's selection as an AGU Fellow will be well received within the planetary science community and will be helpful in implementing NASA's visionary plans for future space exploration

BY TERRY PAGADUAN

First woman amputee to conquer Ironman visits Ames

National Disability Employment Awareness Month puts the spotlight on employment of people with disabilities every October and has become an important annual tradition. It gives us an opportunity to reflect on the progress we have made in recruiting a talented, skilled and diverse pool of employees. People with disabilities bring a unique and underrepresented perspective of diversity to NASA. Secretary of Labor Elaine L. Chao announced the official theme for National Disability Employment Awareness Month 2005 :'Workers with disabilities: ready for tomorrow's jobs today.'

In recognition of this past October 2005, Disability Employment Awareness Month, the Ames Employees with Disabilities Advisory Group hosted a disability awareness event on Jan. 17. Sarah Reinertsen, the first woman amputee to conquer the Ironman Triathlon spoke at Ames about her unique athletic competition experiences. Reinertsen was born with her left leg deformed by a condition called proximal femoral focal deficiency. She wore a stiff, cumbersome leg brace until she was seven. At that point, the decision was made to amputate.

Life changed for Reinertsen when, at age 11, she competed in her first track meet for the disabled. She lined up next to other girls missing limbs. When the gun went off for the 100 meter dash, she ran hard and finished first. For the first time, she experienced the thrill of competition and of winning and her life would never be the same.

Today, Reinertsen focuses on triathlons, where she has broken new ground and gone where no amputee woman has attempted before. The Ironman Triathlon World Championship in Hawaii is a 2.4-mile swim, 112-mile bike ride and 26.2-mile run. Reinertsen became the first woman to finish this grueling test on an artificial leg, finishing in a remarkable 15 hours 5 minutes.

Employees with Disabilities Advisory Group meets on a monthly basis and anyone who wishes to support the group is welcome to attend. E-mail dbolles@mail.arc.nasa.gov for more information and / or to be placed on the group mailing list.

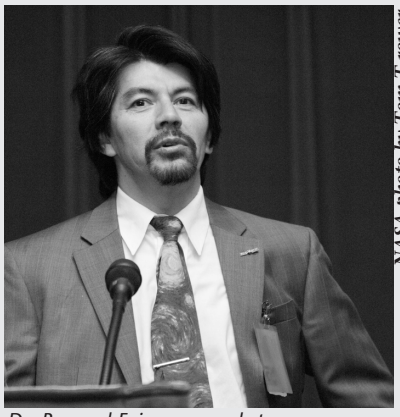
NASA photo by Dominic Hart

Sarah Reinertsen, first woman amputee to conquer the Ironman Triathlon, speaks during her recent talk at Ames.

BY DANA BOLLES

European Space Agency's chief scientist presents at Ames

On Feb. 13, Dr. Bernard Foing, chief scientist of the European Space Agency, gave a director's colloquium entitled 'SMART-1 mission results and future lunar exploration.'



NASA photo by Tom Trower

Dr. Bernard Foing responds to a query from the audience during his recent director's colloquium at Ames.

The European Space Agency's SMART missions- Small Missions for Advanced Research and Technology - are designed to test new spacecraft technology while visiting various places in the solar system.

SMART-1 is now at the moon, mapping the surface mineralogy. Foing discussed the results of the mission and the implications for future lunar exploration. Foing participates in the SMART-1 mission as project scientist and is also a co-investigator in the Mars Express project and acts as executive director of the International Lunar Exploration Working Group. His research interests include lunar exploration, solar-terrestrial relations, solar system history and spectroscopy.

NASA begins e-training project - SATERN

The e-training team is pleased to introduce SATERN (System for Administration, Training and Educational Resources at NASA) and is currently on track for 'go-live' on May 8, 2006.

