THE AMES Astrogram
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD
February 12, 1999
on-line@http://ccf.arc.nasa.gov/dx/

NASA Administrator calls Ames efforts "stunning"

On Feb. 1, NASA Administrator Daniel S. Goldin announced an "overall good news" budget request of $13.6 billion for FY 2000. This represents a decrease of $87 million or 0.6% from FY 1999 levels. "For the sixth year in a row, NASA's budget has declined while productivity has increased," Goldin said. "The record of accomplishment grows and the promise of the future gets brighter . . . NASA keeps getting better and better."

If the budget news was generally good for the agency, it was nothing short of ecstatic for Ames. True, the funding boost that this center will get is nothing spectacular – an increase from $613.5 in 1999 to $625.1 million in 2000. But, as Goldin himself pointed out, "it's not the dollars" that tell the whole story.

Ames is "doing a stunning job," pronounced Goldin in response to a question from San Francisco Chronicle science editor David Perlman. "The employees at Ames ought to be proud at how they are contributing to the nation's air and space program," he continued.

"Under the leadership of Dr. McDonald, Ames has started a very significant effort in information technologies that is going to allow us to fly planes on Mars," Goldin said. His presentation included a five-minute video of recent NASA accomplishments, highlighted by a simulated sequence of the Ames concept aircraft for a Mars micromission flying over the layered terrain in the canyons of Valles Marineris.

Goldin went on to cite what he called "another crucial aspect managed by Ames . . . the Astrobiology Institute." This will be ramped up from $10 million to $25 million per year over the five-year period, he said, with plans to increase funding even further. "Astrobiology is the intellectual underpinning principle that will allow us to undertake the search for life," Goldin concluded.

While the news for Ames was encouraging, it certainly wasn't a totally uniform message across disciplines and across the NASA centers. The aeronautics budget took a major hit with the high-speed research and the advanced subsonic technology programs being terminated. A dramatic change in market conditions in Asia and the resulting change in direction by NASA's primary commercial partner were cited as the major reasons for the action.

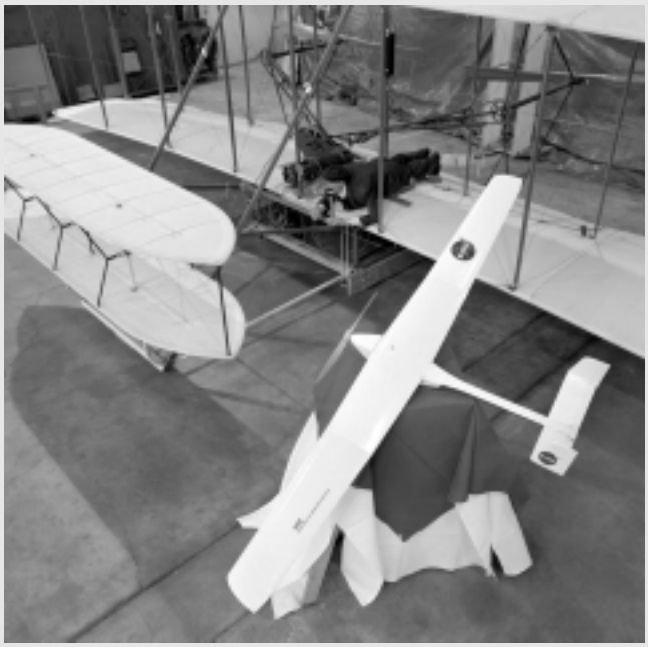


photo by Tom Trower

A model of the Ames Mars micromission concept aircraft is shown beside the Wright Flyer replica in the high bay of Ames' 40' by 80' wind tunnel.

This, Goldin acknowledged, will have a significant impact at the Langley and Lewis research centers. At Lewis alone, there will be a $44 million budget cut, despite a shift in personnel from aeronautics to space exploration activities. However, Goldin announced a number of new "core replacement" programs designed to mitigate these impacts and re-focus NASA aeronautics research in more appropriate directions.

In all, Goldin spoke of four new "aero" initiatives. The agency's ultra-high-efficiency engine program is earmarked to receive $250 million over the five-year budget, with revolutionary concepts to get $100 million, intelligent synthetic environments another $180 million, and a new program in synthetic vision to begin with a $50 million commitment.

