

April 3, 1998

JASON IX- What a success!



photo by Sue Bowling

Above: Congresswoman Zoe Lofgren observes the Squid King, Frank Gonzales, dissecting the 'squishy' creatures.



photos by Tom Trower

Above: External Affairs' Lisa Marie Gonzales leads countdown in the Ames Auditorium prior to the start of the JASON IX telepresence experience.



Above: EDS volunteers display work of Jacques Cousteau and Dr. Bob Ballard, JASON originator.

Ames' Neurolab payload set for lift off

On April 16, the STS-90 mission, designated Neurolab, is scheduled to launch from Kennedy Space Center at 2:19 p.m. EST. Neurolab is a 16-day research mission dedicated to the study of the life sciences. The mission will examine the effects of space flight and microgravity on the functioning of the nervous system. In all, Neurolab encompasses 15 experiments from Ames and 11 from Johnson Space Center on this 25th flight of Space Shuttle Columbia.

Neurolab was configured as a NASA research mission designed to contribute important scientific information during the national research effort of the 1990s, the so-called "Decade of the Brain." It focuses on the most complex and least understood part of the human body — the nervous system. The project's goals are to increase understanding of the basic mechanisms responsible for neurological and behavioral changes in space. Specifically, Neurolab experiments will study the effects of weightlessness and the space environment on the adaptation of the vestibular system. They will also investigate 'space adaptation syndrome,' the adaptation of the central nervous system to microgravity, and will examine the pathways which control the body's ability to sense location in the absence of

gravity, sleep and circadian rhythms, motor performance, cognitive performance and the effect of microgravity on a developing nervous system.

Neurolab will provide unique scientific information which can only be obtained in a microgravity setting. In so doing, it will further NASA Life Science goals in support of human space flight and serve as a model for international and interagency cooperation in space flight research. The information gathered during Neurolab will contribute to our understanding of normal and pathologic neurological conditions, and may be applied to enhancing the health of the general population here on Earth.

Neurolab began when then-President Bush and Congress lent their support to a national research effort to further the development of fundamental neuroscience and behavioral research. NASA proposed the Neurolab mission as its contribution to this

mandate. In 1991, steering meetings were initiated with the National Institutes of Health, the National Science Foundation, the Department of Defense, and some international space agencies (including, Canada, France, Europe, Japan and Germany) to plan a space mission dedicated to the neurosciences, and to establish the criteria for selection of appropriate proposals.

The resulting Announcement of Opportunity for Neurolab in 1993 drew 172 proposals from scientists around the globe. After a peer review managed by the Division of Research Grants at the National Institutes of Health, 32 proposals selected for their scientific merit were received by the steering committee and selected by NASA. Twenty-six of these studies were chosen to fly on the Neurolab mission and six were provided other Shuttle flight opportunities. Of the 26 experiments chosen for flight, Ames Research Center assumed

Left: EDS volunteer Edna Garrett explains the internal structure of squid at JASON Harbor in historic Hangar One.



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Ames hosts student mini-robot 'botball' contest

Almost a hundred students from six Bay Area high schools and their mini-robots competed March 25 in a 'botball' contest hosted by Ames.

Two robot teams 'did battle' at a time, trying to put the most ping-pong balls into a target cup within a set time limit. The small, one-foot robots competed on a smooth, 4-foot by 8-foot playing surface.

"We're excited to provide the opportunity for youth in the Bay Area to explore engineering while challenging themselves in this robotics competition," said Mark León, head of the Learning Technology Project at NASA Ames. The project was co-sponsored by NASA's Center of Excellence for Information Technology located at Ames.

"I find it a challenge to support the students and teachers," said NASA volunteer Terry Grant. "It's rewarding when they see something positive come out of their efforts. The students learn how to work under pressure because

they are only given six weeks to prepare for the contest," he said.



photo by Sue Bowling

Castilleja High School team members Katherine Sleeth (left) and Lauren Friedman share a light moment between practice runs. Their team's entry, "Snookums" was the overall winner at the Bay Area 'botball' championships.

The botball program was initiated by the non-profit KISS Institute for Practical Robotics, Reston, VA. The Institute has encouraged similar contests in other parts of the country. In addition to NASA, SRI International of Menlo Park, CA, and the Stanford University Robotics Lab, Palo Alto, CA, were co-sponsors.

The program provides hands-on education to the students by linking them with companies, government agencies and colleges. The KISS

Institute began the local activity with a three-day tutorial for teachers and local sponsors. Teachers learned about robotics and how to include the subject in their regular science and mathematics curricula.

Teachers received robot kits, and students created the mini robots with help from their teachers and representatives of the sponsoring organizations. Students were required to program the robots themselves to operate independently in their efforts to score points.

Remote control of the robots during the contest was not permitted. The schools provided desktop computers and workspace. No machine tools or electronics labs were required for assembly of the robots. The schools retained the robotic equipment for later educational use.

