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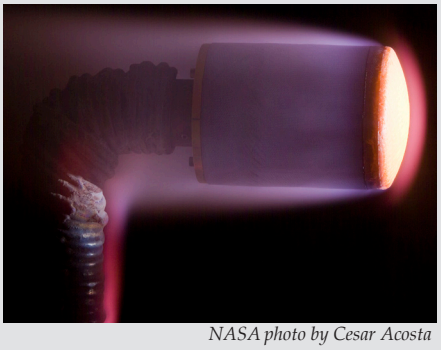
May 2008

Insulation material named 'NASA Government Invention of 2007'

by Rachel Prucey

The 2007 NASA Government Invention of the Year is a heat shield material slightly more dense than balsa wood that is designed to protect spacecraft during their fiery re-entry into Earth's atmosphere.



NASA photo by Cesar Acosta

The 2007 NASA Government Invention of the Year is a heat shield material slightly more dense than balsa wood, designed to protect spacecraft during their fiery re-entry into Earth's atmosphere. The Lightweight Ceramic Ablator material (LCA) developed at Ames, weighs one-fifth as much as conventional heat shields, but can withstand temperatures up to 5,000 degrees Fahrenheit, according to project engineers at NASA.

The Lightweight Ceramic Ablator material (LCA) is a low-density material that weighs one-fifth as much as conventional heat shields, but can withstand temperatures up to 5,000 degrees Fahrenheit, according to project engineers at NASA. The material has a foundation made of fibers coated with a thin layer of organic polymeric resin. The resin, traditionally used as a bonding agent, creates a light, durable, heat-resistant shield.

"This material will play a key role in NASA's future space missions as we mount human and robotic missions to the moon, asteroids, Mars and throughout the solar system," said Ames Center Director S. Pete Worden. "This is indeed an honor and I'm very proud of the Ames team that developed this critical technology."

Because of its durability and low-density, the LCA family of protective materials is expected to play a significant role in future NASA missions every time a spacecraft enters a planetary

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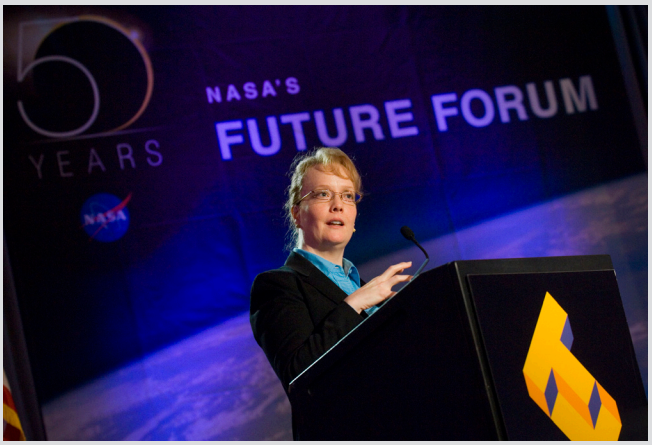
NASA, NIA announce television partnership



NASA photo by Dominic Hart

Deputy Administrator Shana Dale announced the launch of NASA's Education TV (NASA eTV) during her keynote address at the NASA Future Forum in San Jose in May. See story on page 2.

Crowd celebrates Phoenix's successful landing on Mars

NASA photo by Jim Taylor

Local media interviewed visitors at the May 25, 2008 Phoenix Mars Lander touchdown event at Ames. Visitors heard presentations by several Ames scientists and cheered enthusiastically upon learning that the Phoenix had landed successfully.

by Rachel Prucey

More than 1,200 NASA enthusiasts visited the Ames Exploration Center Sunday, May 25, 2008 for the Phoenix Mars Lander touchdown event.

Visitors heard presentations by Ames' David Korsmeyer, who provided listeners with a Phoenix mission overview; Ames' Jim Kurien, who helped develop the Phoenix Science Interface (PSI) software that mission scientists will use to schedule the activities Phoenix will perform in the Martian arctic; and Ames' Chris McKay, a Phoenix mission co-investigator who explained to the audience that Phoenix will search the Martian ice-rich soil for organic components that can lead to life.

Visitors could also see heat shield materials on display, demonstrations of the PSI software and play catch

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NASA, NIA announce NASA education television partnership

by Kelly Humphries

NASA Deputy Administrator Shana Dale announced on May 14 the launch of NASA Education TV (NASA eTV), a partnership with the National Institute of Aerospace (NIA) to produce new educational television programs for distribution on NASA Television and the internet.

The announcement was part of Dale's keynote address at the NASA Future Forum in San Jose, Calif., where NASA and California leaders met to discuss how space exploration benefits Silicon Valley and the nation through discovery, innovation and inspiration.

"California's Silicon Valley is a launch pad for high-tech ideas and businesses, many of which were inspired by NASA scientific discoveries and technology advances," Dale said. "America's long-term space exploration goals support economic growth right here, right now in California communities, and throughout the country."

NASA eTV aims to engage young people in the excitement and challenges the future holds for America's space program. Designed for grades K-12 and young adults, the short video snippets will be available on demand through the internet during the 2008 and 2009 school years. This will allow teachers unlimited options in the timing, sequence and pacing of the video content for greater impact.

"We realize that to sustain U.S. economic competitiveness, it is imperative that students have a solid educational foundation to be prepared for professional careers in the technologically complex 21st century," said Robert Lindberg, NIA's president and executive director.

"Working jointly with NASA, NIA has developed a comprehensive approach to producing visual media that teachers will find easier to integrate into their classroom instruction," he said.

Each NASA eTV program will consist of 5- to- 10-minute video segments designed to meet identified teacher needs. The elementary school-level segments will provide a balanced introduction to the fields of science and engineering and be aligned to national education standards. The middle school-level segments will be aligned with mathematics learning standards and the relevance of math to 21st century careers. The high school-level segments will build on the engineering and science behind NASA projects and missions. The general public programs will be aimed at the 18- to 34-year-old audience and focus on the impact of space exploration, scientific discovery, aeronautics research and NASA-derived technologies on society.

The San Jose Future Forum was hosted by NASA's Ames and The Tech Museum of Innovation in San Jose as part of a year-long series of events marking NASA's 50th anniversary.

Other NASA forum participants included Ames Center Director S. Pete Worden, astronaut Rex Walheim, who just returned to Earth from a mission to deliver the European Space Agency's Columbus Laboratory to the International Space Station, Assistant Administrator for Education Joyce Winterton and James Norman, director of the Constellation Systems Division in NASA's Exploration Systems Mission Directorate in Washington.

"NASA Ames is on the cutting edge of exploration," Worden said. "Here, government, businesses and

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Send your name into space on the Kepler spacecraft

by Michael Mewhinney

How cool would it be to have your name on board the spacecraft that discovers the first known Earth-like planet beyond our solar system? Well, here's your chance.

In May, NASA announced an opportunity for anyone to submit their name to be included on a DVD and rocketed into space as part of NASA's Kepler Mission, scheduled to launch in February 2009 from Cape Canaveral Air Force Station, Fla. "This mission will provide our first knowledge of Earth-like planets beyond our solar system," said Kepler Mission principal investigator William Borucki.

The Name in Space DVD will be mounted on the exterior of the spacecraft in November 2008. A video of the DVD being mounted on the spacecraft will be taken and posted on the Kepler Mission Web site prior to the spacecraft being shipped to NASA's Kennedy Space Center in December of this year. A copy of the DVD with all of the names and messages will be given to the Smithsonian Institution's National Air and Space Museum, Washington.

"It's a way for the public to participate in our space program," explained David Koch, deputy principal investigator for the Kepler Mission. According to Koch, there's no limit to the number of names that can be submitted for inclusion on the DVD.

"We're looking for several million names," Koch said. "The only limitation is people's interest."

