THE AMES Astrogram
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD
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on-line@http://ccf.arc.nasa.gov/dx/

Eshoo: "Ames, you make me proud!"

On May 27, Congresswoman Anna Eshoo came 'home' to Ames Research Center to address a town-hall meeting and to reach out to a large, centerwide audience viewing live on Ames vidnet. The representative for California's 14th district, Eshoo recalled that Ames was the very first place that she visited following her election in 1992, even before she was sworn in. "It was an exciting time," she recalled, participating in the signing of the memorandum of understanding that signalled a new chapter for both Ames and the Moffett complex. But, she acknowledged, the Center has seen some tough times even since those halcion days.

However, Eshoo said, she is very excited about the prospects for the future of the Center. "NASA Ames has gone through its bumps in the road," she declared. "I am thrilled about where you are now and how far you have come." In particular, she referenced the improved morale at Ames, and said that she is truly "heartened" by the huge amount of progress that has been made in a relatively short time.

Eshoo praised Center Director Henry McDonald for what she referred to as "his steady, firm, quiet and enlightened leadership." And she further cited the Center for its new approach to community outreach -- for dispensing with the old paradigm and embracing an approach that involves working with local cities and becoming a true part of the fabric of surrounding communities. "Never underestimate how much can be done by establishing close working relationships," she advised.

Eshoo said that Ames has come out of the recent budget scenario in a strong position. She said the Center is in the "going-in position" of having a planned $48M increase over the current $550M annual budget figure. This gives the Center a chance to "go in with a leg up," she said. This has only resulted because "Ames is excelling at what it is doing."

Eshoo put her considerable knowledge of, and support for, Ames programs and future directions on display, expressing her support for SOFIA, the new Astrobiology Institute, and for Ames' leadership role within NASA in information technology. She called the Astrobiology Institute an "enlightened effort," and said that it has "a great deal of vision to it." She also expressed support for other Congressional initiatives to put money into the Next Generation Internet ($110M), the Tasmin light rail project ($39M), and a variety of educational programs and efforts to help develop computer centers in less affluent neighborhoods, although she called the $10M earmarked "a measly amount" in the overall scheme of things.

photo by Tom Trower

Congresswoman Anna Eshoo addresses Ames employees during a townhall meeting in the Space Sciences auditorium.

Eshoo spent much of her time talking about the forthcoming budget surplus and her opposition to using it to fund a tax cut. It is Eshoo's belief that "we should hold the budget surplus on reserve and use it to fix the Social Security system on a long-term basis." While we are not doing enough for those in the "spring of their lives," she acknowledged, it is imperative that we take care of those in their autumn years. To do so is "a definite yardstick of our society," she suggested. "We have nothing short of a stunning economy" at the present time, Eshoo observed, "but everyone is not a part of it." She concluded that it is essential that we open up the American dream to all of our citizens.

Eshoo expressed concerns about the K-12 public school system. And she made it clear that she does not see a voucher system as any part of a comprehensive answer. "Our University system is the envy of the world," she said. "But nobody comes to the US to observe our K-12 system."

Eshoo said that her three main hopes for the current 105th Congress are that they will pass tobacco legislation "rooted in the public's health;" that they will not "blow the balanced budget we have come to" and will use it to address the long-term problems of the Social Security system; and that they will begin the process of reforming the abuses that are part of the managed care system. She added a fourth goal -- the need for Congress to act in the educational arena to assist local school districts.

Eshoo said that she "loves doing town hall meetings" and getting a chance to "go face to face with her constituents," addressing their concerns and answering their questions. She

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Ames ISO Web-site address: http://nasarc1.arc.nasa.gov/iso9000/index1.html

photo by Roger Brimmer

Ames logo contest - grand prize winner!

Cheryse Triano

The NASA Exchange presented Cheryse Triano with the grand prize check for $1,000 for her creative new design.

Congratulations!

Cheryse Triano holds a copy of the new Ames logo that she designed. The logo will be used in a variety of venues as an updated image of the Center and its mission. The Exchange Gift Shop will soon feature new t-shirts and other products displaying the updated image.

Ames captures three national JASON project awards

The JASON Foundation for Education selected the technical crew from the NASA Ames Research Center as one of the top five groups for its teamwork and problem-solving during the JASON IX Expedition held in March. The awards were handed out at the spring Primary Interactive Network Sites (PINS) conference in Biloxi, Mississippi in May.

A special public relations commendation was given for publicity, media relations, and press releases to Ames' Mike Mewhinney of the Office of External Affairs. His release, entitled "Students To Explore Ocean Environments During JASON Project," was designated a model document for the year.

JASON project coordinator Lisa Marie Gonzales was also honored for her efforts in creating the new "model" interactive site. Special achievements included the hands-on exhibits in Hangar One, quality of student participation, and activities taking place during the telepresence in the auditorium.

Twenty-nine sites around the United States, Bermuda, and England competed for the awards. This is the fourth year that Ames Research Center has hosted the JASON Project. The JASON X expedition, to be held in March 1999, will take students on a comparative field trip to the rainforests of Colorado, the Olympic Peninsula, and the Amazon Center for Environmental Education and Research in Peru.

Galileo scholarship winners

photo by Dominic Hart

From left to right: Sandy Chang of Homestead High School, Sunnyvale; Shirley Ni of Leland High School, San Jose; Lewis Hyatt of Camplindo High School, Lafayette; Steven Huynh of Raoul Wallenberg Traditional High School, San Francisco; and Manu Seth of Piedmont Hills High School, San Jose.

NHUs "Sky is the Limit" student workshop

photo by Tom Reddy

Ruben Ramos of Ames briefing the students.

The National Hispanic University hosted a field trip on May 29 for freshmen, sophomores and juniors who are interested in learning the steps to making it to college, as well as the latest advances that NASA has made in technology and inter-planetary research. The event was sponsored by Ames and East Side Union High School District.

Summer interns tour Ames

photo by Roger Brimmer

The Office of External Affairs' David Morse (far left) discusses the Lunar Prospector mission with summer interns, (from right to left) Ali Finley, Andreas Woods, Bobby Craft and Ramonica Green.

Master of science in systems management at Moffett,

The College of Notre Dame continues to develop its delivery of the Master of Science in Systems Management (MSSM) degree program offered at Moffett Field. A new sequence of classes now includes reduced classroom meetings along with student and instructor discussions using the Internet.

Systems management focuses on innovation and successful management of the whole system through both analytic tools and people skills. The MSSM degree program emphasizes immediate application of systems principles to students' work where the people, technology and projects create complex, rapidly changing systems. Internet discussions are a natural part of the learning environment for MSSM students because they serve as a laboratory for managing teams using this environment, and improve ease of course delivery to working professionals.