The new SATERN will replace and consolidate SOLAR and AdminSTAR and provides Ames a significant improvement in automated training services:

- Web-based course catalogs for Ames and NASA training;
- On-line course registration for Ames civil servants and contractors;
- On-line review approval process for supervisors;
- Employee training history reports for supervisors and managers;
- On-line, Web-based learning courses (replaces SOLAR); and
- On-line course evaluations and tests

Under this e-government initiative, SATERN supports the President's Management Agenda for improving the government's responsiveness to citizens and efficiency of operations.

SATERN is provided by a COTS vendor - Plateau LMS.

For more information, visit http://plateau.com/

The Ames acting e-training team lead is Janet Jarmann at ext. 4-5607 and the deputy lead is Beverly Norris at ext. 4-4224. The functional sponsor is Gail James, Ames training officer.

Clean energy discussed during recent colloquium

On Jan. 24, Professor Daniel Kammen from the University of California at Berkeley gave a talk at Ames entitled 'After oil: the transition to a clean energy economy.' Addressing a packed room of 125 attendees, energy science professor Kammen spoke about the theory of peaking world oil supply and gave evidence for the technical and financial viability of a cleaner energy future.

Books and magazine cover articles published over the past few years have addressed the concern that the world oil supply is currently cresting and will soon start falling. Geologist Kenneth Deffeyes predicted that world oil supply would peak on Thanksgiving Day 2005. That means the world would have consumed half of all known oil reserves in the world on that day.

Many wonder if peaking oil supply and high oil prices will usher in an era of renewable power. Kammen proposed that high oil prices will beget more oil exploration but not necessarily cause a wholesale change over to renewable energy sources such as wind, solar, geothermal, alternative biomass and small-scale hydroelectric. According to Kammen, if we want a future of cleaner, lower-carbon energy, we need to invest in research and development of renewable energy, incentivize commercialization of low-cost renewable energy and encourage demand through rebates. A recent California Public Utilities Commission initiative and an upcoming California ballot initiative could provide the level of funding to help renewable energy reach a more cost-effective level.

Citing concerns about global climate change, Kammen asserted that we are running out of places to put carbon from combusted fossil fuels (petroleum, natural gas and coal) faster than we are running out of fossil fuels. The amount of carbon dioxide in the atmosphere jumped from 270 parts per million (ppm) in pre-industrial times to where it is now at 380 ppm. The United Nations' Intergovernmental Panel on Climate Change predicts that if we continue business as usual, our atmosphere will contain 750 ppm of carbon dioxide by the year 2100. This could tragically affect people living in low-lying coastal areas and species that will lose habitat. But a changing climate may have an ironic upside such as the increased availability of oil that is currently buried under arctic ice.

With only 5 percent of the world's population, the U.S. consumes 25 percent of the world's energy. We spend $1 billion / day on fuel and 60 percent of that fuel is imported. Kammen asserted that "We live like energy hunter-gatherers, not energy farmers," implying that we have an opportunity to cultivate renewable energy resources.

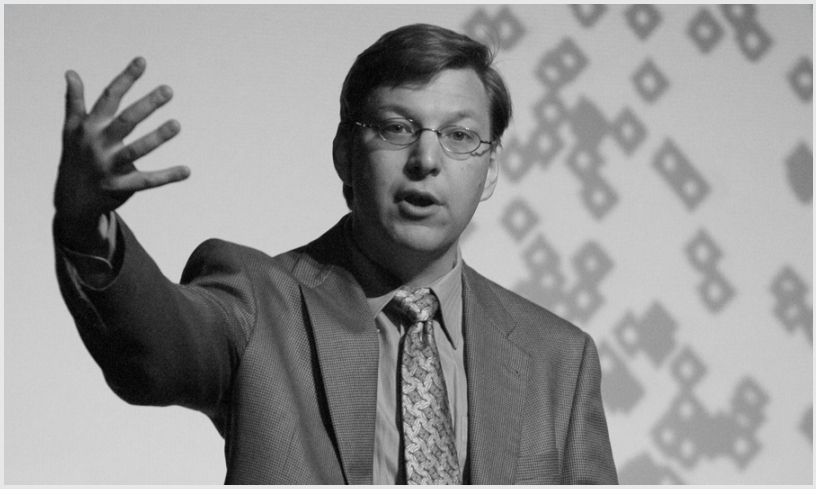
According to Kammen, the benefits of investing in renewable energy include not just energy independence and reduced contribution to climate change but job creation as well. Three to five times more jobs would be created per dollar invested in the renewable energy industry than in the petroleum industry. This is based on 13 job creation studies that explain how small, growing industries will build more infrastructure than larger, more established industries. One caveat Kammen mentioned was that only the countries that invest early in these types of industries will reap the job creation benefits.

