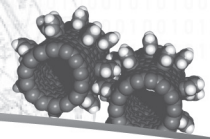




ASTROGRAM



Newsletter of NASA Ames Research Center, Moffett Field, California

September 2006

Worden cites 'incredible progress' in Ames workforce alignment

NASA Ames has made substantial progress in obtaining additional work



NASA photo by Tom Traver

Ames Center Director S. Pete Worden addresses the audience at the recent all hands meeting citing that a new Code D will be organized to fill new positions with Ames' employee skill levels to meet NASA's goal with the Vision for Space Exploration.

to help prevent a reduction in force (RIF) and enable the center to thrive over the next few years, according to S. Pete Worden, director of NASA Ames Research Center.

"We have turned a major corner," Worden told a capacity crowd gathered Sept. 7 in the main auditorium for an all-hands meeting to discuss the state of the center. "I've been here for

four or five months now, and there has been incredible progress in workplace alignment at Ames. I believe we have work that will keep the center going."

Worden said the agency "has been good to its word" to maintain 10 healthy field centers and that over the past few months, there has been considerable thought about what Ames and the other field centers should be doing to implement the Vision.

"The Vision for Space Exploration represents an impressive opportunity for the whole agency," Worden said. He said that over the next four to six weeks, the center will strive to fill the new jobs with its civil servants.

To coordinate the effort, a new temporary Code D office will be organized to help fill the new jobs by matching the new positions with employees' skill levels. Worden said his goal is to get the jobs filled by early October. "We're going to have to get busy," he said.

Turning to other critical issues facing the center, Worden said the embattled Stratospheric Observatory for Infrared Astronomy (SOFIA) program office would be moved from Ames to the Dryden Flight Research Center to complete the aircraft's flight tests. A decision is expected sometime this

winter whether the SOFIA science program will still be managed by Ames.

"We will be watched very closely over the next six months to see if we are good team players," Worden said, adding that what really matters is the scientific return from the SOFIA program.

Worden also addressed the issue of small spacecraft, saying that the agency is now struggling with what role small spacecraft will play in future space missions.

Nevertheless, Worden said he believes there will be a lot of good opportunities for Ames in the small spacecraft business, particularly from partnerships with other field centers, such as the Goddard Space Flight Center, and also with private industry.

He said he expects Ames to sign an agreement with Google Inc., in the near future to collaborate on Earth observation, and noted that Ames is currently negotiating with Loral Corp. to establish a small spacecraft integration facility at Ames. He said there are several other ongoing talks with other potential partners that he was not at liberty to discuss at this time.

"We are in the Silicon Valley and we are noticed; people want to work with us," Worden asserted.

Over the next couple of years, Worden said the agency's focus will be on building new spacecraft to return NASA to the moon and later on to Mars. "We're going to have a

continued on page 2

Ames co-hosts Space 2006 Conference



The American Institute of Aeronautics and Astronautics (AIAA) held the Space 2006 annual conference at the San Jose Convention Center Sept. 19 to 21. NASA Ames co-chaired the event, along with Lockheed Martin and the U.S. Air Force. Ames Center Director S. Pete Worden (right) spoke numerous times at the event. Students at the event (above) participated in the 'Education Alley' hands-on exhibits, which included robot and educational activities.



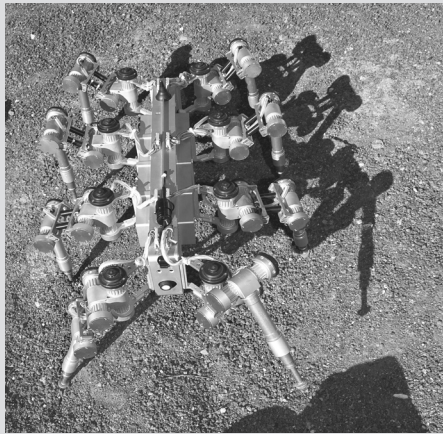
NASA photos by Dominic Hart

On the Inside . . .

- Page 2 - NASA 'Earbot' to help walker robots to keep their balance
- Page 3 - Ames, partners show lunar virtual reality system to media
- Page 5 - NASA licenses program, data management software to industry
- Page 7 - Upcoming events
- Page 8 - Ongoing calendar
- Page 9 - Classifieds

NASA 'Earbot' to help 'walker' robots keep their balance

NASA scientists are developing 'Earbot,' an artificial inner ear for



NASA photo by Tom Trower

NASA's 'scorpion' robot, in which researchers will install the 'Earbot', an artificial inner ear for legged 'walker' robots. The Earbot will aid the control of the robot, helping to stabilize a camera on the robot's head as the robot is walking across the terrain.

legged, 'walker' robots that will help prevent them from toppling.