The MSSM has a long, successful presence in the Bay Area, meeting the needs of managers working in organizations such as the Air Force, NASA, Lockheed Martin, Sun, and Hewlett-Packard. Engineers, software and hardware developers and managers, human resource and marketing professionals can develop skills for managing people, technology, and projects in these high-tech environments. The MSSM is offered at three Bay Area sites including Moffett Field, Belmont and Oakland City Center. It accommodates students' professional lives offering evening and weekend classes, and Internet-augmented online learning. Degree requirements include completing twelve 3-unit courses. Cost per semester unit is $460.

COLLEGE OF NOTRE DAME CALIFORNIA

For more information about the program and to arrange a personal information meeting, contact the MSSM at 650-960-0677 or mssm@cnd.edu.

Visit the program site at http://www.aimnet.com/~mssm

BY DR. SYLVIA SHAFTO

NASA/Ames Branch ATM has moved

The Golden Bay Federal Credit Union relocated their NASA/Ames Branch ATM from Bldg. 204 to the Ames Cafeteria. A "Grand Opening" celebration will take place on Tuesday, June 16, from 11:30 a.m. to 1:30 p.m. The NASA Exchange will provide cake and coffee during the celebration.

In addition, the Credit Union will be giving away special goodies for all who stop by their membership table and ATM. Credit Union representatives will be onsite to open new accounts and answer any questions regarding their products and services.

Sports Day

The Naval Air Reserve Santa Clara is sponsoring "Sports Day" on Friday, June 26, for all personnel at Moffett Field. All NASA employees, including NASA contractors, are invited to participate.

Planned events to be held at Chase Park are as follows:

Softball	10 member teams
Volleyball	6 member teams
Basketball	5 member teams
Racquetball	2 member teams
Golf	4 member teams
Tug-of-War	6 member teams

(Including Darts, Horseshoes and Pool)

A schedule of team order and game times will be determined and distributed after the total number of teams is established. The games are anticipated to be modified by limiting the time or number of innings and/or rounds as applicable to fit all tournaments into a 1-day event (8 a.m. to 4 p.m.)

The Navy MWR will provide a barbecue lunch at Chase Park for participants. Trophies will be awarded to winning teams in each event.

Please call Mr. Dave Kane at ext. 3-8963 if you interested or to request further information.

Briefs

Evidence of abundant water, thermal activitiy in Mar's past

New mineralogical and topographic evidence suggesting that Mars had abundant water and thermal activity in its early history is emerging from data gleaned by NASA's Mars Global Surveyor spacecraft. Scientists are getting more glimpses of this warmer, wetter past on Mars while Global Surveyor circles the planet in a temporary 11.6-hour elliptical orbit.

In addition, the Global Surveyor accelerometer team has discovered two enormous bulges in the upper atmosphere of Mars in the northern hemisphere, on opposite sides of the planet near 90 degrees east latitude and 90 degrees west longitude. These bulges rotate with the planet, causing variations of nearly a factor of two in atmospheric pressure, and systematic variations in the altitude of a given constant pressure of about 12,000 feet.

Possible runaway planet found

NASA's Hubble Space Telescope has given astronomers their first direct look at what is possibly a planet outside our solar system -- one apparently that has been ejected into deep space by its parent stars.

Future observations call for images taken at a later date to confirm the object's predicted movement across the sky. The spectrum of the object will tell whether the object is a background star, brown dwarf, or something whose spectrum is less easy to predict, such as a giant protoplanet.

Solar flare leaves sun quaking

Scientists have shown for the first time that solar flares produce seismic waves in the Sun's interior that resemble those created by earthquakes. The scientists observed a flare-generated solar quake that contained about 40,000 times the energy released in the great 1906 earthquake that devastated San Francisco. (The amount of energy released was enough to power the United States for 20 years at its current level of consumption, and was equivalent to an 11.3 magnitude earthquake.)

The data were collected by the Michelson Doppler Imager onboard the Solar and Heliospheric Observatory (SOHO) spacecraft immediately following a moderate-sized flare on July 9, 1996.

Arctic expedition probes role of clouds in climate change

An ice-breaking ship, research airplanes, space satellites and an international team of scientists are converging in the Alaskan Arctic this month to learn more about global climate change through the study of clouds and radiation of the Sun during the spring and summer.

FIRE (First International Satellite Cloud Climatology Project Regional Experiment) is led by NASA, in collaboration with other government and private organizations, and will take place in Alaska in the Beaufort Sea and in the skies over the coastal town of Barrow.

Tennis ball experiment

NASA Ames recently conducted wind tunnel tests of a large tennis ball model to learn more about the ball's aerodynamics and its flow physics characteristics.

Conducted in the Fluid Mechanics Laboratory's 3-foot by 4-foot wind tunnel May 26-29, the test was part of the 'Aerodynamics in Sports' project, a cooperative agreement to educate young students on the science of sports between Ames' Learning Technology Project (LTP) and Cislunar Aerospace Inc., a Napa-based engineering consulting firm. Test data were shared with participating elementary, middle and high school students over the Internet.

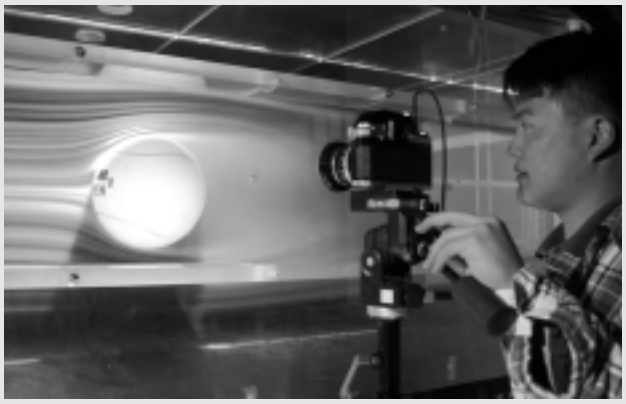

photo by Dominic Hart

Over-sized tennis ball as it is subjected to the wind tunnel tests.

"One of the benefits for students, is that sporting activities are a natural attention grabber," explained Dr. Rabi Mehta, an Ames research scientist and the project's advisor. "For the elementary and middle school students and educators, the tennis ball is a familiar and 'less scary' object to study, compared to an aircraft or airfoil, and yet the same aerodynamic principles can be discussed."

Up to now, most of the scientific research has been conducted on cricket balls, golf balls and baseballs, but not on tennis balls. The wind tunnel tennis ball tests at Ames demonstrated how wind tunnel experiments and Computational Fluid Dynamics (CFD) simulations are used together to calculate aerodynamic forces and to predict a ball's flight path.