Kammen encouraged members of the audience who envision a future of renewable energy to consider the unique capabilities each renewable energy option offers. Where and when is each option abundant? When is there a good match between renewable energy supply and energy demand?

As NASA Ames debates its role in a clean energy future, each procurement offers an opportunity to choose an environmentally friendly option. Renewable energy is part of NASA's history, as evidenced by solar panels on the International Space Station. Building on this pioneering spirit, hopefully energy conservation and renewable energy will play even larger roles in our lower-carbon future.

BY JUSTINE BURT

Co-discoverer of 'tenth planet' speaks at Foothill College



NASA photo by Dominic Hart

On Jan. 25, astronomer Michael Brown, professor of planetary astronomy at the California Institute of Technology and the co-discoverer of the '10th planet,' spoke at a lecture at Foothill College entitled 'Beyond Pluto: The Discovery of the 10th Planet.' The lecture was presented by the Silicon Valley Astronomy Lecture Series and was co-sponsored by the American Astronomical Society, NASA Ames, the Foothill College Astronomy Program and the SETI Institute. Brown discussed how he and his coworkers recently found an object larger than the planet Pluto and with an orbit at least twice as large. He filled the audience in on the latest thoughts about whether this new object (and Pluto) are planets or not. And he explained how astronomers are continuing to find larger (and smaller) bodies in the outskirts of our solar system.

NASA technology featured in new anti-icing windshield spray

A new product using a NASA-based technology might make winter just a little easier to endure for those living in parts of the U.S. where snow and ice are common.

'Ice Free' spray - the latest in technology, using NASA-based technology, now used for automobile windwhields to prevent ice or snow from bonding on windshield surfaces.

'Ice Free' is a spray for automobile windshields that can provide protection up to minus 20 degrees Fahrenheit, according to its producers, WorldSource Inc. Applied prior to inclement weather, it prevents ice or snow from bonding on windshield surfaces.

"As we continue to explore the universe, we are proud that NASA's pioneering efforts keep fueling American creativity, innovation and technology development," said David Morse, acting chief, Technology Partnerships Division at NASA Ames. "This new product is yet another example of the additional dividends Americans reap from their investment in space exploration."

The technology that led to the creation of Ice Free is based on an anti-icing fluid developed by a three-engineer team at Ames. The team designed a non-toxic fluid to keep ice from building up on airplanes. At the time, the anti-icing fluid was hailed for making flying safer, without introducing dangerous chemicals into the environment.

In fact, the fluid was biodegradable and so environmentally safe that it was referred to as 'food grade,' because the ingredients used in its creation were approved by the Food and Drug Administration for use in food.

When the invention was announced in 1997 by co-inventors Leonard Haslim, John Zuk and Robert Lockyer of Ames, the fluid was said to be able to prevent ice build-up on airplane wings and also on automobile windshields, a feature retained in the new product.

"A commuter is much more likely to start his drive without having to spend the time scraping ice and snow off the car windows. We feel it is a great product and we thank NASA for the opportunity to market Ice Free," said Brian Jue, chief executive officer, WorldSource Inc., which is currently marketing Ice Free on the Internet and in television advertisements.

