



# ASTROGRAM

Newsletter of NASA Ames Research Center, Moffett Field, California

March 2007

## NASA to explore future collaborations with state of Hawaii

On March 7, NASA officials announced they have agreed to explore future collaborations with the state of Hawaii in commercial space initiatives and programs supporting research, education and workforce development.

Under the terms of a memorandum of understanding, recently signed in Hawaii, NASA Ames will

explore opportunities for future collaborations with the state of Hawaii in support of the Vision for Space Exploration, NASA's plan to return humans to the moon and later travel to Mars.

"This agreement with the state of Hawaii is another exciting opportunity for NASA to work with a partner in support of the agency's exploration, science and aeronautics mission

goals," said Ames Center Director S. Pete Worden.

"We are excited to partner with NASA to collaborate on future space exploration," said Hawaii Governor Linda Lingle, who signed the agreement with Worden during a signing ceremony in the executive chambers at the Hawaii State Capitol. "We are looking forward to future collabora-

*continued on page 2*

## NASA Administrator and Deputy Administrator visit Ames

NASA Administrator Michael Griffin (left) and NASA Deputy Administrator Shana Dale enjoy a light-hearted moment during an all-hands meeting with Ames employees held in February. During the all-hands session held before a capacity audience in the main auditorium, Griffin and Dale addressed a variety of topics ranging from NASA's proposed budget for Fiscal Year 2008 to the center's role in implementing the Vision for Space Exploration.



NASA photo by Tom Trower

## Remembering the inspirational Johnny Green

Ames security officer Johnny Green passed away on March 10, 2007. In the short five years that he

was here, Green became an institution unto himself at Ames. Every single day that Green was on duty, he was unfailingly cheerful, ready to greet every last one of us with a broad grin and a kind word and a gentle easing into the work day. But we have lost that welcoming voice.

Green served in the U.S. Navy for 26 years, retiring as a senior chief in 1988. During his time in the Navy, he served a tour of duty in Vietnam, was stationed in Japan and served on multiple aircraft carriers. His last duty station was NASA Moffett Field. Green also held a

bachelor's degree in aeronautics with a minor in business from Embry-Riddle University in Daytona Beach, Fla.

Five years ago, he began employment with SecTek Inc, serving as a security officer in support of the Ames Protective Services Office. During this time, Green made a positive impact on every person who entered through a

*continued on page 2*



photo by Jonus Dino

Johnny Green, an Ames security guard, cheerfully greeted employees as they arrived at work. His unexpected death is a great collective loss for the Ames community.

### On the Inside . . .

Page 2 - NASA, Virgin Galactic to explore future collaboration

Page 3 - NASA researchers are key contributors to climate studies

Page 10 - Ames Ongoing Events

Page 11 - Ames Classifieds

## NASA, Virgin Galactic to explore future collaboration

NASA officials recently signed a memorandum of understanding with a U.S. company, Virgin Galactic LLC, to explore the potential for collaborations on the development of space suits, heat shields for spaceships, hybrid rocket motors and hypersonic vehicles capable of traveling five or more times the speed of sound.

Under the terms of the memorandum, NASA Ames and Virgin Galactic LLC, a U.S.-based subsidiary of Sir Richard Branson's Virgin Group, will explore possible collaborations in several technical areas employing capabilities and facilities of Ames.

"As we constantly seek to build upon the advances made by explorers who have come before us, we now embark upon an exciting time in space exploration history that realizes the unlimited opportunities presented by a commercial space economy," said Shana Dale, NASA's deputy administrator. "By encouraging such potential collaborations, NASA supports the development of greater commercial collaboration and applications that will serve to strengthen and enhance the future benefits of space exploration for all of mankind."

Dale is a longtime supporter of commercial space development. As the former staff director of the U.S. House of Representatives Subcommittee on Space and Aeronautics, she was instrumental in the passage of the Commercial Space Act of 1998. This legislation encourages commercial space development in a variety of areas, including launch vehicles, the International Space Station and the acquisition of space and Earth science data.

"This understanding with Virgin Galactic affords NASA an opportunity to work with an emerging company in the commercial human space transportation industry to support the agency's exploration, science and aeronautics mission goals," said Ames Center Director S. Pete Worden. "Our location in California's Silicon Valley provides a dynamic research and development platform for future potential collaborations with other such companies in support of a robust commercial space



NASA photo by Tom Trower

NASA officials recently signed a memorandum of understanding with Virgin Galactic LLC, to explore the potential for collaborations on the development of space suits, heat shields for spaceships, hybrid rocket motors and hypersonic vehicles capable of traveling five or more times the speed of sound. Seated left to right are: NASA Deputy Administrator Shana Dale, Alex Tai, chief operating officer for Virgin Galactic LLC and Ames Center Director S. Pete Worden.

industry."

"We are excited to be working with NASA and look forward to future collaborations in exploration and space travel," said Alex Tai, vice president of operations for Virgin Galactic.

The agreement with Virgin Galactic was negotiated through NASA's Space Portal, a newly formed organization in the NASA Research Park at Ames, which seeks to engage new opportunities for NASA to promote the development of the commercial

space economy.

"This new type of private-public partnership can benefit the agency while helping to foster a new industry," said Dan Coughlin, NASA's lead for the Virgin Galactic agreement.

The memorandum of understanding will be in effect for two years and stipulates that neither NASA nor Virgin Galactic will be required to pay any fees or provide funds to support the areas of possible collaboration.