"From our point of view, we're interested in flow physics - how the flow of air around the ball varies with speed, spin rate and change in surface roughness (fuzz)," Mehta said.

"Since our project is oriented towards elementary and middle school students, the most effective presentation of wind tunnel data is through smoke flow visualization results," Mehta said.

"Flow features such as boundary layer transition and separation and the burbling effects of turbulence in the wake region can all be readily demonstrated and explained to the young students," he added.

In addition to NASA, project team members include aerospace engineers from Cislunar Aerospace Inc., sports scientists from the US Tennis Association and other organizations.

The team is studying ball aerodynamics (including the effects of velocity and spin rate), ball/court interactions and player biomechanics. Team members were guests at the 1997 US Open where they collected data in the form of high-speed video, and they have been invited back to the tournament again this year.

"At each step, the goal is to showcase aerodynamics concepts and the work of NASA," Mehta said.

Mehta and other NASA scientists have been discussing the aerodynamics of sports with students over the Internet using LTP's Learning Technology Channel (http://quest.arc.nasa.gov). An Internet video presentation of the actual wind tunnel test will be shown in early June.

Further information about the project is available at the project website: http://wings.ucdavis.edu/Tennis.

BY MICHAEL MEWHINNEY

Hillary Clinton goes back—and forward—to school

On May 13, first lady Hillary Rodham Clinton learned that it doesn't take big pipes to tap into a huge reservoir—sometimes a straw will do.

That was the lesson when she went to a French schoolhouse for a demonstration of how Internet-based educational opportunities will eventually be distributed to a worldwide, multilingual student body through low-bandwidth, low-cost, off-the-shelf technology.

photo by Pam Sheets

Hillary Clinton speaking at a French schoolhouse on the benefits of Internet-based educational opportunities.

This demonstration of the benefits of advanced computing being delivered to ordinary citizens was also witnessed by NASA Administrator Daniel S. Golden, as well as the U.S. Ambassador to France, the President of Centre National d'Etudes Spatiales (CNES-the French National Space Agency), the French Ambassador to the U.S., and the French Minister of Education.

The educational technologies demonstrated at this event were: (1) a French interactive software that permits shared control of a program providing layers of environmental data within a single *birds-eye* view of a location; and (2) an American interactive program that involves students around the world as expert, ground-based observers validating satellite-observed ground conditions.

The event is the result of the close collaboration between NASA and CNES. Learning Technologies Project (LTP) Manager Mark León of Ames, said, "Participating at this level is a profound opportunity for both NASA and CNES. While we are serious competitors at the national aeronautics level, we are equally serious about finding and creating opportunities to cooperate in the service of education, which is for the common good of all humankind."

Also contributing vital resources and expertise to the success of this project were individuals from NASA's software debugging group, the Independent Verification and Validation facility and from the LTP units within NASA's High-Performance Computing and Communications Program at Goddard Space Flight Center, Langley Research Center, Lewis Research Center and ARC.

Observing the demonstration from the French National School of Chemistry, Physics and Biology in Paris were first lady Hillary Clinton; Ambassador and Mrs. Felix Rohatyn; Alain Bensoussan, CNES President; Jeffrey Hoffman, NASA; and Mrs. Segolene Royal, France's deputy education minister.

Across the Atlantic ocean, observers at the Kramer Middle School of Environmental Studies in Washington, D.C., included NASA Administrator Daniel S. Goldin and his Excellence Francois V. Bujon (Ambassador, Republic of France), while the Brooklyn School for Global Studies in New York hosted M. Richard Duque, Consul General of France.

Back in France, students at the American School of Paris also participated.

This two-continent event demonstrated LTPs expansion to Europe. The LTP *broadcasts* live audio and video across the Internet from NASA's Ames Research Center to 10 other NASA centers. These centers then act as transmitters, providing local access to a constantly expanding global network of science and space information and education.

photo by Pam Sheets

Left to right: Kristen Fourtney, Eric Morgan, Hillary Clinton and Vincent Montibus

The May demonstration of the expanding global network presented two examples of what is possible: Titus and SCOOL.

Titus is a French application that allows geographically distributed users to collaborate and simultaneously view selectively filtered levels of a satellite-generated image and to share control of the program itself. In this project, Titus was used sequentially by students to *webcast* satellite photos of their respective top sights in Washington, New York and Paris, and to study and compare vegetation, water sources and anti-pollution measures. At each point in the presentation, control of the system was resident at the location being presented.

"You didn't show us where I live," Mrs. Clinton chided a Washington, DC student who failed to point out the White House as he noted other landmarks to an Internet audience during the presentation. "I want to make sure it's still there while I'm gone."

Student Cloud Observation On Line (SCOOL) is an American project that encourages individual students to recognize how they, their school and data from orbiting satellites, such as the optical, land-mass images from LANDSAT, are connected. In this case, downloaded NASA data allow students to determine when a LANDSAT or other satellite is making observations directly over their schools. When the satellite image of the clouds and ground cover near the school is downloaded, students make simultaneous, local, ground-based observations to validate the satellite information. Thousands of students from 117 schools in 12 countries currently contribute data to SCOOL.

León explained that "the 18-month goal of this project is to interact simultaneously with 5,000 schools across the nation. We are six months into the project, and we can already support 1,500 schools online, with students listening to audio content from NASA Ames and asking questions in live chat windows."

The Learning Technique Channel allows educators and the general public to participate in courses, workshops, seminars and other events that probably would not be available to them without leaving their schools or homes and going to a specialized Net access site. The LTC originates from ARC and is a service of the Quest Project, which produces many NASA educational websites supported by the LTP within the High-Performance Computing and Communications Program.

In addition to sharing NASA on the Internet and making available a huge reservoir of science data, another central focus of the LT Channel is to provide

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Wind Tunnel/Simulator Divisions Pass ISO Certification Audit

DNV auditors announced on May 28 that the Wind Tunnel Operations Division (Code FO) and the Simulation Operations (Code AFO) and Systems (Code AFS) Branches, formerly Code AO, passed the ISO certification audit with no major nonconformances. After the organization sends DNV a plan for corrective actions for the eight minor nonconformances found, DNV will issue the official ISO Certificate. As a team of civil servants and contractors, the former AO Division has reached their 2 1/2 year goal to become ISO certified.

The division's effort began when an AO management group in January, 1996, decided that the division's TQM efforts should be redirected to ISO. Bob Shiner, AOS Branch Chief, was appointed the management representative by Roy Presley, the AO Division Chief at that time and a great proponent of TQM. A Management Review group of branch and division management as well as AO contractor site managers met monthly for two years to oversee the implementation of ISO.

