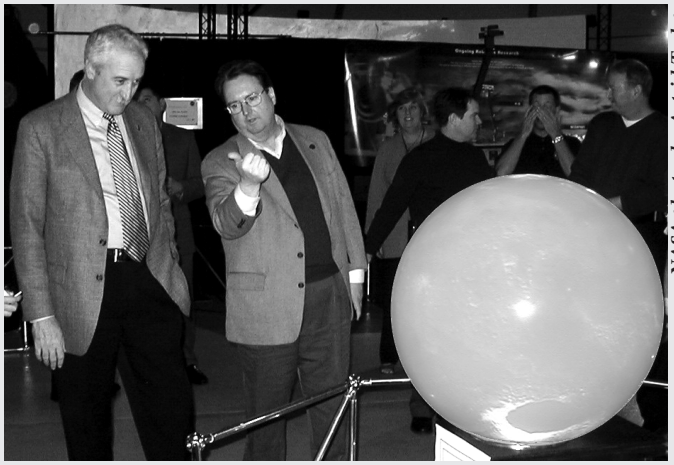
National Aeronautics and Space Administration, Ames Research Center, Moffett Field, CA
April 2004

Astrogram

Communication for the Information Technology Age

Administrator O'Keefe visits Ames and the Mars Center



NASA photos by Astrid Terlep

Ames Director Scott Hubbard describes the fine points of the Global Imagination exhibit to NASA Administrator Sean O'Keefe.

On Sunday, March 28, NASA Administrator Sean O'Keefe dropped by NASA Ames for a short visit on his way to an Explorer school event in Oregon (see photos p. 5). He spent some time with scientists attending the early Sunday sessions at the Astrobiology Science Conference and then moved on to pay a first-hand, first-time visit to the Ames Mars Center.

SGI's Afshad Mistri narrates a space station animation sequence.

At the Mars Center, O'Keefe chatted with a group of young visitors, took the opportunity to view a number of the exhibits and tried his hand at the Mars interactive rover yard. Then O'Keefe was treated to a special presentation at the Mars Reality Theater where he viewed some of the latest images from the Mars Exploration Rover mission while receiving an update report from one of the MER mission principal scientists, Ames' own David Des Marais. Some of the extensive capabilities of the new theater that will be used in the future were also put on display for O'Keefe to see.

It was clear that O'Keefe really enjoyed the opportunity to spend time with the enthusiastic youngsters who were operating the rover yard during his visit. He was in no hurry to leave, taking time to joke and tell stories with the children and signing autographs – on hats, posters and anything else presented to him. As he left, clearly in jovial spirits, he quipped to staff on hand, "just a typical Sunday at Ames?"

O'Keefe checks out the interactive Mars rover yard with a young visitor.

Ames Astrobiology Science Conference is "rousing success"

Ames hosted the third bienial Astrobiology Science Conference March 28 to April 1 in a large tent on the Moffett Field parade ground.

"It was a rousing success," said conference organizer Lynn Rothschild of Code SGE. "We had over 700 attendees, lots of press, and, most important, pushed the boundaries of astrobiology and captured the promise and excitement of the field."

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NASA photo by Tom Trower

Distinguished panelists take part in a lively 'Science Fiction meets Science Fact' debate about terraforming Mars held at Ames on March 30 at the Astrobiology Science Conference. Participants include (left to right): moderator Dr. Donna Shirley; author Greg Bear; Dr. Lisa Pratt, Indiana University; Dr. James Kasting, Penn State; Dr. John Rummel, NASA planetary protection officer, author Kim Stanley Robinson and Ames' Dr. Chris McKay.

Ames Astrobiology science conference is “rousing success”

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The meeting was structured around morning plenary sessions on topics such as 'Where do we come from?' Are we alone?' and 'Where are we going?' followed by parallel afternoon breakout sessions that ranged from the evolution of intelligence to the ethics of exploration. The last session included philosphers, astronomers, authors and religion scholars, who weighed in on this profound topic.

Harold Huber, a speaker from Germany (left) at the recent Ames Astrobiology Science Conference, chats with Lynn Rothschild, the conference chair person (center), and another attendee.

Science stars were in abundance, including McArthur Award winner Chris Chyba; Vatican astronomer G. Consolmagno; Mars Exploration Rover (MER) principal investigator Steve Squyres; NASA planetary protection officer John Rummel; time travel author Paul Davies and the inimitable Sir Arthur C. Clarke, who took part by telephone link from his home in Sri Lanka.

Conference highlights included:

• The ‘Astrobiologia en Espanol’ public astrobiology talks on March 28, hosted by chair Hector D'Antoni. Scientists from Latin America, Spain, Mexico and the U.S. delivered short public talks in Spanish about their astrobiology research. There was also an educator session with hands-on classroom activities.

• A media roundtable, 'Astrobiology and the Press', on March 29, hosted by San Francisco Chronicle science reporter David Perlman. Media members discussed how to successfully pitch astrobiology stories to print media, electronic media and book publishers. Speakers included Simon Mitton from the Cambridge University Press; Ned Potter of ABC World News Tonight; and Pauline Davis from the BBC and Australian Broadcasting Corp. radio. Helpful tips included: presenting fresh ideas, using a concise, organized outline or ‘treatment,’ being an expert in the field and avoiding jargon.

• On March 29, MER principal investigaor and Cornell professor Squyres delivered the Klein lecture to an enthusiastic standing-room only crowd who packed the 800-seat auditorium to see and hear the mission's guru. He discussed science results from the MER Athena science investigations at Gusev Crater and Meridiani Planum. Squyres did a follow-up interview touting Ames role in the mission with the local NBC affiliate.

• Ames Center Director G. Scott Hubbard chaired the final plenary session on April 1, titled ‘Where Are We Going / Space Exploration,’ which examined how astrobiology fits into the new vision for space exploration. NASA chief scientist John Grunsfeld discussed the broad new vision; and Michael Meyer, chief scientist for astrobiology at NASA Headquarters discussed ‘Astrobiology, Crossing the Threshold.’ Planetary protection officer John Rummel discussed the topic of back contamination; and Chris McKay tackled biology and the future of Mars.

NASA photos by Tom Trower

Scott Hubbard speaks at the recent Astrobiology Science Conference during the opening ceremonies.

Representatives from approximately 30 media organizations attended the conference, including CNN, the Washington Post, U.S. News and World Report, the New York Times magazine, the Associated Press, Knight-Ridder News, the San Diego Union Tribune, Cambridge University Press, the Scientist, Nature, Nova, NPR Radio, the National Geogrphic Society, Discovery Channel Canada, the BBC, the Australian Broadcasting Corp., the San José Mercury News, the S.F. Chronicle and several local television stations.

Said a tired but elated Lynn Rothschild, who was sighted in the tent late on Thursday afternoon, "In terms of science content, top speakers and overall excitement, this one was the best yet!"

BY KATHLEEN M. BURTON

Space exploration lecture series begins

NASA photo by Dominic Hart

NASA Research Park (NRP) launched a new ‘Exploration’ lecture series at NASA Ames in March. The new series features top researchers and academics examining new technologies for human and robot-based exploration and planned space exploration missions.

The first lecture ‘The Moon, Mars and Beyond,’ was held in March and featured Dr. Andrew Chaikin, left, author of ‘A Man on the Moon: The Triumphant Story of the Apollo Space Program.’ The book was the basis for Tom Hanks' HBO miniseries ‘From the Earth to the Moon.’

Ames develops computerized silent, 'subvocal speech' system

NASA scientists have begun to computerize human, silent reading using nerve signals in the throat that control speech. In preliminary experiments, NASA scientists found that small, button-sized sensors, stuck under the chin and on either side of the 'Adam's apple,' could gather nerve signals and send them to a processor and then to a computer program that translates them into words. Eventually, such 'subvocal speech' systems could be used in spacesuits, in noisy places like airport towers to capture air-traffic controller commands, or even in traditional voice-recognition programs to increase accuracy, according to NASA scientists.

NASA photo by Dominic Hart

Ames scientists have begun to computerize human, silent reading using nerve signals in the throat that control speech. In preliminary experiments, they found that small, button-sized sensors, under the chin and on either side of the 'Adam's apple,' can gather nerve signals and send them to a processor and a computer program that translates them into words. Ames' Chuck Jorgenson 'demos' the system above.