BY MICHAEL MEWHINNEY

## NASA, Hawaii future collaborations

*continued from front page*

tions with NASA to develop innovative opportunities in aerospace-related fields that capitalize on Hawaii's science and technology resources and capabilities."

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partnerships with NASA to promote the development of commercial space exploration.

The memorandum of understanding will be in effect for two years and stipulates that neither NASA nor the state of Hawaii will be required to pay any fees or provide funds to support the areas of collaboration.

BY MICHAEL MEWHINNEY

## Remembering Johnny Green

*continued from front page*

gate he was guarding. His encouraging words, unyielding smile and energetic signature arm pump will be missed. Few people have found such simple ways to leave such a lasting impression in the hearts of so many. A tree will be planted in his honor, near the

front gate from which he greeted us.

A memorial service was held at Ames in his honor on March 21.

Donations can be made to: Johnny G. Green Memorial Fund, Account # 246033, Golden Bay FCU, P.O. Box 1449, Mountain View, CA 94042-1449.

## NASA researchers are key contributors to climate studies

Many agree that one of the greatest scientific challenges of the 21st century is to understand the complexities of our home planet's climate. While most Earth science data are acquired from the many Earth-orbiting satellites, much of the critical data can be gathered only at the research site to really understand the detailed processes.

NASA scientists conduct field research missions to acquire this key data in every continent of the globe, from the Arctic to the Antarctic. One group in particular has been intricately involved in many of these research projects, the NASA Ames' Earth Science Project Office (ESPO).

The ESPO group has provided overall project management for large, multi-agency, national and international Earth science field campaigns for more than 20 years. Whether it is studying the Earth's ozone layer, the production of thunderstorms, intercontinental pollution, hurricane tracking and intensification, or tracing the atmospheric effects of global warming, the ESPO team plays a large role in the scientific understanding of these phenomena.

The team is responsible for the planning, implementation and management of the often complex logistics required for fielding all the scientific personnel and equipment of a particular mission. Each mission has its own specific requirements, including identifying the most advantageous geographic sites from which data can be collected, and ensuring that NASA aircraft and personnel can be accommodated in some very remote locations.

The ESPO team has a long history of successful field campaigns, beginning in 1987 with both the Stratosphere-Troposphere Exchange Project and the Airborne Antarctic Ozone Expedition experiments. To date, ESPO has managed more than 30 large, complex missions on five continents, each with anywhere from 80 to 400 scientific personnel involved.

"I'm very proud of our reputation," said Michael Craig, the ESPO director. "NASA Headquarters relies on us to make these missions happen and at the lowest possible cost." ESPO has received four exceptional achievement medals and more than 20 NASA

group achievement awards.

This past year, ESPO managed missions at nearly a dozen different sites, including Costa Rica, Mexico, Alaska, the Cape Verde Islands and



The Earth Science Project Office group: Front row, left to right: Dan Chirica, Steven Gaines and Kent Shiffer. Middle row: Mike Gaunce, Sue Tolley, Mike Craig and Quincy Allison. Back row: Marilyn Vasques.

the U.S. One major NASA airborne science field campaign in 2006 was the Intercontinental Chemical Transport Experiment (INTEX-B).

The purpose of this mission was to understand the transport and transformation of gases and aerosols on transcontinental and intercontinental scales while assessing their impact on air quality and climate. ESPO managed this large mission, which included more than 300 participants and four aircraft equipped with more than 41 scientific instruments, to sample the chemistry of the upper atmosphere.

Another successful mission in 2006 was the NASA African Monsoon Multidisciplinary Analyses (NAM-

MA) mission that studied the birth of tropical hurricanes off the coast of West Africa. Based in the Cape Verde Islands, researchers used NASA's DC-8 aircraft and multiple ground sites to collect atmospheric readings on the composition, structure and formation of developing tropical systems as they cross the Atlantic Ocean on their westward track.

"The remoteness of the location, the limited amount of time to organize it, and the large number of scientists and multiple ground sites made it a complex mission to manage," said Mike Gaunce, NAMMA project manager.

ESPO's major mission this year is the Tropical Composition, Cloud and Climate Coupling (TC4) mission, which will be conducted in Costa Rica this summer. The mission will utilize NASA's ER-2, WB-57 and DC-8 aircraft, as well as multiple radar and ground sites to study the upper atmosphere of the tropical region.

In addition to Craig and Gaunce, the ESPO staff includes Kent Shiffer, Marilyn Vasques, Quincy Allison, Steven Gaines, Sue Tolley and Dan Chirica.

"This is an amazing job", said Gaunce, one of the lead ESPO project managers. "Organizing and managing field deployments are a critical part of getting the scientific data to understand what's happening to the Earth's climate. We work with all types of people all over world, from ambassadors to truck drivers. I'm very fortunate to be a part of it."