The prototype Earbot - golf ball-size, energy efficient and cushioned in a Styrofoam core - is made of special electronic sensor chips that can mimic the motion detection of the human inner ear.

"We will process signals from the sensors in the Earbot in the same way that a human brain does to provide balance control," said Xander Twombly, a scientist at NASA Ames.

A human inner ear has clusters of sensory hair cell receptors and nerve fibers within hollow areas that interconnect like a system of tiny caves - a labyrinth - or a coiled, shell-like structure - the cochlea. This system helps a person maintain stability and hear.

"(In Earbot) we are using tiny sensors that can sense direction of motion," Twombly explained. Special chips -- micro-electro-mechanical sensors (MEMS) -- in the Earbot measure its acceleration and rotation. These sensors are similar to the organs in the human inner ear that measure the acceleration and rotation of the head.

Robotics researchers say there will be a much larger role for legged robots in the future, according to Twombly. Earbot could have much broader use in these legged robots, controlling not only robot 'eyes,' but also far more complex robot 'arms' and 'legs,' Twombly ventured.

"A walking robot is able to move across dangerous and rocky terrain such as a hillside or inside a cave. We expect to be able to explore areas on

this planet or other planets that would otherwise be inaccessible," Twombly said.

The ability of a walking robot to explore difficult terrain not only will be dependent on Earbot balance control -- but also, more importantly -- will hinge on the robot's general design. "Earbot will aid the control of an appropriately designed robot significantly, but it will not be the sole deciding factor about whether or not a robot can handle difficult terrain," cautioned Twombly.

One scenario that scientists envision is a 'mother,' wheeled robot carrying one or more legged robots on its body. "The mother rover will drive through safe terrain to an area of interest that it cannot safely enter," Twombly explained. "Then the mother will dispatch the legged robot or robots to explore the target area."

Plans call for a cadre of students, using unique NASA testing facilities, to conduct tests of the Earbot. Researchers later will install the device in an eight-legged 'scorpion' robot, which is about the size of a dog. The first task of the Earbot will be to stabilize a camera on the robot's head when the robot is walking, much in the same way the human inner ear sensors stabilize the eyes in their sockets during walking and running. The stabilization results in a clear image of the world. These early tests will not evaluate Earbot as a total robot balance aid.

The Earbot research team consists of principal investigator Richard Boyle, a vestibular neurophysiologist; computer scientist Twombly; electrical engineer Tony Intravaia and robotic engineer Silvano Colombano.

BY JOHN BLUCK

Worden cites 'Incredible progress'

continued from front page

few years in which they'll expect us to build stuff that people are going to fly in," he said, adding that Ames will play a major role in helping develop the

the software called the Future Air Traffic management Concepts Evaluation Tool, better known as FACET, which won NASA's 2006 Software of the



NASA photo by Tom Trower

Ames Center Director S. Pete Worden, fourth from left, presided over a ceremony before the All Hands on Sept. 7 to honor the members of the team that developed the software called the Future Air Traffic management Concepts Evaluation Tool, better known as FACET, that won NASA's 2006 Software of the Year award.

new spacecraft.

However, after the new spacecraft are built, by 2011 or 2012, he said the agency's focus will return to science. "The Vision for Space Exploration is going to open huge scientific opportunities," Worden said.

Prior to his remarks, Worden presided over a ceremony to honor the members of the team that developed

Year award.

"I am really proud of these folks," Worden said. "The FACET award is really a cool thing." He said the award represents a "small measure of the reward" to people who do the agency's business. "We have strutted our stuff and we'll do even better," Worden said.

BY MICHAEL MEWHINNEY

Ames, partners show lunar race virtual reality system to media

A small crowd of local reporters enthusiastically tried out a virtual reality moon racing system Aug. 31 in the Exploration Center just outside Ames' main gate. Simulated moon racing images were projected on the big screen in the center.

Ames, with VirtueArts Inc., and VirtuePlay Inc., both of Los Angeles, set up the moon-racing preview for news media. Earlier, Ames signed an agreement to collaborate with the companies for engineering and real-time simulation training in a variety of applications, including a dynamic learning system that allows users to virtually race lunar buggies on the moon in 3D.