"What is analyzed is silent, or subauditory speech, such as when a person silently reads or talks to himself," said Chuck Jorgensen, a scientist whose team is developing silent, subvocal speech recognition at Ames. "Biological signals arise when reading or speaking to oneself with or without actual lip or facial movement," Jorgensen explained.

"A person using the subvocal system thinks of phrases and talks to himself so quietly, it cannot be heard, but the tongue and vocal cords do receive speech signals from the brain," Jorgensen said.

In their first experiment, scientists 'trained' special software to recognize six words and 10 digits that the researchers repeated subvocally. Initial word recognition results were an average of 92 percent accurate. The first subvocal words the system 'learned' were 'stop,' 'go,' 'left,' 'right,' 'alpha' and 'omega,' and the digits 'zero' through 'nine.' Silently speaking these words, scientists conducted simple searches on the Internet by using a number chart representing the alphabet to control a Web browser program.

"We took the alphabet and put it into a matrix -- like a calendar. We numbered the columns and rows, and we could identify each letter with a pair of single-digit numbers," Jorgensen said. "So we silently spelled out 'NASA' and then submitted it to a well-known Web search engine. We electronically numbered the Web pages that came up as search results. We used the numbers again to choose Web pages to examine. This proved we could browse the Web without touching a keyboard," Jorgensen explained.

Scientists are testing new, 'noncontact' sensors that can read muscle signals even through a layer of clothing.

A second demonstration will be to control a mechanical device using a simple set of commands, according to Jorgensen. His team is planning tests with a simulated Mars rover. "We can have the model rover go left or right using silently 'spoken' words," Jorgensen said. People in noisy conditions could use the system when privacy is needed, such as during telephone conversations on buses or trains, according to scientists.

"An expanded muscle-control system could help injured astronauts control machines. If an astronaut is suffering from muscle weakness due to a long stint in microgravity, the astronaut could send signals to software that would assist with landings on Mars or the Earth, for example," Jorgensen explained. "A logical spin-off would be that handicapped persons could use this system for a lot of things."

To learn more about what is in the patterns of the nerve signals that control vocal chords, muscles and tongue position, Ames scientists are studying the complex nerve-signal patterns. "We use an amplifier to strengthen the electrical nerve signals. These are processed to remove noise, and then we process them to see useful parts of the signals to show one word from another," Jorgensen said.

After the signals are amplified, computer software 'reads' the signals to recognize each word and sound. "The keys to this system are the sensors, the signal processing and the pattern recognition and that's where the scientific meat of what we're doing resides," Jorgensen explained. "We will continue to expand the vocabulary with sets of English sounds, usable by a full speech-recognition computer program."

The Computing, Information and Communications Technology program, part of NASA's Office of Exploration Systems, funds the subvocal word-recognition research. There is a patent pending on the new technology.

BY JOHN BLUCK

Transit of Venus preview held

NASA photo by Tom Trower

Venus will transit the sun on June 8, 2004. Nobody alive today has seen this unique event.

The NASA Ames Space Science Division recently presented a 45-minute program, professionally produced by the Great Lakes Planetarium Association, that described the history and importance of this upcoming event.

MAPGEN contributes to success of Mars Exploration Rovers

A new ground-based science planning support system developed for the Mars Exploration Rover (MER) mission is helping NASA scientists create plans and program computer command sequences for the twin rovers' daily operations.

NASA photo by Kanna Rajan

Scientists at the Jet Propulsion Laboratory (JPL) are shown at work during the Mars Exploration Rover mission operating the Mixed Activity Planning Generator (MAPGEN) science planning support system. From left are: Steve Squyres, MER principal investigator, working with tactical activity planner Jeff Norris of JPL to command Spirit on Sol 15 using MAPGEN, for the first day of nominal surface science operations on Mars on Jan. 17, 2004. On Norris' left is Ames' John Bresina, who recently became the first Ames employee to command a rover on the surface of another planet when he served as the tactical activity planner to command the Opportunity rover.

Developed jointly by NASA Ames and the Jet Propulsion Laboratory (JPL) in Pasadena, Calif., the Mixed Activity Planning Generator (MAPGEN) is a tool that scientists say is critical to the success of the MER mission.

"MAPGEN is a software system that takes a collection of activities that scientists want to do and builds a potential plan of action for the rovers to execute the next day. It enables the human planner of these activities to generate a robust, conflict-free plan and iterate on that plan numerous times to ensure the capture of the scientific intent of the planned activities," explained Kanna Rajan, a senior research scientist at NASA Ames and the principal investigator for the MAPGEN project.

With more than 200 scientists working round the clock on the MER mission, having a tool like MAPGEN is essential to generating efficient daily operation schedules for the Spirit and Opportunity rovers currently conducting science on the surface of the red planet, according to Rajan. "This is mission critical software and the first application of an artificial intelligence-based system for operating a platform on the surface of another planet," he said, adding that MAPGEN plans out a whole day of activities for the rovers in advance. MAPGEN even decides when the rovers wake up from their nightly slumbers to begin the next 'Sol,' or martian day, of activities.

MER project manager Richard Cook is equally effusive in his praise of the scientists operating the MAPGEN tool twice daily during the MER mission.

In a recent e-mail to the MER science team, Cook noted that MAPGEN has enabled scientists to greatly increase the amount of science conducted by the Spirit and Opportunity rovers. Instead of operating effectively only two out of every three days on the surface of Mars, scientists have been able to make progress nearly every day. Thanks to MAPGEN, scientists estimate they have been able to conduct 40 percent more science operations during the MER mission.

"One of the recurring fears that I heard before we landed was that we weren't ready for surface operations, and that we wouldn't be able to get as much out of these missions as we hoped. Obviously, that hasn't been the case," Cook observed.

"One group in particular deserves special mention for this accomplishment, namely the team responsible for putting together the daily uplink products," Cook wrote. "The effort to plan and develop a new set of activities every day is clearly the most difficult aspect of surface operations, yet those of you in the 'boiler rooms' have made it look easy. You have all stepped up and done an outstanding job executing your roles, despite the difficulty of transitioning to the new (and mysterious) world of surface operations. Significant credit also goes to the development team who came up with the tools and processes."

The MAPGEN system is a combination of two previously built planning systems: APGEN, a manually-operated planner developed by JPL and EUROPA, an automated planning and scheduling system developed at Ames. An earlier version of EUROPA was flown as part of NASA's Deep Space One Remote Agent experiment in 1999.

MAPGEN took three years to develop by a team of scientists and engineers and that team effort continues today, in support of the tool's successful use for planning the science activities for the twin rovers on Mars.

"MAPGEN takes applicable science constraints and operations flight rules into account when building a science plan. This capability makes it straight forward to build, modify and work with complex science plans" said Bob Kanefsky, an Ames engineer who is part of the MER mission staff.

One of the keys to MAPGEN's success is that it allows mission scientists to be flexible in how they schedule their science plans and objectives each day. The tool is capable of taking care of numerous details that would take many people many hours to accomplish.

"MAPGEN is an automated tool with artificial intelligence software, but with a human user in the loop, making it a mixed initiative decision-support tool," observed Ari Jonsson, a senior research scientist with the Research Institute for Advanced Computer Science at Ames. The result is that, while key decisions can still be made by humans, the software takes care of required rule enforcement and various routine daily tasks. In doing so, the software reduces the complexity of the planning task and allows a uniform enforcement of the flight and mission rules for the two rovers, when it generates a plan, Jonsson added.

Thus, for example, MER scientists may want the rovers to take a picture of a rock or a panorama of Mars. By using MAPGEN, they can schedule that activity to be accomplished in the most effective way possible, having the software handle constraint and rule enforcement. The software takes into account the potential conflicts associated with a given task and develops a schedule to overcome them. MAPGEN also allows tasks to be prioritized. For conflicts that cannot be resolved by clever timing, MAPGEN can reject lower-priority tasks according to priorities set by the mission scientists.

The development, integration and use of the MAPGEN system has been a resounding success. This is in no small part due to how closely MAPGEN team members from Ames and JPL worked

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Earth sensor 'mole' adapting to read data from Mars soil

A NASA Ames-led science team is modifying a sensor so it can look for signs of martian life by reading data from a soil-burrowing 'mole' capsule.

Researchers at Ames are adapting the Earth observation instrument for potential use during future Mars missions in a search for water, ice, organics and minerals in the soil. The instrument previously flew over Hawaii in 1997 aboard a remotely piloted, solar-powered airplane, scanning vegetation and land.