To find out more about ESPO and its work, go to the group's Web site at <http://www.espo.nasa.gov>

BY RUTH MARLAIRE

## Astronaut Tom Jones speaks at Ames



NASA photo by Dominic Hart

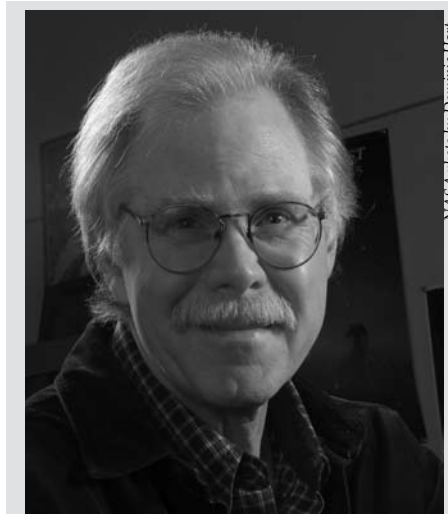
Planetary scientist and veteran shuttle astronaut Tom Jones presented a director's colloquium on March 13 and also delivered a free public lecture that same evening at Ames. He discussed his new book, 'Skywalking: An Astronaut's Memoir,' detailing his experiences as mission specialist and payload commander aboard four space shuttle flights and signed copies of the book after the lecture.

## Ames scientist Jeffrey Cuzzi awarded AGS Fellow

Ames scientist Jeffrey Cuzzi has been elected Fellow by the American Geophysical Society for 25 years of planetary rings research. Each year, members of the American Geophysical Society honor some of their peers as Fellows. Fellows are recognized for outstanding contributions to the advancement of the geophysical sciences, to the service of the community and to the public's understanding.

Cuzzi, a senior scientist in the Space Science Division at Ames, has made ongoing contributions to the interdisciplinary study of planetary science. He started his career modeling Saturn's rings, which helped him theorize the properties of ring material, the nature of ring structure and the physical processes involved.

When Ames was conducting engineering studies for planetary probes, it gave Cuzzi the opportunity to do preliminary work for the design on



NASA photo by Dominic Hart

Ames scientist Jeff Cuzzi, recently elected Fellow by the American Geophysical Society for his 25 years of planetary rings research.

the Titan entry probe --- work that was used by the European Space Agency 30 years later. He was later invited

to join the Voyager imaging team as its rings expert, which later became the Saturn-Orbiter-Dual-probe mission. He also was the interdisciplinary scientist for rings and dust for the Cassini-Huygens international effort.

Cuzzi's major awards include the Lawrence Sperry Award (AIAA -1982); Exceptional Scientific Achievement Medal (NASA -1982, 1986, 1999); Sustained Superior Performance Award (NASA Ames -1986); Ames Associate Fellow Award (Ames-1987); Special Achievement Award (Space Science Division -1989, 1994); Editor's Commendation for Excellent Referees (Icarus -1991, 1993); Ames Honor Award for Excellence (Manager/Supervisor -1995); H. Julian Allen Award for best Ames research paper (1997); NASA Group Achievement Award, Cassini IDS's (1998); and the NASA Group Achievement Award, Astrobiology Team (2000).

BY RUTH MARLAIRE

## Ames holds science panel to inspire girls to higher learning



Photo by Tom Clausen

Recently, Ames scientists held a panel to encourage girls to pursue science, engineering and math careers. More than 50 girls from five high schools in Dublin, Livermore and Pleasanton listened to NASA employees (left to right) Bernie Luna (Code SCB); Karen Gundy-Burlet (Code TI); Dora Herrera (Code PFP) and Kim Wagenbach (Code PM). The girls are part of a program that encourages female students to enroll in science, technology, engineering and mathematics (STEM) courses; supports female students already enrolled in those classes; encourages female students to explore a variety of STEM careers; and demonstrates the link between current course selection and future career paths.

## Wheelchair-accessible van now available in Dispatch

Vivian Torres and Tony Calvo recently were recognized with a certificate of appreciation from the Diversity Equal Opportunity Board (DEOB) by the DEOB chair, Ames Associate Director of Institutions and Research Steve Zornetzer.

Torres and Calvo are on staff in the motor pool and manage the center's vehicle fleet program. They both recognized that the center's dispatching fleet did not have accessible vehicles for use by individuals in wheel chairs. Essentially, individuals in wheel chairs were excluded from utilizing the dispatch vehicle program as passengers. Deputy Director of Safety, Environmental and Mission Assurance Sandy

Olliges suggested the motor pool look into adding a wheelchair-accessible van to the GSA fleet.

Torres and Calvo worked diligently with the GSA provider and in a very short time, augmented the dispatch program with a wheelchair-accessible vehicle. The vehicle is now part of the Ames government vehicle fleet and can be reserved by employees requiring transportation of individuals in wheelchairs.

Additional evaluation of the shuttle buses in the Ames fleet resulted in retrofitting to an upgraded system designed for the securing of wheelchairs and their occupants.

The efforts that Torres and Calvo

put forth are a good example of examining a center system that may exclude certain groups of individuals. Their assessment rendered corrective actions to change a deficiency in a system and ensure that vehicles are available for all Ames employees.

The DEOB encourages all personnel at the center to evaluate various processes, policies, systems and procedures to determine if any group of center employees may experience exclusion or impediments to the effectiveness of productivity and initiate the necessary steps to ensure effectiveness and inclusion of all Ames employees.

BY ERIC KRISTICH

## Long-time Ames contractor Allen “Al” Ross dies

Allen (Al) H. Ross died unexpectedly in February at his home in Gardnerville, Nev. Known as “Al,” he was a highly regarded network-engineering contractor at Ames for 33 years.

Originally from Florida, Ross trained in electronics while serving in the U.S. Air Force and went on to receive his associate of arts degree in computer information systems from De Anza College in Cupertino.

Ross was highly skilled in the operation and maintenance of sophisticated satellite tracking, telemetry and ground control stations; data acquisition and processing systems; magnetic testing and earthquake forecasting;



Allen (Al) H. Ross

and geostationary domestic satellite systems.