Reporter Scott Budman of KNTV-TV, NBC News, San Jose; Rob Fladeboe from KRON-TV, San Francisco; and Stefanie Olsen, CNETnews.com, San Francisco, attended the demonstration, broadcast or wrote stories. In addition, Mark Levenson, host of the syndicated Tech Close-ups cable TV show, made a half-hour program about the software. Federal Computer Week magazine printed an article about simulated lunar races, and KLIV-AM radio, San Jose, broadcast an interview with Mary Duda, CEO/president of VirtuePlay Inc.

"The Lunar Racing Championship not only provides immersion racing on a simulated lunar surface in virtual reality, it also creates a dynamic learning experience for the user," Duda said. "Our goal is to transform education by immersing students in fun learning experiences." The Lunar Racing Championship simulation was developed from actual lunar mission footage derived from the 1998 Clementine mission. The software realistically simulates the moon's gravity, one sixth of that on Earth.

"The technology used in this type of software can help advance future NASA exploration by providing realistic simulations of complex missions," said Dan Rasky, an Ames senior scientist. "Immersion racing on the moon is the introduction to being on the moon," Rasky added.

"The Lunar Racing Championship demonstration is a truly unique experience that combines the adrenaline-pumping immersion, with real low-gravity physics and the accurate terrain of the moon," said Steve Henderson, senior vice president of sales for VirtueArts Inc.

During the simulated lunar races, drivers are seated in individual racing

pods, complete with race car seats, force feedback steering wheels and gas and brake pedals. High-fidelity stereo, head-mounted displays with four-directional head-tracking devices enable drivers to look in any direction and see the racecourse, other racers and the lunar terrain in 3D.

Each lunar buggy is equipped with various thrusters to help maintain stability and traction, as well as jumps and bursts of speed. Each race lasts approximately five minutes and will take place in a variety of locations on the moon: Hadley Rille, Amundsen Crater, Alpine Valley and the Tycho Crater.

The software also was demonstrated to the public at the AIAA Space 2006 Conference and Exposition, Sept. 19-21 at the San Jose McEnery Convention Center.

Duda said she envisions that students who participate in the lunar races will be inspired to build their own lunar robots. Following the AIAA conference, the corporation plans to offer an online version of the lunar race experience to students and schools throughout the country, and provide lunar buggy tool kits to assist the students to build their lunar racers.

Under the terms of the three-year memorandum of understanding with

VirtueArts Inc., and VirtuePlay Inc., NASA will collaborate with the two cor-



NASA photo by Tom Trower

Local reporters and other visitors tried out the virtual reality moon racing system in the Exploration Center at Ames in late August. The racing images were projected onto the big screen located inside the Exploration Center. The moon-racing preview was set up by Ames, VirtueArts Inc., and VirtuePlay Inc., both from Los Angeles. The virtual system provides engineering and real-time simulation training, including a program that permits users to virtually race their lunar buggies on the moon.

porations in several areas of mutual interest, including engineering design tools, simulation and modeling tools, multi-disciplinary collaborative design tools, data visualization tools, multimedia outreach and education, logistics modeling and studies, mission planning, and human factors simulation studies.

BY JOHN BLUCK

Future airport planning discussed at Ames



NASA photo by Dominic Hart

Experts from NASA, the Federal Aviation Administration and the nation's airports gathered at Ames on Sept. 12 and 13 for the 2006 NASA/Industry Airport Planning Workshop to discuss ways to improve future airports. During the two-day conference, keynote speakers and expert panelists discussed the challenges of planning for the future capacity needs of airports and how new technologies are providing solutions.

Visitors check out NASA info booth at local festival



It is estimated over 2,000 visitors came by the NASA booth at the 2006 Mountain View Arts and Wine Festival the weekend of Sept. 9 and 10. Staff at the booth shared information about NASA. Visitors had an opportunity to have digital photos taken that made it appear that they were in spacesuits.



Photos by Astrid Olson

Foundation for a college education is recruiting volunteers

Since 1995, the Foundation for a College Education (FCE) has helped more than 200 underrepresented students prepare for college. By providing students and families in East Palo Alto



with the tools they need to navigate the college admissions process, the FCE is influencing the entire community to believe higher education is within their reach.

The partnership between NASA Ames, the San Jose State University

Foundation and the FCE during the past five years has enabled nearly a dozen of FCE's students to get hands-on experience in laboratories, under the direction of renowned researchers. Several Ames employees have also served as mentors for these young men and women, starting in high school and continuing through college. Imagine having a hand in helping talented students attain their dream of attending college!