Participating schools included: Castilleja High School, Palo Alto; Palo Alto High School, Palo Alto; Broadway High School, San Jose; Foothill Academy, San Jose; Menlo-Atherton High School, Menlo Park; and Sequoia High School, Redwood City.

First place in the botball contest went to the "Snookums" robot and the all-woman team from Castilleja High School, Palo Alto; second place went to the Mangler robot team from Broadway High School, San Jose; and third place went to the Ted robot team, a second team from Castilleja High School. Donna Shirley of JPL and Michael Sims of Ames served as judges.

BY JOHN BLUCK

Weight Watchers at Work program

A meeting on the proposed program will be held on Monday, April 6, at 11:30 a.m. in the Galileo Room in the Ames Cafe. Seating is somewhat limited and will be on a first-come, first-served basis. A minimum of 18 people and a maximum of 30 people are required to conduct the 10-week program, which will meet on Mondays at the same time and location.

The cost for the 10 weeks is \$89, and there will be an option to renew at the end of the 10 weeks if enough people wish to continue.

Please call Betsy Robinson at ext. 4-3360, or Miriam Glazer at ext. 4-5172 if you have any questions.

Space Station design contest

Sixth through twelfth grade students from around the world are

designing orbital space settlements and sending them to NASA Ames for the annual space settlement design contest. Each year, over 200 students and a dozen or more teachers participate. Grand prize winners have come from as far away as Argentina and from as close as the San Francisco Bay Area. Study materials are provided to all students through the Internet at <http://science.nas.nasa.gov/Services/Education/SpaceSettlement/>.

These materials include studies of space settlement conducted at Ames in the 1970s, images, videos, materials designed for students and teachers, and an interactive

space settlement computer-aided design program written in Java.



photo by Sue Bowling

Two of the judges for the Space Station model contest, Sandy Joham (left) and Dan Machak, both computer engineers with Code IN, look over a few of the early entries.

Space colonies are permanent communities in orbit, as opposed to groups living on the Moon or other planets. The work of Princeton physicist Dr. Gerard K. O'Neill and others have shown that such colonies are technically feasible, although expensive. Settlers of this high frontier are expected to live inside large, air-tight, rotating structures holding hundreds, thousands, or even millions of people along with the animals, plants, and single-celled organisms vital to comfort and survival. There are many advantages

to living in orbit: environmental

independence, plentiful solar energy, and terrific views, to name but a few. There is plenty of room for everyone who wants to go; the materials from a single asteroid can build space colonies with living space equal to about 500 times the surface area of the Earth.

The recent discovery of water ice near the lunar poles by the Ames-managed Lunar Prospector spacecraft means important materials are available on our nearest celestial neighbor. Ames' work on closed ecological life support systems is also bringing space colonization closer to reality. Who knows, maybe some of these students will build the real thing!

BY AL GLOBUS

Human Interest/Personal Experience

Trip to Italy...

It was the dream vacation: changing jobs from a contractor to a civil servant with DX, I had two weeks off. I'd always wanted to go to Italy and visit the home of my grandfather, Francesco Dipaulo, in the rugged Abbruzzi region, 150 km east of Rome. My passport was up to date, I got a low fare on SwissAir, so it was: "ciao bella!"

The trip over on SwissAir was a mixture of heaven and hell. The heaven part was rich Swiss chocolates and coffee-lattes on demand. The hell part was a baby three rows back who screamed the entire nine hours from Atlanta to Zurich (and being squashed in a middle seat). On the overhead TV at the front of the aisle were Swiss mimes. You haven't really 'lived' until you've watched Swiss mimes at 30,000 feet at 4 a.m., with a migraine headache stuck in your right sinus like a clawhammer.

We touched down at Milano's Linate airport at 10 a.m. I jumped on to an InterCity Train for the two-hour ride south to Firenze. Firenze — on one hand is a modern city of putt-putts and pollution; on the other, it's an ancient city dominated by the sparkling Duomo, intricately inlaid with white, green and pink marble, and newly cleaned for the Pope's visit. The cathedral dominates the city, both physically and in spirit: Florentines in Leonardo's time, wandering in alien lands, sometimes expressed their loneliness and nostalgia by saying that they suffered from "la malattia del duomo" (cathedral sickness).

I checked into the Pensione Vincenci, so close to the Duomo you could throw a stone and hit it. The Duomo bells pealed late that night and began early the next morning full of life and death in a mixture that only the Italians seem able to achieve.

The next day in Florence, I sketched in the Bolbilin Garden at Pitti Palace in the sun and watched the city sparkle in the distance. The couple at the next table ordered in French and leaned close. The French syllables, elegant and profound, made it sound like they



Villa Borghese



Kathleen, with the Apennine mountains in the background.

were reading Dante instead of ordering "calmari and chianti."