But these new NASA aeronautics programs will be markedly different than those of the past, Goldin said. The days of teaming with one company or two tied to a specific airframe are "yesterday's newspaper," he declared. Aeronautics, too, will become "faster, better, cheaper." And yet, despite these changes, Goldin does not foresee any reduction in the civil service workforce at NASA's aeronautics centers. Further, he insisted "crucial technical skills" will be maintained.

Overall, without adjusting for inflation, the annual NASA budget has declined by about $1 billion since its peak in 1994. Aerospace Daily reports that the budget is now expected to stabilize and flatten out at about a $13.7 billion annual figure beginning with FY 2001. As development of the International Space Station winds down, space science research is projected to be the biggest benefactor with an anticipated increase of nearly 32 percent from $2.2 billion in FY 2000 to $2.9 billion in FY 2004.

By David Morse

NASA Ames Research Center ISO 9001 world class quality
3 Months to Certification

see related story on page 2

Ames ISO Web-site address: http://dqa.arc.nasa.gov/iso9000

TGIR award ceremony held

photo by Dominic Hart

Dr. Heinz Erzberger, team leader for the Center/TRACON Automation System (CTAS) shown at right talking to Center Director Dr. Henry McDonald, accepted the NASA Administrator's Trophy on behalf of the CTAS Team for NASA's Turning Goals into Reality (TGIR) award.

Presented during a ceremony held Dec. 16 in the Committee Room of Bldg. N-200, the award was announced during the TGIR Conference held Oct. 9 at NASA Lewis Research Center. Created by NASA's Aero-Space Technology Enterprise, the new award was presented to the CTAS Team members in recognition of their outstanding accomplishment towards meeting ten aeronautics and space transportation technology goals that will have a dramatic impact on the 21st century. Founding team members each received replica trophies of the Administrator's Trophy, which was designed by Ames' Model Shop. In addition to Erzberger, team members include Dr. J. Victor Lebacqz, Robert Jacobsen, Thomas Davis, Steven Green, Harry Swenson, Dr. Dallas Denery and Michelle Eshow. CTAS provides computer intelligence and graphical user interfaces to assist air traffic controllers in the efficient management and control of traffic, both in the terminal area and in the enroute airspace.

Ames hosts Kwanzaa presentation

photo by Dominic Hart

The Ames Multicultural Leadership Council (MLC) hosted a Kwanzaa Celebration on January 12.

Mrs. Brenda Smith Ray and students from the Courtland Esteem Home School in East San Jose, gave a lively presentation of the Kwanzaa principles, symbols, table settings, room settings, and festivities.

Kwanzaa is an African-American seasonal event. The principles used in celebrating Kwanzaa are meant to be a year-round way-of-life as we strive to strengthen our families and communities. The symbols of Kwanzaa serve as instructive and inspirational objects that represent and reinforce desirable principles, concepts and practices as reflective of both traditional and modern concepts.

The Ames event was an opportunity for all attendees to experience "Kwanzaa" and to contribute to this wonderful event.

Ames moves boldly forward with ISO implementation

Ames Research Center is in the final stage of implementing its quality system in accordance with ISO 9001. The center's systems for document and data control, internal auditing, and corrective and preventive action are fully operational. Center-wide documentation has been re-baselined with inputs from internal audits and two third-party pre-assessments.

Planning continues for the April certification audit. To that end, first and second level managers completed an audit checklist with 43 items before the January sequence of internal audits. A three-phase internal audit program was initiated comprised of audits of organizations, 6 functional areas, and implementation effectiveness of corrective action requests (CARs).

Ames accomplishments in ISO implementation to date are significant. A mature, second generation of documentation for the center-wide Quality Manual and 25 system-level procedures (SLPs) and work instructions was approved last September. Internal audits of Ames' 7 directorates were completed in preparation for the first pre-assessment audit in July. Civil service personnel who received ISO audit training gained valuable on-the-job experience by participating as members of the audit teams.

The internal audit team performed vertical audits of 87 organizations in 7 weeks in preparation for the second pre-assessment audit in November. On-the-job training for civil service personnel was expanded to include lead auditor experience under the supervision of seasoned professionals. In addition, audits to determine the implementation effectiveness of CARs were accomplished for all 7 directorates in December.