"The subsurface on Mars is a very interesting place that needs further study," said Carol Stoker, principal investigator of the project and an Ames scientist. "It is interesting because it's the most likely environment in which to find life or its organic remnants."

"We are developing an instrument package to observe and analyze martian soil properties down to five meters depth," Stoker said. Called the 'Mars Underground Mole,' the entire system, including sensors, would burrow underground like a mole.

The Mole is shaped like an artillery shell. An internal, sliding weight will drive the Mole into the soil. Once dug in, the Mole will connect by a tether to an apparatus on the surface. The tether will include power wires and a fiber optic cable that will transport light collected underground to a spectrometer on the surface above.

The Mole concept is derived from a device the European Space Agency designed to collect subsurface samples on Mars, according to Stoker.

To enable the Mole to analyze subsurface soils, the NASA team is adding a sensor to the Mole that has been used for more than a decade to obtain spectral imagery of locations on Earth from aircraft.

The instrument, called a digital array scanning interferometer (DASI), was part of the payload on the remotely piloted, solar-powered Pathfinder aircraft that flew over the Hawaiian islands scanning reefs off the Napali coast, vegetation on Makaha Ridge, the Alakai swamp and agricultural fields.

For a Mars mission, the instrument will be stationed on the planet's surface, connected to the Mole by a fiber optic cable in the tether.

"The fiber optic cable is a 'light pipe' that will transport light to the interferometer, which is at the heart of the instrument," said William Hayden Smith at Washington University, St. Louis, who is leading instrument development. "An interferometer measures light interference to precisely determine its spectral properties," he explained.

The spectral images produced by DASI are composed of many different colors ranging from visible to infrared light. Each point of the image has spectra, rainbow-like arrays representing energy and light wavelengths that scientists can analyze. Like a fingerprint or a DNA profile, this 'spectral data' from the light reflected from a substance enables scientists to identify it. Researchers say they must be ready to identify possible water, ice, organics and minerals beneath the surface of Mars.

A lamp or laser source will illuminate soil samples through a window in the Mole. The system for collecting light underground and transmitting it to the surface is the primary new development used in the instrument.

"One advantage of adapting the DASI for a Mars mission is that this instrument can be built very compactly," said Philip Hammer, a scientist at NASA Ames and co-investigator on the project. Because the DASI operates with fixed optics and no moving parts, it also is very stable under severe conditions. The entire Mole will weigh only about 2.2 pounds (1 kilogram) and be about 20 inches (50 centimeters) long.

"We expect to be ready to integrate the DASI instrument with the Mole by the end of 2004," said Stoker. "We will then conduct laboratory and field tests of the system," she added.

Laboratory chamber tests designed to simulate potential conditions on Mars will take place at NASA Ames, followed by field tests in Mars analog environments in the California desert on dry lakebeds. Later, tests may take place in permafrost conditions at Haughton Crater on Devon Island, Canada, Stoker said.

BY JOHN BLUCK

Explorer school visit inspires youth

Ames Center Director G. Scott Hubbard (left) and NASA Administrator Sean O'Keefe sign posters for the middle school kids in the Chapman library during their recent visit to the Explorer school in Sheridan, Ore.

Some of the young and enthusiastic explorers of tomorrow pose with Administrator O'Keefe and their teachers during a break in the ceremonies.

NASA photos by Dominic Hart

Congress of the United States
House of Representatives
Washington, DC 20515

March 26, 2004

The Honorable Sean O'Keefe, Administrator
National Aeronautics and Space Administration
300 E. Street, Southwest
Washington, D.C. 20546

Dear Administrator O'Keefe:

Since its inception, NASA has been at the center of creating wonder, hope, and new opportunities for our nation's citizens. Our country is fortunate to have an agency that has taken us to the moon, Mars and beyond, and which has fulfilled dreams and created many more. The President's renewed spirit of discovery through his commitment to manned and robotic space exploration presents an incredible opportunity for our nation to build upon our successes and create new ones.

We're excited about this commitment to resuming shuttle operations, and the furthering of the space exploration program with its potential impact on our nation's scientific, academic and business interests. We want to highlight the opportunities that are available in Silicon Valley and the entire San Francisco Bay Area to assist in this renewed vision.

The NASA Ames Center at Moffett Field has created long-lasting relationships in the region with top academic and business communities that are ideally situated to help meet the Administration's goals. In fact, NASA Ames has created a new partnership with the University of California at Santa Cruz to create a University Affiliated Research Center which is already increasing the relationships between NASA and universities in the region to address important work in nanotechnology, life sciences, and many other fields. Additionally, Stanford University, San Jose State University, Santa Clara University and Utah State have established the Space Technology Center in the NASA Research Park (NRP). NASA Ames has also brought new and diverse talent from around the nation into the NRP including: Carnegie Mellon University, Clark University, the Kentucky Science and Technology Center, and the National Association for Equal Opportunity in Higher Education (NAFEO).

NASA Ames has strong ties with local businesses such as Lockheed Martin, Silicon Graphics (SGI) and Loral, creating relationships benefitting both partners tremendously. Over twenty small businesses are also a part of the NRP, collaborating with NASA Ames researchers and conducting R&D on many exploration technologies including fuel cells, life sciences for astronauts, unmanned aerial vehicles and bio-info-nano convergence technologies. These are just a few examples of the outstanding work that is already taking place at NASA Ames and the surrounding community that are helping to create new discoveries, innovations and collaborations.

We understand that the details of the budget in meeting the President's initiative are still being worked out, but we hope that you will consider utilizing the opportunities that already exist at NASA Ames and in the San Francisco Bay Area to help reach your goals effectively and efficiently. This is truly an investment in the future of our nation.

Sincerely,

Anna G. Eshoo
Member of Congress

George Miller
Member of Congress

Ellen O. Tauscher
Member of Congress

Michael M. Honda
Member of Congress

Tom Lantos
Member of Congress

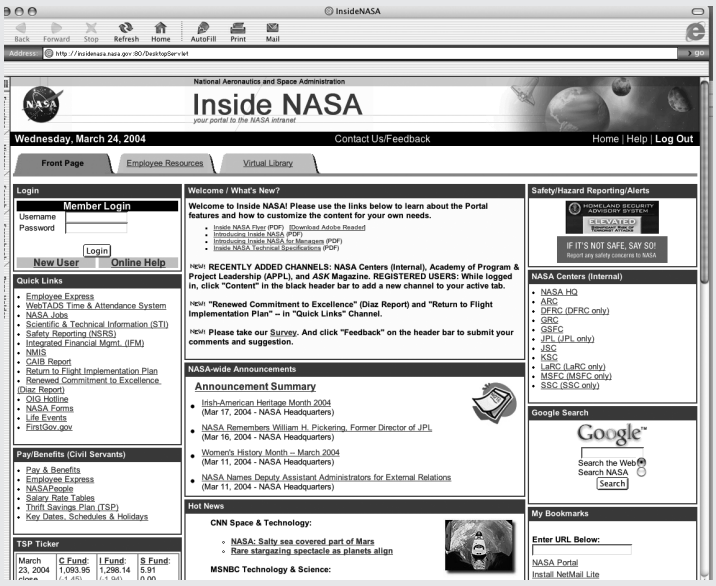
Zoe Lofgren
Member of Congress

Stay connected with 'Inside NASA'

Have you ever tried to find obscure and not-so-obscure NASA-related information? Have you ever wished there was one NASA Web site that linked to everything related to your job?

Then you need to get acquainted with 'Inside NASA' located on the Web at http://insidenasa.nasa.gov. Inside NASA is a Web portal developed and implemented out of the NASA chief information officer's office designed to be 'the place to go' to find NASA agency-wide information.

Accessible from anywhere within the nasa.gov domain, 'Inside NASA' helps you locate and manage information from across the agency. Organized for you on one interactive Web page, are links to the NASA information and resources you frequently, and not so frequently use.



The Web site main page for the 'Inside NASA' Web portal is displayed above.

Features of 'Inside NASA' include:

- Google search capabilities - within NASA or the Internet
- Secure instant messaging via Jabber (ITAR data approved)
- Search the x500
- NASA employee resources -- WEBTADS, benefits, holiday calendar, etc…
- Site for On-line Learning and Resources (SOLAR) training
- Lessons learned database
- Engineering standards
- Links to NASA center information
- Connection to library resources
- A place to store your personal / additional bookmarks
- Calendars of events

'Inside NASA' is designed to be customizable to suit your content and layout preferences. The content on 'Inside NASA' is organized via three pre-set tabs, with multiple channels (sections) on each. You may delete unwanted content from one tab or from your entire 'Inside NASA.'