Question: How do you say emergency room in Italian? (pronto

socorsco). How do you say ambulance? (ambulanzi). Doctor? (dottor).

American insurance? (Isuranze americani). I found all of this out.

My second night in

Firenze, jet lagged and in unfamiliar terrain, I walked into a glass door of a taverna on the Via Venetto. I had gone in to ask directions and didn't see the door or the tiny "tirez" on the lower left. The door exploded in glass. I bent double, in a haze of pain and gushers of blood.

The barman waved his arms in shock, thrust snowy cotton napkins at me and

ran to call "118" (the Italian 911). The ambulanzi arrived within five minutes and the rubber gloved paramedic and I rocketed to the nearby Santa Maria Nuovo Ospital (originally a monastery built in the 1400s and partly funded by Leonardo da Vinci.)

No one at Santa Maria Nuovo spoke English, of course. I was rushed (in a wheelchair) at breakneck speed to "radiographie," where I and my wheelchair were promptly (and inexplicably) abandoned. Trying to find someone official, kleenexes pressed to my nose, I wandered the long unmarked halls until I found a trauma nurse who recognized me and took charge. After the "radiographie" tech did his thing, my x-ray showed a clean jagged break near the bridge of my nose, like a cool, confident line in a Miro.

To avoid returning to the U.S. early, and wanting to push on from Firenze, I headed south and had my nose reset, (in a procedure called a 'close reduction') by Dr. Favio

Silvagni, in Avezanno, a town in the Apennines about 50 km east of Rome. Dr. Silvagni, a big bear of a man, performed the procedure with deft, light hands.

After a night of recuperation at the Hotel Villani in Avezanno, I was on my way, albeit with a nose cast that made me look either very punk or like

Pinnocchio on a bad day. The cast had its advantages though. Once when an Italian conductor on a Rapido

started hectoring me for not validating my ticket, and threatened a fine of 40,000 lira, he looked at my nose, stopped in mid-sentence and backed off, most likely in deference to the nasally-challenged Ingliski.

I still have no idea what medical instructions Dr. Silvagni gave me, but I did "capiche" 10 days. But, 10 days what? — wear the cast for 10 days? Don't wear my glasses for 10 days because they put pressure on the nose? See an American doctor in 10 days? Dr. Silvagni either said (a) he fixed the nose and it would heal nicely or (b) it looked pretty bad but I could *maybe* get plastic surgery back in the U.S. Whatever, I wasn't going home.

And, after Avezanno, Rome: dripping and wintery; the clouds like shrapnel. The dripping purple-silver lilacs, their heads lowered, lined up like soldiers in the Villa Borghese in the rain. And the Museum d'arte Moderne on the Via Della Arti where I stood transfixed before an awesome restrained Pollock, and less awe-struck before a teetering cubist Cezanne.

And outside, in the drenched garden, Italian men out for a run. And women walking, muffled deep in their furs, furs which said, 'I am owned'; and "I've made thoughtful, correct choices." Women walking in the Villa Borghese, leading around a mastiff or an English boxer or a dalmation. And, under the furs, the longing for the sun. And the streets of Rome—pure theatre. Unshaven Armani-clad men shouting into their cell phones. And older blue-eyed elegant men, who flirted with the (warming) radar-lock of a glance. In late winter in Rome, the colors (women wear) are black and brown. But for spring, the shop windows are blooming with fawn and the soft pale grey the French call 'gris.' And charcoal, the color of a fallen eyelash, in fluttering blowy fabrics-like wind.

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Briefs

Global Surveyor's revealing data

Surveyor has captured the full evolution of a Martian dust storm, and returned new insights into the deeply layered terrain and mineral composition of the Martian surface and two highly magnetized crustal features that provide important clues about the planet's interior. In addition, measurements from the spacecraft's magnetometer and electron reflectometer have yielded new findings about the strong, localized magnetic fields on Mars.

Over the next six months, the spacecraft will stay in an 11 and 1/2-hour orbit and collect an additional bounty of data at closest approach of about 106 miles (170 kilometers) above the surface, much closer than the spacecraft will pass over the planet once it has reached its formal mapping orbit in March '99. This closer orbit will allow the science teams to take more detailed measurements of the Martian atmosphere and surface without magnetic interference from the solar wind.

Solar energy to be studied

The Naval Research Laboratory, Washington, DC, and the University of Colorado's Laboratory for Atmospheric and Space Physics in Boulder have been selected by NASA's Office of Earth Science to conduct parallel six-month definition studies of a new small satellite to monitor variations in the amount of radiant solar energy that reaches Earth. The precise measurements to be obtained by the Total Solar Irradiance Mission (TSIM) will help scientists better understand the relationship between the Sun's variable energy output and its effects on Earth's climate.