Of the 361 CARs that were issued by January 22, 1999, 259 have been closed. Internal audits have verified the effectiveness of the corrective action specified on 144 of the closed CARs. New CARs were issued for only 14 of the 144 that were previously judged ineffective.

Ames' Independent Verification and Validation (IV&V) software center, Fairmont, WV was recommended for ISO 9001 certification in October. In addition, the previously certified quality system for Ames wind tunnels and flight simulators passed its first surveillance audit.

There are a number of remaining issues. At present, not all required quality records and objective evidence are being generated or managed. In addition, document control procedures are not always being followed at lower levels. And the effectiveness of CARs implementation has not been 100%.

There are indications that user calibration of measurement equipment and associated records are not always being properly maintained. In some cases, calibration requirements are not clearly understood by equipment users. And lower-level documents are still being completed due to the flow-down impact of updated SLPs.

In many areas, procedures may not be followed. Most personnel are familiar with the more routine procedures that govern their work, but they may not yet be fully implementing their requirements.

Current plans call for the conduct of directorate vertical internal audits by February 26. In addition, horizontal internal audits will be performed for the functional areas: calibration, corrective and preventive action, document and data control, records and training by mid March. By April 19, the Ames ISO team will audit the effectiveness of CARs implementation. This should prepare the center to pass the certification audit during the week of April 26.

Beyond that, the ISO team will close out April audit findings, and begin internal audits in late July in preparation for the 6-month surveillance audit.

By Rick Serrano

Fletcher named Director of Aeronautics at Ames

Dr. L. S. "Skip" Fletcher has been named the new Director of Aeronautics at Ames.

Formerly Regents Professor in the Texas A&M University System and Dietz Professor of Mechanical Engineering, Fletcher has held several different positions in the Texas A&M University College of Engineering,

Dr. L. S. "Skip" Fletcher

including Associate Dean. He also served as the Education Coordinator for the university's Offshore Technology Research Center. Fletcher succeeds Dr. Fredric Schmitz who retired last year.

"It is with a great deal of pleasure that I announce the selection of Skip Fletcher as NASA Ames' new Director of Aeronautics," McDonald said. "Dr. Fletcher began his distinguished career as an aeronautical test technician at NASA Ames in 1956 and also served as a project engineer and research scientist," McDonald added. "He is extremely well qualified for this important leadership position, and we look forward to working with him."

In his new position, Fletcher will be responsible for planning, directing and coordinating Ames' aeronautics technology, science and development activities, including basic and applied aerodynamics, aviation systems, rotorcraft aerodynamics, acoustics, space transportation and thermal protection systems, and advanced aeronautical projects.

"I'm looking forward to returning to Ames and leading the center's aeronautics research and development efforts as we head into the 21st century," Fletcher said. "I'm also looking forward to renewing old friendships with my many Ames colleagues and to making new ones in the research community as we all work together on the many challenges that lie ahead."

During his career, Fletcher served as professor and chairman of the Department of Mechanical and Aerospace Engineering at the University of Virginia, Charlottesville, VA, and as the Acting Associate Dean for the College of Engineering at Rutgers University, New Brunswick, NJ. He also worked as an instructor at Arizona State University, Tempe, AZ and as a research assistant at Stanford University.

Fletcher has won numerous honors and awards and is a member of many professional organizations. He is a past president and Fellow of the American Society of Mechanical Engineers and a past president and Fellow of the American Institute of Aeronautics and Astronautics. He is a Fellow of the American Association for the Advancement of Science, the American Astronautical Society, the American Society for Engineering Education and the Accreditation Board for Engineering and Technology. Fletcher is also a Fellow of the Institution of Mechanical Engineers and the Royal Aeronautical Society, both headquartered in the United Kingdom, and the Institution of Engineers in Australia.

Fletcher has authored or co-authored six books and more than 225 conference and journal publications. He has patents or patents pending on six inventions, including a heat transfer cylinder and temperature control mechanisms for a micro heat pipe catheter. Fletcher is listed in Who's Who in the World; Who's Who in Aviation and Aerospace; Who's Who in America; Who's Who in Engineering; and American Men and Women of Science.

Fletcher and his wife, Nancy, an instructor at Texas A&M University, have been married 33 years. They are the parents of two children, a son who is attending graduate school at Stanford University and a daughter attending Baylor College of Medicine in Houston, TX.