He contributed significantly to establishing the first television broadcast to Ames from Antarctica and the first video broadcast from the arctic.

Last summer, he helped set up the Ames side of a satellite communications system that enabled the remote operation from Ames of two micro-rovers in Chile’s Atacama Desert.

Ross is survived by his wife of 32 years, Kay, his sons Logan and Taiho, and his daughter Veronica.

BY LARRY LAUFENBERG

## Ames celebrates National African-American History Month

During National African American History Month in February, we celebrate and reflect on the many outstanding achievements and contri-

month with a plethora of activities and events.

The main event, ‘A Patchwork Quilt,’ took place on Feb. 28

in the early afternoon in the main auditorium at Ames. The program provided an oration of stories to give the audience a glimpse of the lives of some prominent and lesser-known people who were instrumental in the formation of African-American history.

The title, ‘A Patchwork Quilt,’ was derived from the African-American tradition of



NASA photos by Dominic Hart

Sherry Patterson, from *CI Travel*, plays the pivotal role of the grandmother as she shares the story of the Patchwork Quilt during the recent event at Ames.

the African-American style quilts was born. African-American patchwork quilts were made of cloth and provided a narrative of family history. Stories were told through quilts and they provided visual records of family events such as birth, marriage, geographical locations, and spiritual dedication.

The program concluded with a reception in the lobby of Building 200 featuring a selection of baked specialty desserts prepared by Brown Girl Kitchen. For more information about this and other events sponsored by the African-American Advisory Group, please send any correspondence to AAAG Chair Kevin Jones at Kevin.L.Jones@nasa.gov.

BY KEVIN JONES



The cast of the Patchwork Quilt gather for a photo at the end of the performance held recently at Ames in celebration of National African-American History Month. Front row, left to right, Terrence Montgomery, Sherry Patterson and Ken Freeman. Back row, left to right: Jeanne Caldwell, Joe Shields, Kevin Jones, Leticha Hawkins, Paula Harris, Rose King, Onike Bright and Sheila Johnson.

butions made by African Americans to our nation in such areas as education, defense, science, art, religion, business and entertainment. The national theme for 2007 is ‘From Slavery to Freedom: The Story of Africans in the Americas.’ The African-American Advisory Group (AAAG) at Ames celebrated the

storytelling and historical documentation. As the slave trade brought millions of Africans to the Americas, these African slaves brought with them the traditional appliqué technique of quilt making. In combining traditional African appliqué technique with traditional European quilting styles,

## Ames offers on-site career counseling for employees

A unique benefit that NASA has afforded its employees is an on-site Career Transition Assistance Program (CTAP) career center. The Ames



photo by Leticha Hawkins  
Barb Kinnune, the Career Transition Assistance Program (CTAP) career center career counselor, at the CTAP center.

career center provides career management services for all Ames civil service employees and their spouses. All group events are open to contractors on a space-available basis.

The CTAP center services include:

one-on-one counseling; job placement services; assistance with resume writing and interviewing skills; and job development. The services are confidential, and no feedback is provided to management.

The career center is staffed by Barb Kinnune, a seasoned career counselor who offers a combination of extensive recruiting and coaching skills. She enthusiastically facilitates various lunch-and-learn sessions and workshops related to effectively managing one's career and navigating the work environment. Kinnune is experienced with addressing the issues associated with transition and assisting employees with the decision-making process concerning job changes or retirement.

The CTAP center is located in trailer number T28H, DeFrance Ave. (across from bldg. N-255). While

most sessions take place at the career center, arrangements can be made for customized workshops to be delivered directly to organizations. Contact Kinnune at ext. 4-3792, or by e-mail at [bkinnune@mail.arc.nasa.gov](mailto:bkinnune@mail.arc.nasa.gov) to schedule a one-on-one counseling session or if you have questions concerning the CTAP center or offered courses.

As with all training, employees must coordinate any work absences with their supervisor and schedule training around work requirements. Employees (including contractors) also must register for the workshops through the SATERN system. Employees who are charging to Code DDX WBS element numbers may use those charge codes in conjunction with all CTAP Center activities, or activities sponsored by one of its partners at the Connect! Job Seekers center in Sunnyvale. The percentage of time charged as training must not exceed the percentage of time approved by their detail supervisor.

BY LETICHA HAWKINS

## NRP tenant Pragati makes knowledge connections

NASA Research Park tenant Pragati Synergetic Research Inc. is planning for a bright future. "My long-term plan is to add value to existing information systems by providing a high-end analysis tool for (information) reuse, interoperability and quality assurance," said founder and chief executive officer Mala Mehrotra, sitting in her sunny office in Bldg. 19 at the NASA Research Park (NRP). The company's vision, she noted, is to provide innovative software solutions for data analysis.

Since joining the NRP in June 2005, Pragati has spent the past few years designing a proprietary software suite called Expozé.

Expozé is a clustering tool aimed at ferreting out interesting patterns of information from large, complex information systems, such as those found at government agencies like NASA, the intelligence community and the Department of Defense, explains Mehrotra. True to its name, Expozé exposes hidden patterns in the data and helps analyze key information for its end users.

In 2004, under Phase I Small Business Innovative Research (SBIR) at Ames, Pragati used the Expozé tool suite in a pilot study to analyze safety-related reports written by airline pilots. The conceptual clusters discovered by Expozé revealed regular patterns of preventive measures pilots took when conditions such as turbulence, icy conditions, or birds flying into the blade fans occurred in flight. A laundry list of preventive measures on how to avoid similar accidents in the future could be drawn up from Pragati's analysis.