"I often heard how advancements due to NASA research and development help mankind enormously and, if you live in an icy part of the U.S., this is further proof of the accuracy of that statement," said Bob Harrick, president of WorldSource. "NASA technology played a key role in the development of this very useful product."

WorldSource is a developer and distributor of products for the consumer marketplace. It has established an experienced management team with considerable expertise in the development, manufacturing, marketing and distribution of consumer products.

For information about Ice Free, please visit: http://www.ice-free.com

BY MICHAEL MEWHINNEY

e4Xchange Corp., partners with Ames in research and commercialization

e4Xchange Corp.'s mission is to research, innovate and commercialize technology and science applications that help improve the quality of life and human advancement.

Sam Addala, CEO of e4Xchange Corporation (left), in product review session with Ashwin Agate, solution architect.

Founded by Sam Addala in 2000, e4Xchange Corp. provides custom software development, systems integration and contract personal services.

"My passion is to build e4Xchange as an innovative company that brings the convergence of information technology, nanotechnology and biotechnology,"said Addala. Having over 25 of years of industry experience, Addala also is an adjunct mentor at Carnegie Mellon-West.

e4Xchange successfully researched and developed Web-based Factorial Survey and Statistical Analysis (FESA) software for the Centers for Disease Control and Prevention, under the SBIR Phase I/II programs. e4Xchange is currently commercializing this product with government, academia and corporate organizations to support local and global survey design, data collection and statistical analysis.

Potential benefactors include aviation safety, patient safety reporting, Earth sciences and others conducting data collection and analysis survey experiments. e4xchange also is working on the application of nano particles in the inkjet printing technology.

Addala says that NASA Ames is the best place for research and innovation. e4Xchange is a small business with unlimited Silicon Valley potential (surrounded by world-renowned NASA scientists). "The NRP address on my business card gives me extra courage to think BIG," laughed Addala.

He applauded the NRP Division for making NRP partners more visible - fostering collaborations. He's confident that being located in the NRP helps realize his passion of multi-disciplinary research. "Simply put, Ames is ideal!"

Addala hopes for a preferred vendor relationship with NASA and a close working relationship with Ames scientists and NRP industry partners. "Helping each other with the best research - bringing the fruits of the research to the general public, is what I strive to do," said Addala.

For collaboration opportunities with e4Xchange Corp., contact Addala at (650) 868-0836 sam@e4xchange.com or visit the Web at www.e4xchange.com.

COMPILED BY ANTOINETTE PRICE

The next generation of explorers discovers JASON at Ames

During the week of Jan. 31, 2006 to Feb. 4, 2006, NASA Ames Research Center hosted 7,200 students from 163 schools at the 17th annual JASON Expedition, a program established by world famous oceanographer Dr. Robert Ballard (the discoverer of the Titanic). Attendance at JASON broke previous records by more than 1,000 visitors.

NASA photo by Karen Hanner

A student from Wagner Ranch at the recent JASON event held at Ames.

Using satellite broadcasts and Internet technology, JASON scientists were linked to classrooms and educational institutions across the country for students to interact with JASON researchers in real time and see how they worked in the field. "The expedition engages students by having them learn directly from the scientists," said Caleb M. Schutz, president of the JASON Project. "We're trying to change the way science is taught by stepping out of the textbooks and making students a part of the research. We aim to create moments when the light bulb goes off in a student's head, and he or she is moved to jump in the game of science. It's important not only for future generations, but for our entire country as we move into a more scientific and technologically literate society."

NASA photo by Tom Trower

Students learned the basics of robotics by using remote-control VEX robots sponsored by the NASA Robotics Alliance Project

The event at Ames took place mainly in the auditorium and in JASON City. JASON City was filled with hands-on activities for the students. Special guests at the event were NASA astronaut Janice Voss; JASON student argonaut Lauren Dunec-Castillja High School, Palo Alto; Amy Jo Fisher, outreach coordinator, Inland Northwest Space Alliance; John Bradley, director, SF Bay Wildlife Refuge and Dr. Mac Liebman, superindendent of Berryessa USD. Organizations that participated in this year's JASON City at Ames were NASA SOFIA, Astrobiology, the Ames Robotics Alliance Project team, the Peninsula Astronomical Society, San Jose State University Department of Geology, University of California Santa Cruz, Spaceward Foundation, Santa Clara Valley Water District, Happy Hollow Zoo (San Jose), San Jose Beautiful, Don Edwards National Wildlife Refuse, Alviso and the Ames Exchange.