Due to the increase in the number of students participating in the high school program, FCE is actively recruiting volunteers to work directly with students. Here are ways you can help:

- Mentors/college coaches - The college coach serves as an academic mentor for a small group of students. Coaches monitor students' academic progress, advise them on academic issues and lend moral support as the students strive to achieve their goal of attending college.

- Tutors - Group tutors provide academic assistance in specific areas in a group setting. Group tutoring occurs

on Tuesdays and Thursdays from 4 p.m. to 8 p.m. FCE compiles a pool of group tutors that share responsibility of attending tutoring sessions. Group tutors alternate days and weeks.

- Individual 1:1 tutors -- Academic tutors provide academic assistance in a specific subject area(s), while encouraging basic skills, study habits and self-confidence. Individual tutors work with an assigned student once or twice a week depending on the schedule of the student and tutor.

Through your commitment, FCE's students will be prepared to tackle life's exciting challenges and will ultimately contribute significantly to our society with the education and skills they cultivate in college.

For more information about how you can help, please contact Joyce Latu at: jlatsu@collegefoundation.org, call (650) 322-5048 or visit us online at: www.collegefoundation.org

BY ANTOINETTE BATTISTE

NRP's Tibion Corp. to accelerate bionic device development

Tibion Corp., a Silicon Valley developer of active orthotic devices based on bionic technologies, announced Sept. 14 the initial closing of its \$3.5 Million Series A financing. Tibion, based at NASA Research Park (NRP), said it will use the money to accelerate development of its bionic devices, particularly its "PowerKnee."

Tibion develops bionic devices for those with loss of muscle function due to disease, injury, aging or surgery. Tibion's products provide exo-skeleton assistance, resistance, and rehabilitation of muscle function via a combination of patented, sensor-driven, actuator technologies, and advances in embedded computer systems and orthotic science.

Oakland-based Claremont Creek Ventures led the financing round with participation from Los Gatos-based Saratoga Ventures. In connection with the funding, John Steuart and Ted Driscoll from Claremont Creek Ventures will serve on the company's board.

Medical device luminary Thomas J. Fogarty, M.D., also joined Tibion's board of directors recently, which is now comprised of Steuart, Driscoll, Fogarty and the Tibion co-founders, CTO Robert Horst, PhD, and CEO Kern Bhugra.

"Tom has an amazing record of medical device innovation and entrepreneurial accomplishments," said Tibion CEO Kern Bhugra, "His insights will be enormously valuable to Tibion

as we progress in the development and delivery of bionic medical devices."

"Without imagination, innovation is not possible," said Fogarty. "Tibion's innovative technologies and products

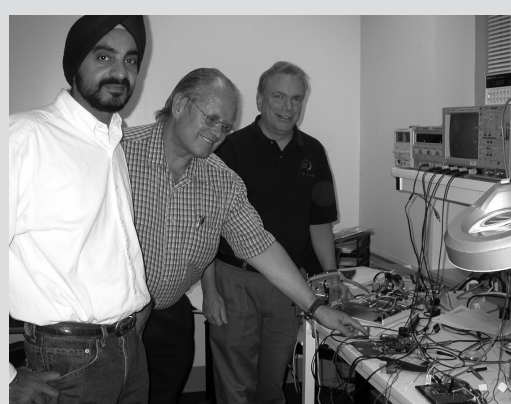


photo by Diane Farrar

Tibion Corp. is a developer of bionic devices for those with loss of muscle function resulting from disease, injury, aging or surgery. Seen here with a prototype of their work are, left to right, Kern Bhugra, Tibion president and chief executive officer; Fred Zeise, Tibion hardware engineer; and Robert Horst, Tibion chief technology officer.

are geared to improve the quality of life for the mobility-impaired. I look forward to collaborating with Tibion to realize these imaginative products."

Fogarty is an internationally recognized cardiovascular surgeon, inventor, entrepreneur and vintner involved

with a wide spectrum of innovations in business and technology. The founder/co-founder of over 33 companies, Fogarty has acquired over 100 surgical patents, including the "industry standard" Fogarty balloon embolectomy catheter. He has received, most significantly, the Jacobson Innovation Award of the American College of Surgeons and the 2000 Lemelson-MIT prize for Invention and Innovation. Fogarty was inducted into the Inventors Hall of Fame in December 2001.

Fogarty, Steuart and Driscoll joined co-founders CTO Robert Horst, PhD, and CEO Kern Bhugra on the Tibion board of directors.

Tibion at NASA Research Park since early 2003, has won awards for its work in bionic medical device development from the American Society on Aging and the National Council on Aging. Tibion is broadly recognized as leading the development of bionic technologies and products for those with impaired mobility.