Although currently Pragati has a Phase II SBIR with the Office of Naval Research, it has previously served various federal agencies such as the Defense Advanced Research Projects Agency, NASA, the Air Force and the Department of Transportation. Pragati is looking forward to Phase III, the commercialization of Expozé's tool suite with the Army, the Air Force's Rome Labs and the intelligence community. With wider exposure in mind, Pragati also is pursuing poten-



Pragati President and CEO Mala Mehrotra.

tial collaborations at NASA Ames' Information Technology directorate.

Mehrotra's two years at the NRP have been valuable. "I like the quiet, campus-like atmosphere, yet there are always people to talk to," she said.

Pragati has a team of six -- three software developers, a software architect, a business development manager and a business adviser.

BY KATHLEEN BURTON

## Worden receives Ames Sailing Club honorary membership

The NASA Ames Sailing Club (ASC) celebrated the start of its 10th year with the annual officer installation dinner held at Don Giovanni's in Mountain View in February. Among the invited guests was Ames Center Director S. Pete Worden, who was presented with an honorary Sailing Club membership by club President Brian Gore and club shore director Paul Birch.

The Ames Sailing Club was founded in 1997 by Greg Sherwood, who had a vision to provide Moffett Field employees and their families an opportunity to enjoy the art and sport of sailing. Today for locals ready to take a sail and enjoy brisk sea breezes, the Ames Sailing Club provides access to the best sailing and most dramatic backdrops on the California coast. The ASC organizes regular sails out of local marinas in Redwood City, Santa Cruz, Monterey, Coyote Point, Oakland and San Francisco. Events range from relaxing 'attitude adjustment'

sails, day sails on the bay, weekend cruises along the coast and recreational racing. Instructional opportunities are also available.

held on the second Thursday of each month (March through November) from 12:00 noon to 1:00 p.m. in Bldg 262, Rm 100. All Moffett Field employees and their guests are welcome.

The ASC is sponsored by the NASA Ames Exchange and is open to all NASA employees, contractors, students and their guests. No previous sailing experience is required, so come aboard and enjoy clear skies, bright sun, cool breezes and spectacular views that make San Francisco Bay one of the best sailing locations in the world. New member dues are \$35 and include one free sail. Renewal dues are only \$10 per year.

For more information about membership, activities and monthly meeting topics, visit the ASC Web site at <http://www.sail.arc.nasa.gov> or contact Ames Sailing Club President Brian Gore at ext. 4-2542; or e-mail [bgore@mail.mail.arc.nasa.gov](mailto:bgore@mail.mail.arc.nasa.gov).

BY PAUL BIRCH



Ames Sailing Club President Brian Gore (far left); Shore Director Paul Birch (center) present Ames Center Director S. Pete Worden (far right) with an honorary Sailing Club membership certificate at the recent annual Sailing Club officer installation dinner.

The ASC hosts monthly meetings with presentations about local and exotic cruising destinations, racing, navigation and more. Past meetings have included local experts and world renowned guest speakers, such as Dawn Riley, Stan Honey and Kame Richards. The monthly meetings are

## Buying remanufactured toner cartridges for your office printer

The federal government is required to buy recycled office products, including remanufactured printer toner cartridges. Although remanufactured laser toner cartridge quality continues to improve, recently employees have had a few quality concerns with toner leaking from cartridges and faulty memory chips. Employees can avoid these mishaps by buying certified remanufactured laser toner cartridges. Although most manufacturers will guarantee their cartridges, only some are certified using an industry standard, similar to buying a 'certified' pre-owned vehicle from a dealership.

What does 'certified' mean? The Standardized Test Method Committee (STMC) was created by the remanufacturing industry to standardize methods for testing the quality of its prod-

ucts. A STMC certified manufacturer must be trained to test its cartridges using specific testing equipment according to certain criteria.

What to look for when buying remanufactured toner cartridges:

1. Do they use cartridges that have not been recycled previously? Manufacturers with strict quality assurance will use only cartridges that have been used once since the plastic casing or shell of a cartridge that has been rebuilt several times can warp and leak

toner;

2. Do they replace all parts? The drum, wiper blade, primary charge roller and magnetic rollers are all subject to wear and should be replaced;

3. Do they test 100 percent of their cartridges? The best companies require every cartridge to be tested prior to sale; and

4. Do they have the STMC logo? Only manufacturers that have been certified by STMC can use the STMC logo (graphic to the left) This logo often appears on the package. Certified companies are listed on the International Imaging Technology Council Web site at <http://www.i-itc.org/stm-companies.htm>. The NASA Supply Store carries cartridges from STMC certified companies.

BY MARK LACY



## NASA Research Park leasing and outreach are successful

In a short two years, much of the available space at NASA Research Park (NRP) has been leased to universities, non-profit and industry part-



*Building 19, headquarters of NASA Ames Research Park, an integrated, dynamic research and education community which cultivates diverse partnerships with academia, industry and non-profit organizations in support of NASA's mission.*

ners. "Ames was one of two NASA centers granted enhanced use leasing authority. The NRP team has been extremely successful in maximizing the use of this unique authority by bringing collaborative partners into the Research Park," said Meaghan Haider, chief NASA Research Park.