'Online Help' (top of the page) and the 'Welcome' channel walk you through the customization process. If you have problems or questions during your customization, click the 'Feedback' link at the top of the page.

'Inside NASA' is in a fully functioning pilot phase. Your feedback is helpful to the on-going improvement of the 'Inside NASA' Web portal. If you have any comments, go the 'Feedback' link and complete a survey.

Check out Inside NASA live during planned upcoming demos in the Ames Café.

BY CELESTE MERRYMAN

MAPGEN contributes to MER success

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together with the mission scientists and engineers.

As an additional fruit of the close cooperation with the MER mission, a MAPGEN team member, John Bresina, recently became the first Ames employees to command a rover on the surface of another planet when he served as the tactical activity planner. In this capacity, he used the MAPGEN system to successfully generate complete activity plans for the Opportunity rover.

"John did an outstanding job and the complex rover plan he generated based on the science and engineering inputs for the day was completed well in advance of the time period put aside for this important part of the rover commanding process," Rajan said.

The MAPGEN system was used in all nominal post-egress sols for both rovers and performed very well. According to Rajan and his team, MER mission personnel estimate that the increase in science generated due to the use of MAPGEN is between 20 percent and 40 percent. With this demonstrated success in the MER mission, scientists are optimistic that the technology will be an invaluable tool for future Mars missions. In fact, according to Rajan, MAPGEN has an excellent chance to play a major role in NASA's upcoming Mars missions in 2005, 2007 and 2009.

The MAPGEN project's three-year development cost of $3.25 million is funded by NASA's Computing, Information and Communications Technology (CICT) program. CICT is part of the Aerospace Technology Enterprise's Mission and Science Measurement technology theme to develop crosscutting technology for a variety of space and aviation applications.

BY MIKE MEWHINNEY

To learn about estate planning and wealth preservation strategies, see page 12.

Six for six - Ames candidates make leadership grade

All six candidates recommended from Ames to the NASA Leadership Development Program (LDP) were chosen by the agency's executive review panel at NASA Headquarters for FY04-05. Thomas Berndt, Bryan Biegel, Michael Eodice, Beverly Girten, Steve Green and Mark Loomis interviewed with the Ames Leadership Development and Recognition Panel in August 2003. They were subsequently chosen and join those chosen by the ERP from other centers as participants for the program. The selection of this number of nominees from Ames in one year is unprecedented. Ames is honored to have these people represent us to the agency for the coming program year.

Left to right are four of the six candidates recommended from Ames to the NASA Leadership Development Program: Steve Green, Bryan Biegel, Tom Berndt and Mark Loomis. Not shown are: Michael Eodice and Beverly Girten.

Prior to the interview process and eventual selection, all six candidates had to determine whether the LDP was the most appropriate developmental experience for them. Having reviewed their career development options, they completed the application process, were interviewed by the Ames leadership development and recognition panel, subsequently recommended by same, and eventually chosen by the agency executive review panel. Along with participants from other centers, Ames' six anticipate attendance at orientation for the program. The orientation is being hosted by Ames the first week of June.

The agency's call to next year's class of LDP for FY05-06 has recently been announced. Persons interested in applying for the FY05-06 competition should contact the Ames point of contact for the program, the author, who is the senior program manager for leadership development, in the Workforce Development Branch, as soon as possible at ext. 4-4684. He will be able to explain the program in depth as well as coach interested parties in their application and interview requirements.

As part of NASA's integrated Strategic Human Capital Plan, the LDP is a key succession-planning tool aimed at ensuring that the agency has the right kind and number of diverse leaders to achieve mission success. The LDP is intended to prepare leaders to take on higher and broader roles and responsibilities in the near future. To ensure mission success into the future, NASA needs a diverse cadre of leaders who are adaptable, inspire, motivate and guide others to produce tangible results, who mentor and challenge the workforce, and who demonstrate high standards of honesty, integrity, trust, openness and respect. The LDP is not a 'guarantee' of a future promotion or selection for a particular position. Rather, future promotion is dependent upon the increased leadership effectiveness of the individual participant.

Over the course of the year, the LDP class meets six times for leadership development and professional skills training. Participants engage in developmental work assignments designed to challenge them and increase their understanding of agency, federal and national issues. During each of the six workshops participants engage in training related to the development of leadership knowledge and skills. At each LDP session, as well as in individual sessions during the year, participants will have access to personalized leadership coaching and feedback from the team of program leaders and consultants supporting the program.

Throughout the year, the LDP participants will be interacting with many of NASA's top leaders, as well as effective leaders from a variety of sectors. These structured interactions, in a variety of formats, are intended to provide participants with access to the current leadership thinking that is guiding this agency into the future.

Ames will be holding an informative briefing on specific aspects of the program on Thursday, May 6 at 9:30 a.m. to 11 a.m. or Wednesday, May 12 at 2:00 p.m. - 3:30 p.m. E-mail Janice Shook at e-mail jshook@mail.arc.nasa.gov for information regarding scheduled locations and to register for one of these briefings by May 3. The closing date for applications for Ames' candidates for FY05-06 is June 30, 2004. Those applying for the program will submit their applications to the author, at Mail Stop 241-3. Qualified applicants will be interviewed this July and August for next year's program participation.

BY R. LEE HAYWARD

Ask the 'export expert'

Question:

I keep hearing the term 'deemed export,' when I host a foreign visitor or go on international travel. What does this mean?

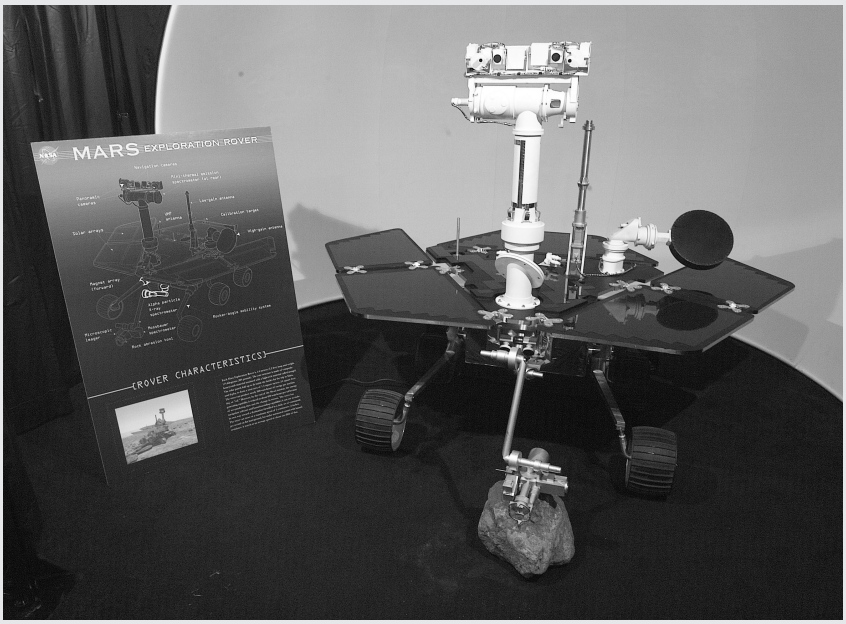
Answer:

Any transfer to a citizen or representative of a foreign country, regardless of where the transfer occurs, is deemed by the U.S. government to be an export to that country. For example, that means verbally "It was just a casual chat" or visually "He was just looking over my shoulder at the laptop screen" providing a citizen or representative of a foreign country with export-controlled information is an export to that person's country of citizenship as surely as mailing them the technical schematics for the space station. Be careful!

Do you have a question for the export expert? Then e-mail it to kwall@mail.arc.nasa.gov. And, visit the Web at http://jp.arc.nasa.gov/EC/EC.html.

Mars Exploration Rover model excites Bay Area audiences

NASA Ames recently gave people in the San Francisco Bay area the chance, for a limited time, to view a full-scale model of the Mars Exploration Rover (MER), two of which now are exploring the red planet.



NASA photo by Tom Trower

A full-scale model of the Mars Exploration Rover that was on display recently in the NASA Ames Mars Center.