By Michael Mewhinney

Ames hosts prince

photo by Roger Brimmer

Center Director Henry McDonald presents a commemorate plaque to Prince Willem-Alexander van Oranje, the Crown Prince of the Netherlands, during his visit to Ames on January 26. His visit was prompted by his strong personal interest in aviation.

Bay Area Backroads scales Hangar One

continued from back page

And what a relief it was! On the roof of Hangar One, the entire structure is below you, and you feel safe and secure on the walkway. On the catwalk just below, there is nothing under you (except that distant, hard, cement floor), and it's a far scarier place to be. Plus, the view from the roof is simply spectacular. All of Ames is at your feet, and you can see Stanford, the mountains, and even parts of San Francisco on a clear day.

The crew shot several video segments on the roof, and hoped to do an interview up there with Greg Kihn, the rocker and KFOX 98.5 FM radio's morning DJ. But nobody had informed Kihn of this, and one look at that ladder and he had other ideas! Afraid of heights, give him credit, he still came up to the top catwalk. But he refused to climb the ladder to the roof. "We can send down a safety harness," Honaker said. "A box of Depends would be more useful," Kihn replied, "but I'm still not coming up."

After the trip to the hangar roof, the rest of the day was a bit of an anticlimax. Except, of course, for the climb down. Suffice it to say that I descended the vertical ladder to the unsighted railing of the catwalk below with a death-grip on each rung and my eyes tightly closed. McConnell didn't even wait for the elevator, he climbed all the way down the stairs.

The crew shot the interview with Kihn in just one "take" on the grassy area of the former Navy Parade Ground. For me, there were a few more uneasy moments, like when McConnell asked me questions about the military that I couldn't answer. Fortunately, they were shooting "live to tape," and the producer assured me they wouldn't use those segments.

We shot additional video footage at the gravitational biology research facility, the 80' by 120' wind tunnel test section, and at the Ames Visitor Center. Hopefully, while my segues may have been awkward, I trust that what I did manage to work in about information technology, astrobiology and aviation capacity won't end up on the cutting room floor.

For those interested, the show is scheduled to air on Saturday, February 20 on Channel 4, KRON. I hope it is informative and gets Ames some useful publicity and recognition. Rest assured, I won't be watching. I will tape the show and face my performance demons later. After all, I'm still riding high. That hangar climb should shore up my male ego for quite some time.

by David Morse

Black History Month Profiles

photo by Dominic Hart

Marjorie Murphy

"Everything in life happens for a reason, be it good or bad," says Marjorie Murphy a "co-op" student in the human resources division at Ames. For three years at UCLA, Murphy remained undecided about her major and her career path. She sampled various academic programs, happened into the Department of Sociology one day, and has never looked back.

Now, Murphy is well on her way to securing her BA in Sociology with an emphasis on organizational development. She has interned at Ames during the summers since 1993, beginning as a SHARP student. In 1997, Murphy decided to focus on a career in human resource management; she is currently being trained as a personnel manager.

Being involved in the community is important for Murphy and is a pursuit of which she is very proud. She spent three years as a candy striper while in high school, and worked with the African-American education project while at UCLA, serving as a peer tutor for multiple subjects. She instilled in her students a desire to learn and be diligent. She believes that each individual can be an important contributor to society as a whole.

After graduation, Murphy intends to use her academic training and Ames work experience to prepare for a leadership role at the center. She currently supports two personnel managers in reviewing resumes for potential candidates for vacancies at Ames; assists in the development and creation of informational resource packets; and rates applications submitted for employment consideration. She intends to continue attending training classes and expanding her knowledge and experience base so that she can be a contributor to discussions on policy and ethical issues for big business and their employees.

How does one achieve personal goals in the absence of support from friends and companions? Easy, says James Davis, a recent graduate of UCLA, "develop new relationships that support you, your abilities and your ambitions." With that as his credo, Davis earned his B.S. in mathematics with a specialization in computer science in 1998. An electronics engineer in Code FES, he attributes much of his success to the support of his mentor Scott Jensen.

Davis started at Ames in the summer of 1990 in the SHARP fellowship program. He went on to the Federal Junior Fellowship program, completing it this past year. He is currently involved in the sun photometer project, and will soon begin work on the use of virtual instrumentation for data acquisition by means of a computer platform. Setting a positive example is paramount for Davis. Currently in the accelerated training program, he is preparing himself for a leadership role in the future.