Horst and Bhugra have also made recent presentations sharing Tibion milestones including those at the IEEE conference in New York and the Dow Jones conference in Redwood City, Calif.

For more information, contact Kern Bhugra at (650) 694-7384, or (408) 398-7214 or e-mail info@tibion.com and on the Web at <http://www.tibion.com>

BY DIANE FARRAR

NASA licenses program, data management software to industry

NASA and JumpStart Solutions are working together to bring software developed for use in the nation's space program directly to consumers and commercial markets.

Through a recently signed agreement, JumpStart Solutions, Cave Creek, Ariz., will license NASA's Program Management Tool (PMT), Query Based Document Composition (QBDC), and NETMARK software. The Program Management Tool is a comprehensive, Web-enabled, business application tool. It is designed to monitor, disseminate and track the progress of research and development programs and to project milestones. The tool operates in conjunction with QBDC and NETMARK.

NETMARK is an information-on-demand framework that manages, stores and retrieves unstructured and/or semi-structured documents. QBDC is a tool that enables content or context searches, either simple or hierarchical, across a variety of data-

bases. NETMARK is a revolutionary concept in information management. Along with PMT and QBDC, NETMARK was invented and developed at NASA Ames.

"Using NASA's PMT/NETMARK technologies as a platform, JumpStart Solutions has developed the PanOptica product suite, which provides users with a comprehensive set of Web-based tools for project and portfolio management," said Jim Goulka, chief executive officer of JumpStart Solutions. The company plans to integrate the NASA software into its PanOptica product suite. "PanOptica enables users at disparate locations to work collaboratively, using the latest Web-based communications technologies," Goulka explained.

JumpStart Solutions has indicated that it plans to integrate other technologies with PMT/NETMARK to provide project portfolio management and knowledge document management capabilities for its industry, university

and other customers.

"We recently granted a non-exclusive patent and copyright license to an Arizona company to develop new software based on the Program Management Tool/NETMARK technology developed at NASA Ames," said Martha Del Alto, technology partnership manager at Ames. "This agreement represents a continuation of NASA's commitment to transfer technology to the commercial marketplace," she added.

JumpStart Solutions LLC is a technology company that licenses and commercializes select, well-developed technologies sourced from federal government and university research centers.

Additional information about JumpStart Solutions is available at: <http://www.jumpstart-solutions.com>

BY MICHAEL MEWHINNEY

NASA Ames wins energy efficiency award

NASA Ames Research Center was chosen from a pool of 250 applicants for California's fourth annual Flex Your Power Awards. Flex Your Power is California's statewide energy efficiency marketing and outreach campaign.

Initiated in 2001, Flex Your Power is a partnership of California's utilities, residents, businesses, institutions, government agencies and nonprofit organizations working to save energy.

Specifically, NASA Ames won an energy efficiency honorable mention for energy efficiency improvements at the facility. Ames has saved

11.7 million kilowatt hours (kWh) annually since 2000 by introducing several energy-efficient technologies.



Ames retrofitted lighting in more than 50 buildings by replacing T-12 fluorescent lighting fixtures with more energy-efficient T-8 fluorescent light-

ing. Ames also upgraded the facility management control systems for heating, ventilation and air conditioning systems in 10 buildings, which has enabled better monitoring and control of these systems to minimize energy waste, and installed 10 kilowatts of photovoltaic solar panels on two buildings to help offset grid provided electricity usage in these buildings.

By 2010, the facility aims to reduce energy use and carbon dioxide emissions by 30 percent from 1990 levels.

BY STACY ST. LOUIS

Commute fair exhibitors demonstrate alternatives in transportation

On Sept. 12, Ames' Environmental Services Division hosted a commute alternatives fair to educate employees



NASA photo by Tom Trower

Mikal Satchell from the 511.org Rideshare program discusses local transportation choices with an attendee at the Ames Commute Alternatives Fair.

alternatives fair demonstrated, there are many ways you can make a positive impact.

Local car dealerships offered hybrid test drives (and discounts) during the fair. Local transit agencies including SamTrans, CalTrain, Peninsula Traffic Congestion Relief Alliance, 511.org Rideshare and the Valley Transportation Authority educated employees on the variety of public transportation options available.

Ames' Commute Alternatives Program provided shuttle bus schedules and Ames-specific information. The

Ames' Bicycling Club, the Mountain View Bicycle Pedestrian Advisory Committee, the Silicon Valley Bicycle Coalition and Breathe California touted bicycling as a pollution-free alternative that also benefits health.