Anyone who wants to participate in the Name in Space project should submit their name, the state or country they live in and if they desire, a short statement (500 words or less) answering the question: "Why do you think the Kepler Mission is important?" The deadline for submissions to the Kepler Mission Web site is Nov. 1, 2008.

Certificates of Participation will be available for printing from the Kepler Mission Web site. The certificate states that the person whose name has been submitted has been included on the list of names launched in 2009 with the Kepler spacecraft into orbit around the sun. There is no charge for participating in the project or for printing the certificate.

Name in Space is an international activity associated with the International Year of Astronomy 2009 in recognition of the 400th anniversary of Johannes Kepler's publication of his first two laws of planetary motion.

Kepler is a NASA Discovery mission. NASA Ames is the home organization of the science principal investigator and is responsible for the ground system development, mission operations and science data analysis. Kepler Mission development is managed by NASA's Jet Propulsion Laboratory, Pasadena, Calif. Ball Aerospace & Technologies Corp., Boulder, Colo., is responsible for developing the Kepler flight system.

To submit names and learn more about the Kepler Mission, visit: http://kepler.nasa.gov/

Supercomputing facility marks 25 years of accomplishments

by Michael Mewhinney

This year is the 25th anniversary of NASA's premier supercomputing organization at Ames Research Center.

NASA officials in April observed the occasion with a celebration highlighting the NASA Advanced Supercomputing (NAS) Division's legacy of accomplishments in high performance computing and aerospace modeling and simulation.

Originally founded in 1983 as the Numerical Aerodynamic Simulation program, the NAS Division today encompasses not only supercomputing, mass storage system, and high-speed networking, but also a host of integrated services. This includes advanced visualization, application performance optimization, expert user services, high-fidelity computational science and innovative information technology solutions.

"Over the past quarter century, the NAS Division has earned an international reputation as a pioneer in development and application of high-performance computing technologies," said Ames Center Director S. Pete Worden. "This outstanding team provides its diverse customers with state-of-the art supercomputing services and world-class aerospace modeling and simulation expertise."

The NAS facility and staff have contributed significantly to NASA's missions, including essential work for the space shuttle's return to flight and subsequent missions. Simulations conducted at NAS are critical to the design of Ares and Orion, NASA's space transportation vehicles for a new generation of explorers.

In science, Columbia and the other supercomputers at NAS are used for simulations in nanotechnology, combustion, atmospheric chemistry, ocean and climate modeling, hurricane prediction, solar and black hole physics, and cosmological structure simulations. The division continues to support NASA's aeronautics research covering all flight regimes from subsonic to hypersonic.

"NAS has a stellar record of innovation and delivery of cutting-edge technology," said Rupak Biswas, chief of the NAS Division. "None of that success would have been possible without our expert staff, which continuously accomplishes ambitious goals while overcoming challenges. I look forward to the next 25 years and the new heights that this outstanding team surely will attain."

NAS continues to strive to improve and expand its capabilities. The division installed the world's largest known visualization engine, the "Hyperwall-2," a powerful tool with more than a million times the graphics rendering power of the original workstations installed nearly 25 years ago. This summer, NAS plans to install a new cluster supercomputing system to augment its current computational capability.

NASA photo by Dominic Hart

Former Ames Center Director Hans Mark, (left), NASA Ames Senior Advisor for History Jack Boyd and Ron Baily, a senior consultant for Computer Sciences Corporation in the NASA Advanced Supercomputing (NAS) Division, chat during the recent NAS division 25th anniversary celebration.

For more information about the NASA Advanced Supercomputing Division, visit: http://www.nas.nasa.gov/

NASA, Intel, SGI plan to 'soup up' supercomputer

by Michael Mewhinney

NASA, Intel Corp., and SGI in May announced the signing of an agreement establishing intentions to collaborate on significantly increasing the space agency's supercomputer performance and capacity.

Under the terms of a Space Act Agreement, NASA will work closely with Intel and SGI to increase computational capabilities for modeling and simulation at the NASA Advanced Supercomputing (NAS) facility at NASA's Ames.

"Achieving such a monumental increase in performance will help fulfill NASA's increasing need for additional computing capacity and will enable us to provide the computational performance and capacity needed for future missions," said Ames Director S. Pete Worden. "This additional computational performance is necessary to help us achieve breakthrough scientific discoveries."

NASA Ames, Intel and SGI will work together on a project called Pleiades to develop a computational system with a capacity of one Petaflops peak performance (1,000 trillion operations per second) by 2009 and a system with a peak performance of 10 Petaflops (10,000 trillion operations per second) by 2012.

"Throughout its history, NASA has sought to explore the most compelling questions about mankind, Earth, and the worlds that await our discovery," said Robert "Bo" Ewald, chief executive officer of SGI. "SGI is proud to be part of this effort. These groundbreaking new systems powered by SGI and fueled by the latest multi-core Intel processors, offer a platform for new discoveries that will help us all achieve the most promising future for the human race. This effort is important to everyone on this planet."

This collaboration builds on the 2004 deployment of Columbia, which generated a tenfold increase in supercomputing capacity for the agency. Meeting NASA's future mission challenges will require additional computational resources to handle increasingly higher fidelity modeling and

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NASA nanotechnology-based biosensor helps detect biohazards

by Michael Mewhinney

NASA has developed a revolutionary nanotechnology-based biosensor that can detect trace amounts of specific bacteria, viruses and parasites. This biosensor will be used to help prevent the spread of potentially deadly biohazards in water, food and other contaminated sources.

NASA's Ames licensed the biosensor technology to Early Warning Inc., Troy, N.Y. Under a Reimbursable Space Act Agreement, NASA and Early Warning jointly will develop biosensor enhancements. Initially, the biosensor will be configured to detect the presence of common and rare strains of microorganisms associated with water-borne illnesses and fatalities.

"The biosensor makes use of ultra-sensitive carbon nanotubes which can detect biohazards at very low levels," explained Meyya Meyyappan, chief scientist for exploration technology and former director of the Center for Nanotechnology at Ames. "When biohazards are present, the biosensor generates an electrical signal, which is used to determine the presence and concentration levels of specific micro-organisms in the sample. Because of their tiny size, millions of nanotubes can fit on a single biosensor chip."

Early Warning company officials say food and beverage companies, water agencies, industrial plants, hospitals and airlines could use the biosensor to prevent outbreaks of illnesses caused by pathogens - without needing a laboratory or technicians.

"Biohazard outbreaks from pathogens and infectious diseases occur every day in the U.S. and throughout the world," said Neil Gordon, president of Early Warning. "The key to preventing major outbreaks is frequent and comprehensive testing for each suspected pathogen, as most occurrences of pathogens are not detected until after people get sick or die. Biohazards can enter the water supply and food chain from a number of sources which are very difficult to uncover."

Early Warning expects to launch its water-testing products in late 2008.

"Ambitious space missions have produced some of the world's most creative technologies by NASA and its industrial partners," said Harry Partridge, deputy director of the Space Technologies Division at Ames. "Not only does NASA want these technologies used in space applications, an equally important objective is the transition of NASA research into real world products that can benefit our society."

For more information about Early Warning, visit: http://www.early-warninginc.com

NASA photos by Dominic Hart

Above photo: Meyya Meyyappan, chief scientist for exploration technology and former director off the Center for Nanotechnology at NASA Ames (left), and Neil Gordon, president of Early Warning, Inc., Troy, N.Y., examine a prototype of NASA's revolutionary nanotechnology-based biosensor licensed to Early Warning. The biosensor can detect trace amounts of specific bacteria, viruses and parasites and will be used to help prevent the spread of potentially deadly biohazards in water, food and other contaminated sources. Right photo: the Early Warning's Lab-on-a-Chip incorporates NASA's nanotechnology-based biosensor which can test for both common and rare strains of microorganisms associated with waterborne illnesses and infectious diseases.