Davis has turned his creative mind to artistic pursuits. He received the first runner-up award in a monologue contest while attending West Valley College. Currently, his love of acting has him working on a screenplay which reflects his poetic and romantic nature. He was recently recognized for his work on Ames' 1998 Combined Federal Campaign.

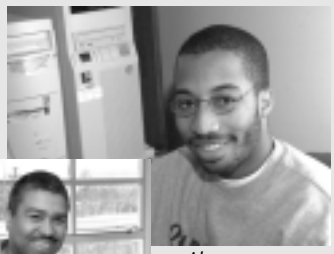
For Davis, "Timing is everything. But you don't need a watch, to tell you when you should or should not take action." He admits that he enjoys his time at Ames because there is "always something new happening." He is fortunate, he says, because at Ames you never dread coming to work.

Bev Norris

Beverly Norris is a personnel management specialist with Code JH. She is responsible for the integrity and accuracy of the information submitted to the consolidated payroll office now located at the Marshall Space Flight Center.

This data is included in the central agency

photos by Tom Trower



Above: James Davis Jr.

Left: Gerald Temple

Gerald Temple is an electronic design engineer (in Code FES) who has worked at Ames since 1980. Temple believes in keeping things interesting and innovative, claiming that, "when you work for NASA, your potential for new and creative projects is unlimited." Temple completed the design of the interface control panel used for large-scale rotor models in the 40' by 80' wind tunnel, and recently came up with a creative invention for a vibration suppression system. He believes it is important to work as a team, and describes coming to work for NASA as "like winning the Super Bowl."

Temple is committed to supporting youth so that they may excel. Tutoring and mentoring students and young adults is one of many ways in which he shows his support. He recently served as a NASA judge on the electrical competition for ACTSO (Academic, Cultural, Technical, and Scientific Olympics). He has won numerous awards for outstanding achievement, including his recent work on the Ames arc-jet facility.

"The key to happiness is unconditional love," according to Temple. For him, "Love is caring, sharing and being sensitive to other's needs, as well as your own." It also means "focusing on your needs, versus your wants, and being less materialistic and more spiritualistic in your approach to life."

Temple has a great love of the arts. Having recently learned Flamenco dancing, he now holds a seat on the Board of Directors of the Flamenco Society of San Jose where he has supported San Jose's very successful annual Jazz festivals. His other hobbies include investing, dancing, pocket billiards, chess, writing poetry and teaching electronics.

photo by Roger Brimmer

From left to right: Starr Strong, Wardell Lovett and 'Roz' Jones

personnel data system. Norris is also responsible for regulatory and procedural processing prescribed by OPM and NASA of all personnel action for every civil service employee at Ames.

After 10 years with Code JH, Norris' contributions are plentiful. She enjoys the challenge of overseeing and coordinating the work of the personnel assistants and clerical staff of the division to meet the ever rising workload requirements. In the face of a shrinking staff and continual turnover, she approaches each challenge with an attitude that ensures that, if it can be done, it will be. Norris has a strong work ethic and follows these constants -- "don't let your work be your life, live your life to the fullest, and enjoy every day as if it is your last."

Norris is committed to advancing her leadership role in all areas that interest her. She continues to take training classes that support her role as a personnel management specialist. Further, she is about to start courses at a local college to support her interest in finance. Strong communication skills are a requirement of her job that she intends to continue developing.

Much of Norris' time is spent enjoying life. She insists that the key to an enjoyable life is "to not sweat the small stuff." Being a mom is what gives her the most enjoyment. She is the number one fan at her son's athletics competitions, be they baseball or football games. She is constantly on the move, but never forgets to breathe. Every so often, she even exhales!

Black History Month should be the reaffirmation of struggle and determination to change attitudes and heighten the understanding of the African-American experience. It is a special time to actualize and acknowledge our gratitude for the exceedingly rich history of accomplishments of African Americans.
— Dr. Henry McDonald, Ames Center Director

Rosalind 'Roz' Eve Jones is a graduate of San Jose State University with a BA degree in industrial psychology. A contractor employee with Quantum Service, Inc. in Ames' Equal Opportunity Programs (EOP) office, she is pursuing her MBA in international business law.