"Two open house events, a revamped NRP Web site, numerous outreach events and great center support has enabled us to almost reach our capacity," said Diane Farrar, NRP marketing lead.

"Ninety-eight percent of the available space has been leased and we have 50-plus partners on site," said Haider. About 4,000 square feet of renovated office space still is available within the Historic District of the NRP, and the NRP team is working to bring more interim space on line to address the demand by many existing partners growing and expanding, in addition to, 4.2M square feet of entitlement for new construction," Haider added.

NRP and Partnership Office officials continue to use innovative methods to increase NASA's collaboration with partners at NRP. For example, an agreement with Virgin

Galactic LLC, recently was negotiated through NASA's Space Portal, a newly formed organization in the NASA Research Park, which seeks to engage new opportunities for NASA to promote the development of the commercial space economy.

NASA officials recently signed a memorandum of understanding with Virgin Galactic to explore the potential for collaboration on the development of space suits, heat shields for spaceships, hybrid rocket motors and hypersonic vehicles capable of traveling five or more times the speed of sound.

NASA Ames also recently signed a

Space Act Agreement with Google to work together on technical problems including large-scale data management, massively distributed computing and human-computer interfaces. NASA and Google are also finalizing details for additional collaborations including joint research, products, facilities, education and missions, according to a NASA news release.

"The NASA Research Park has reached out into the surrounding community in several important ways," added Kathleen Burton, a business development specialist with NRP. "For two years, we sponsored the NRP Exploration Lecture series, the mission of which is to inspire the explorer in everyone," Burton observed.

Past lecture speakers have included renowned authors. Andrew Chaikin, who spoke about 'Moon, Mars and Beyond,' and wrote the book, 'A Man on the Moon: The Triumphant Story of the Apollo Space Program.' Red Whittaker of Carnegie Mellon University, who led the university's 2005 entry in the Defense Advanced Research Projects Agency (DARPA) Grand Challenge Remote Robotic Vehicle Race, also was a speaker.

On March 13, 2007, author-astronaut Tom Jones spoke about his book, 'Sky Walking - an Astronaut's Memoir.' Jones talked about his experiences as a mission specialist and payload commander aboard four space shuttle flights.

NRP also conducts 'technology showcases,' Burton added. "The main hope is for the technology showcase events to bring in business leaders so they can find out more about NASA partnership opportunities," Burton said. The next technology showcase is scheduled to take place in Bldg. 3, the NASA Ames Conference Center, on April 24 from 1 p.m. to 4:30 p.m.

During the event, NASA partners will exhibit and discuss their business ideas and technology for Silicon Valley decision makers, showcasing NASA partnerships at NRP. Representatives from the NRP community--Honeybee Robotics, Machine to Machine Intelligence and other organizations--will make short presentations about intelligent robots, space commercialization and voice-activated and wireless communications.

Some of the current NPR partners include: Apprion Inc.; Advanced Wireless Communications; Santa Clara University - CREST (Center for Robotic Exploration and Space Technology); United Negro College Fund Special Programs; Tibion Inc.; Jumping Beans; Pragati Inc.; Carnegie-Mellon University - West; Ozen Engineering; Inovamar; Changene; Gary Air; Telebrowse; Digiproofs; E4Exchange; Photozig; Zenpire Corp.; IntelligenTek; University of California, Santa Cruz; Golden Bay Federal Credit Union; ASRC Aerospace; Blu Point Global; Moffett Field History Museum; Intrinsyx; NXAR; Top Quadrant; UAV Collab; Western Disaster Center; the Mars Institute; Planner's Collaborative; SAIC Corp.; M2MI (Machine to Machine Intelligence); Honeybee Robotics; Bloom Energy; Ecliptic Enterprises; and QTech Inc.

For more information about NASA Research Park, please visit: <http://www.researchpark.arc.nasa.gov>

BY JOHN BLUCK



## AIB Express and Environmental Services events set

On April 19, the Environmental Services Division will host its yearly Earth Day 2007 celebration. Earth Day is the annual event celebrated nationwide to recognize the value of our environment. The event will be held in conjunction with the AIB Express Customer Appreciation Day semi-yearly free luncheon. From 11:00 a.m. to 1:00 p.m., AIB Express will host its luncheon in building N-255. Companies that offer alternatives to traditional commute methods will be on hand to share information. Other scheduled Earth Day activities are as follows:

### Founder of the Regeneration Project, Reverend Sally Bingham, to speak at Ames for Earth Day

**Date:** Tuesday, April 17

**Time:** 10:00 a.m. to 11:00 a.m.

**Place:** Building 943, Eagle Room

The mission of the Regeneration Project's 'Interfaith Power and Light Campaign' is to mobilize a response to global warming within the business element of the religious community. For more information, contact Stacy St. Louis at ext. 4-6810 or at e-mail [sslouis@mail.arc.nasa.gov](mailto:sslouis@mail.arc.nasa.gov).

### Electronic Waste Recycling Event

**Date:** April 18 to 19

**Time:** 9 a.m. to 3 p.m.

**Location:** in the parking lot behind the white tent at the Moffett Blvd. gate

Has yet another one of your electronic gadgets become obsolete? Don't throw it out! Recycle it at Ames' free electronic waste recycling event on April 18 to 19, open to all Ames employees, contractors, NASA Research Park tenants and local community residents. Hundreds of thousands of computers, televisions and other electronic items are replaced in California every year. This e-waste contains materials such as lead, mercury, arsenic and cadmium that can be hazardous if not disposed of properly. They also contain valuable materials that can be recovered for recycling. In celebration of Earth Day, the NASA Ames Environmental Services Division

has invited Earth Care Recycling to collect and recycle your personal electronic equipment. Earth Care is a state-authorized collector of electronic devices. Visit their Web site at [www.earthcarerecycling.com](http://www.earthcarerecycling.com).