NASA has been measuring the total radiative output of the Sun from the unique perspective of space since the late 1970s. The current sensor being used is called the Active Cavity Radiometer Irradiance Monitor (ACRIM). A third ACRIM instrument is scheduled for launch aboard a dedicated small satellite in Oct. '99.

New space infrared telescope facility

NASA Administrator Daniel S. Goldin has authorized the start of work on the Space Infrared Telescope Facility, an advanced orbiting observatory that will give astronomers unprecedented views of phenomena in the universe that are invisible to other types of telescopes. It is scheduled for launch in December 2001 on a Delta 7920-H rocket from Cape Canaveral, Florida.

"The Space Infrared Telescope Facility will do for infrared astronomy what the Hubble Space Telescope has done in its unveiling of the visible universe, and it will do it faster, better and cheaper than its predecessors," said Dr. Wesley Huntress, NASA's associate administrator for space science.

Ames' Neurolab payload set for lift off

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responsibility for implementation of 15 of the experiments. Since June of 1995, the Ames' Life Sciences Division has been actively involved with hardware design, testing, and validation; crew training; preflight and postflight preparation at KSC; and coordination of all aspects of the experiments with JSC mission management.

Neurolab will provide access to space flight for brain and behavioral scientists, thus enhancing and broadening NASA's interaction with these scientific communities.

The links established between NASA, NIH, NSF and the other agencies through implementing the Neurolab program will provide a firm foundation for future inter-agency cooperation. Most importantly, Neurolab will provide a highly visible achievement for NASA at the culmination of the "Decade of the Brain."

Richard A. Searfoss (Lt. Colonel, USAF) will command the STS-90 mission, with pilot Scott D. Altman (Lt. Commander, USN) and mission specialist Kathryn "Kay" Hire joining him on Columbia's flight deck. Assigned payload crew members include mission specialist Richard (Rick) M. Linnehan (DVM), Canadian mission specialist, Dafydd (Dave) R. Williams, (MD), and payload specialists Jay C. Buckley (MD) and James (Jim) A. Pawelczyk (Ph.D.). This crew will serve as both operators and subjects in efforts to determine the effects of microgravity on the nervous system.

Crew members will carry out the prescribed experiments using a variety of biomedical instrumentation, including some instruments developed especially for the mission. The crew will not be the only living beings on board: rats, mice, two kinds of fish, snails and crickets will also participate in the experiments.

To accommodate the non-human subjects, Ames provided several housing facilities to maintain animal health. The previously flown (SLS-1 and SLS-2) Research Animal Holding Facilities (RAHF's) will be used to separately house adult male rats and dams with their litters. In addition, Animal Enclosure Modules (AEM's) are being flown to house either rats or mice. The Japanese Space Agency contributed the Vestibular Function Experiment Unit (VFEU) which previously flew as a freshwater habitat on SL-J (STS-47) and IML-2 (STS-65). For the Neurolab mission, the VFEUs will support the salt water fish, Oyster Toadfish. The German Space Agency has provided the

BOTEX (incubator for BOTany Experiments) hardware which was previously utilized on the D-2 Mission for botany, but deemed compatible to house the crickets to be flown on this mission. The German Space Agency is also providing the Closed Equilibrated Biological Aquatic System (CEBAS) which successfully flew on STS-89.

This unit is a middeck, locker-sized fresh water habitat developed for the controlled incubation of various fresh water plants and animals.

Other hardware provided by Ames includes the General Purpose Work Station (GPWS), a laminar flow hood developed to accommodate inflight operations requiring bench space and particulate containment. Ames is also making use of the Spacelab refrigerator and freezer provided by JSC. Together with 489 stowed hardware elements, the Ames payload will support the performance of inflight experimental tasks, as well as housing facility maintenance.

Ames' Neurolab participation is managed by the center's Life Sciences Division with the support of its prime contractor, Lockheed Martin Engineering and Sciences Company, and its subcontractor, GB Tech. In addition, many other center organizations contributed to this project, including: the Systems Engineering Division (Code FE; formerly JE), the Aeronautics and Spaceflight Hardware Development Division (Code FM; formerly JM), the System Safety, Reliability and Quality Assurance Office (Code DQA), Sverdrup Technology, Micro Craft Inc., Bionetics Corp., Hernandez Engineering Company and Sterling Software. Without the support of a multitude of Ames' organizations and individuals, it would not have been possible to deliver the center's Neurolab payload to the Space Shuttle Transportation System at KSC.

Those wishing to learn more about the Neurolab mission are invited to visit the Ames' Life Sciences web page at: <http://lifesci.arc.nasa.gov/home.html>. Other interesting Neurolab-related websites include: www.neurolab.nasa.gov and www.psu.edu. Points of contact include: the author, Christopher Maese, Ames Neurolab payload manager, at ext. 4-6633; Anthony Intravaia, Ames payload engineer, at ext. 4-6962; and Louis Ostrach, Ames project scientist, at ext. 4-6820.