Jones serves as the EOP multicultural programs coordinator, focusing on increasing awareness of diversity in the workplace and equality for women and minorities. She is responsible for equal opportunity training program and for identifying sources of underrepresented women and minority job applicants. She also works with the center's special emphasis groups to address employment needs of women and minorities in scientific and engineering fields.

Jones has received numerous awards at Ames.In 1997, she received the "Above and Beyond" Award for supporting the contract team that earned the "NASA George M. Low Award for Quality." In 1998, she was recognized for her outstanding performance as a valued member of the EOP office team.

Jones is involved with the Sacramento Chapter of Blacks in Government, the San Francisco Bay Area Chapter of the National Black MBA Association, Women for Positive Communication, Federally Employed Women and the National Association for Female Executives.

Born in New Orleans, LA, Jones likes to create her favorite cajun/creole dishes from back home. She is a published photographer, specializing in aerial architectural photography using a black and white format. Her photographic images expressing her signature creative contemporary style have been exhibited in solo and group shows. Extending a helping hand to those in need has always been her nature. She says, "One can always find ways to help others. Simply take the time to stop and listen."

Starr Strong is committed to being the best that she can be in all that she pursues, regardless of the obstacles she may encounter. Currently being trained as a junior contract specialist at Ames, she is attempting to integrate her academic lessons with her work experience to better prepare her for future work-related endeavors. Strong is also focusing on her studies as a business major at San Jose State University. She has already successfully completed a course of business study at Foothill College, which was the basis for her being offered her current position at Ames.

Strong has received recognition for her outstanding contributions to her department and work performance several times during her four years with Code JAC. Some of her important work duties involve the closing of contracts, and verification of accuracy and completeness of contracts assigned to her Branch. Strong maintains her integrity and strength in the business environment through exposure to leaders within her church and by observing her coworkers in leadership positions. She understands that follow through and commitment are required for longevity and success in the workplace. She is tenacious in her approach, always living by the motto, "If at first you don't succeed, try, try again!"

Strong coaches her son's t-ball team and is an active participant at his elementary school. She is consistent in her support of children, and tries hard to set an example of the positive benefits of good ethics, not only in business but in her personal life as well.

Profiles by Ursula Hawkins, Office of External Affairs

Communication is extremely important for Wardell Lovett, a senior system ground support hardware engineer in Ames' Code AFD. Lovett manages the design, procurement and maintenance of organizational systems located throughout his code. His efforts have earned him numerous awards and certificates. He recently received an award for the CTAS project, winner of NASA's "Software of the Year Award." He also received special mention for his efforts in 1998 at the NAACP annual convention, which was attended by more than 16,000 people.

After 10 years with Ames, Lovett continues to see communication as a key element in the process of promoting change. Throughout his career at Ames, Lovett has taken on increasing responsibility within his organization. He has chosen to take management training courses and workshops to enhance his current skills in preparation for a future leadership role, possibly in management. These training efforts emphasize his commitment to leadership and being a team player.

Lovett believes in giving back to the community and for the past four years, he has committed a significant amount of time to the Cal-State Hayward University "upward bound" program. He prides himself on being a positive person, and he avoids being around negative people. "Usually, you don't have to point out the negative, it is obvious," says Wardell. His philosophy is, "If you can't say something nice about a person, then better to say nothing at all."

Ames to host western regional robot games for students

Student-made robots will "clash" in a western regional competition to be held Feb. 25 to 27 at Ames.

Organizers predict that the "robot games" will attract participants from at least 40 high schools in California, Washington, Oregon, Arizona, Idaho, Nevada, Colorado and Utah. During the competition, robots will "battle" for two-minute rounds in an arena setting.

"In the next two decades, NASA will engage in bold new missions of exploration of our star system with robots," said Mark Leon, NASA's manager of the competition at Ames. "In order to accomplish these robotic missions, we will need talented people to build the next generation of robots; that fact, plus NASA's dedication to education, is our motivation for helping students to participate in this competition."

NASA is working cooperatively with a non-profit group called "For Inspiration and Recognition of Science and Technology," U.S. FIRST, Manchester, NH, which organizes the contests. Each year, the group develops the competition by supplying "a problem" and a kit of parts to teams of students. To encourage participation by a broad and diverse range of schools and to ensure that no group is excluded for financial reasons, NASA has agreed to cover the registration fee for 20 high schools with the best proposals from the eight-state western region.