Please note that NASA-owned equipment absolutely cannot be accepted for recycling at this event. To recycle government-owned equipment, contact Frank Custer in the Logistics Branch at ext. 4-4058. Following is a list of items that can and cannot be accepted for recycling at this event. Acceptable items: Computer monitors, computer hard drives, laptops, printers, televisions, stereos, VCRs, cell phones, calculators and PDAs. Non-acceptable items: large appliances (e.g., refrigerators, freezers, washing machines); fluorescent bulbs,

batteries and appliances containing freon, oil or any fuel (e.g., air conditioners, lawn mowers). If you have any questions about whether or not a specific item can be recycled, contact EarthCare at (408) 573-8573.

### Earth Day Photo Contest

You are encouraged to submit a photo that you feel best reflects the meaning of Earth Day; an image that celebrates the Earth's natural environment. Please do not limit your creativity. We encourage imaginative and artistic interpretation of Earth Day. Winners will be chosen by popular vote at the April 19 luncheon. To learn more about submission details, e-mail Stacy St. Louis at [sslouis@mail.arc.nasa.gov](mailto:sslouis@mail.arc.nasa.gov).

## Ames Bicycle Club to host talk

As part of the Earth Day celebrations, the Ames Bicycle Club will host a talk by Dawn Hassell to find out a lawyer's view of 'What You Need to know about Bicycles and the Law.'

**Date:** April 19

**Time:** Noon to 1 p.m.

**Place:** N255 lecture room

Hassell's talk will provide a perspective of where bicyclists stand

with respect to typical police officers, insurance companies and injuries. The main points she will discuss will be: When a motorist hits a cyclist what can be done about it; legal rights and responsibilities of bicyclists; how traffic laws apply to cyclists; what bicyclists can do to improve a dangerous road; and what to do if injured by a careless motorist.

## Free public talk on climate catastrophes among the planets

Astronomer David Grinspoon of the Denver Museum of Nature and Science, will give a non-technical, illustrated talk entitled, 'Comparing Worlds: Climate Catastrophes in the Solar System.'

**Date:** Wednesday, April 11

**Time:** 7 p.m.

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

This event is part of the Silicon

Valley Astronomy Lectures and is free and open to the public. Parking on campus costs \$2. Call the series hot-line at (650) 949-7888 for more information and driving directions.

This will be the Carl Sagan Medal Lecture of the American Astronomical Society with Grinspoon receiving the medal at the event.

No background in science will be required for this talk.

The lecture is co-sponsored by NASA Ames; The Foothill College Astronomy Program; The SETI Institute and the Astronomical Society of the Pacific.

# Ames Ongoing Monthly Events Calendar

**Ames Amateur Radio Club**, third Thursday of each month, 12 noon, N-T28 (across from N-255). POC: Michael Wright, KG6BFB, 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 3rd Wednesday of the month. The meeting location is Building 19, Conference Room 1083 and the meeting time is 12 noon - 1 p.m. Contact Julie Nottage at jnottage@mail.arc.nasa.gov, ext. 4-3711. By-laws of Ames Bicycling Club can be found at <http://zen.arc.nasa.gov>; the link is right under the picture.

**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 Tuesday in N-229/Rm 117 from 12 - 1:30 p.m. POC: Julie Schonfeld, ext. 4-6504.

**Ames Contractor Council Mtg**, first Wednesday each month, 11 a.m., N-200, Committee Room. POC: Chris Johnson, ext. (650) 938-8017.

**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 (March through Nov), from 12:00 p.m. -1:00 p.m. in Bldg. N-262, Rm 100. URL: <http://sail.arc.nasa.gov/>. POC: Becky Hooley, ext. 4-2399.

**Environmental Forum**, first Thursday every other month, 9:00 a.m. to 10:00 a.m., Bldg. 218/2nd floor training room. URL: <http://q/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: Miwa Hayashi at ext. 4-1397, mhayashi@mail.arc.nasa.gov, Web: <http://jetstream.freetoasthost.com>

**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.

## 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 2007 Jan. 1, 2007 – Feb. 28, 2007

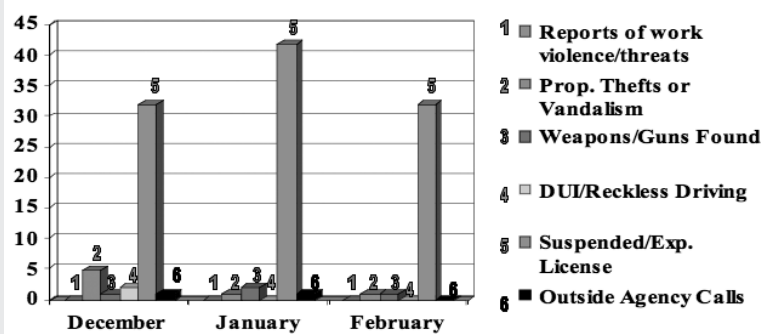
	Civil Servants	Contractors
First aid cases	1	3
Lost Workday cases	0	0
Recordable cases	0	0
Restricted duty days	0	0