DriveNeutral introduced the concept of purchasing alternative energy credits to offset carbon pollution from vehicles. The Environmental Division also hosted the 'Just Hoof It' pledge to encourage employees to walk or bike to meetings and lunch breaks while they are at Ames.

BY STACY ST. LOUIS

about the commuting choices available.

Alternatives to using gasoline-powered vehicles grow increasingly important for the environment and our pocketbooks.

According to a 2002 study by the U.S. Department of Energy, vehicles consumed 8.5 million barrels of oil per day, which constitutes 42.5 percent of total U.S. consumption. And, the 2000 U.S. Census found that 78 percent of all trips to and from work are taken in single-passenger vehicles. Vehicle emissions are one of the leading contributors to global warming, which is the accelerated increase in the Earth's surface temperature.

As the exhibitors at the commute

Ames interns host poster session



NASA photo by Tom Trower

The Foothill-De Anza Community College District Internship Program held its 3rd annual poster session on Sept. 14. This unique educational internship program is conducted as a cooperative effort between NASA Ames and the Foothill-De Anza Community College District. NASA internship positions are available in a wide range of settings that include private industry, and correspond to almost every college major. Student interns work directly with scientists, programmers, accountants, engineers, administrative assistants, Web developers and other professionals as they carry out or support research related to astrobiochemistry, aviation operations systems, information technology, psychology, life sciences and space and Earth sciences.

Upcoming special events . . .

Ames Safety Week set for Oct. 3 to 5

Safety Week celebrations are set for Oct. 3 - 5 promising an action-packed week, recognizing that your safety is vital to mission success.

The Safety Week schedule is as follows:

Event:	Date:	Time:	Location:
ASAP Awards Presentation	Oct. 3	10:00 a.m.	201 Auditorium
COTR/Contract Site Managers Training	Oct. 4	10:00 a.m.	Bldg. 3 Ballroom
Fall Fun Run/Walk	Oct. 4	11:45 a.m.	De France (near N221)
Safety Street Fair and Ames Exchange Council's Chili cook-off	Oct. 5	11:00 a.m.	King Road
All-Hands Supervisor Presentation	Oct. 5	2:00 a.m.	Bldg. 3 Ballroom

The Safety Street Fair will take place on King Road from 11:00 a.m. - 1:00 p.m. A variety of health and safety informational booths will be set up. Safety training will be given all week and the Kids' Calendar Contest entries will be displayed in the Ames Café for your votes.

All center employees are invited to attend. For more information, contact Jennifer Chan at ext 4-5602, or e-mail jschan@mail.arc.nasa.gov or Linda Vollenweider at ext 4-5007, or e-mail (lvollenweider@mail.arc.nasa.gov) or visit the Web at <http://q.arc.nasa.gov/qh/>.

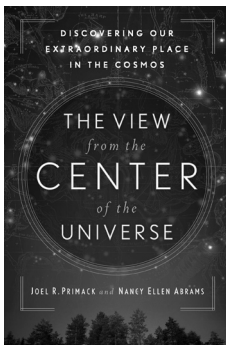
NRP 'View from the Center of the Universe' talk set

The NASA Research Park Exploration Lecture Series presents 'The View from the Center of the Universe.' This will be the next lecture in the ongoing NRP series. All Ames employees and their guests are invited.

Date: Oct. 25
Time: 7 p.m.
Place: Eagle Room, Bldg. 943.

Cosmologist Dr. Joel R. Primack and writer/philosopher Nancy Abrams will discuss recent advances in astronomy, show spectacular new videos, and frame a compelling

theory for understanding the universe and our role in it.



Dr. Joel Primack and writer/philosopher Nancy Abrams, both scheduled to speak at Ames on Oct. 25.

Silicon Valley astronomy lectures presents . . .

Astronomer Dale Cruikshank of NASA Ames will give a non-technical, illustrated talk on 'The Planet Pluto: Maligned but Not Forgotten.'

This talk is part of the Silicon Valley Astronomy Lectures.

Date: Nov. 8
Time: 7 p.m.
Place: Smithwick Theater, Foothill College, El Monte Road and Freeway 280, in Los Altos Hills.

The event 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.

No background in science will be required for this talk.

Cruikshank is one of the world's foremost authorities on the outer solar system. He and his colleagues discovered the ices that make up Pluto's surface and evaporate to form its thin atmosphere. As a former amateur astronomer, he has a knack for explaining scientific ideas in simple, direct language.