The MER model was exhibited at the San José State University Event Center, San Jose, Calif., April 1 through April 3, during the FIRST Robotics Competition there, which was open to the public free of charge. Later the MER model was on display at the Mars Center just outside Ames' main gate from April 4 through April 10.

"Presenting the MER model in the San Francisco Bay area gives students and families an ideal chance to see the kind of rovers that now are exploring Mars," said Joe Hering of the NASA Robotics Education Project at Ames just prior to the exhibitions. Hering worked with officials at Jet Propulsion Laboratory, Pasadena, Calif., to enable the display of the robot model in the Bay area. "This full-scale model is exactly the same size, and looks the same as the MER robots," Hering added.

During the regional robotics event at San José State University, 47 student teams competed their robots against each other. The regional contest included schools mostly from California, but also, teams from Boston; Newark, N.J.; and Las Vegas took part. As many as 5,000 spectators attended the contest.

More information about the FIRST Robotics contests is on the World Wide Web at: http://robotics.nasa.gov

The Ames Mars Center is open to the public (no entrance fee) Tuesdays through Fridays 10 a.m. to 4 p.m. PDT and weekends, noon to 4 p.m. PDT. The Mars Center is closed on Mondays and federal holidays. The Mars Center telephone numbers are ext. 4-6274 and ext. 4-6497.

Ames launches new international travel process

In the spirit of unifying processes, an agency-wide team has been diligently working toward the OneNASA goal of standardizing to achieve efficiencies, collaborating to leverage existing capabilities and making decisions for the common good. In March, NASA Ames launched its newly re-engineered international travel process.

For the first time, Ames has a 'gatekeeper' -- a centralized resource for Ames travelers and a single point of contact between travelers and NASA Headquarters. The intent is to make this process easier for the traveler, the travel order preparer, the gatekeeper and NASA Headquarters, in that order.

No new requirements have been added, but existing ones are now being dutifully enforced. A new Ames electronic form has been created for your convenience, which combines NASA Form 1167 (Request for Non-Program Travel); NASA Form 1676 (STI Authorization); ARC Form 1676A (Public Domain Declaration); and the new NASA Form 1711 (Medical Clearance). The new form packet is called ARC 803 and it can be found on the travel Web site or on the Ames Electronic Forms Service.

A wealth of information can be found regarding TDY preparations on the new travel Web site at http://travel.arc.nasa.gov. This Web site is intended to be one-stop shopping for all international travel needs. If it is missing something helpful, or if you have comments on how the process or site can be improved, contact the Ames gatekeeper office. You can contact the gatekeeper staff during normal business hours if you have questions regarding the re-engineered international travel process.

The Ames gatekeeper is Raj Shea, in Building 15, Room 135A, ext. 4-1955 or ext. 4-1957. You can also reach him via e-mail Gatekeeper@mail.arc.nasa.gov The travel Web site is http://travel.arc.nasa.gov

Each directorate also has an associate gatekeeper who will be your in-house resource and checkpoint. Check on the Web at http://travel.arc.nasa.gov/gatekeepers.html for your associate gatekeeper's contact information.

BY KIMBERLY WALL

Former employee Mary Hubbard passes away

Ames lost a good and loyal long-term friend recently with the passing of Mary Hubbard. Hubbard was perhaps best known to most of the Ames community as the executive assistant to former Center Deputy Director Dale Compton and former Center Director William Ballhaus. In her more than 20 years of service during the 1980s and 1990s, she served as an administrative specialist in many capacities and in several different organizations. Hubbard touched many lives with her dedication, integrity and high personal standards of performance. She also took pleasure in providing solid information and service to those who needed it.

NASA photo by Tom Trower

Mary Hubbard

Hubbard came to Ames in April of 1978 where she worked in Code STS until she was selected in 1985 by Compton to fill his executive assistant position. In 1988, she moved up to the Office of the Director. After two busy years supporting Ballhaus and the rest of the center, she accepted a position in the Search for Extraterrestrial Intelligence Office (SETI). In 1994, she moved to the Airfield Management Office where she began to get more involved in budget and financial tasks. She had a real talent for that sort of work and for her last four years at Ames, Hubbard was a budget specialist in the Facilities and Logistics Division, until her retirement in April of 1999.

Hubbard lost a long battle with cancer in February. Even though she endured five years of radiation and chemotherapy, Hubbard and her husband Doug still traveled extensively. As full time 'RV'ers,' Hubbard once said that it was like living in a small apartment, just the scenery outside your window changed every few days. From May to August last year, they were 'RVing' in Alaska. Since her retirement, they spent time in places like Texas, Kentucky, Tennessee, Arizona, New Mexico, Idaho, California, Washington, Canada (to see the polar bears), Pennsylvania, Indiana and all the places in between. Her friends here at Ames would get messages such as 'Hello from .....' containing vivid descriptions of many wilderness places and we often felt that we were there with her.

Doug and Mary were avid bird-watchers, campers and canoeists. They had also ridden their motorcycles for years on weekends and vacation trips (even though they didn't get to use them since they retired).

Hubbard is survived by her husband Doug and leaves many NASA friends and an organization that will always be grateful for her valuable contributions. Her ashes were spread at Lake Ahjumawi, one of her favorite camping sites, in northern California.

BY JACK STANLEY

'Inside the Director's Studio'

Did you know that our own Center Director G. Scott Hubbard made rocket fuel at a young age until he blew up the basement and was relegated to the backyard for future scientific experiments?

If you were part of the premiere 'Inside the Director's Studio – Can We Talk' held on April 1, you would have learned of Hubbard's early interests in science, as well as his exciting plans for Ames' future.

In an effort to provide a casual, open communication forum for employees to ask questions and gain insight into Ames' senior leadership, 30 employees from across Ames were invited to participate in the premiere activity. The event followed an interview format, which allowed for questions of both a personal and professional nature. Participants submitted a wide range of questions, from wanting to know more about Hubbard to rumors about the closure of Ames. Hubbard came well prepared to address as many questions as possible in the hour-long session.

Armed with a copy of Space News and a letter signed by several congressional representatives, he emphatically stated "Let me correct the news rumors. Ames will not close." Hubbard presented a copy of the letter that was sent to the administrator and signed by six members of Congress, as proof of support for Ames. He articulated the five reasons that Ames will not close: 1) Ames is anchored in Silicon Valley, the heart of world-class technology; 2) Ames' connection with world-class collaborators outside of NASA; 3) Ames is on the critical path for major projects, such as Kepler; 4) Ames is on the critical path for other NASA centers; 5) Ames is well known and respected for its work. He asked the gathered employees to take part in dispelling such rumors with the facts and to take every opportunity to set the record straight.

Covering topics such as IFMP, full cost and facilities, he kept the short hour full of questions and interactive dialogue. Hubbard has been personally engaged in the topic regarding the operation of Ames' unique facilities, as well as full cost. Rumors that Ames' G&A rate is the most expensive is just not true. Ames is actually cheaper than JPL and comparable to GSFC. Unfortunately, due to the limited time, not all submitted questions were answered at the session. However, Hubbard is determined to continue future sessions and utilize the new director's broadcast forum known as WARC that is to begin broadcasting in May to address questions of universal interest across the center, as well as hot topics and personal concerns.

Finally, Hubbard was not able to get away without answering some lighthearted questions in honor of April Fools Day. When asked what profession other than his current one would he like to attempt, he responded 'professional musician,' obviously a holdover from his college days when he was in a garage band. And when asked "If you were to go to Sean O'Keefe's office today, what would you like to hear him say when you arrive at his door?' Hubbard did not hesitate when he said "Here's a check for $500,000,000."

Interested employees who would like to participate in future 'Inside the Director's Studio" sessions should contact their organizational directors. Sessions will be held every 6 to 8 weeks for the foreseeable future.

BY GAIL E. JAMES

Ames technology enables remote research collaborations

For the first time, researchers thousands of miles away can study laboratory specimens by remotely operating NASA's new 'super magnifying glass'.

Developed at NASA Ames, the Remote Scanning Electron Microscopy (RSEM) technology has been successfully tested to help create strategies to ensure astronauts' health during long-duration space flight.

"The RSEM will enable multiple researchers at locations across the country to observe and control the Scanning Electron Microscope (SEM), hence allowing for remote, real-time simultaneous analysis of tissue by several investigators," said Richard Boyle, director of Ames' BioVIS Technology Center.