After the decision was made to go for ISO certification, seven working groups, involving about 60 civil servant and contractor employees, were formed each with an assignment to write sections of a Division Quality System Manual. The manual was developed with a combination of policies and high level procedures. The working groups faced the arduous task of trying to understand and agree upon the meaning of the ISO elements as well as to agree upon the implementing procedures. The challenge was to write the sections so that the two simulator facilities, VMS and CVSRF, and the two wind tunnel cultures, high-speed and low- speed, could agree on a procedures for the manual. In retrospect, although the working groups' task was difficult, many in the division learned about ISO through this effort. The working groups completed the sections in about six months. Management spent an additional three months reviewing and approving the sections

Once management approved the Quality System Manual, many employees became involved in writing or revising implementing documents, which took about one year. Also during this time, Bob Shiner, who initiated the effort, stepped down as management representative. Ron Johnson, now the FOF Acting Branch Chief, was appointed as the new management representative.

Added to the division's challenge was the center's decision to become ISO certified. Center management debated whether the AO Division should continue on with their effort, which had been underway for a year, or fold into the center's schedule. Fortunately, the center supported AO's determination to be ISO pathfinders and to be certified separately one year ahead of the rest of the center. Another challenge was that AO was reorganized into two different directorates last fall. Again, the decision was made to continue on under one certification.

Was the effort worth it? The answer is overwhelmingly, yes. Although documents existed for running the facilities, the procedures needed to be standardized and updated to reflect changes over the last few years. ISO provided a focus for coordination of staff efforts to write and revise procedures which resulted in improved documentation on the development and management of data in the wind tunnels and simulators.

As pathfinders down the road to ISO certification, the wind tunnel and simulator facilities personnel can share lessons learned. One such lesson is that ISO has to have real benefit and not just be an exercise for individuals already overwhelmed by too much to do. ISO can be the leverage to streamline work, reduce errors, improve communication and take the arbitrariness out of processes. ISO becomes a part of how business is done and not just an add-on. Following the rigorous requirements of the ISO elements, most would agree, does develop a true quality system. Division employees are certainly willing to share other specific lessons learned.

The key to ISO certification is teamwork. Many people were involved either writing sections of the Quality System Manual, conducting internal audits, or writing procedures for their functional area. Throughout all parts of the organization there were many unsung heroes who attended the quality training classes, found appropriate documents on the servers, used and reviewed new procedures , and spent time preparing for both internal and external audits. They could recite the division quality policy backwards and forwards!! Without this dedication and support from everyone, the task could never have been accomplished. Each and every person in the wind tunnel and simulator facilities should feel pride in a job well done. All deserve a big CONGRATULATIONS. Soon the Center will see ISO CERTIFIED banners flying on wind tunnel and simulator facilities at Ames.

By Sally Brew

Weight Watchers at Ames... *- new session!*

Nineteen Ames employees have lost over 160 pounds in seven weeks. That would be the Weight Watchers group that meets every Monday at 11:30 a.m. in the Ames Cafe - Galileo Room. The class members are getting helpful training in healthier eating habits and ideas for incorporating exercise into busy life styles.

On Monday, June 15, there will be an Open House for all employees who are interested in signing up for the next 10-week session which will start on Monday, June 29. Please stop by the Ames Cafe Galileo Room on Monday, June 15, at 11:30 a.m. to learn about the program and meet some of the people that have already discovered success.

Please note that the Weight Watchers at Work Program is less expensive than joining the externally held Weight Watchers sessions. Ten weeks for only $89 -- that's a $30+ SAVINGS!

Class dates are:
6/15 - Open House
6/29
7/6
7/13
7/20
7/27
8/3
8/10
8/17
8/24
9/1

If you have any questions, please contact Betsy Robinson at brobinson@mail.arc.nasa.gov

Astrobiology Institute selection

NASA Headquarters has announced that Ames is one of the eleven successful proposers which submitted in response to the Agency Cooperative Agreement Notice soliciting membership in the newly formed Astrobiology Institute.

This Institute, which will in addition be managed by Ames, will be at the forefront of research into the new interdisciplinary field of the issue of life in the University, its origin, distribution, and destiny.

Ames scientists successfully competed for Institute membership in a hotly contested peer reviewed field of some fifty three excellent submissions from major research institutes in the United States and Europe.

photo by Roger Brimmer

Center Director, Henry McDonald (right), shaking hands with Louis (Lou) Allamandola (left) of Code S at the Ames proposal for membership meeting.

Hernandez turns fifteen

On May 21, Hernandez Engineering, Inc. (HEI) celebrated its 15th anniversary with employees at Ames Research Center. As incumbents for the system safety, reliability and quality assurance (SSR&QA) support service contract at Ames, Hernandez management decided to visit this site, as well as their other host locations across the country, in order to share the occasion with employees and customers alike.

At Ames, owners Mike and Terry Hernandez presented ARC/HEI employee Richard Chase, lucky winner of a random drawing, with a trip for two to New York City. Twelve such lucky employees' will be honored by Hernandez at their sites across the country throughout the course of the company's year-long celebration.

In thanking Ames workers, Mike Hernandez acknowledged the 3 years of excellent support the company has received from its workforce during its association with Ames. He expressed his belief that the success of an SSR&QA contractor is a direct reflection of the quality of its staff. And he pointed out with pride that, for two consecutive years, the Hernandez contract at Ames has produced award winners, specifically Barry Grimm and Alexis Flippen, in the Quality Assurance Special Achievement Recognition (QASAR) program. Hernandez concluded by saying that the company is committed to long-term, steady growth and is looking forward to an even larger celebration for the company's 25th anniversary.

BY DAVID MORSE

photo by Beverly Sauler

Ames/HEI party-goers gather for 15th Anniversary team photo.

photo by Beverly Sauler

From Left to right: HEI Vice President, Tery Hernandez, congratulates drawing winner, Richard Chase, along with SSR&QA Program Manager, Dave Zimmer.

Hillary Clinton goes back—and forward—to school

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training to educators, wherever they are located. Many teach at local schools just now connecting to the Internet, commonly with low-end technology such as 28.8 Kbps modems operating across phone lines. And for those schools accessing at even slower speeds of 9.6 Kbps, a real-time transcription of some programs on the audio channel are presented in an all-text chat window. Instead of a pipeline into the reservoir, these users are making do with a straw.

The Titus and SCOOL activities are the fruit of an ongoing educational collaboration between the U.S. and French space agencies, giving French and American students access to scientific data from both agencies. Students also work together via the Internet to share information and collaborate, as well as interact with NASA and CNES personnel.