The lecture is co-sponsored by:

- * NASA Ames Research Center
- * The Foothill College Astronomy Program
- * The SETI Institute
- * 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, 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 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 Thursday (check Web site for meeting dates: <http://accn.arc.nasa.gov>),

12 noon to 1:30 p.m., N-210, Rm. 205. POC: Cheryl Quinn, ext 4-5793.

Ames Contractor Council Mtg, first Wednesday each month, 11 a.m., N-200, Comm. Rm. POC: Doreen Cohen, ext. 4-5203.

Ames Diabetics (AAD), 1st & 3rd Weds, 12 noon to 1 p.m., at Ames Mega Bites, Sun room. Support group discusses news affecting diabetics. POC: Bob Mohlenhoff, ext. 4-2523/e-mail at: bmohlenhoff@mail.arc.nasa.gov.

Ames Federal Employees Union (AFEU) Mtg, third Wednesday of ea. month, 12 p.m. to 1 p.m., Bldg. 221, Rm 104. Guests welcome. Info at: <http://www.afeu.org>. POC: Marianne Mosher, ext. 4-4055.

Ames Mac Support Group Mtg, third Tuesday of ea. month, 11:30 a.m. to 1 p.m., Bldg. N262, Rm 180. POC: Tony ext. 4-0340.

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

Ames Sailing Club Mtg, second Thursday of ea. month (Feb through Nov), from 12:00 p.m. -1:00 p.m. in Bldg. N-262, Rm 100. URL: <http://sail.arc.nasa.gov/>. POC: Becky Hooley, ext. 4-2399.

Environmental Forum, first Thursday 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.

Vice President visits Bay Area

NASA photo by Dominic Hart



Vice President Dick Cheney landed at Moffett on Sept. 15 for a visit to the Bay Area.

Safety Data

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

	Civil Servants	Contractors
First aid cases	10	14
Lost Worday cases	0	3
Recordable cases	2	7
Restricted duty days	0	0

Above data are as of 08/31/06. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

The NASA Lodge

Rooms starting at \$45 a night.



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

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



Ames Classifieds

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

Housing

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

Unfurnished room in house in San Jose, close to light rail and Caltrain. \$525 inclt utils and WiFi. Available to quiet, mature, non-smoking female student or professional. Email: mbualat@stanfordalumni.org, or call (408) 578-9580.

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.

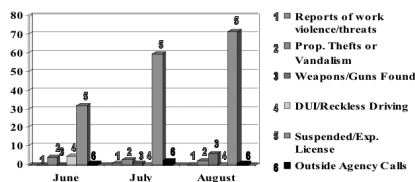
Wanted: 40-foot aluminum extension ladder. Call (408) 281-7011.

Drexel Heritage Bar Stools (4) in white washed finish. Exc. cond. Originally \$2,400, asking \$500. Lorie (408) 377-7747

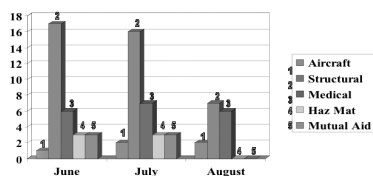
Protective Services monthly activity

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

Security/Law Enforcement Activity



Fire Protection Activity



Exchange Information

Information about products, services and opportunities provided to the employee and contractor community by the Ames Exchange Council. Visit the web site at: <http://exchange.arc.nasa.gov>

Beyond Galileo N-235 (8 a.m. to 2 p.m.) ext. 4-6873

Ask about NASA customized gifts for special occasions.

Mega Bites N-235 (6 a.m. to 2 p.m.) ext. 4-5969

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

Visitor Center Gift Shop N-943 (10 a.m. to 4:00 p.m.) ext. 4-5412

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

Tickets, etc...(N-235, 8 a.m. to 2 p.m.) ext. 4-6873

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

NASA Lodge (N-19) 603-7100

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

Ames Swim Center (N-109) 603-8025

Ames Swim Center, 25 meter swimming pool open and heated year round. (80-82 degrees) Lap swim: Mon, Weds, Fri, 10 a.m. to 1 p.m. and 3-6 Tues to Thurs 10 a.m. to 1 p.m. and 4 p.m. to 7 p.m. Seasonal recreation swim; swim lessons. Locker rooms w/sauna and shower facility. Open to all civil servants and contractors. Location: Bldg. 109 across the street from the tennis courts. Fees vary depending on activity. POC: Tana Windhorst, ext. 3-8025; e-mail: tw4lsb@aol.com

Vacation Opportunities

Lake Tahoe Squaw Valley townhouse, 3bd/2ba-equipped, balcony view, horseback riding, hiking, biking, golf, river rafting, tennis, ice skating and more. Summer rates \$100 per night, 2 night minimum. Call (650) 968-4155, e-mail DBMcKellar@aol.com

Vacation rental, Bass Lake, 4 mls south of Yosemite. 3bd/1.5 ba, TV, VCR, MW, frplc, BBQ, priv. boat dock. Sleeps 8. \$1,050/wk. Call (559) 642-3600 or (650) 390-9668.