Employees discuss culture survey

NASA photo by Dominic Hart

Ames Center Director S. Pete Worden (left) spoke at a special All Hands meeting on May 16 focusing on the recent NASA Culture Survey. Center senior management described their roles and interactions, and provided information about the responsibilities of each directorate. The managers want to hear from center employees concerning improvements the employees believe are needed.

Help inspire the next generation of scientists, engineers

by Dana Bolles

NASA is in a unique position to lead the world in space exploration. However, the ability to sustain this position is directly tied to the knowledge, commitment and skilled leadership of its people. As NASA's workforce ages, it faces perhaps its biggest challenge -- to inspire an entire generation that to this date, is not connecting with NASA.

The millennial (aka Gen-Y) were born between 1980 and 2000 and while they are 25 percent of the workforce today, 50 percent of the workforce is projected to be from Gen-Y by the year 2014. Now more than ever, we all need to take seriously our responsibility to engage future generations.

What better way to inspire future generations than by going out into the community as ambassadors of space exploration? The life experiences of Gen-Y have resulted in a generation that explores, connects and collaborates in the personal, dynamic, virtual world of the internet. We can provide greater service and inspiration by joining NASA's Speaker Bureau and creatively connecting with Gen-Y on their level. The possibilities are countless and the excitement is unmatched by the routine of a typical work day.

The Speakers Bureau is a NASA-sponsored program composed of engineers, scientists and other professionals who represent the agency as speakers at civic, professional, educational and other public venues. Each year, NASA speakers provide hundreds of presentations to thousands of people.

Each NASA center represents a territory. Ames' territory covers Alaska, California, Hawaii, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming. The Speakers Bureau is a free service as a part of the center's public communication and outreach programs. Audiences include pre-school to college classes, libraries and museums, scouts, professional and technical organizations and community groups.

The center receives several requests for speakers each month. Speaking opportunities are listed in the weekly Heads-Up announcements. Don't just be an employee working at Ames, be that role model who goes the extra step and invests in NASA's future. Contact the program coordinator Sheila Johnson, ext. 4-5054.

For more information, visit http://speakers.grc.nasa.gov/speaker and inquire about the speaking engagement that best suits you. With all expenses paid, you have nothing to lose.

Photo by Sheila Johnson

NASA employee Dana Bolles (left) and Stanford oncologist Denise Johnson spoke recently at Technology Day at Intel, Santa Clara, an event for 4th – 8th grade girls, organized by the National Coalition of 100 Black Women.

Crowd celebrates Phoenix's successful landing on Mars

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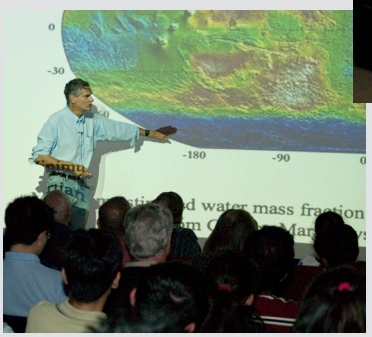
Top and right photos: visitors at the May 25 Phoenix Lander touchdown fill the Exploration Center at Ames, patiently waiting to hear that the Lander had reached it's destination. Ames' Chris McKay, photo, below left, a Phoenix mission co-investigator, explains to visitors how Phoenix will search the Martian ice-rich soil for organic components that can lead to life.



NASA photos by Jim Taylor

with a five-foot-tall robot that the For Inspiration and Recognition of Science and Technology (FIRST) robotics team from Gunn High School, Palo Alto, Calif., had racing around in front of the Exploration Center entrance.

Phoenix landed right on schedule, at 4:54 p.m. PDT, to the enthusiastic crowd who cheered, clapped and smiled to learn that Phoenix had successfully landed.

Education partnership

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learning institutions are forging partnerships to develop technologies for a new generation of space explorers. We're at the dawn of an exciting new era that will help us explore our solar system and make life on this planet and others sustainable."

The forum was sponsored by Aerojet of Sacramento; Google of Mountain View; Jacobs Technology of Tullahoma, Tenn.; Lockheed Martin of Bethesda, Md.; Nortel of Toronto, Canada; Microsoft Research of Redmond, Wash.; Symantec of Cupertino; and Raytheon of Waltham, Mass.

For more information about NASA's 50th Anniversary Future Forums, visit: http://www.nasa.gov/50th/future_forums

Ames hosts 2008 Patent Awards ceremony

The Entrepreneurial Initiatives Division, along with Ames Center Director S. Pete Worden, hosted the 2008 Patent Awards Ceremony and luncheon in April, in the ballroom of the Ames Conference Center. Jeff Koplow of Sandia National Labs gave a well-received keynote presentation about "Managing Creativity, the Search for IP Gold." Invention and Contributions Board Staff Director Anthony J. Maturo from NASA Headquarters delivered closing remarks.

This event was an opportunity for the center to thank individuals for their hard work, as well as recognize them for helping build Ames' intellectual property portfolio for partnership development.

Worden presented plaques to U.S. patent recipients who have had a patent issued within the past five years. There have been 47 patents issued to NASA Ames researchers by the U.S. Patent Office since 2003.

The Entrepreneurial Initiatives Division is responsible for awarding various Space Act Awards throughout the year. Ames employees are encouraged to investigate the types of awards available, and can visit the division awards web site at http://technology.arc.nasa.gov/awards. Additional information is available on the NASA Headquarters Inventions and Contributions Board web site at http://icb.nasa.gov.

The following current NASA civil servant and contractor employees and retired civil servants were honored for their recent technical and scientific contributions:

Andrew B. Watson - Method and Apparatus for Evaluating the Visual Quality of Processed Digital Video Sequences (DVQ) (Patent # 6,493,023)

David H. Wolpert - Masked Proportional Routing (Patent # 6,577,601)

John W. Hines, Carsten W. Mundt, Robert D. Ricks - Advanced Sensor Systems for Biotelemetry (Patent # 6,582,365)

Matthew R. Jardin - Neighboring Optimal Aircraft Guidance in a General Wind Environment (Patent # 6,600,991)

Nateri K. Madavan, Man Mohan Rai - Method for Constructing Composite Response Surfaces by Combining Neural Networks with Other Interpolation or Estimation Techniques (Patent # 6,606,612); Method for Constructing Composite Response Surfaces by Combining Neural Networks with Polynomial Interpolation or Estimation Techniques (Patent # 7,191,161)

Muriel D. Ross, Xander Twombly - Method and Apparatus for Virtual Interactive Medical Imaging by Multiple Remotely-Located Users (Patent # 6,608,628)

Mark D. Betzina, Khanh Q. Nguyen - Method and System for Active Noise Control of Tiltrotor Aircraft (Patent # 6,671,590)

Owen R. Greulich - Wire Insulation Defect Detector (Patent # 6,677,761)

Michael W. McGreevy - System, Method and Apparatus for Generating Phrases from a Database (Perilog) (Patent # 6,697,793); System, Method and Apparatus for Discovering Phrases in a Database (Perilog) (Patent # 6,721,728); System, Method and Apparatus for Conducting a Phrase Search (Perilog) (Patent # 6,741,981); System, Method and Apparatus for Conducting a Keyterm Search (Perilog) (Patent # 6,823,333)

Russell J. Andrews, Robert W. Mah - Multimodality Instrument for Tissue Characterization (Patent # 6,718,196)

Charles C. Jorgensen, Kevin R. Wheeler - Characterization of Bioelectric Potentials (Patent # 6,720,984)

David J. Loftus - Retinal Light Processing Using Carbon Nanotubes (Patent # 6,755,530)