Mark León, who spearheaded the technology for the event, states, "Although this has been an impressive demonstration for the VIPs and press, our intention was never merely that. Our design was, and is, to demonstrate that superior, curriculum-enhancing content can be accessed by the vast, worldwide range of educational institutions, instructors and students. It is available even to those whose access to the treasures of NASA-on-the-Net is limited to one pair of twisted-copper wires and a telephone modem." The proverbial straw, as it were.

"The LTP's communication of science is something that belongs to all students and citizens of the world, and we are building the technology that will put the information in their hands. We will have succeeded when events such as those carried out here today are performed routinely in every educational setting and are considered unremarkable and ordinary," León concluded.

For more information, see the Learning Technologies Channel's web page at *http://quest.arc.nasa.gov/ltc*

BY TOM MEAD

Recent VIP visitors to Ames

Brant Sponberg, White House Office of Management and Budget (OMB), Budget Examiner for Space Science and Advanced Space Transportation Technology visited the Center on Friday May 22. Brant has worked at OMB for nine months and not visited the Center before. He has an undergraduate degree in Astrophysics and the History of Science, Masters degree in Science and Technology Policy. He was given the Ames overview by Deputy Director Bill Berry and briefed on Space Science/ Astrobiology by Larry Manning and Dr. Larry Caroff. He toured the Biocomputation Lab (Dr. Muriel Ross), the SOFIA Project (Chris Wiltsee), International Space Station Biological Research Project (John Givens), Lunar Prospector mission control (Bob Jackson), arc-jets facility, X-33, X-34, (Carol Carroll), NAS Supercomputer Visualization Lab (Dr. Tom Lasinski), and Neural Nets (Dr. Robert Mah). At lunch, Dr. Francis Everett, Stanford University, briefed on the Gravity Probe B mission.

On May 29, Congressman Tom Campbell's Washington DC and local staff visited the Center, including: Ed Siebert, Legislative Assistant on Energy, Power, Environment, Agriculture; Joel Starr — Defense, Education, and Labor; Suhail Khan, Press Secretary; and local staffer Dennis Cima. The group visited the Biocomputation Lab (Dr. Muriel Ross), NAS Supercomputer Vis Lab (Dr. Tom Lasinski), Neural Nets (Dr, Robert Mah), Crew Vehicle Systems Research Facility (Barry Sullivan), and Air Traffic Management (Dr. Heinz Erzberger).

On June 8, Ed Heffernan, Associate Administrator for Legislative Affairs and White House Liaison; Lori Garver, Special Assistant to NASA Administrator; Patrick Mellody, Special Assistant to NASA Administrator, Dr. Charles R. Denham, MD; and Betsy Ross, Assistant to Dr. Denham visited the Center. Dr. Denham is touring all the NASA centers to gain a better understanding of NASA technologies and commercial applications. He is also a pilot. The group received the Ames overview by Deputy Director Bill Berry and toured the NAS Supercomputer Vis Lab (Dr. Tom Lasinski, Gina Morello, Chris Gong), Neural Nets (Dr. Robert Mah), the Crew Vehicle Systems Research Facility (Matt Blake, Barry Sullivan), the Biocomputation Lab (Dr. Muriel Ross), arc-jets facility, X-33, X-34 (Carol Carroll), Air Traffic Management (Dr. Heinz Erzberger), infrared detectors for astronomy (Dr. Craig McCreight), the 80x120 wind tunnel (Brenda Collins) and Hangar One. At lunch, they were briefed on the Ames Commercial Technology Program by Acting Chief Carolina Blake.

Italia numero due

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The thread is stretched but unbroken. Thomaso and his son both play brass instruments in "La Bandadi IntroD'acqua," as my grandfather played a century before.

After leaving for America in 1901 at the age of seven, my grandfather never went back to the Abruzzi. The last he saw of his parents were two tiny hands waving from behind a lace curtain. And the tears on his mother's face, like diamond stigmata. He was part of the first wave of emigrees that left the hamlet for Mott Street in New York, for Chicken Street in Carracas, and for Vieux Carre Street in Rio, followed by a second identical wave after WWII. Nella regione Abruzzi non era lavore. In Abruzzi, there was simply no work.

Now, Thomaso and Annuncia fear their children will leave for the prosperous north after graduating university.

Coda / Fina: By the way, my nose is okay. Two weeks after I got back it peeled, undramatically. I was a great curiousity among the nurses and PA's at Dr. Rubenstein's. He examined me under a halogen light and pronounced the nose "perfect," amending with "as it was before."

Standing there surrounded by lights, metal instruments and the curious interested faces of Dr. Rubenstein and his assisting nurse, I felt like Marco Polo, returning, a cache of silks and spices in my backpack; (lit up with the light of a thousand stars, reflecting the light of a thousand campfires in high mountain passes). With a wild and dangerous glint in my eye that spoke of tangled stars, of stories that would never be told.

BY KATHLEEN BURTON

Street Fair set for July 15

After a six-year hiatus (can it really have been that long?), the Multicultural Street Fair returns to Ames on July 15. Dancing, music, art and food from different parts of the world will be featured. Meal tickets will be available after June 8 at a cost of $5 each. Individual tickets will purchase one complete meal from a selection of Asian-American, European-American, Hispanic-American, African-American, Native American, or just plain good ol' American (i.e. hamburgers, chips and soda) cuisines. The choices are extensive, the cost is not expensive, and the food is merely the beginning. Bet you can't wait!

The Street Fair is sponsored by the Center's Multicultural Leadership Council (MLC) in the spirit of fun, and in an effort to expose the entire Ames community to a variety of different cultures. The hope is that, through the experience of entertainment, conversation and food in a relaxed and enjoyable setting, Ames employees will become more receptive and open to a broader range of people, ideas and customs. The ultimate goal of the MLC is to help promote a diverse and multicultural workforce at Ames, and a work environment free from discrimination — that is open and receptive to all, and hostile to none. The theme for this year is "STRENGTH THROUGH DIVERSITY."

Further details on the entertainment, where to buy food tickets, and menu specifics will be made available in an upcoming Astrogram article. That information will also be posted on flyers all around the Center in the next few weeks.

Come out and celebrate the passing of El Nino. Join Ames senior managers, your colleagues and friends in enjoying the warm July summer that we have all waited so long for and which we richly deserve!

Volunteers are still needed for set-up and clean-up. Those interested in contributing a modest amount of their time to help make this event a big success, may contact one of the following:

• Mary Buford Howard (mbhoward@mail.arc.nasa.gov),
• Mary Salcido (msalcido@mail.arc.nasa.gov), or
• Joe Shields (jshields@mail.arc.nasa.gov)

Accomplishment through participation is its own, and best, reward.