In contrast to conventional light microscopes that use light waves, the SEM uses electrons to magnify details of the tissue from 10 to 100,000 times. This 'super-dissecting microscope' illuminates the sample with a great depth of field and produces three-dimensional, high-resolution images.

To use the SEM, scientists need only a suitable Web browser and network access to connect to the instrument. A remote-control system that resides on the microscope enables real-time interface with the tissue researchers are studying.

"We are very excited about our work with NASA scientists," said molecular biologist Doris K. Wu, acting chief of the Section on Sensory Cell Regeneration and Development in the Laboratory of Molecular Biology at the National Institute of Deafness and Other Communication Disorders, Bethesda, Md. "By providing remote access to a unique tool like SEM that is too expensive for many settings, NASA is enabling medical researchers to work with a wide variety of specimens without unnecessary travel costs," she said.

"Our first collaborative project with Dr. Wu focuses on unraveling key developmental processes of structures of the inner ear involved in hearing," said Boyle.

"The inner ear cells change when you are in space and this impacts astronauts' health," said NASA astronaut and physician Yvonne Cagle. "If we understand how these hair cells reposition themselves, we can better understand what happens over a long period of time in space."

According to Cagle, numerous sensory receptors in the inner ear help humans detect sound and motion. The sensors also enable humans to hear airborne sounds, feel themselves moving and sense the presence of gravity. As the population ages, hearing and vestibular disorders rise, as evidenced by the dramatic increase in falling and hearing loss in the elderly. Humans exposed to altered gravity conditions, such as those experienced by astronauts, often acquire many symptoms similar to those of vestibular patients. The first collaborative project between NASA and NIH is an ongoing study that focuses on unraveling key developmental processes of structures of the inner ear involved in hearing.

"This line of research will enhance our ability to diagnose, and hopefully develop, novel therapies to treat the disorders commonly seen in the clinic," Boyle ventured.

"The remote aspect of this telescience capability is very essential to doctors, scientists and especially to astronauts," said Cagle. "Our training schedule is very constrained and time is very limited, so we have to use it most efficiently. So it's really exciting to be able to have a look and a feel and to actually interact with what is going on without physically being there. RSEM enhances our interface with science without impacting astronauts' very restricted time."

But that is not all. With the RSEM, the microscope also becomes a great educational tool. RSEM will help students learn science by bringing NASA's unique research tools into their classrooms inspiring the future generation of explorers.

"Remote SEM allowed students direct participation in the scientific process to an extent that previous projects could not, particularly because of the limited availability of scientific materials in the school," said Anand Kulkarni, outreach coordinator for the Space Science Outreach and Research Program, a non-for-profit organization in Berkeley, Calif., that brings science courses into inner-city high schools. "The flexibility to conduct research of their own choosing engaged students better than the previous projects did," Kulkarni said. "This time, for example, they were studying hair damage caused by peroxide bleaching."

Students can send their research samples, such as insects or plants, to NASA Ames and work on their science projects using the SEM. Using a personal computer with Internet capability, they can log onto the SEM with a video projection system that allows demonstration and hands-on microscope operation.

"Scientific and medical collaborations between remote sites have been of high interest within the academic community for over a decade. With the advent of higher speed communication protocols over the internet, higher resolution graphic processing and advanced computational architecture it is now possible to work in real-time or near real-time with our colleagues," said Boyle.

For more information about the Remote Scanning Electron Microscopy project, visit the Web at http://biovis.arc.nasa.gov

BY VICTORIA STEINER

NASA Earth Science conference set for local venue

NASA's Earth Science Technology Office (ESTO) will present the fourth annual Earth Science Technology Conference in Palo Alto, Calif., June 22-24. The conference will showcase a wide array of technology research related to NASA Earth science efforts. Attendees will encounter new developments in information systems, computing, instruments and component technologies and learn about the vision and future needs for Earth science technology.

To register, examine abstracts and presenters and preview the venue and schedule, log onto the conference homepage at http://esto.nasa.gov/conferences/estc2004/

Emissions reduction task force meets

Recently, the Sustainable Silicon Valley group, a collaboration of sectors made up of the California Environmental Protection Agency, local businesses, local government agencies and environmental organizations, met in San José City Hall to discuss increasing energy efficiency and effectiveness and reducing C02 emissions in the Silicon Valley. Its initiative is to make substantial improvements in a non-regulatory, cost-effective way, by using environmental management systems as a model.

The CO2 emissions reduction protocol seeks to advance the multiple objectives of:

- sustained environmental quality,
- energy certainty,
- reduced operations and maintenance costs
- addressing public health issues related to improved air quality and climate change, and
- fostering effective regional partnerships working towards common goals.

San José Mayor Ron Gonzales, center, speaks at the recent Sustainable Silicon Valley group's meeting in San José to discuss increasing energy efficiency and effectiveness. NASA Ames representatives attended the meeting and participated in discussions.

NASA photo by Jon-Pierre Wiens

VPP report submitted to OSHA

In February, Ames Center Director G. Scott Hubbard and Mark Hightower, the Ames federal employee union vice president for safety, approved the center's annual report of Voluntary Protection Program (VPP) activities during 2003 for submittal to OSHA. The annual report was then submitted to OSHA.

This report, which all VPP participants are required to submit, includes the goals and accomplishments for the continuous improvement of the safety and health program, injury and illness numbers and rates, and results of the safety and health management system evaluation. It was prepared using input from each directorate, the chairperson of each centerwide safety committee, the Ames federal employee union and the Safety, Health and Medical Services Division.

The Ames VPP annual report highlights the center's continuous improvement in all areas of the health and safety program. It describes the new program that was developed and implemented to recognize contractors for exemplary health and safety performance. It examines the accomplishments of the center-wide safety committees during the past year.

The Ames Annual Safety and Health Program evaluation report can be viewed on the VPP Web page at http://q/qh.

Estate planning seminar set for May 6 at Ames

Everyone knows how to make money, but few know how to preserve what wealth they have. Sadly, most of us are not well informed when it comes to protecting the assets we have worked so hard to accumulate. And that can be a very costly mistake!

Now, the NASA Ames Human Resources Division is making it possible for people in the extended Ames community to change all that.

On Wednesday, May 6, San José attorney Hollis Logue III will come to Ames to offer a free seminar on personal wealth preservation strategies.

In a fast-paced one-hour presentation, attendees will learn:

- what probate is, why it can be bad, and how to avoid it,
- what a will can do to you instead of for you,
- why holding your personal residence in joint tenancy can become a hidden tax trap that can cost tens or hundreds of thousands of unnecessary tax dollars,
- how and why you can lose 50 percent of the value of your life insurance,
- how children from a first marriage can be left out and get nothing, and
- why married people lose a $1,500,000 federal tax break in most estate plans!

This is not a seminar about how to invest or what stocks or bonds to buy.

Rather, it is designed to teach you how to protect yourself, your family and your assets with a properly planned estate.

You'll learn ways you can reduce or eliminate estate taxes, probate fees and many other 'hidden' traps that can destroy what you have worked so hard to build up. You will also have the chance to explore the myths behind so much of what you might previously have thought was true about estate planning.

Finally, you will learn how to title your home to get the best tax break, the basics of living trusts, and much, much more!

Hollis Logue has given estate planning seminars at many of the top companies in the Bay area. The NASA Ames Human Resources Division is delighted to have him back once again. His previous Ames seminars have been a big hit. Don't miss his highly entertaining and informative presentation. Spouses, partners and friends are welcome!

When: Thursday, May 6
Time: Noon to 1:00 p.m.
Where: Space Science Auditorium, Building 245

For more information, contact Barbara Chenier at ext. 4-6986.

You can also check out attorney Logue's Web site at: www.loguelaw.com

The missing 'Mini' key epic

Editor's note: This first-hand account by the driver of a Mini-Cooper car at Ames highlights the importance of notifying the center's lost-and-found office as soon as an employee finds a lost key or other valuable item. Their number is ext. 4-5416.

The joys of losing my car key for a day turned into a 'Mini' epic. On a nice, sunny Friday morning, I decided to bike from my building N-248 to building N-213. This was a short distance, but it would quickly allow me to do my task and get back to my office. My car key was in my coat pocket. Along the way, I stopped to put some air in one of my tires, proceeding to angle off through the back of buildings N-213 and N-212.

Done with my journey and back in my office, I put my hand into my pocket. It wasn't there! "Where's my key?" I said to myself. Hmmmm…it must have dropped out as I rode along. It's a $150 electronic key, on a key-ring, large enough to spot along the path I just took. So, began my 'Mini'-epic journey.