John H. Goebel, Robert E. McMurray - Wide Operational Range Thermal Sensor (Patent # 6,838,669)

Stevan M. Spremo - Diffraction-Based Optical Switch (Patent # 6,847,749); Diffraction-Based Optical Correlator (Patent # 6,930,775)

Lance D. Delzeit, Meyya Meyyappan - Controlled Patterning and Growth of Single Wall and Multi-Wall Carbon Nanotubes (Patent # 6,858,197)

Peter M. Goorjian, Cun-Zheng Ning - Ultrafast Laser Beam Switching and Pulse Train Generation by Using Coupled Vertical-Cavity, Surface-Emitting Lasers (VCSELs) (Patent # 6,865,208)

Thomas R. Chidester, Robert E. Lawrence, Robert E. Lynch, Loren J. Rosenthal, Irving C. Statler - Identification of Atypical Flight Patterns (Patent # 6,937,924); Information Display System for Atypical Flight Phase (Patent # 7,206,674)

Daniel J. Rasky, Christine E. Szalai, Huy K. Tran - Secondary Polymer Layered Impregnated Tile (SPLIT) (Patent # 6,955,853)

Man Mohan Rai - A Hybrid Neural Network and Support Vector Machine Method for Optimization (Patent # 6,961,719); A Hybrid Neural Network and Support Vector Machine Method for Optimization (Patent # 7,293,001)

Yuri O. Gawdiak, Shu-Chun Y. Lin, David A. Maluf, Khai Peter B. Tran - Extensible Database Framework for Management of Unstructured and Semi-Structured Documents (NETMARK) (Patent # 6,968,338)

Lance D. Delzeit - Carbon Nanotube Purification (Patent # 6,972,056); Increased Alignment in Carbon Nanotube Growth (Patent # 7,288,490)

Robert W. Mah - Metrics for Body Sensing System (Patent # 6,976,013)

David J. Loftus - Provision of Carbon Nanotube Bucky Paper Cages for Immune Shielding of Cells, Tissues, and Medical Devices (Patent # 7,070,923); Bucky Paper as a Support Membrane in Retinal Cell Transplantation (Patent # 7,135,172)

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Ames hosts 2008 Patent Awards ceremony

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Thomas R. Chidester, Robert E. Lawrence, Robert E. Lynch - Energy Index for Aircraft Maneuvers (Patent # 7,075,457); Historical Analysis of Aircraft Flight Parameters (Patent # 7,161,501); Real-Time Analysis and Display of Aircraft Approach Maneuvers (Patent # 7,212,135)

Meyya Meyyappan - Carbon Nanotube Interconnect (Patent # 7,094,679); Metallic Nanowire Interconnections for Integrated Circuit Fabrication (Patent # 7,217,650); Nanoengineered Thermal Materials Based on Carbon Nanotube Array Composites (Patent # 7,273,095)

David F. Blake, Philippe C. Sarrazin - Powder Handling Device for Analytical Instruments (Patent # 7,113,265)

Liljana Spirkovska - Intelligent Weather Agent (Patent # 7,129,857)

Upender K. Kaul - Enhanced Elliptic Grid Generation (Patent # 7,231,329)

NASA photo by Dominic Hart

Ames Center Director S. Pete Worden (far left, top row) and NASA Inventions and Contributions Board (ICB) Staff Director Anthony J. Maturo (second from left, top row) with the 2008 patent award recipients.

Bishun N. Khare, Meyya Meyyappan - Functionalization of Carbon Nanotubes (Patent # 7,276,266)

Cun-Zheng Ning - Conversion of Type of Quantum Well Structure (Patent # 7,286,573)

Steven M. Green - Delay Banking for Air Traffic Management (Patent # 7,313,754)

Daniel B. Leiser, David A. Stewart - Toughened Uni-piece Fibrous Reinforced Oxidation-Resistant Composite (TUFROC) (Patent # 7,314,648)

Peter M. Goorjian - Communication Using VCSEL Laser Array (Patent # 7,333,735)

Durand R. Begault - Auditory Alert Systems with Enhanced Detectability (Patent # 7,346,172)

Insulation material named 'NASA Government Invention of 2007'

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atmosphere. The materials quickly are becoming the industry standard for heat shields on commercial spacecraft. The invention may lead to the application of heat shields specially tailored for broader commercial and government applications.

NASA applied a type of this innovative heat shield material, the Phenolic Impregnated Carbon Ablator (PICA), on the Stardust sample return capsule, which brought back to Earth the first comet particles and interstellar dust samples in January 2006. Stardust holds the record for the fastest Earth re-entry speed of any human-made object. PICA is planned for use as the heat shield on the new Orion crew vehicle and the Mars Science Laboratory mission. Other LCAs were used to protect the Mars rovers during their descent to the surface of the red planet.

"It is an honor to be involved in the development of an innovative heat shield material that has a far reaching impact on NASA missions and perhaps on commercial space travel in the future," said Huy Tran, an Ames engineer and member of the team that invented the technology.

"I'm very pleased to see a simple idea we had years ago evolve into important technology for pursuing space exploration for NASA, and new space development for the commercial space industry," said Daniel Rasky, another member of the Ames development team. Other members of the team included Ming-Ta Hsu, William Henline, and Salvatore Riccitello, all since retired. U.S. Patents have been granted for the inventions.

NASA's general counsel selects the Invention of the Year Award with technical assistance from NASA's Inventions and Contributions Board.

NASA photo by Dominic Hart

Ames Center Director S. Pete Worden, (right), presents NASA Inventor plaques for a new addition to the Lightweight Ceramic Ablator (LCA) family of heat shield materials to (left to right) Daniel Rasky, Christine Szalai and Huy Tran.

Inventors of the technology will be honored at the NASA Project Management Challenge Conference tentatively scheduled in February 2009.

For more information about NASA's Inventions and Contributions Board, visit: http://icb.nasa.gov

Ames' Jack Boyd earns NASA History Award

For his significant contributions to NASA history, Jack Boyd was recently awarded the 2008 NASA Headquarters History Division Award. In addition to his numerous other duties, Boyd has served as the NASA Ames senior advisor for history since 2003.

NASA photo by Dominic Hart

Jack Boyd, NASA Ames senior advisor for history (center) with the NASA Ames History Office staff, Glenn Bugos (right) and April Gage (left). Boyd received the 2008 NASA Headquarters History Division Award.

The award citation commends him for "Energetic outreach and promotion of NASA history and for making history relevant to NASA's present and future."

NASA Chief Historian Steven Dick commended Boyd for his vigorous lecture and outreach schedule, and his ability to describe NASA's present and its future in an interesting and informative manner. He noted how NASA benefits when those with corporate memory, like Boyd's, participates so actively in conversations about shaping the agency's vision.

In thanking the NASA history community for the award, Boyd said it a pleasure to work for an agency that has taken its history seriously.

Boyd thanked the NASA Ames History Office staff, Glenn Bugos and April Gage, for building a professional history and archive function at Ames, which is consistently relevant, cutting-edge and working to achieve high academic standards. He marveled at how quickly and efficiently Bugos and Gage had established an archive, a system of finding aids, a way to track historic artifacts, and a reference culture so that people who have questions can get some answers.

He paraphrased a favorite quote, saying that "Historians never finish their work; for various reasons they simply abandon it." Not to abandon its responsibilities to the future, NASA Ames has just committed itself to substantially revising and updating its most recent history book, Atmosphere of Freedom, and republishing it for NASA Ames' 70th anniversary year.

Dick presented the award at the annual NASA History Program Review at NASA Langley Research Center. NASA has built one of the largest, most professional, and most mission-directed history programs of any government agency in the world. In April 2009, the NASA History Review will convene at NASA Ames so that historians and archivists can share their best practices.