The Ames' Multicultural Leadership Council is an advisory group comprised of members from all segments and ethnic groups within the Ames community. The MLC works with the Equal Opportunity Programs Office, the EO Board, the EO Working group and all advisory groups at Ames to promote diversity issues and a multicultural workforce. Past activities of the MLC have included sponsorship of a diversity conference, training classes on diversity, and the Center's renowned Diversity Dialogue Groups.

Last year, the MLC worked with Center Director Henry McDonald and the EOP office to help develop a policy statement of non-discrimination at Ames. The group is currently developing a program to recognize model managers and leaders at the Center. This summer, MLC will co-sponsor a retreat for all Ames advisory groups in conjunction and cooperation with the EOP office.

For further information, or to learn how to get involved in MLC activities, interested parties may contact MLC co-chairs: Sheila Johnson (sajohnson@mail.arc.nasa.gov) or David Morse (dmorse@mail.arc.nasa.gov).

By Mary Howard

Ames Aerospace Encounter - Ames Employee Day

On Wednesday, June 24, from 10 a.m., until 2 p.m., the Ames Aerospace Encounter will be holding another in their series of "Ames Employee Days at the Ames Aerospace Encounter." The Encounter is located on the second floor of Bldg. 226.

All on-site personnel are invited to come, bring their family and friends for a self paced tour (allow about an hour). No registration necessary. The Encounter is open on a drop in basis during this event.

This is a special opportunity for children and guests to see and experience this unique interactive facility that makes math and science come alive. The Encounter is booked year round with 4th, 5th & 6th grade student fieldtrips. We have opened two dates this summer to accommodate the request of Ames employees to share this learning facility with their children.

Please note that children must be accompanied by an adult at all times and that Employees are responsible for arranging to bring their guests onto Moffett Field.

The next Ames Employee Day at the AAE is Thursday, August 27th, from 10 a.m. until 2 p.m.

Visit the Encounter's website at http://ccf.arc.nasa.gov/dx/encounte.html

Red Cross blood drive - June 22

NASA Ames will be hosting a Blood Drive in cooperation with the Red Cross on Monday, June 22, 1998. The Blood Drive will be held from 7:30 a.m. to 3:30 p.m. in Building 3, the Moffett Training and Conference Center.

Blood is a natural resource which cannot be manufactured. Until scientists find a blood substitute which is comparable to human blood, the only way to ensure a safe and adequate supply is for healthy individuals to donate on a regular basis. The average adult has approximately 10 to 12 pints of blood in his/her body. A person easily adjusts to the loss of the pint that is donated, and can safely give again every 56 days, up to 6 times per year.

There are four major blood types: O, A, B, AB. Red blood cells contain chemical compounds which combine in different ways to determine a person's blood type. Blood types are inherited through genes and do not change during one's lifetime. While all blood types are needed, there is a special need for group O donors because group O is the universal blood type. When an emergency occurs and there isn't time for a patient's blood to be typed, type O blood comes to the rescue.

When you give blood, you give a precious gift. A single blood donation can save as many as 4 patients; one of them could be someone you know or even yourself. Patients rely on healthy people in the community to voluntarily make blood donation part of their lives. Giving blood is safe, easy and takes little time away from one's life to save another life.

All medically eligible donors are invited to participate in this life-giving process. Registration can be made via the World Wide Web. To make an appointment, please go to the location site: http://dq.arc.nasa.gov/dqh/blooddonation.htm. Click on Register Now To Give Blood. Choose a time slot and you're done.

If for any reason you are unable to register, please contact Chaz Czaplicki for assistamce. Also, those interested in participating in the Bone Marrow Donation Procedure are also welcome. For more information on the Bone Marrow Donation, please contact the author at ext. 4-6942.

by Chaz Czaplicki

Italia numero due - The Abruzzi

Editor's note: This is part II of Kathleen Burton's Italy story part I of which ran in the April 3 issue of the Astrogram.

I left Florence in a thin drizzling rain on the Rapido, bound for Pescara on Italy's Adriatic coast. I disembarked at Sulmona, the nearest town to my grandfather's village of Intro'Daqua, at midnight. Everything, of course, was closed and the iron awning of the stazione tabacchi was rolled down tight like a closed eye.

A man and his wife who'd gotten off the same train offered me a ride to Sulmona in their rusty green Fiat (with four-cylinders and the power of a lawn mower). We drove through the blackness over a mountain pass toward a tiny sprinkling of lights. They dropped me at the Pensionne Albergi where I had the guilty pleasure of watching my first TV in a week — Colombo, with subtitles.

That night, I dreamed about my mother and grandfather eating black, pitless olives from a bowl. On Sunday morning, I got my first look at Sulmona. Located in a valley, surrounded by the snow-capped Apennini, the town of 20,000 was abloom with mimosa, wild primrose and goldenrod, all washed in the electric green of Italy's cold, late spring.

Ovid, the Latin poet, was born here in 43BC, as was Pope Innocenzo VII. Fronting the Maiella National Park, the Abruzzi is known for its goldsmith workshops, stonemasonry and artisans. In the feudal societies of the 11th and 12th centuries, the world here spun around the monasteries and castles, in whose hands the land the only source of wealth—was held.The people of the Abruzzi have always had to struggle—with internecine conflicts, with the stony, uncooperative land, and with the conquering waves of armies that periodically swept the region— the Spanish, Bourbon and Aragonese, and before them, the Samnites and Romans.

Wandering among Sulmona's Sunday passegio (the Italian custom best translated as "strolling"), I photographed the original Roman town gates, porticos, engraved porches and wells, a medieval aqueduct and the baroque Santa Chiara monastary.

That afternoon, I took a taxi to Intro Daqua, 6 kilometers away. At 650 meters, Intro Daqua is located at the confluence of Valle Saint Antonio and San Benedetto dell'Alpe. The cabdriver pulled up at a landscaped townhouse, rang the bell and spoke into the intercom in rapid Italian. Thomaso de Francesco, my second cousin, bounded out to welcome me. Small, dapper and black-moustached, Thomaso didn't speak English, so we resorted to pidgin Ital-ish, hands, and sketching on the backs of thin blue airmail envelopes.

Inside, Annunciata, Thomaso's wife, offered me espresso and sugar covered almonds. Their two teenage children, a boy and a girl, gave me that universal teenage death-ray look that said "You're not as cool as we are!" and quickly dove back into their analytic geometry homework. The grandfather and cukoo clocks ticked loudly, one beat off each other, like sparring jazz musicians.