NASA photo by Tom Trower

Some 350 of the over 7,200 JASON visitors enjoying the live broadcast from the N201 Auditorium at Ames.

NASA photo by Tom Trower

JASON middle-school students studying a leopard gecko from the Happy Hollow Zoo.

"The students that are learning about Mars through this expedition are understanding the tools and technology to ask the right questions and get the right answers," said Jim Garvin, Ph.D., chief scientist for NASA Goddard Spaceflight Center. "They're the ones who will be traveling to Mars and making the great discoveries. They'll do the fun stuff."

BY KAREN HANNER

In Memory of...

Ronald Gerdes

Ames research pilot Ronald M. Gerdes passed away Feb. 1, 2006. Born in Oakland in 1928, Gerdes graduated from Alameda High School in 1946. Entering the Navy V-5 program (as an aviation midshipman) at UC Berkeley, he completed his naval aviator training at NAS Pensacola and served in the Korean War, flying an F9F Panther with VF-111.

His Navy flying also included F2H Banshees and A-4 Skyhawks. He completed his engineering degree at Cal in 1957, including summer work at Ames. Initially working in the Ames Flight and Systems Simulation Branch, he transferred into Flight Operations as a research pilot in 1961.

During his NASA flying career, Gerdes made significant contributions to vertical flight aircraft, including the XV-5 Fan-In-Wing, X-14 Deflected Jet, UH-1V/STOLAND, and XV-15 Tiltrotor aircraft.

Ronald Gerdes

He performed a key role with the NASA/DARPA/USMC AV-8V/STOL Systems Research Aircraft Program. Gerdes also flew and participated in airborne astronomy missions aboard the Lear 24 and Kuiper C-141.

Following his NASA retirement in 1988, Gerdes continued to make significant contributions to aeronautical science as a contract employee in the Ames simulation laboratories.

Gerdes was a great pilot, an aviation enthusiast, loving husband and father, a true gentleman and friend. Aviation and the Ames community will miss him.

BY BILL DECKER

Joseph Frank

Joseph Frank died peacefully in his home on Dec. 14, 2005. He was born Nov. 1, 1919, in Spring Valley, Ill. He served during World War II in the U.S. Army as a staff sargeant in the western U.S. and the pacific. He then attended Stanford University, graduating with a mechanical engineering degree in 1948.

Frank then worked at Ames for 32 years, first working in the wind tunnels, and then for the greater part of his career, as an engineer on the Pioneer series, sending spacecraft past the sun, to Jupiter and to Saturn. He always felt fortunate to have been part of the space program with a team of close friends at Ames.

In 1950, Frank married his wife, Carolyn, to whom he was married for 55 years. They lived in Los Altos, in a house he designed and helped build, and had two daughters, Laura and Dana. He loved the ocean, so in 1984 he and Carolyn moved to Los Osos, where he could look out to the sea and fish to his heart's content.

He read widely, loved classical music, and traveled with his wife to Mexico, Central America, Europe and throughout the Pacific northwest. He had a wonderful sense of humor. Those who wish may make donations to the charity of their choice.

Wayne Wiley

Wayne Wiley

A valued member and long-time employee of the Logistics Branch at NASA Ames, Wayne Wiley, 74, passed away on Dec. 18, 2005, from brain cancer. Wiley was born on June 11, 1931 in Alvord, Texas.