Science fair students present ideas from sun beams to leaf blowers

by Deborah Robin Croft

One could be forgiven for thinking that all those kids and parents descending from busses in front of the Exploration Center in early May were just part of another elementary school field trip coming to see the sights at Ames. But these were not your average school kids -- they are tomorrow's leaders in science, engineering, physics and astronomy-- the winners of the 2008 Silicon Valley Science and Technology Championship, (Synopsys). They were here for a breakfast held in their honor and convened by Carl Pilcher, director of the NASA Astrobiology Institute and Brad Bedout of the Exobiology Branch of the Space Science and Astrobiology Division.

The students each stood up and described their projects to an audience in the World Room of Building 943 at 8 a.m., while drinking orange juice and snacking on bagels.

The students attending the breakfast were primarily elementary and middle school students in Santa Clara County. This year, out of 754 applicants, 666 students participated and out of those, 218 students in grades six through eight received awards. One 140 participants in grades nine through 12 also received awards.

In her welcoming remarks at the beginning of the 2008 fair competition, Heidi Strahm Black, the Santa Clara Valley Science and Engineering Fair association president said, "It sounds corny, but growing up in the '60s and '70s I observed that no matter what the political problems between countries, regardless of walls, real or otherwise, athletes and scientists transcended the 'boundaries.' Strahm Black reiterated how important the study of science is for giving young people the intellectual tools to solve complex global problems.

Indeed, some of the projects the students described were ingenious in their simplicity. Kevin Shay called one project "Lighter Than Air." He constructed a "hover craft" with a leaf blower engine, a plywood board and plastic sheeting that remained suspended in the air and could support up to 250 lbs., and travel a distance of about 70 feet. Another young inventor, Justin To, a sophomore at Oak Grove High School, created sub-critical, silica aero gel, a substance that NASA developed for its Stardust mission.

The students' projects illustrate a commitment to inventing and improving technologies in order to benefit society and the environment. The objective of the science and engineering fair is to awaken more students to the wonder and power of science and engineering and it certainly accomplished that goal with this group of young wizards.

In Strahm Black's words, "Whether the issue is global warming, bee colony collapse, or locating land mines, we need minds that are not just knowledgeable--they must be skilled in the processes of science. Today we celebrate the skills of critical thinking: analysis, observation, classification, inference, hypothesizing and -- for the engineers – how to put it all together."

continued on next page

National Day of Prayer celebrated at Ames

BY DAVID BROWN

A prayer service was held May 1 at the Moffett Chapel during the lunch hour to celebrate the National Day of Prayer. Under the authority of 36 U.S.C. 119, the President issued a proclamation designating May 1, 2008 as the National Day of Prayer.

More than 50 NASA Ames and Army personnel attended this event and the fellowship luncheon that followed in Bldg 152 at Moffett. The chapel service was arranged by Chaplain Major Ray Alexander and the luncheon was sponsored by the Ames Christian Fellowship.

Chaplain LTC Steven Langhough kicked off the event with an inspirational message. Following this, several people from Ames participated in prayer sessions. Prayers were offered for the nation, the nation's leaders, Ames Research Center, the armed forces personnel and their own personal needs.

National Day of Prayer was celebrated at Ames on May 1, 2008, with a special prayer service held at the Moffett Chapel (left and below) followed by a fellowship luncheon.

photos by Mike Henschke

Students present ideas at science fair

continued from previous page

Following is a list of the science fair winners:

2008 NASA Science Fair Winners

Sabrina Paseman - Creation of a Ferrometer

Justin To - 'Much Ado About Nothing': An Analysis of the Thermal, Optical, and Other Physical Properties of Various Aerogel Nanocomposites

Anoop Galivanche - A Comparison of Different Water Purification Methods

Ethan Van Steenburgh - Magnetic Propulsion

Patrick Tierney - What is the Effect of Temperature on Elastic Materials

Devon White - Speed of Light Inductive (Solid) Charger

Surya Sivaram - Extending the Range of UAVs through the Use of Proton Exchange Membrane Cells and Other Renewable Energy Sources

Eric Cassavant and Alex Marshall -The Detection of Graviton Exchange Rate with Ocean Tides

Elizabeth Bernal and Alec Simpson - A Prototype of a Lunar Planet Growth Chamber

Kevin Shay - Lighter Than Air

Frederic Enea - Photovoltaic Cell Efficiency

NASA, Intel, SGI plan to 'soup up' supercomputer

continued from page 3

simulation. In 2009, NASA expects to increase that computing capability 16 times with the Pleiades project, and by an additional tenfold in 2012.

"Intel, working with SGI, is proud to play an important role in helping NASA expand the pursuit of scientific discovery," said Diane M. Bryant, vice president of Intel's Digital Enterprise Group and general manager or Server Platforms Group, Intel Digital Enterprise Group. "Systems such as Pleiades challenge the imagination, and guide our exploration of Earth, space and beyond. As we approach performance that was once thought impossible to achieve, our eyes are opened even wider to the vast possibilities enabled by supercomputing."

For information about the NASA Advanced Supercomputing facility, visit: http://www.nas.nasa.gov

Scientist offers better ways to search with Google

by Beverly McLeod

On May 16, the Ames Library sponsored a National Library Week presentation by Daniel Russell, a Google research scientist who studies search quality and user happiness. Russell shared with the audience several tips to make searching with Google easier and more productive. Highlights and examples of his advice are summarized below. DVD recordings of the entire talk will soon be available for checkout from the Ames Library. Watch the library home page, located at http://ameslib.arc.nasa.gov, for an announcement.

NASA photo by Dominic Hart

Daniel Russell, a research scientist at Google, spoke recently at Ames and offered tips for conducting better searches using Google.

Russell and his colleagues know a lot about searches, and Google incorporates sophisticated search algorithms, but one thing that Google can't do, Russell emphasized, is read a person's mind. Until that objective is realized, an individual's search satisfaction depends on six kinds of knowledge that he or she brings to the task:

1. Search engine technique (knowing what Google can do)
• the dictionary function (define:astrobiology)
• the exact phrase search with quotation marks ("to the moon and beyond")
• the calculator (4 percent of 389) (3121 in hex) (lightyear x 29)
These and many more useful functions can be found at www.googleguide.com, a Web site that is unaffiliated with Google.

2. Information mapping (knowing how to think about searching)
• using Wikipedia first to get a overview of an unfamiliar area
• using a reverse dictionary to find specific terms
• understanding what is available and where certain information might be found (Google doesn't index everything; NASA reports are more likely to be located in a specialized database.)
• searching for and using mashups (www.runningmap.com can be used to plot a path and find the distance between any two points)

3. Domain knowledge (having expertise in a particular field)
• using domain-specific terminology, which makes a search more focused and thus more effective
• using synonyms of key terms to conduct a more complete or satisfactory search

4. Search strategy (planning the most effective search steps)
• using the minimum number of low-frequency search terms to start broad (search mars)
• refining search results by adding terms one at a time (then add planet)
• eliminating unwanted results using the minus sign (mars –candy)
• understanding that the sequence of terms matters in a search string (milky way galaxy yields different results than galaxy milky way)
• searching maps and images as well as text

5. Assessment (understanding how to evaluate the authoritativeness of a site)
• understanding that sites that are indexed and searched by Google are not vetted by Google
• examining sponsorship of site
• distinguishing truth from the "truthiness"
• limiting type of sites searched (entering mars site:edu searches only educational Web sites)

6. Site-specific knowledge (knowing how to "read" different sites)
• realizing that each site is organized differently; greater familiarity with a site makes for more efficient retrieval of information

Russell also mentioned several other useful Google features:
• Google Alerts (www.google.com/alerts allows users to monitor individual interests by receiving e-mail updates on selected topics.
• Google Custom Search Engine (http://www.google.com/coop/cse/) allows users to set up a custom search engine—"your very own Google." You can also search for CSEs that others have created.
• Downloading the Google toolbar (http://toolbar.google.com/T4/index_pack_xp.html) to your browser adds helpful features, such as instant suggestions as you type in the search box.
• If you have a Gmail account, Google saves your search history, which is particularly useful to leverage your own memory of what you have done. Research indicates that one-third of searches are actually re-searches—searching for the same information again.
• Search for mashups—combinations of data sets—to find out what your house (and your neighbor's house) is worth, or the standardized test scores of various schools.
• Searching for a book will lead to a page that links to the holdings of local libraries.
• Entering NASA Ames library in the Google search box leads you to more help from the Ames library staff.