Thomaso is a bureaucrat at the coutume (court house). He suggests a walk to the campanile with a stop at the courthouse to look for my great grandfather's records (birth, marriage or death). My grandfather's father, he tells me, was a red-haired french orphan who emigated to Intro Daqua in 1880 and became the town baker.

The three of us bundle into coats and stroll up a serpentine road past scrub-filled ravines and ochre and grey houses. We stroll past strings of laundry and climbing Tuscan roses (roses d'ogni mese), as deep and red as garnets. Thomaso explains that the town has not had an economic infrastructure since the 30s, and that the only jobs here are highly-prized government jobs or working for the Fiat plant, 30 kilometers away.

Thomaso and Annunciata both have those green-grey Abruzzi eyes; eyes that look like water, eyes that look like the color of the ocean (the day) after a storm. The Di Paulo eyes that my mother and I both inherited.

Intro Daqua is a town of 2,000 (smaller than my high school), and everyone knows everyone else. Thomaso winks at a gimlet-eyed man in a fedora backing a smog-belching 48-inch wide truck down this 50-inch wide medieval cobbled lane. "Ma lui e pazzeo" he mutters. In the square, boys play soccer, one with a faceful of measles. Three older women in suits coming from church (as they have every Sunday for the past 20 years) carry bouquets of mimosa and wild roses, their arms linked.

Walking, we pass lots of police—carabinieri, polizia, vigili municipali and urbani. Thomaso can't explain the difference between them.

Francesco DiPaulo and Jenny DiPaulo, in Livingston, NJ, May 1956.

At the courthouse, our search is disappointing. The DiPaulo records, Thomaso says vaguely, waving a hand in the air, are in Rome being microfiched. The subject is dropped. We walk on.

We reach the campionelle, a lonely slag heap cut by an icy wind. Next to it is an abandoned church, its blue door hanging by a hinge, the stones of the bascillica tumbling down. At the altar, the angel's wing is ripped off and the rusted metal support sticks through. The angel has a look of blank, inward concentration.

We have a 360-degree view of the valley and, in the distance, Mt. Playa and Mt. Genzana. I look at Mt. Playa and think of my grandfather. "Plant a seed, and up springs a musician," is a saying about the people of Abruzzi. With no training, my grandfather could play the reed pipe, a bagpipe made of sheep's bladder and a guitar. But the double-stringed mandolin was his weapon of choice. I remember him sitting in the garage on an overturned crate in his undershirt and suspenders playing lightning licks on Celito Lindo and Come Back to Sorrento with his cronies, his pick flying at warp 1, his foot tapping a hole in the floor.

And my grandmother and her sister Rose, with dark brooding sopranoes, a voce che alza i morti. (With voices like stone angels, who could sing "the dead back across Charon".)

continued on page 8

Calendar

Jetstream Toastmasters, Mondays, 12 noon to 1 p.m., N-269/Rm. 179. Guests welcome. POC: Jenny Kahn at ext. 4-6987 or Pam Walatka at ext. 4-4461.

Ames Child Care Center Board of Directors Meeting, Tuesdays, 12 noon to 1 p.m., N-213/Rm. 220. POC: Lisa Reid at ext. 4-2260.

Ames Amateur Radio Club, June 18, 12 noon, N-260/conf. rm. POC: Walt Miller, AJ6T at ext. 4-4558.

Ames Asian American Pacific Islander Advisory Group Meeting, June 18, 11:30 a.m. to 1 p.m., N-213/Rm. 261. POC: Daryl Wong at ext. 4-6889 or Brett Vu at ext. 4-0911.

Native American Advisory Committee Meeting, June 23, 12 noon to 1 p.m., Ames Café. POC: Mike Liu at ext. 4-1132.

Ames Contractor Council Meeting July 1, 11 a.m., N-200/Comm. Rm. POC: Greg Marshall at ext. 4-4673.

Hispanic Advisory Committee for Employees, July 2, 11:45 a.m. to 12:30 p.m., N-239/Rm. 177. POC: Carlos Torrez at ext. 4-5797.

Environmental, Health & Safety Monthly Information Forum, July 2, 8:30 a.m. to 9:30 a.m., Bldg. 19/Rm. 1078. POC: Linda Vrabel at ext. 4-0924.

Ames African American Advisory Group Meeting, July 2, 11:30 a.m. to 12:30 p.m., N-241/Rm. 237. POC: Antoinette Price, at ext. 4-4270 and Mary Buford Howard at ext. 4-5095.

Nat'l Association of Retired Federal Employees, S.J. Chapter #50, Meeting. July 3, at the Elk's Club, 44 W. Alma Avenue, San Jose. Social hour: 10:30 a.m. Program & business mtg. follow lunch at 11:30 a.m. POCs: Mrs. Leona Peery, President, (650) 967-9418 or Earl Keener, Public Relations, (408) 241-4459.

Professional Administrative Council (PAC) Meeting, July 9, 10:30 a.m. to 11:30 a.m., N-244/Rm. 103. POC: Janette Rocha, ext. 4-3371.

Ames Sailing Club Meeting, July 9, 11:30 a.m. to 1 p.m., N-262/Rm. 100. POC: Greg Sherwood at ext. 4-0429.

Ames Multicultural Leadership Council Meeting, July 15, 11:30 a.m. to 1 p.m., Galileo Rm./Ames Café. POC: David Morse at ext. 4-4724 or Sheila Johnson at ext. 4-5054.

NFFE local 997 Union General Meeting, July 15, 11:30 a.m. to 12:30 p.m., Bldg. 19/Rm. 1040. POC: Marianne Mosher at ext. 4-4055.

Ames Classifieds

Ads for the next issue should be sent to *astrogram@mail.arc.nasa.gov* by the Monday following publication of the present issue.

Ads must involve personal needs or items; no commercial/third-party ads. Ads will run on space-available basis only. First-time ads are given priority. Ads must include home phone numbers. Ames extensions will be accepted for carpool and lost and found ads only. Ads must be resubmitted for each issue.

Housing

For rent: Master bedroom in Sunnyvale home, one block from El Camino, 5 blocks from H85. $550/mo + applied utils., and first and last month's rent. Private bath, full use of kitchen and pots and pans. Big garden. Touran (408) 773-1927.

Working on a project at Ames during June and July. Looking for a 2 bdrm/1 or 2 bath furnished apartment within 15 miles radius of Ames Lab. If you have an apartment for rent, pls. contact me at raja@usl.edu.

Wanted to rent: room in house or apartment, close to Ames (bus or walking), I am NS/NP, clean, quiet, temporary: ASAP thru Aug 15. Call Joel (415) 604-0113 days, no home number.

Transportation

'85 VW GTI, 5-speed, 180k mi, gd. cond., $1000. Bob (650)349-7825.