He served 26 years with the U.S. Air Force in Japan, Korea, Vietnam and Thailand and retired as a master sergeant. Wiley was then hired at Ames in December 1974, and was the center's transportation officer and mail manager when he retired 24 years later. After his retirement, he enjoyed returning to Ames to visit his friends and former coworkers.

Wiley is survived by his wife of 54 years, Utako Wiley; his daughters, Janis Cruce and Linda Hurst; his grandchildren, Micah Cruce, Melanie Hurst and Kara Hurst; and his brothers and sisters. He was a kind, gentle man who loved people and loved God. He will be greatly missed and remembered by all of his family, friends and co-workers at Ames.

On Dec. 28, 2005, he was buried with full military honors at the San Joaquin National Cemetery in Gustine, Calif.

BY VIVIAN TORRES

Honeybee colony removed in building N239

The Plant Engineering Branch (PFP) is dedicated to the preservation of the environment. The latest example comes in the form of honeybee preservation.

PFP received a trouble call reporting a bee problem at the building N239 penthouse. Upon investigation, it was discovered that a European honeybee colony was present in the penthouse wall.

"Our policy is to preserve beneficial species like honeybees. We designed our pest control contract to fulfill this objective," said Al Lyon of Code PFP. Lyon is responsible for overseeing the pest control services under contract with IAP World Services and A-Pro Pest Control, sub-contractor to IAP.

"Since honeybees are so valuable for their pollination of crops and our native honeybee populations have been dwindling so dramatically in recent years, PFP is dedicated to initiating rescue activities whenever a honeybee colony is found on the center."

The colony in building N239 was constructed inside a wall, in the space between the 2-foot-by-4-foot wall studs. This location provided a protected, clean, warm and dry environment for the colony. The hive was 5-feet high by 14-inches wide and about an inch thick. It ís estimated that the hive was constructed in less than 6 months, possibly within three or four months and contained one healthy queen bee and an estimated 40 to 60 thousand worker bees.

A-Pro Pest Control called upon the services of Dave Williams, aka Dave the Bee Man, a professional bee handler to safely remove the hive.

A-Pro technicians Jason Fritz and Juan Limon were on hand and Williams and his associate, Ray Hicks, arrived on Friday, Jan. 13 to remove the bees. Before the bees could be removed, IAP technicians Carman Morey and Lee Bradford, dressed in protective tyvek suits, removed the drywall between the wall studs.

Bee professionals then carefully disassembled the hive from the bottom up, removing an estimated 60 to 70 pounds of hive with approximately 30 to 40 pounds of raw honey. Williams described the colony as active, strong and healthy.

So what became of the bees? The colony was relocated to a new home in the Los Altos hills, where they have a beekeeper to look after them.

Approximately 40 - 60 thousand honeybees that were removed from the colony that they had cleverly built inside one of the walls of N239.

BY STEVE FRANKEL

NASA Ames receives CFC awards

NASA photo by Tom Trower

Left to right: Deputy Director (acting) Steve Zornetzer; Ames' representative for the CFC Bay Area board Don Durston; Ames' campaign chairperson Larry Lasher; and loaned executive to the CFC office Dennis Romano.

NASA Ames received two awards in the recently completed 2005 Combined Federal Campaign (CFC). Don Durston, Ames' representative for the CFC Bay Area board, accepted the Civilian Sector Chair Award from the Greater San Francisco Bay Area CFC for Ames' outstanding 2005 campaign. Larry Lasher, Ames' CFC chairperson, was selected coordinator of the year.

Events Calendar

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

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

Ames 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. to12:00 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://accc.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 Hooey, ext. 4-2399.

Environmental Forum, first Thursday of each month, 8:30 a.m. to 9:30 a.m., Bldg. 221/Rm 155. URL: http://q.arc.nasa.gov/qe/events/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.