Above data are as of 02/28/07. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

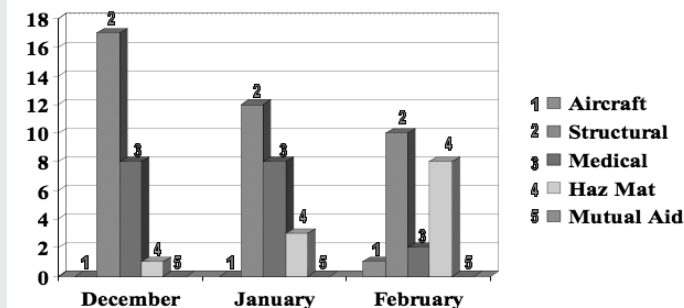
## Protective Services monthly activity

A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire Protection Services units for the month of February 2007 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](mailto:astrogram@mail.arc.nasa.gov) and must be resubmitted for each issue. Ads must involve personal needs or items; (no commercial/third-party ads) and will run on a space-available basis only. First-time ads are given priority. Ads must include home phone numbers; Ames extensions and email addresses will be accepted for carpool and lost and found ads only. Due to the volume of material received, we are unable to verify the accuracy of the statements made in the ads. Caveat emptor!

### Miscellaneous

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

Wooden rocking chair \$30 or B/O. Free coffee table. You pick up. Phyllis (408) 718-3282 or e-mail at [reutzel@aol.com](mailto:reutzel@aol.com).

Sleeper sofa bed, like new. Beige/brown, unattached pillows across back, \$100. Call (408) 765-4935.

Maytag 21 cu. ft. refrigerator/freezer, \$300; 4-burner gas range w/self-clean. oven, \$200; Stacked washer/dryer (gas), \$100; Kenmore microwave, \$45; Sony CD/DVD player w/remote, \$45; 21" color TV w/remote, \$60; Rhode Gear 24", 7-spdl Trail-a-Bike (kid's rideable bike trailer), \$95; Double jogger stroller, \$30; Burley enclosed double bike trailer, \$30; Rampar 27" 10-spdl bike (low bar), \$5; Specialized 20" 6-spdl bike (low bar), \$5; HP LaserJet 5L printer (PC), \$15; kid's plastic table & chairs, \$15; kid's plastic play kitchen w/access., \$15. Jeff (650) 328-7191.

### Housing

Looking for some one to share 2 bd / 1 ba apt. 4 miles from NASA Ames in Sunnyvale. \$450 a month. Downstairs, quiet complex with Squeakers (kitty). Phyllis (408) 718-3282 or e-mail at [reutzel@aol.com](mailto:reutzel@aol.com).

Rivermark single family home for sale: 5 bd / 4 full baths, many upgrades. Immaculate condition, 2 years old. Includes first floor guest room and full bathrm; 3,100+ sq ft; expansive master bdrm; jetted oval spa tub; hardwood tile on first floor; upgraded carpet throughout; all stainless steel appliances; 2 car garage \$1,399,000. More information at <http://www.3cim.com/3cim/tour.do?method=viewTour&id=1172552322015&view=3> Call (408) 829-3994.

### 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 4 p.m., ext. 4-5412 and Beyond Galileo, 8 a.m. to 2 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/Contrators, \$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.

### 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](mailto: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 in 24 hour security bldg. overlooking Washington Square Park, \$2,000/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).

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](mailto:jdgoehler@aol.com)

Maui luxury oceanfront resort one-bedroom condo available one week. Rents for \$345/night now, \$495/night in the summer. We will rent to an Ames family for \$1,750 for the week. See the condo at <http://www.starwoodvo.com/resorts/villafeatures.jsp?resortID=12> Call (650) 572-8877 for availability and questions.

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 Stalene 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.

## Astrogram deadlines

Please submit articles, calendar and classified advertisements to [astrogram@mail.arc.nasa.gov](mailto: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 Olson at the aforementioned e-mail address or ext. 4-3347.

**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? Reserve rooms at the NASA Lodge

Ames employees and contractors can "host" their friends or relatives at the Lodge, and it doesn't have to be government or NASA related.

Let Us Welcome You!

Call (650) 603-7101



<http://naccenter.arc.nasa.gov/lodging.html>

## Ames Partnerships Office to present technology showcase

### NASA Ames Partnerships Office Technology Showcase

The Technology Showcase is a great opportunity for networking with both Ames and Silicon Valley communities. Over 40 NASA Research Park partners will exhibit their technology and discuss their collaborations with NASA. Ames Center Director Dr. Worden will make the opening remarks, followed by Director of Partnerships Michael Marlaire who will give an overview of the NRP.



Tuesday, April 24, 2007  
1 p.m. - 4:30 p.m.  
Bldg. 3 Moffet Training  
and Conference Center  
FREE Open to the public

*The NASA Technology Showcase will be held April 24 from 1 p.m. - 4:30 p.m. in Bldg. 3, the NASA Ames Conference Center. Sponsored by the Ames Partnerships Office, the showcase will provide an opportunity for more than 40 NASA Research Park partners to exhibit their business technology and discuss their NASA partnerships and collaborations with the Silicon Valley business community. In addition to the exhibits, selected NASA Research Park partners in cutting-edge areas such as intelligent robots, space commercialization and voice activated and wireless communications will give brief presentations. All Ames employees are welcome to attend.*



National Aeronautics and Space Administration



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