Former Astrogram editor Laura Weikle proudly displays her company's support for Neurolab. Weikle developed signs and labels for the mission at her Fremont-based company.

GAO computer system study to be conducted

All computer users at Ames are advised that the General Accounting Office (GAO) will soon initiate a penetration study of NASA systems. GAO intends to use the National Security Agency (NSA) to conduct the penetration tests. NASA and GAO are in the process of developing a protocol for the test. This test will affect computers which are Government-owned or Government-funded. For all computer users at Ames, there can be no expectation of privacy. In using Ames' computer systems, users consent to their keystrokes and data content being monitored.

The National Telecommunications and Information Systems Security, Communications Security (COMSEC), monitoring guidelines state that users of systems to be

monitored must be properly notified in advance that their use of these systems constitutes consent to monitoring for COMSEC purposes. NSA has told NASA and GAO that, before they begin their test, they need written verification that users have been notified consistent with these guidelines.

A notification in the centerwide email has satisfied this requirement for the forthcoming penetration study. NASA is required to provide a written certification that this notification has been sent and that a valid attempt has been made to notify all employees and contractors affected by this penetration testing.

On-site engineering courses at USC

The University of Southern California School of Engineering has begun its third year of broadcasting engineering courses live to the engineers and scientists of Ames Research Center via the Instructional Television Network (ITV).

ITV is an extensive, interactive, one-way video, two-way audio broadcast system enabling part-time students to take USC engineering courses for graduate credit from the convenience of Ames facilities. The ITV program is designed for the professional engineer or scientist. Students are given the opportunity to increase their knowledge base or earn a graduate level degree while still fulfilling their employment responsibilities.

Courses are offered for the Master of Science Degree in Computer Science, Computer Engineering, Electrical Engineering and Systems Architecture and Engineering, with a variety of specializations in each field of study:

- * Master of Science in Computer Science (general or with specialization in computer networks, software engineering, robotics and automation, or multimedia and creative technologies)
- * Master of Science in Computer Engineering
- * Master of Science in Electrical Engineering (general or with specialization in computer networks, VLSI design, or multimedia

and creative technologies)

- * Master of Science in Systems Architecture and Engineering

Also, certificate courses are being developed for software engineering and communications engineering and are being considered for robotics and automation.

The Computer Science Department at USC has more than 40 faculty actively doing research and teaching. They offer a broad range of courses. Areas of specialization include: networking, graphics, software engineering, artificial intelligence, neural engineering and robotics. The Electrical Engineering Department is one of the largest and most respected in the nation and has earned worldwide recognition. The faculty collaborate with colleagues in other departments to provide broad-based, interdisciplinary research and education.

For a list of course offerings, or for more information about the USC Engineering ITV Network, please visit the ITV web site at: http://www.usc.edu/dept/engineering/Distance_Learning or contact Marilyn Jackson, academic programs administrator, at ext. 4-6937 or mjackson@mail.arc.nasa.gov. A USC representative will attend the April 9 College Fair.

BY MARILYN JACKSON

Social security earnings records

The Social Security Administration (SSA) recently notified Ames that the annual tax tapes for 1993, 1994, 1995, and 1996 were not processed correctly. As a result, the Social Security Earnings Records for FERS civil servant employees with FICA and Medicare wages and deductions may be incorrect. For CSRS civil servants, the Medicare wages and deductions may be incorrect.

The problem began with the Internal Revenue Service (IRS). At the end of each pay year, Ames is required to submit magnetic tapes with payroll information to the IRS. The IRS then makes copies of the tapes and sends the copies to SSA. The copies of the tapes the SSA received from the IRS for 1993, 1994, and 1995 were incomplete. Ames' review of these records indicates that all center employees (both FERS and CSRS) have been affected by this situation.

Ames is working with the SSA to update each employee's record to accurately reflect their deductions. The tapes for 1993, 1994, 1995, and 1996 have been reconstructed and submitted directly to the Regional Social Security Office. They will work with the SSA in Baltimore, MD, the office responsible for updating employees' records. The SSA Baltimore office will run a computer program to verify that the replacement tape data has been updated in each employee's record. Any discrepancies that occur will be resolved on a case-by-case basis between Ames and the SSA. SSA will send each employee an updated record when the replacement tapes have been successfully processed and validated. It will take approximately three months to complete this validation.

If you have any questions, contact Marcia Smith at ext. 4-1141 or Barbara DiPaula at ext. 4-5293.

Secretaries' Day Workshop, April 22

DoubleTree Hotel, San Jose, 8:00 a.m. to 12 noon. Contractors welcome on a space available basis.

Please submit your ARC 301 to Gail James by April 8. No training applications will be accepted at the door. POC: Gail James at ext. 4-5472.