Safety Data

NASA-Ames Occupational Illness-Injury Data for Calendar Year-to-Date 2006 Jan. 1, 2006 – Jan. 31, 2006

	Civil Servants	Contractors
First aid cases	0	1
Lost-time cases	0	0
Recordable cases	0	1
Lost workdays	0	0
Restricted duty days	0	0

Above data is as of 1/31/06. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

Education Associates poster session scheduled for March 15

The Education Associates program will hold a poster presentation in Ames Café on March 15 between 11:30 a.m. to 1 p.m.

This poster presentation includes work from education associates at varied academic levels from undergraduates thorough post-docs in organization codes A through Y.

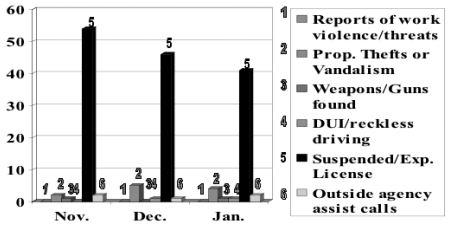
Come see the work these education associates are doing. They look forward to discussing their projects with you.

Date: March 15
Time: 11:30 a.m - 1 p.m.
Location: Ames Café (sun room)
Information Web site:
http://edassoc.arc.nasa.gov

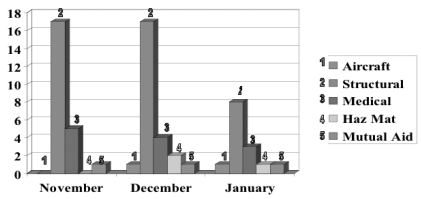
Protective Services monthly activity

A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire Protection Services units for the month of January 2006 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



For All Your Supply Needs On Installation
NASA Ames Supply Store • Building N255 • DeFrance Ave. (North Side)
Huge In-Store Selection
50,000 Catalog Items
FREE on Installation Delivery
SKILCRAFT
JWOD
NAME BRANDS
• Office Products
• Paper
• Paper Products
• Janitorial & Cleaning Supplies
• Computer Accessories
• Furniture & Tools
AIB EXPRESS Federal Supply Centers
Retail Store
650-604-6801 • Fax 650-604-6802
On-Line
www.aibexpress.com

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.

2bd/1.5 ba, 2 story spacious townhome. In Fremont's Ardenwood District, 1,056 sq. ft. of living area w/gate enclosed spacious front patio, laundry room w/full size W/D. New bathrms, new carpeting, flooring, fresh interior paint. Large master bdrm w/mirrored closets. Large dining area w/view of enclosed front lawn. Kitchen w/granite countertops, new appliances, carport. Attached exterior storage unit that stores trash cans. Easy access to H880, 84-Dumbarton Bridge, nearby shopping, dining, entertainment. Close to parks, creek side walking/biking trail that spans across Fremont. $1,400/mo./deposit-only $800. John (510) 209-1311.

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.

Moving sale. Various items: wood entertainment center, rocking chair, big oak desk, small desk, small XL-100 TV, chest of drawers, Dell computer (runs Windows 98) - nothing more than $20 - some $10. Make offer. Barry Cunningham (510) 793-4457, EZrdrdad@comcast.net

Waterbed - King size, Universal, canopy, pedestal with drawers - beautiful, large, wood frame waterbed, with newish wave free mattress. Moving sale. $800 or B/O. Barry Cunningham (510) 793-4457, EZrdrdad@comcast.net

Piano for sale. Upright white maple Wurlitzer in excellent condition. You arrange pick up from San Jose. $800 or B/O. Marilyn (408) 629-7889.

Automotive

'92 Harley Davidson Softail Custom - $8,500 or B/O. Barry Cunningham (510) 793-4457 EZrdrdad@comcast.net

'04 Ford Expedition, Eddie Bauer, clean, loaded, exc. cond., extended warranty, leather, 6 CD, DVD, 30,000 mls. Joe (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 bdrms/2 ba, sleeps 8, fireplace, TVs/VCR/DVD, stereo w/ CD player, microwv, W/D, jacuzzi, sauna, outdoor pool. Walk to lake. Close to ski areas. Visit web site for pictures: http://www.ACruiseStore.com $135/night spring and fall, $173/night summer and winter (holidays higher) plus $125 cleaning fee and 12 percent Nevada room tax. Charlie (650) 743-8990.