Got property? Then, check out N-PROP

by Michelle Stransky

If you are an equipment user, property custodian or an organizational point of contact, or involved in any type of equipment management role/responsibility, the recent roll out of N-PROP affects you.

The new and improved Integrated Asset Management (IAM) Property Plant and Equipment (PP&E) system is replacing two agency mainframe legacy systems: the NASA Equipment Management System (NEMS) and the NASA Property Disposal Management System (NPDMS). Why make all the effort to replace the old systems? There are so many reasons! Here are just a few:

- is easy to access either via i-View at https://iview.ifmp.nasa.gov or directly through the internet at: https://web.ifmp.nasa.gov:3200/;
- is a web-based application that is user friendly and facilitates real-time updating, tracking, managing and reporting; thus reducing manual processing;
- includes the automatic routing of e-mail messages to assist with notification of actions;
- allows for a standardized mechanism to view and update equipment across the entire agency; thus, eliminating multiple systems and redundant data; and
- allows users to search for active and/or excessed property across NASA which will reduce procurements and increase reutilization statistics.

All civil servants and contractors are now able to manage their assigned property via N-PROP. Before logging onto N-PROP, employees should take a short web- based training course in SATERN – "IEM 1066 N-PROP Basic Navigation Course." Drop-in labs and additional training opportunities at Ames are also being planned during the implementation of this new system.

Once you have completed a training course in SATERN and feel you are fully prepared to use N-PROP you will find that this intuitive tool will help you accomplish many things in a more efficient and effective manner. Some examples of what you can do to make your life easier by using N-PROP include the following:

1. Accept or reject equipment and cancel a pending action;
2. Display property assigned to property custodians or property users, as well as property transfer history;
3. Change location information or transfer equipment to another property custodian or user;
4. Generate a removal pass for a piece of equipment; and
5. Request new tags or replacement tags for equipment

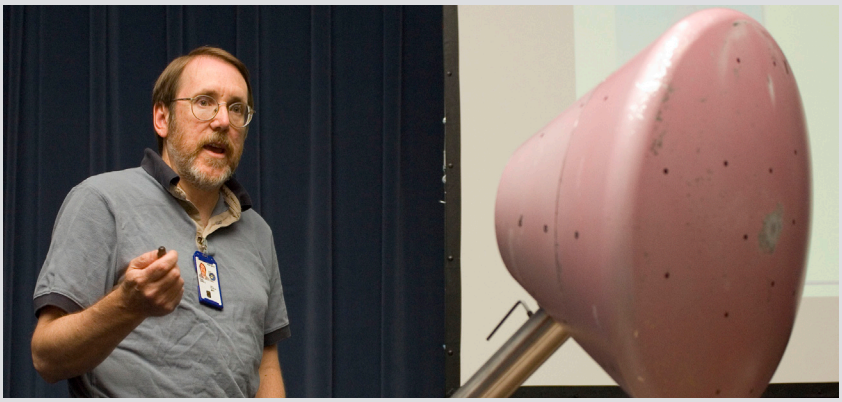
Implementation of this initiative is exciting because it will improve the accountability and visibility of assets used by all NASA installations, programs and projects.

For questions or more information regarding the IAM PP&E, contact the ITSC Help Desk at ext. 4-2000 or help@mail.arc.nasa.gov.

photo by Melody Miles

From left to right, Carl Lawson, John Reiss, Lisa Fabish, Darlene Gross and Jayme Johnson during a regular Wednesday agency-wide telecon status/planning meeting.

Crew Exploration Vehicle testing discussed at aeronautics seminar



NASA photo by Dominic Hart

Recently an Aeronautics technical seminar was held at Ames entitled, "Aerodynamics and Aeroacoustics Testing of the Crew Exploration Vehicle (CEV)." The presentation was given by James C. Ross (seen here speaking during the event, with a model of the CEV in the foreground) who explored the fundamental link between NASA's Aeronautics and Exploration Systems Mission Directorates. Every flight of NASA's next-generation spacecraft will begin and end with a transit of the Earth's atmosphere. These relatively short portions of the flight are critical to the safety of the vehicle and its crew. The Constellation Program is therefore spending a great deal of effort to develop an accurate aerodynamic database for the CEV. The CEV Aeroscience Project is responsible for defining the aerodynamic, aeroacoustic and aerothermodynamic environment of the CEV during re-entry and descent from orbit and during the unlikely event of a launch abort.

In memory of . . .

Remembering a woman who really knew how to live

by Lorien Wheeler

Cherished Ames friend and colleague Linda Christine Cortez passed away on May 2, 2008 after a courageous struggle with cancer. Among those blessed with knowing her, she will always be loved and admired for her vibrant spirit, kindness, unforgettable laugh and propensity for inspiring joy in everyone around her.

Born in Livermore, Calif., on Sept. 14, 1957, she was raised by her mother along with two brothers and a sister. In spite of an upbringing unsupportive of women pursuing education and careers, Cortez possessed the motivation and strength of character to push herself through school and become the first of her family to go on to college.

Cortez first started working for NASA in 1981, providing administration and financial analysis support at the office of an Ames-contracted company. She then joined Ames' NASA Advanced Supercomputing Division in 1992 as a Mac/PC system administrator for the desktop support group, where she became an inspirational group lead and integral member of the community. Her skill with computers along with a personable "can-do" attitude quickly distinguished her as an invaluable colleague and dependable friend.

In 2004, she took on a position as Columbia project administrator, bringing the same attributes to this new role. Regardless of what position she held, Cortez always brought laughter and cheer into everything she was involved with.

Even greater than her dedication on the job was her devotion to her family, which was always first and foremost in her life. She was well-known by all as a wonderful mother with unparalleled love for her four children—Paul, Nicole, Daniel and Natane—and, most recently, for her new grandchildren. Cortez also played classical guitar, loved to sing and dance and delighted in swimming and being out on the water.

photo by Paul Munoz

Linda Christine Cortez

Ames hosts Education Coordinating Committee meeting

On May 15 and 16, Ames hosted the Headquarters-sponsored Education Coordinating Committee meeting. The committee is a collaborative structure that maximizes NASA's ability to maintain an integrated education portfolio and strategically manage the implementation of programs, projects and activities in a distributed system to ensure the achievement of education outcomes. Attendees at the meeting, left to right, included: Susan White, Jim Stofan, Gregg Buckingham, Larry Cooper, Bill Anderson, Tammy Rowan, Jerry McKee, Jo Ann Charleston, Parvin Kassaie, Roger Hathaway, Bernice Alston, Alotta Taylor, Joyce Winterton, Christine Ivie, Diane DeTroye and Jerry Hartman.

NASA photo by Dominic Hart

Dancers celebrate Cinco de Mayo at Ames

NASA photo by Eric James

In celebration of Cinco de Mayo, the Hispanic Advisory Committee of Employees (HACE) celebrated with entertainment by the San Francisco Ballet Folkloric Dancers. The dancers entertained the lunch time crowd at the Mega Bites Cafeteria with traditional dances. Steve Zornetzer, associate director for Institutions and Research at Ames, was on hand to welcome and thank the HACE group for hosting the event. He also thanked the dancers and participants for their contributions to the event. The dancers also were treated to a tour of the Vertical Motion Simulator and met an astronaut. The event was a bridging of cultures and an introduction to NASA for the next generation of explorers.