NASA web-based training now available

Self-paced education resources are now being provided for Ames employees. NASA has developed and recently released a training program that is available on the Internet. Known as the Professional Development Initiative (PDI), this is a planned approach to provide standardized, comprehensive and state-of-the-art training resources. The PDI homepage consists of a series of training modules designed to enhance the user's proficiency in many NASA disciplines. These web-based modules bring training opportunities right to your desk-top computer, providing ready reference to additional materials and training, and connect the user with NASA personnel who have expertise in the topics presented. On-line tools can be used to

measure ones comprehension of the training material and track completion progress. Each module has been developed by a subject matter expert for the area covered, and has been extensively reviewed to assure it fits user needs.

Access the PDI homepage at <http://pdi.msfc.nasa.gov>, or click the PDI icon located under 'Training' on the Code DQA homepage (<http://dqa.arc.nasa.gov>). Clicking twice on the catalog icon on this homepage displays more than 30 courses currently available, with more on the way. The intended audience includes new employees, current employees with new job assignments, and employees who want a refresher on current policies and procedures. Special topics such as an intro-

duction to ISO 9000 and Performance-Based Contracting will be of current interest to many at Ames. The page has many user-friendly features and graphics designed to assure easy transition through the interactive course material.

At the conclusion of each module, tests (basic or comprehensive level) may be taken. Test results are provided immediately. Tests are generated by providing 20 to 30 questions randomly selected from a large cache. For any missed questions, there are hyperlinks to the appropriate areas of the module. New tests can be taken at once. Users can generate confidential reports on their progress.

There is an easy, on-line contact with the module developer for technical questions or suggestions. A local Ames training administrator is also available on-line to assist with any user questions or problems. A limited number of PDI brochures containing more detailed information and instructions are available. Call the author at ext. 4-4538 or send your request to jbricken@mail.

Assistance in using the site is available on-line. Enter the PDI web site and select the "Web Workshop" option under the "First-time Users" section of the homepage. The "Web Workshop" is an interactive tutorial designed for first-time users containing information about web basics and the PDI site. Included is information on getting around, access, taking tests and help.

There is no need to set aside a whole day to try PDI. When you have a few minutes, go into the PDI training web site to have a look. Further exploration of the site and taking some of the training can be done as time permits. Self-paced is the whole idea behind the Professional Development Initiative.

BY JIM BRICKEN 

Ames history project in the making

NASA Ames has launched a history project--a chance for everyone at the center to reflect upon their contributions to aviation and space technology. The project encompasses all facets of Ames history since 1939--its traditions of research and engineering excellence; its evolution within the NACA and NASA organizations; its relations with industry, academia, and the community; its facilities, personalities, and projects; and especially the culture and managerial methods so fundamental to its success.

To research and write this history, Ames has contracted with Glenn Bugos, through Quantum Services, Inc. He holds a Ph.D. in the history of technology from the University of Pennsylvania, teaches at the University of California-Berkeley, and works as a contract historian for Bay area businesses. Plans are to have a book--

about 300 pages complete with illustrations--published by the Government Printing Office in time for Ames' 60th anniversary celebrations in December 1999.

Helen Rutt has joined the project as archivist. Her task is to build databases of documents deposited at the National Archives and Federal Record Center in San Bruno, as well as processing historical materials donated during the history project.

Over the coming year, Bugos will be wandering around Ames, asking questions, conducting oral history interviews and collecting documents. External Affairs' David Morse, the history project manager, supported by John W. Boyd,

advisor, encourage all Ames employees and retirees to share their insights and opinions. Bugos can be reached via email at: historian@mail, or at ext. 4-2992, or Rm 1090 of Bldg 19.



Glenn Bugos

Events & Classifieds

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, ext. 4-2260.

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

Ames Sailing Club Meeting, Apr. 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, Apr. 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, Apr. 15, 11:30 a.m. to 12:30 p.m., Bldg. 19/Rm. 1040. POC: Marianne Mosher at ext. 4-4055.

Ames Amateur Radio Club, Apr. 16, 12 noon, N-260/conf. rm. POC: Walt Miller, AJ6T at ext. 4-4558.

Ames Asian American Pacific Islander Advisory Group Meeting, Apr. 16, 11:30 a.m. to 1 p.m., N-213/Rm. 261. POC: Daryl Wong at 4-6889 or Brett Vu at ext. 4-0911.

Java Users Group Meeting, Apr. 21, 1 p.m., to 2:30 p.m., N-258/NAS auditorium, POC: Sharon Marcacci, ext. 4-1059.

Native American Advisory Committee Meeting, Apr. 28, 12 noon to 1 p.m., Ames Café. POC: Mike Liu at ext. 4-1132.

Ames Contractor Council Meeting May 6, 11 a.m., N-200/Comm. Rm. POC: Greg Marshall at ext. 4-4673.