Back and forth I went, inside and out of buildings, inquiring, looking into gutters, along curbs, under cars, in waste-baskets, putting up signs, all along my irregular bike route. The key, it seemed, had disappeared from the face of the Earth. I could not go home to get a spare key. It just so happened that today, of all days, all my spare keys were in the car.

I called NASA security (ext. 4-5416) and reported my loss to the 'lost and found' officer. No one had turned in my key. By 3 p.m. I started thinking that I better get serious about what my next step would be. I called the Mini dealership and was told that my car could not be opened by a 'slim-jim' device, because I had locked the car electronically, not the 'old fashioned' way. I needed to have my car towed into the dealership, where someone would find a way to get into the car. Or, the dealer would order a new key and leave my car there until the key arrived.

Hours later, a tow truck arrived around 6 p.m. My Mini and I were on our way to the dealership. Once there, the Mini technician, who had been waiting for me since 4 p.m., two Mini salesmen and the tow truck driver worked through a one inch opening in the car's roof, via the sunroof. They used two flexible, round, 4-foot-long rubber specialized slim-jims with hooks to gain access to my spare keys in a metal box, on the floor of the Mini.

This was harder than you think, as I also have a mesh sun-screen below my sunroof that could not be opened. Miracle upon miracle and infinite patience brought one of my spare keys up from the metal box and through a wedged-open window.

Finally, the Mini-epic over, I drove home after 7 p.m., drained. Two days later, on Monday morning, I received an e-mail from someone trying to locate the owner of a lost Mini key. The person had found it on the ground in the parking lot near building 240 on Friday.

I tell the story of the Mini epic to suggest that if you ever find a car key, don't assume anything. BE A HERO and turn it in. Call NASA security ASAP at ext. 4-5416. It could save the day for someone.

By Shirley Burek

Fire department holds fundraiser

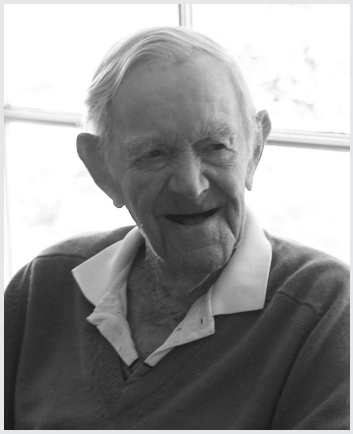
The Moffett Field fire department invites you to a pancake breakfast fundraising event at the fire house at Moffett Field.

Bring your appetite to building 580 on April 29 and 30, between 7 a.m. to 11 a.m. and have breakfast cooked by the firefighters. Cost is $3.00 under 12 years old and $5.00 over 12, paying at the entrance door. Money raised from the pancake breakfast goes to the Alisa Ann Ruch Burn Foundation in San Francisco.

Oldest Ames alumnus provides perspective

-- "Don't try to direct the wind, just adjust the sails"

Carlton Bioletti was among the first to arrive at the NACA's new Ames Aeronautical Laboratory in 1940. A native Californian and a graduate of the University of California, Bioletti had already established his reputation in engineering while at the NACA Langley Laboratory. He was happy to return home when his friend Smith DeFrance recruited him to help build some of Ames' most sophisticated wind tunnels. Bioletti also served, alongside Russell Robinson, as assistant director for Ames research programs in the 1950s.



Carlton Bioletti

NASA photos by Tom Trower

Jack Boyd, Ames' historian, (right), recently met with Carlton Bioletti, Ames' oldest living alumnus.

Bioletti turns 98 years old on May 29, making him the oldest Ames alumnus. Friends attribute his longevity to his proper perspective on life, noting that during the 1950s he was able to convince NACA administrators that he should take three years off to sail around the South Pacific. Bioletti returned recharged from his sabbatical to build Ames' first ballistic ranges. In the early 1960s, Bioletti lead Ames into space exploration management as head of the biosatellite program.

by Glenn Bugos

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 6:15 p.m. Higher-level class meets at 5:15 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang, hwang@dm1.arc.nasa.gov, 4-1368.

Ames Bowling League, Palo Alto Bowl on Tuesday nights. Seeking full-time bowlers and substitutes. Questions to sign up: Mike Liu at ext. 4-1132.

Ames Child Care Center Board of Directors Mtg, every other Thursday (check Web site for meeting dates: http://accc.arc.nasa.gov), 12 noon to 1:30 p.m., N-210, Rm. 205. POC: Cheryl Quinn, ext 4-5793.

Ames Contractor Council Mtg, first Wednesday each month, 11 a.m., N-200, Comm. Rm. POC: Anita Fogtman, ext. 4-4432.

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: Julie ext. 4-4694 or 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 11.30 a.m. -1 p.m. in the special events room in the Ames Visitor Center in N-223. All are welcome. POC: Jeff Smith, ext. 4-2586.

Environmental, Health and Safety Information Forum, first Thursday of each month, 8:30 a.m. to 9:30 a.m., Bldg. 221/Rm 155. URL: http://q.arc.nasa.gov/qe/events/EHSseries/ POC: Stacy St. Louis at ext. 4-6810.

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

Jetstream Toastmasters, Mondays, 12 p.m. to 1 p.m., N-269/Rm.179. POC: Becky Brondos at ext. 4-1959, bbrondos@mail.arc.nasa.gov or Bob Hilton at ext. 4-1783, bhilton@mail.arc.nasa.gov.

Nat'l Association of Retired Federal Employees, (NARFE). Former and current federal employees. Your only contact with Congress. Join to protect your federal retirement. Chptr #50 meets the first Fri. of each month at HomeTown Buffet, 2670 El Camino (at Kiely), S. Clara, 11 a.m. lunch. POC Earl Keener (408) 241-4459 or NARFE 1-800-627-3394.

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

Code SL sponsors charity egg event

NASA photo by Rudy Aquilina

Code SL recently sponsored an egg-coloring and egg-drop contest. They also donated egg baskets that they had assembled to a local charity.

The Flight Projects Office, Code SL, (representing the entire payloads office roster) got together recently and held its first annual egg-coloring and egg-drop contests in April. They also competed to put together baskets to be donated to a local charity. In total, 14 baskets were completed and several dozen eggs were decorated. Left over candy and treats also were donated. Prizes were awarded for the best egg, and best basket representing each of the three themes; best NASA representation, most attractive and most delicious.

Winners received chocolate and the heartfelt thanks from Community Solutions- a charity in the South Bay. It supports battered women, teen mothers and overextended families. The organization coordinators explained they would distribute the baskets to needy families or battered women/children. For more information, visit their Web site at www.communitysolutions.org.

Baskets were prepared by civil servants and contractor personnel from Codes QS, SLO, SLE, SFB and the SL division offices.

There were six entries in the egg drop contest, or as we called it a 'prototype ISS sample return vehicle.' Teams were given14 drinking straws, three feet of masking tape and one egg to survive at least an eight-foot drop. Three teams survived the eight-foot drop and then a 10-foot drop and all succumbed to the final agonizing 12- foot drop.

It was a great break from the daily work routine and Code SL will definitely plan on doing an event next year with another egg-related contest.

BY VAN PHAN

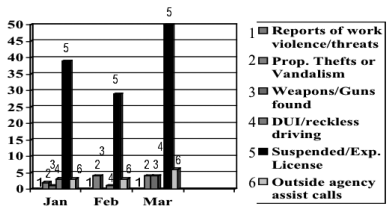
Retirements

Name	Code	Date
Robert T. Scott	AFJ	02/27/04
Ron York	FOO	02/27/04
Clyde A. Best	FOO	03/31/04
Reese L. Sorenson	AFD	04/02/04
David L. Astill	AFJ	04/02/04
Dennis A. Johnson	APS	04/02/04
Dale Satran	APS	04/02/04
Murray Tobak	APS	04/02/04
Luigi S. Cicolani	ARH	04/02/04
Thomas A. Spalding	FM	04/02/04
Richard C. Carlson	FMX	04/02/04
Jack A. Marsh	FOO	04/02/04
Alfred A. Lizak	JF	04/02/04
Karen L. Adams	JIT	04/02/04

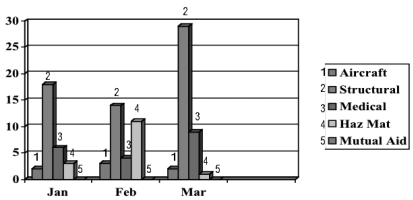
Protective Services monthly activity

A statistical summary of activities of the Protective Services Division's Security/Law Enforcement and Fire Protection Services units for the month of March 2004 is shown below.