NASA CoLab to connect the public with NASA's work

CoLab is an agency-wide project started at NASA Ames and is designed to connect individual members of the public with NASA's mission. Its vision is to foster collaborations between NASA and the public by providing the tools and environments for collaborations, two-way communication and content creation. During a recent open house (right), Ames employees learned how NASA CoLab can make their work more collaborative and accessible to the public.

NASA photo by Dominic Hart

NASA's support of Southern California firestorms highlighted

NASA photo by Dominic Hart

In May, a Director's Colloquium, "NASA Science Serving Society: UAV/Sensor Mission Support to the Southern California Firestorms of October 2007 was held in the Space Sciences Auditorium. Vincent Ambrosia (photo left) and Francis Enomoto co-presented the colloquium, followed by a reception. In late October 2007, a series of large wildfires, spawned by Santa Ana winds, spread throughout Southern California. The wildfires burned more than 500,000 acres, forcing the evacuation of more than half a million residents. Funded by NASA's Earth Science Applications Program, a team of NASA Ames researchers developed new capabilities to observe and provide real-time fire-related sensor information to disaster managers, utilizing innovative NASA capabilities, such as uninhabited aerial vehicles (UAVs) and infrared sensors. This presentation highlighted the capabilities demonstrated during the summer and fall of 2007 over the wildfire events, and provide insight into the future of the technologies, science and concepts vividly displayed during a true "test of fire."

Ames A.I.B. Store sponsors lunch and Earth Day event

In April, the NASA Express A.I.B. supply store held a customer appreciation free lunch for Ames employees (left photo) and also sponsored Earth Day exhibits during the event (photo, far right), inside the NASA supply store, Bldg. N-255. 'Green' products were featured and Ames organizations and employees showcased their environmental and health activities with table-top exhibits.

NASA photos by Dominic Hart

Ames Ongoing Monthly Events Calendar

Ames Amateur Radio Club, third Thurs., of ea. 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, every third Wednesday of each month, 12 noon - 1 p.m., Bldg. N-245 Auditorium. POC: Julie Nottage at jnottage@mail.arc.nasa.gov, ext. 4-3711.

Ames Bowling League, Homestead Lanes on Thursday nights at 6:20 p.m. Seeking substitute bowlers. Questions to sign up: Mike Liu at ext. 4-1132.

Ames Child Care Center Board of Directors Mtg., every other Monday, 1 - 2:30 p.m., Bldg. N-262/Rm 180. POC: Sally Miller, ext. 4-5411.

Ames Contractor Council Mtg., first Wednesday of ea. month, 11 a.m., Bldg. N-200, Committee Room. POC: Kathleen Starmer, ext. 4-6959

Environmental Forum, first Thursday every other month, 9 a.m. - 10 a.m., T20-G conference Rm. 129. URL: http://q/qe/events/EHS-series/ POC: Stacy St. Louis, ext. 4-6810.

Ames Federal Employees Union (AFEU) Mtg, First Wednesday of November (7th), noon. First Wednesday of December (5th), noon. Bldg. N-247, Rm. 109. Beginning 2008, third Wednesday each month, same location. Guests welcome. Info at: http://www.afeu.org. POC: Paul K. Davis, ext. 4-5916.

The Hispanic Advisory Committee for Excellence (HACE) Mtg., first Thursday of each month, 11:45 a.m. - 12:45 p.m., Bldg. N-255, Rm. 101C. POC: Eric Kristich, ext. 4-5137 and Mark Leon, ext. 4-6498.

Jetstream Toastmasters, Mondays, 12 p.m. - 1 p.m., Bldg. N-269/Rm.179. POC: Miwa Hayashi, ext. 4-1397, mhayashi@mail.arc.nasa.gov. Web: http://jetstream.freetoasthost.com

Ames Mac Support Group Mtg., third Tuesday of each month, 11:30 a.m.to 1 p.m., Bldg. N-262, 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.

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

Ames Nimble Knitters Club, every Tuesday at 11:30 a.m., Bldg. N-241/Rm 237. POC: Rosalyn Jung, knitfan2@yahoo.com or Diane Alexander at ext. 4-3140. URL: http://knit.arc.nasa.gov

Ames Safety Committee, third Thursday of each month, 10 a.m. - 11 a.m., Bldg. N-237, Rm. 201. POC: John Livacich, jlivacich@mail.arc.nasa.gov, ext. 4-3243 or Terry Reichert, treichert@mail.arc.nasa.gov, ext.-4-0375.

Ames Sailing Club Mtg., second Thursday of each month (March through November), from 12 p.m. - 1 p.m., Bldg. N-260, Rm. 113. URL: http://sail.arc.nasa.gov/. POC: Clif Horne, ext. 4-4571.

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.

Safety Data

NASA-Ames Occupational Illness-Injury Data for Calendar Year-to-Date 2008 Jan. 1, 2008 - April 30, 2008

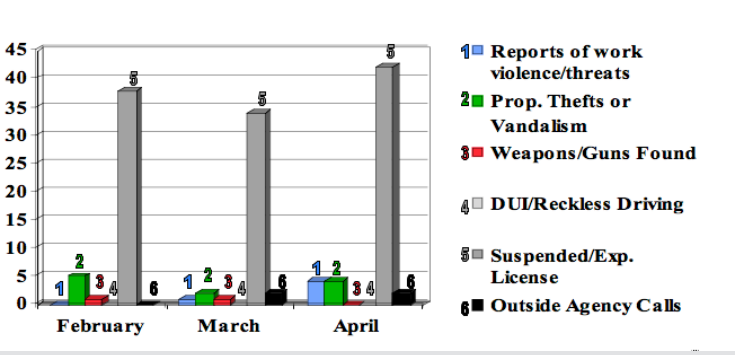
	Civil Servants	Contractors
First aid cases	10	5
Lost Workday cases	1	0
Recordable cases	0	3
Restricted duty days	0	2

Above data are as of April 30, 2008. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

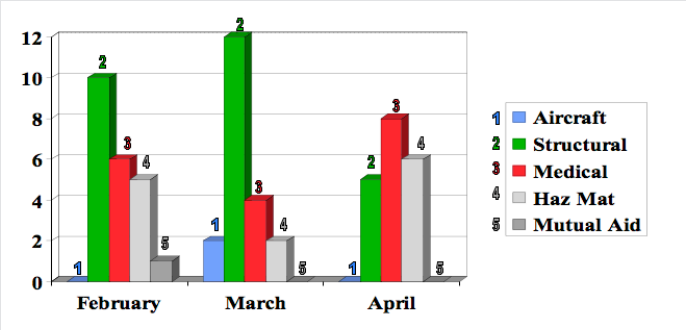
Protective Services monthly activity

A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire Protection Services units for the month of April 2008 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



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

Researcher with family of three looking for housing for six months near NASA Ames. Contact Ram e-mail ram@prl.res.in

Visiting researcher/intern needs furnished room within walking or biking distance of Ames for June - August 2008. Ann (202) 285-2150.

Brand new one bedroom garden apartment behind single family home. Available in both furnished and non-furnished (non-furnished: $1,500). Located at Willow Glen Area. Stainless steel appliances, granite kitchen counter, beautifully designed and decorated hardwood mahogany floors, cherry wood cabinets, tile kitchen and bathroom. W/D, dishwasher. Call (408) 239-3050 (cell) or (408) 978-8422 (home).