Hispanic Advisory Committee for Employees, May 7, 11:45 a.m. to 12:30 p.m., N-239/Rm. 177. POC: Carlos Torrez, ext. 4-5797.

Ames African American Advisory Group Meeting, May 7, 11:30 a.m. to 12:30 p.m., N-241/Rm. 237. POC: Antoinette Price, ext. 4-4270 & Mary Buford Howard, ext. 4-5095.

Environmental, Health & Safety Monthly Information Forum, May 7, 8:30 a.m. to 9:30 a.m., Bldg. 19/Rm. 1078. POC: Linda Vrabel at ext. 4-0924.

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

Two rooms for rent for price of one, culdesac home w/priv. rooms + bath. Campbell school district, lg. bkyard, new carpet/paint, W/D, garage. NS, M or F, no drugs, clean, prof., \$774/mo. + dep. + half utils. Tom (408) 369-9718 eves.

For rent: 1 bdrm. in 2 bdrm., condo, priv. bath. Full privileges, N/S, no pets, no drugs, clean prof. \$750/mo. + dep. + half utils. Barbarann (650) 390-9791.

Room for rent in condo (Stevens Creek/Keily). Pool and hot tub available in complex. NS, M or F, prof., 500/mo. + 1/2 util., avail 4/11. Harry (408) 244-6309.

Roommate wanted to share large 3 bd/2ba house in Mountain View about six blocks southwest of downtown. Five minutes from Ames via H85. Prefer NS, sgl. prof. \$700/mo + 1/3 utils. Avail. approx. 4/10. (650) 969-5581.

Transportation

'82 Honda CB750F Super Sport, Very gd cond., Very well maintained. Silver w/blue striping and small clear wind screen. Low Mileage, always garaged. Great classic for a great price. \$1,800 B/O. Franz (408) 264-2846 eves.

'85 Toyota Camry DX Liftback - AT, A/C, PS, PB, radio, 138K miles, 1 owner, well maintained w/all records, some body work needed. \$1,400 B/O. (408) 736-0838.

'85 VW Jetta GL, 4-dr, 111K mi, very gd cond. AC, AT, AM/FM cass. stereo, sunrf., clean, paint shines! \$3500 B/O. Steve (510) 828-1484 or (408) 563-1855.

'87 Toyota 2WD Pick-up, gd cond., bed-liner, sliding back window, new clutch, brakes, etc. Asking \$2750, (408) 395-8326.

'88 Cadillac El Dorado Biarritz, Gold series, 120k, lots new. Asking \$5300 or B/O. Robert (408) 736-4039.

'97 White Neon Highline, Like new, 15,000 miles, 4-door, cruise control, ac, dual airbags, 26 mgh, am/fm tape player, Asking \$10,000. (650) 341-2165.

Obituary

Friends and colleagues of John "Mac" McLaughlin will be saddened to learn of his death on Dec. 12, 1997 at Lone, Calif., at the age of 82. Mac worked at Ames from 1962 on, retiring three times, but returning after each retirement to work in the library. His friendly assistance was well known by researchers looking for research documents. Before Ames, Mac was in the U.S. Army until 1960, and then worked for a short time at Lockheed Martin.

Mac is survived by his wife of 26 years, Elaine, two sons and one daughter, five grandchildren, and a great grandson.

Miscellaneous

Sears Kenmore portable washer and dryer set w/washer sink attachment. Exc. cond., \$175 for pair B/O. (408) 749-9643 after 5 p.m.

Country Comfort wood-burning fireplace insert w/ blower, orig. \$1500, \$595 B/O. (408) 229-0625.

One dirt bike helmet in exc. shape. One pair of Alpine Star Tech 3 Motocross boots size 11, in exc. cond. Both helmet and boots retail for over \$400. Will sell both together or separately. Helmet \$125, boots for \$125. Franz (408) 264-2846 eves.

Queen size waterbed mattress w/heater, like new. \$80 B/O. (510) 657-4561.

486-66Mhz VLB motherboard & CPU, 256K cache w/"green" BIOS & manual. \$65. (408) 295-2160.

Child's wooden desk, \$50. (408) 378-2064.

Slalom water ski and knee board. \$60 ea. or \$100 for both. John (408) 737-8209.

Sega Genesis 16-Bit game system includes 2 paddles and 11 Sega games. \$120 B/O. (408) 448-6118.

Two 4-ft Red Tail Boas, 1 male, 1 female. Serious inquiries only, B/O. (408) 246-8483.

Antique Clocks, Art Deco Granddaughter clock, \$500, Dual Face Ithaca, mantle clock, circa 1865, \$1,150. (408) 395-8326.

Weight machine/home gym. Pacific Fitness brand, Newport model. Great condition, like new. \$700 B/O. Sheri (650) 508-8956.

Rooster & hen, (408) 773-1927.