"The 20 best proposals we receive that follow the correct format and satisfy the selection criteria will be rewarded with registration to the U.S. FIRST regional competition at Ames," said Leon. "In addition, schools with the best proposals will receive airfare and hotel accommodations for one team member to attend the kick-off event in Manchester, New Hampshire."

Each year, specific detailed requirements of the robot games are carefully guarded until announced at the kick-off workshop. Students and their advisors then design and construct remote-control robots in six weeks using identical kits of material. Advisors are often professional engineers from private industry, government and universities. In all, regional finals will be held at eight locations across the country, including two other NASA centers. Winners may compete at the national finals in April at Walt Disney World's EPCOT Center, Orlando, FL.

Half of the schools to be awarded the $4,000 for fees must be "disadvantaged" as defined by the U.S. Department of Education. By visiting the Ames Learning Technology Project website at: http://quest.arc.nasa.gov/firstrobots, students and educators can learn how to apply to participate in the robot contests.

"Other requirements include a plan for a dedicated teacher and a dedicated mechanical engineer to work with the students. They also have to have transportation arrangements to Ames," Leon added. Each team had a representative at the kick-off event in New Hampshire. This is a critical phase in the competition where the teams receive their robot kits and clarify their understanding of how they should prepare.

The U.S. FIRST website at: http://www.usfirst.org lists more information about the other regional contests. They will be held at the visitor center at Johnson Space Center, Houston, TX; Kennedy Space Center, FL; William Rainey Harper College, Chicago, IL; Temple University, Philadelphia, PA; Meadows Music Theater, Hartford, CT; Rutgers University, New Brunswick, NJ; and Eastern Michigan University, Ypsilanti, MI.

Organizers say the overall goal of the robot competition is to allow students to interact with engineers so that the young people can see the connection between classroom instruction and the real world. Hopefully, this will inspire more students to become engineers.

"The competition truly is a fine, creative example of what can be done to excite the next generation about science and technology and motivate young Americans to the pursuit of scientific and technological excellence," said President Clinton.

U.S. FIRST was started in 1989 by inventor Dean Kamen to persuade American youth that engineering and technology are exciting fields. The annual robotics competition is patterned after Massachusetts Institute of Technology Professor Woodie Flowers' engineering design course.

BY JOHN BLUCK

Hazards, Close Calls & Safety Hotline

Are you aware of a safety hazard or a close call situation at the center that may involve (or have involved) a building, office, lab, shop, vehicle, person, intersection, or other human/facility-type issue? If so, let your supervisor or the Safety Office know. What is a hazard? A hazard is any condition that could result in an accident, injury, or illness. A close call is any situation that might have resulted in an accident.

The best way to prevent an accident is to correct the hazardous condition before it results in an accident, injury, or property damage. Studies have consistently shown that there are 300 close calls for every serious injury. If you report the hazard, we will have a chance to correct the hazard before an accident occurs. How do you report a hazard? Your first option should be to notify your Supervisor or the Safety Office at ext. 4-0268. But if you prefer to do this anonymously, visit the Code Q website at HYPERLINK http://q.arc.nasa.gov/ http://q.arc.nasa.gov/. Click on Close Call/Hazard Report and just fill in the Close Call/Hazard Report form. This is strictly an anonymous submittal. It is not known who reports these close calls/hazards unless you specifically choose to tell us. If you do choose to let the Safety office know who you are, the office will be able to resolve the safety concern more efficiently. Additionally, you can report a close calls/hazard via the Safety Hotline at ext. 4-SAFE. This is an anonymous message-recording device and is not for 911 emergencies. There is no record of who is making the call or from which phone the call originates. The Safety Hotline can also be reached from off the center at the same number (650) 604-SAFE. Help Ames maintain a safe work environment.

Astrobiology flies high!