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 Lie-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.

Bicycling club presents . . .

Join us as Al Painter shows us the best training for our bodies to perform the movements essential to daily living and regular activities.

Date: March 15

Time: 11 a.m. to 12:00 p.m.

Place: Bldg 245 auditorium

POC: Julie Nottage at jnottage@mail.arc.nasa.gov or ext. 4-3711.

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 Shared Services Center to open in March

The NASA Shared Services Center (NSSC)is set to open March 1 on the grounds of Stennis Space Center in Mississippi. NSSC provides customer-focused service by working collaboratively with each NASA center through a customer contact center (CCC) and through NSSC center liaisons (located at each center).

NSSC is accessible through the CCC and each center's NSSC liaison. The CCC is the primary point of contact for all issues that the NSSC will resolve. Support hours are from 8 a.m. (EST) to 8 p.m (EST), Monday through Friday and each center liaison is available during normal working hours. NSSC may also be contacted through its Web site located at www.nssc.nasa.gov and also through the customer contact center at 1-877-NSSC123 (1-877-677-2123).

Starting in March, a variety of activities previously performed by your center will be done at the NSSC and each of these transitions may affect NASA employees differently. Many of the transitions will be transparent to the general NASA employee, such as drug testing administration and the 1102 Procurement Training Program; however, others may take slight NASA employee adaptations, such as the voucher authorization process for foreign travel and permanent change of station (PCS).

Previously, the Centralized Travel Office (CTO) at Johnson Space Center processed foreign travel vouchers and change of station (COS) transactions. On March 1, the NSSCwill assume responsibility for both processes. For COS travel, the CTO processed transactions received on or before Feb. 16. For foreign travel, the CTO processed vouchers received on or before Feb. 24. Transactions received after these dates have been forwarded to the NSSC for processing starting March 1.

Drug testing administration was previously performed independently at each NASA center through a drug program coordinator; however, on March 1, drug testing administration will be performed by the NSSC. NSSC will provide the administrative support necessary to generate random selections. NSSC also has reporting capabilities with respect to the drug test program. NASA employees being tested should notice little, if any difference in the process.

Previously, the HQ 1102 training program manager and center training coordinators were responsible for logistical and operational matters concerning the 1102 training program. Beginning March 1, the NSSC will assume center operational and logistical activities and coordinates with NASA Headquarters on the 1102 Procurement Training Program. NASA procurement employees should notice little, if any process transition since each center will retain its center training POC.

Check out on the Web site at: www.nssc.nasa.gov or contact the NSSC by dialing 1-877-NSSC123 (1-877-667-2123).

BY THE NSSC TEAM

Live pain free - stand up straight!

Let CitySports magazine's 2005 Best Bay Area personal trainer Al Painter show you the best way to achieve better living through standing up straight. He will talk about the benefits of functional training to improve your posture and eliminate joint pain, how to fight losses of flexibility brought about by sitting for prolonged periods of time and how to fit exercise into a busy schedule.

Painter is a member of the National Academy of Sports Medicine, USA Cycling and a graduate of Santa Clara University with over 10 years experience as a personal trainer. His clients range from elite level road bicycle racers and collegiate athletes to 'every day athletes' in need of more strength to pick up their kids and those wanting to spend a pain free day working in their yards.

He specializes in the elimination of joint pain, correcting muscle imbalances and improving the way the body performs on a daily basis.

Join the Ames bicycle club as Painter shows us the best training to functionally strengthen our bodies to better perform the types of movements essential to both daily living and regular activities.

Date: March 15
Time: 11 a.m.
Place: N245 second floor auditorium (Room 276)

Astrogram
Explore. Discover. Understand.

National Aeronautics and Space Administration

Ames Research Center
Moffett Field, CA 94035-1000

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