'86 Ford Econoline white van 150, 1/2 ton, V-8, fuel injector, exc. cond. Call (408) 732-9309.

'86 944, Zermat Silver Gray, 62K miles, orig. owner. Stick shift, 5 gear; beauty to drive and own. Asking $6K. Call after 7:30 weeknights. Bonnie (408) 736-6947.

'87 Ford Escort wagon , AC, tilt, PS, PB, AM/FM Cass. 130K. Asking $1550 or best offer. Call Bob (408) 736-4039.

'87 Honda Accord LX-i, 4-dr, automatic, 136K, loaded, gd. cond., $3,600 or b/o. Call Walt or Sue (408) 984-3426 on weekends or after 6:30 p.m., weekdays.

'88 Cadillac Eldorado Briarritz , gold series. Fully loaded , 120K , asking $5100 or best offer. Call Bob at (408) 736-4039.

'89 Mercury Sable w/electronic features. Computerized key system, A/C, V-6 engine, 4-wheel drive, exc. cond., needs paint job. $2,800. Call (408) 732-9309 eves.

'89 Mustang 5.0 LX Convertible, 25th Anniversary Edition, 81K miles, auto, CD, exc. cond. $7,500 or B/O. Ralph (408) 730-4630.

'91 Ford F-150 XLT Lariat pickup with shell. (Loaded) 61,200 org. miles. Exc. cond. $9000. Call (510) 656-7723.

'92 Ford Mustang 4cyl 5sp, loaded, Very Reliable, $4,500. Call (408) 267-4105.

'93 Mercury Tracer Station Wagon Excellent Shape, 1.9L SEFI Engine, Extra Low Mileage 27,300, Air AM/FM W/tape, $4,999. Offers welcome, (408) 268-9568.

'94 Dodge Ram 4 x 4 SLT 2500 Turbo Diesel, 67,500 miles, standard cab, two-tone black/red, auto, power everything, tow pkg., 10 disk CD, custom wood dash trim, bed liner. Exc. cond., all maintanance records, $22.5K. Stuart (403) 338-6199.

'95 Toyota 4Runner, SR5 V6, AT, 4WD, only 28K mi., AC, power everything, mnrf, rf. rack & other opts. Exc. cond., $20,995 (under low blue book). Girish (408) 363-8727.

'95 Ford Aerostar 7 passenger van. Immaculate, all amenities, new tires, brakes, shocks, 58K $13,500 firm.

Miscellaneous

Genuine BMW leather jacket and bibs: exc. cond., gray w/red and blue, size L (fits mens size 42). $1200 new, will sell for $400 or B/O. Stuart (408) 338-6199.

Volkswagen service manual for '77 to '84 Jetta/Rabbit diesel cars, $15, Brian (650) 940-1673.

2 evenflo infant car seats, great cond., $20 each. Call (650) 968-7715 eves.

Akai Reel to Reel tape players, Cross-Field X-355D, AKAI X-150D. Both with extras. Make Offer. Call (408) 395-3831.

Sofa and loveseat, oatmeal color and texture, simple lines. Clean, no stains, but loveseat arm is catscratched. $45/B/O. Small accent chair, burnt orange, swivels. $20/BO. Teak entertainment unit, 2 pieces, 20 dx24 h, width expandable 59"- 118" $20/BO. 408-257-3175.

'94 Travelark electric chair with upgraded med. sized basket, right-hand brake, left-hand motor ctrl, battery charger/battery incl., swivel seat & arms and cane holder. Good condition, seldom used. New $2100, asking $750. Standard hand-push wheel chair good condition. New $400, asking $250. Jeanette (408) 378-1447.

Pre WW II Japanies sword w/sheath in cloth cover exc. cond., $1,500 or B/O. Dan (650) 962-8869 .

Computer system of Mac Quadra 700, 20 MB RAM, 400 MB disk, 17" color monitor and HP laser printer. Includes cables and software for a basic, stand alone system. $500. (408) 734-5769.

Bunk Beds, exc. cond. Almost new. Used by only one child. Full size bed on bottom, twin size on top, including matresses, $350.00 or B/O. Charmaine (408) 870-8239.

'92 Kawaski Jetski. Like brand new. Comes w/cover, and roll- around stand. Runs like new! Must sell/ moving, $2,500 or O/B. Call (209) 827-9287 (home) or (650) 428-6118 (pager).

Beautiful, healthy, male and female Zebra Fench birds for sale, $8.00 ea. Mary (408) 947-7179.

Electric twin size hospital bed, $150; queen size beign sofa, $100; living room sofa, $100; Singer electric sewing machine and chair, $150; ping pong table and accessories, $100. Call (408) 732-9309.

Vacation rental

Lake Tahoe-Squaw Valley-Townhse, 3br-2ba, Balcony View, horseback riding, hiking, biking, golf, river rafting, tennis, ice skating, and more. Summer rates. Call (650) 968-4155, DBMcKellar@aol.com.

Houseboat for rent on Claire Engle Lake ("Trinity" Lake) in No. CA. Sleeps 8, kitchen, bathroom w. shower. Peaceful. See www.wildhorses.com/houseboat.html, $1200/wk. Call (650) 941-3396.

Ames retirements

Name	Date	Code
Michael M. Sobremonte	5-30-98	JAC

Astrogram deadlines

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram*. When you submit stories or ads for publication, make sure to check the publication deadline and submit your material by e-mail to astrogram@mail.arc.nasa.gov on or before the deadline. Stories should be sent as enclosures in MS Word.

If you have questions about items for publication, contact the editor at the above email address.

Deadline	*Publication*
Mon., Jun 15	*Fri., Jun 26*
Mon., Jun 29	*Fri., Jul 10*
Mon, Jul 13	*Fri, Jul 24*

Asian and Pacific Islander luncheon held 5/29

Congressman Underwood, Governor of Guam and the featured luncheon speaker, enjoying the festivities.

photos by Dominic Hart

Polynesian dancers performing the art of the hula.

Eshoo speaks of pride at Ames

continued from front page

closed by saying that she "senses that Ames is on the move and not about to be stopped." She expressed her pride in the women of the Ames workforce, and encouraged Dr. McDonald to continue and redouble his efforts to further the position of women in the Center's scientific and management structure.

McDonald praised Eshoo for her "passionate and articulate" support of the Center, and acknowledged her "active role in promoting the interests of Ames."

He said that Eshoo is an expert at championing the causes of her entire district, and declared that she has been "the strongest proponent for Ames in Washington, DC in many years."

BY DAVID MORSE

THE AMES Astrogram

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

Managing Editor.....David Morse
Editor.....Astrid Terlep

THE AMES Astrogram

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