Single family home located in Willow Glen, 2bd/2ba. Furnished (beautifully decorated) or not furnished ($2,100) as requested. Split-level family room (could also be used as a guest room with full bath). Cozy living room/dining room, hardwood floors, fireplace. Call (408) 239-3050 (cell) or (408) 978-8422 (home).

Miscellaneous

Young parakeets, nine months old. Three female and two male, four are yellow/green and one is blue. They are $10 each or two for $15. All five w/the cage, $45. Desiree (510) 493-1927.

Transportation

'01 Chevy Prizm, 50K miles, 1.8L eng., AT, AC, Corolla twin, $5,170. Original owner, all records available. Dan (408) 238-6538.

Car Pool

Looking for carpool from central/south Fremont to Ames three days/week. Call (510) 657-7543 or ext. 4-3258 or nancy.dorighi@nasa.gov

Wanted carpool mate or carpool to Ames from Ida Price School area in San Jose. Hours flexible. Ann, ext. 4-2350.

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

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 Gift Shop N-235 in the cafeteria , 8 a.m. to 2 p.m., ext. 4-6873

Don't forget to purchase your baby shower, birthday, holiday gifts at Ames' two gift shops!

Visitor Center Gift Shop N-943 M-F, 10 a.m. to 4 p.m., ext. 4-5412

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

Tickets, etc... N-943 outside the main gate, 10 a.m. to 3:30 p.m., ext. 4-5412 and Beyond Galileo, 8 a.m. to 1:30 p.m. ext. 4-6873

Mega Bites Cafeteria N-235, 6 a.m. to 2 p.m., ext. 4-5969/Catering ext. 4-2161

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

Moffett Field Golf Club with 'Tee minus 1' Grill and Sports Bar. Call (650) 603-8026.

RV Lots Available Call to reserve a space at (650) 603-7100/01.

Civilian/Contractors, $50/mo; military $25/mo

NASA Lodge (N-19) 603-7100

Where to stay when you're too tired to drive home? What about the lodge?! Two types of rooms: Bldg. 19 (43 rooms), rate: $55/night ($5 ea add'l adult); Bldg. 583 (150 rooms), rate: $45/night ($5 ea. add'l adult)

Ames Swim Center (N-109) 603-8025

The pool is heated year round! The pool is currently available for lap swim, pool parties and special events. POC -Chana Langley, Pool Manager (650) 603-8025. Memberships: single memberships: $40/yr. Family memberships: $60/yr. After purchasing a membership, there is an entrance fee: daily entrance fee - $3/day or lap pass fee - $40 for 20 uses. Platinum membership - $360/yr. (no daily fee). Special events: include military training, swim team events, kayak role practice, etc. The cost for special events is $50/hr.

Ongoing Vacation Opportunities

Lake Tahoe-Squaw Valley Townhse, 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.

Bass Lake vacation rental, 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.

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.

New York, 5th Ave., one fully furnished bedroom apt. in 24 hour security fbldg. overlooking Washington Square Park, $1,000/week or 3,000/month, negotiable. Call (650) 430-6977.

Paris/France: Fully furnished studio. 5th arr, Latin Quarter, Notre Dame and Lie-St. Louis, $1,400/week, negotiable. Call (650) 430-6977.

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).

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.

Florida west coast vacation in St. Petersburg, beautiful 2bd/2ba condo, fully equipped kitchen and furnished, sunset views, 1/4 mile from St. Pete Beach, monthly or 2 week minimum rentals only. Call (703) 299-8889 or e-mail: jdgoehler@aol.com

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. $700/wkend, $2,100/wk including cleaning by the maid service when you depart. Call (408) 252-7260.

South Lake Tahoe large cabin surrounded by protected forest, 8 miles from Stateline Sleeps 12 comfortably, 4 bd/3ba. Hot tub/pool table/65" TV Matt (408) 482-5286

South Lake Tahoe cozy home backs up to large open meadow, 1 mile from Heavenly Valley. Sleeps 11, 3 bd/2.5 ba. Large deck with hot tub. Matt (408) 482-5286.

Ames Cat Network

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.

The NASA Lodge
Rooms starting at $45 a night.

Having a B-I-G family reunion and just run out of bedrooms and inflatable beds?
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Agency announcement: NASA Innovation Ambassador Developmental Assignment

Qualified NASA employees are invited to apply to be Innovation Ambassadors under a new program sponsored by the Innovative Partnerships Program at NASA Headquarters.

The Innovation Ambassadors program will provide a temporary developmental assignment for select members of NASA's technical workforce. These employees will be assigned to work with a host external organization for up to one year. Shorter assignments of three months or more will also be considered.

The host organization will have the benefit of the expertise of the NASA employee at no cost. The NASA employee will focus on improving their technical and management skills while learning, on a day-to-day basis, about the innovative technologies and processes used by the host organization.

The Innovation Ambassador can also share ideas and approaches from their NASA experience. Following the assignment, the NASA employee will be expected to disseminate their new knowledge within NASA and lead efforts to implement new technologies and process improvements based on their experience.

An additional benefit for NASA and the host organization is the potential for the Innovation Ambassadors activity to lead to future business partnerships and other interaction.

Innovation Ambassador applicants must be civil servant engineers, scientists, project managers or program managers at the GS-11 to GS-15 level. The host organization can be a private company, academic or research institution, national laboratory or another government agency. Innovation Ambassador applicants can propose work assignments at an external organization with which they have established their own contact.

Also, the Innovative Partnerships Program Office is requesting information from external organizations interested in hosting an Ambassador and a list of those organizations will be provided to each Center Innovative Partnerships Program (IPP) Office for reference by June 27. The NASA Headquarters IPP Office will fund the travel expenses for the Innovation Ambassador. However, the salary of the Ambassador must be paid by their home organization and so the concurrence of the home organization supervisor is essential.

Interested employees should contact their center IPP Office for additional guidance and to submit their application packages. Center IPP Offices will begin reviewing Innovation Ambassador applications by July 14, 2008. The center IPP Office will forward a limited number of applications to NASA Headquarters for final selection by Aug. 1, 2008.

For more information about the Innovation Ambassador program and the application requirements, visit: http://ipp.nasa.gov/ii_ambassadors.htm. You can also contact Andrew Petro, Innovation Incubator Program Executive, Innovative Partnerships Program Office, NASA Headquarters: andrew.j.petro@nasa.gov.

HACE presents award to college students

photo by Melody Miles

Hispanic Advisory Committee of Employees (HACE) Chairman Eric Kristich (front, center) presented the HACE Awards for Evergreen Valley College students. The students graduated from a two-year college and are moving to universities to complete their bachelor degrees and higher education. This event also marked a bridging of cultures between the students and NASA. The recipients of the awards were, (left to right) Andres Mendes, Bianca Rivera, Maria Rocha, and Montserrat Orozco (center) with Eric Kristich. HACE will host its annual golf tournament Sept. 12, 2008.

What's on InsideNASA . . .

NASA Deputy Administrator Shana Dale's corner on InsideNASA this month features an article entitled, "SpectraSensors, Inc."

This feature describes SpectraSensors, Inc., formed in 1999 by co-founders Randy May and Carl Kukkonen. Their research efforts at NASA's Jet Propulsion Laboratory (JPL) in Pasadena, Calif., helped develop a special type of laser diode-based gas analyzer for measuring atmospheric gases on Earth, on the International Space Station and on Mars.

To learn more about this technology, visit: http://insidenasa.nasa.gov/nasa_stories/May_SpectraSensors.html

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 a weekend or holiday, then the following business day becomes the deadline. For Astrogram questions, contact Astrid Olson at the aforementioned e-mail address or ext. 4-3347.

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Managing Editor.....Michael Mewhinney
Editor, Layout and Design.....Astrid Olson

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