Security/Law Enforcement Activity



Fire Protection Activity



Ames Classifieds

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

Housing

For rent: 2 bd/split ba house in San Francisco. Garage, laundry, hardwood floors, new paint, fireplace, new appliances, large kitchen, formal dining room, great access to 80/280/101/train, short drive to BART. N/S, N/P. $2050/mo. Call (650) 969-0787.

For rent: 1 mile from Ames. 1 bdrm condo, 840 sqft. Fireplace, beautiful view, fountains, berber carpet, tile floors, free laundry. $1,100/mo. Mike (650) 961-8162.

Wanted: Room for rent. French summer intern looking for room betw. 5/1 - 6/20 biking distance to Ames. $500 a month. E-mail rchalex@noos.fr or call (650) 323-1708.

Room for rent: Large room in a 3bd/2.5ba home (near Lawrence Expwy and Saratoga Ave.) in beautiful, quiet neighborhood. Avail. 5/1. $600 and share utils. Call (408) 257-7554.

Need a house sitter/pet sitter for your home or apartment near NASA Ames? My brother is a conscientious/studious 47-yr-old husband and father with twins headed for college next fall and he'll be working on a project for NASA for at least one year, starting June 1 and most likely relocating after that. His wife and 17-year-old son will remain in Oregon. Also considering a shared situation but would make a great housesitter. Corey (707) 815-8555.

Miscellaneous

Washer/dryer, Whirlpool, heavy duty thin twin stacked unit, excellent condition, $195 or B/O. Mike (408) 267-6635.

Dining room table. Rattan base and 4 swivel chairs. Oval glass top. $150 Leather chair-recliner-rocker. Light grey. $150. Call (650) 691-1239 (hm) or (408) 234-0025 (cell) Shirley.

Wanted to rent: Pop-up trailer or small RV to use as a guest room for one week (first week of May.) No miles except to Ben Lomond & back. (Total miles round-trip from Ames, 80). Jeanie or Terry (831) 336-2216 after 5:00 p.m.

Wanted: Baskeball hoop w/adjustable stand in good condition. Chest freezer in good working condition. E-mail: falcon7777_2000@yahoo.com

Back two rooms for rent as storage, $200 each and doublewide garage for rent as storage, $300 a month in Sunnyvale near 101 and 237 and Lawrence Expressway. Also looking for valid work-at-home ideas. E-mail: falcon7777_2000@yahoo.com

Chef Copter's Rotorcraft recipes cookbook. A collection of recipes by Army/NASA Rotorcraft QOL Committee, $10 (spiral-bound, 100pgs.) Limited supplies. Susan ext. 4-1747.

Transportation

'93 Saturn Sport Coupe SC2, all leather, exc. cond., 33K mls, beautiful aquamarine, $5,750. Charlie (408) 515-1765 or e-mail bfrieder@msn.com

'99 Mustang GT, 4.6 V8, green, 69K mls, 5 spd, all options fully loaded, priced to sell at $9,500 Mike (408) 529-6953.

'99 KIA Sportage, approx. 44K orig. mls. Automatic. Grey w/hardroof w/rack, very gd condition, clean, non-smoker, new tires and battery, $6,900. Call Gladys (650) 349-0238.

Car Pool

Carpool rider/driver needed to Los Banos. Hours are from 6 a.m. to 3:30 p.m. with some flexibility. Tom, ext. 4-3862.

Safety Data

	Civil Servants	Contractors
Not recordable first aid cases	1	1
Recordable no lost time cases	1	3
Lost time cases*	0	0
Restricted duty days	0	0
Lost work days	0	0

Data above is as of 3/26/04. May be subject to slight adjustment in the event of a new case or new information regarding an existing case.

Note: Under new OSHA rules, lost time is defined as lost work days, restricted duty or job transfer.

Astrogram deadlines

Deadline:	*Publication:*
Apr 27	*May 2004*
May 25	*June 2004*
June 25	*July 2004*

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram*. When submitting stories or ads for publication, submit your material, along with any questions, in MS word by e-mail to: astrogram@mail.arc.nasa.gov on or before the deadline.

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.

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. Make your reservations for Chase Park

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.

Vacation Opportunities

Lake Tahoe-Squaw Valley Townhse, 3bd/2ba. View of slopes, close to lifts. Per night: $250, two night minimum. Includes linens, cleaning, propane fireplace, fully equipped. Call (650) 968-4155. dbmckellar@aol.com

South Lake Tahoe cottage w/wood fireplace, hot tub. Rates $50 to $130 per night. Call (650) 967-7659 or (650) 704-7732.

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.

Incline Village: Forest pines, Lake Tahoe condo, 3 bd/2 ba, sleeps 8. Fireplc, TV/VCR, MW, W/D, jacuzzi, sauna, pool. $120/night low season; $155/night high season. $90 cleaning fee and 12% Nevada room tax. Charlie (650) 366-1873.

Tahoe Donner vacation home, 2 bd/2ba. trees, deck, sun, fun. Access to pools, spa, golf, horseback riding, $280 wkend, $650 week. Call (408) 739-9134.

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

Spacious 2 bdrm Maui suite available (can accommodate up to 6 people) for 1 week. Cooking facilities, color TV, swimming pools, access to beach and much more. Located nearby shopping centers, golf courses, and all water activities. $1,200 a week or B/O. Call (408) 446-4416 for more information.

Incline Village: Forest Pines, Lake Tahoe condo, 3 bd/2ba, sleeps 8. Fireplace, TV/VCR/DVD, MW, W/D, jacuzzi, sauna, pool. Walk to Lake, close to ski areas. Visit Web page for pictures: http://www.ACruiseStore.com. $120/night low season, $155/night high season (holidays higher) plus $156 cleaning fee and 12% Nevada room tax. Charlie (650) 355-1873.

Disneyland area vacation rental home, 2 bd/1ba. Nearing completion completely remodeled w/new furniture. Sleeps 6 (queen bed, bunk beds, sleeper sofa). Air hockey and football tables. Introductory rate $600/wk, once completed rate will be $1000/wk. Security deposit and $100 cleaning fee required. Call (925) 846-2781.

NASA praised for presidential management success

On April 13, NASA was recognized by the administration for achieving the highest standard in 'Strategic Management of Human Capital' and 'Budget and Performance Integration.' NASA is the first federal agency to achieve a 'green' President's Management Agenda (PMA) status score in these important areas.

Kay Coles James, director, Office of Personnel Management and Clay Johnson III, deputy director for management, Office of Management and Budget, recognized NASA Administrator Sean O'Keefe for his leadership of NASA's effort. NASA's Assistant Administrator for Human Resources Vicki Novak and Comptroller Steven Isakowitz and their teams also were recognized for their efforts in support of the PMA.

"This is a great achievement for NASA," said Administrator Sean O'Keefe. "The hard work, dedication and technical excellence of our human resources and budget teams resulted in significant improvement in critical management areas. The entire NASA family is proud of the teams being honored today."

He added "the President's Management Agenda is a starting point for management reform and the guide to NASA's own reform in the way we do business, improving performance and in the way we meet our objectives."

"When one thinks of NASA, one thinks of landing on the moon, pictures of far-away galaxies and robotic rovers searching for traces of life on Mars," said O'Keefe. "We have also emphasized management reform as a necessary condition for accomplishing the next generation of scientific and space discoveries. Every manager and employee knows, he or she must not only be committed to the 'cool stuff' of NASA lore, but also to the management requirements for organizational competence and prudence."

The PMA was created in response to the president's vision for a dynamic, 21st century government. Standards of excellence were created for five key areas of government: human capital, competitive sourcing, financial management, e-government and improved financial performance. Ratings of red, yellow or green are assigned for each area. NASA continues to pursue the highest standard in the other three areas. For information about PMA see http://www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf

Photo by Richard Glueck

Ames' education software captivates students

Sixth-grade students at the Orono Middle School in Orono, Maine, construct a model of Olympus Mons using data from the MarsVE CD developed by the NASA Ames Education Office and building blocks provided by their teacher Richard Glueck. Glueck calls the MarsVE CD "the most useful piece of NASA-designed software I have ever used."

Astrogram

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