Big Sur vacation rental, secluded 4bd/2ba house in canyon setting. Fully eqpd kitchen. Access to

priv. beach. Tub in patio gdn. Halfway between Carmel and Big Sur. \$175/night for 2; \$225 for 4 and \$250 for more, plus \$150 cleaning dep. Call (650) 328-4427.

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

Incline Village, Forest Pines, Lake Tahoe condo, 3 bd rms/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, \$1,000/wk or \$3,000/mo. negotiable. Call (650) 349-0238.

Paris/France: Fully furnished studio, 5th Arr, Latin Quarter, Notre Dame and Lie-St. Louis., \$1,400/wk. negotiable. Call (650) 349-0238.

Santa Cruz townhouse, 2 bedrooms plus study, 2 baths, decks, totally furnished, 3 blocks from beach, available July, August, September; \$1,600 per month. Call (831) 423-5777 (H) or (831) 277-8476 (C).

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

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.

Astrogram deadlines

Please submit articles, calendar and classified advertisements to astrogram@mail.arc.nasa.gov no later than the 10th of each month. If this falls on the weekend or holiday, then the following business day becomes the deadline. For Astrogram questions, contact Astrid Olson at the aforementioned e-mail address or ext. 4-3347.

Ames emergency announcements

To hear the centerwide status recording, call (650) 604-9999 for information announcements and emergency instructions for Ames employees. You can also listen to 1700 KHz AM radio for the same information.

Ames staff gathers at employee appreciation lunch

The Ames Exchange sponsored an employee appreciation BBQ at the golf course at Moffett Field on Aug.



to the golf course through meandering mowing patterns and bunker renovation. Already available is a new fleet of state-of-the-art golf carts.

The Golf Club at Moffett Field, as well as the full-service bar and restaurant, is open from daybreak to dusk every day, including Mondays. Group golf outings are encouraged seven days a week as are special social and business functions oriented around breakfast, lunch and dinner.

A new golf club is being organized, and diversified

30. The entire Ames community was invited to attend, to enjoy hamburgers, veggie burgers, baked beans, corn on the cob and more.

The Ames Exchange gained full operational control of the entire golf facility from the Air Force on Aug. 1. The new enthusiastic management team is guided by Algie Pulley Jr., professional golf course architect and operational consultant.

Pulley designed and developed the Chardonnay Club located in the Napa Valley. Long range plans at Moffett Field include green and tee reconstruction styled after Chardonnay, as well as a new automated irrigation system. Immediate plans call for cosmetic improvements



NASA photos by Dominic Hart

Ames employees enjoying the employee appreciation BBQ sponsored by the Ames Exchange on Aug. 30. The lunch was held at the golf course at Moffett Field.

golf leagues will begin in September. Call the Pro Shop for more information at (650) 603-8026.



Bigelow visits Ames 'Mars yard'



NASA photo by Tom Trovner

In July, Robert Bigelow of Bigelow Corp., in a joint venture with NASA, sent 'Genebox' into orbit on a Russian rocket. Genebox, a shoebox-size payload, contains a miniature laboratory that in future missions will analyze how the near weightlessness of space affects genes in microscopic cells and other small life forms. Left to right: Terry Fong, Robert Schingler (both from Ames) and Bigelow with his staff assistant during their visit to the center on Aug. 30. Bigelow visited Ames to observe the Ames rover maneuvers in the 'Mars yard' at the center.



National Aeronautics and Space Administration



FIRST-CLASS
U.S. POSTAGE
PAID
PERMIT NO. 85
MOUNTAIN VIEW, CA

Ames Research Center
Moffett Field, CA 94035-1000



The Ames Astrogram is an official publication of Ames Research Center, National Aeronautics and Space Administration.

Editor-in-Chief..... Laura Lewis
Managing Editor..... Ann Sullivan
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/centers/ames/news/astrogram/2006/06astrograms.html>

PLEASE RECYCLE
Printed on recycled and recyclable paper with vegetable-based ink.