French family seeks American family to welcome their 14-year-old son. Family w/son about 14 preferred. He would be welcome in France later. Inv (650) 966-1364.

Looking for a small refrigerator for my office. (408) 286-2941.

Ames retirements

Name	Date	Code
Robert H. Stroub	3-27-98	AD
Cecil Wachsman	3-27-98	JMD
Michael Adamson	3-28-98	JEE
Charles T. Snyder	3-28-98	N
Jere DePascale	4-03-98	JFS
B. Douglas Pearson	4-03-98	II
Lynne A. Roach	4-03-98	J
Larry D. Russell	4-03-98	JES
L. Wayne Wiley	4-03-98	JFS
Joseph J. Vaccaro	4-03-98	JMM
Dwayne A. Frey	4-03-98	CF

Vacation rental

Pajaro dunes: Classy Shorebird condo, 2bd/2ba, great ocean view, all conveniences, HBO, no smoking, no kids under 8. Rent weekends/days. (408) 252-0963.

Lake Tahoe-Squaw Valley Townhse, 3bd/2ba, View of slopes, close to lifts. Wkend \$400, midwk \$150 nite. Includes linens, firewd, cleaning service. (650) 968-4155, or email: DBMcKellar@aol.com

College Fair '98

The Human Resources Division (JH) and the Career Center invite you to the Education Outreach College Fair '98. This is a wonderful opportunity to find out about educational opportunities, both in the area and on site at Ames.

Representatives from several local colleges will be on hand to provide information about their programs and answer questions. All NASA employees, contractors, family members, and residents of Onizuka Air Station, Naval Air Reserve Santa Clara and Moffett Federal Air Field are welcome to attend.

The College Fair will be held on April 9 from 12 noon to 3:30 p.m. in the Moffett Training and Conference Center's Patio room. For more information, contact Marilyn Jackson at ext. 4-6937 or Ken Rossi and Peggy Watson at ext. 4-1819.

Miscellaneous News

Italy

continued from page 3

One rainy black night, I was followed back to the Hotel Ercoli down the Via di Bonne Campagnie by a nerdy guy in glasses who looked like Woody Allen. He'd stop when I'd stop, speed up when I sped up, cross the street when I crossed the street. "Mi lasci in pace," I finally said. "Chiamo la polizia." I stopped to ask directions of a liveried doorman and 'il mashero' dissolved in the mist.

In Rome, I also survived an Italian train strike where the "Informatzione" had no official word on which, if any, train was running. Strikes in Italy are extremely well-organized. This one ran promptly from 9 to 5.

"We won't know if a train is running until 15 minutes before its scheduled departure," said an official unctuously, cleverly dishing out non-information disguised as real help. With constant 20-minute delay notices flashing up on the electronic board, I managed to waste 3 hours at the Rome Terminale, before finally getting out on a pescara-bound train for Inter D'Agua, birthplace of my grandfather.

InterD'Aqua, at an altitude of 4,500 feet in the Apennine mountains, was freezing, whipped by downdrafts and updrafts from nearby Mount Paloma. But InterD'Aqua and Sulmona (Ovid's town), and Pescaroli (a ski resort), and Lake Como (with its blue-capped waves), are other stories for another time.

"One travels so that one can return home," someone once said. Allora!

BY KATHLEEN BURTON



Congresswoman Zoe Lofgren chats with External Affairs' Tom Clausen, Ames' JASON program manager, and EDS' coordinator Leslie Flowers (above). At right, she addresses JASON students.



photos by Gary Franklin

April JUG on Java Database Applications

The next Java Users Group meeting at NASA Ames will be at 1 p.m. on Tuesday, April 21, in the auditorium of the NAS Building, N-258. The speaker, Marian Corcoran, will be discussing 'JDBC: Java Database Connectivity Using Java Applications with Existing Databases.' The JUG presentation will begin with an examination of the architecture of JDBC and a short tutorial on SQL. After looking at an overview of the classes in Java related to JDBC, the speaker will cover two programs which use Java to connect to a database in Microsoft Access '97. Also discussed will be a simple middleware server used as an intermediary between a client and a database.

Marian Corcoran, M.S.C.S., is the CEO and founder of the San Francisco Bay Area Center for Advanced Technology. Corcoran does consulting and training for companies worldwide in Java, C++, and Windows NT/ActiveX, and is currently teaching a series of Java classes

at Lockheed and Mentor Graphics. She has conducted advanced industrial research in object-oriented programming and GUI applications published at international levels. She is a member of the C++ and Java standardization committees, and has been elected to Who's Who of American Women.

Those interested in using Java and learning more about JDBC are invited to attend this informative presentation. Contact Sharon Marcacci at ext. 4-1059 with any questions regarding the JUG meeting. For more information about Java at Ames, visit the 'Coffeehouse' web site at: <http://mystic.arc.nasa.gov/java/coffeehouse.html>.

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