The 1997 Ames Astrobiology Academy was very fortunate to work with the crew of STS-90 on designing a shuttle experiment. As part of the curriculum, Astrobiology Academy participants must work together on a group project which pulls together all of the their resources over the ten-week period. This inaugural group of the Academy proposed to do a shuttle experiment to work in conjunction with the Neurolab payload of STS-90. Their experiment examined if astronauts dream differently in microgravity, as well as if the new sleeping aid Melatonin, affects their dream patterns and thus their quality of sleep while on a mission. The Academy was able to work very closely with the astronauts of STS-90 while they visited Ames and built strong relationships with the crew. Although the experiment was not approved to fly on board the Neurolab mission, the crew showed their support of the Academy by flying an Ames Astrobiology Academy T-shirt. The T-shirt is shown here being worn by Jim Pawelczyk in a picture with fellow crew member and payload specialist Jay Buckey.

Calendar

Jetstream Toastmasters, Mondays, 12 noon to 1 p.m., N-269/Rm. 179. Guests welcome. POC: Jenny Kahn at ext. 4-6987 or Karen Matsuoka at ext. 4-6184.

Model HO/HOn3 Railroad Train Club at Moffett Field invites train buffs to visit and join the club in Bldg. 126, across from the south end of Hanger One. The club is in particular need of low voltage electricians and scenery builders & maintainers. Work nights are usually on Friday nights from 7:30 p.m. to 9:30 p.m. Play time is Sunday from 2 p.m. to 4 p.m. For more info, call John Donovan at (408) 735-4954 (work) or (408) 281-2899 (home).

Ames Bowling League meets at Palo Alto Bowl every Tuesday at 6 p.m. The league is in need of substitute bowlers. POC: Mina Cappuccio at ext. 4-1313.

Ames Child Care Center Board of Directors Meeting, Wednesdays, 12 noon to 1 p.m., N-213/Rm. 204. POC: Debbie Wood at ext. 4-0256.

Ames Ballroom Dance Club beginning and intermediate West Coast Swing starting Feb 16 and Cha Cha starting Mar 9. Tuesdays from 5:15 to 7:00, MTCC, bldg 3. POC: Rosalyn Jung at rjung@mail.arc.nasa.gov.

Computer History Lecture, Feb 16, 5:30 p.m. Bldg N-201 Auditorium. Speaker: Paul Ceruzzi, Curator, The Smithsonian Institution, Wash, D.C., Topic: Doing Computer History in Internet Time. Reservations required. POC: Dag Spicer, at ext. 4-2578 or email at: spicer@tcm.org

Ames Multicultural Leadership Council Meeting, Feb 17, 11:30 a.m. to 1 p.m., Galileo Rm/Ames Cafe. POC: David Morse at ext. 4-4724 or Sheila Johnson at ext. 4-5054.

NFFE Local 997 Union General Meeting, Feb 17, 11:30 a.m. to 12:30 p.m., Bldg. 19/Rm. 2017. Guests welcome. POC: Marianne Mosher at ext. 4-4055.

Ames Asian American Pacific Islander Advisory Group Meeting, Feb 18, 11:30 a.m. to 1 p.m., N-241/Rm. B2. POC: Daryl Wong at ext. 4-6889 or Brett Vu at ext. 4-0911.

Ames Amateur Radio Club, Feb 18, 12 noon, N-260/ Conf. Rm. POC: Mike Herrick, K6EAA at ext. 4-5477.

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

Ames Contractor Council Meeting, Mar 3, 11 a.m., N-200/Comm. Rm. POC: Greg Marshall at ext. 4-4673.

Hispanic Advisory Committee for Employees, Mar 4, 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, Mar 4, 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, Mar 4, 11:30 a.m. to 12:30 p.m., N-241/Rm. 237. POC: Mary Buford Howard at ext. 4-5095.

Nat'l Association of Retired Federal Employees, S.J. Chapter #50, Meeting, Mar 5, at the Elk's Club, 44 W. Alma Avenue, San Jose. Social hour: 10:30 a.m. Prog. & bus. mtg. follow lunch at 11:30 a.m. POCs: Mr. Rod Peery, Pres., (650) 967-9418 or NARFE 1-800-627-3394.

Southbay FEW Chapter Meeting, Mar 9, 11:30 a.m. to 1:00 p.m., Bldg. 241, Rm B1. POC: Christine Munroe at ext. 4-4695.

Professional Administrative Council (PAC) Meeting, Mar 11, 10:30 a.m. to 11:30 a.m., Location TBD. POC: Janette Rocha, ext. 4-3371.

Ames Sailing Club Meeting, Mar 11, 11:30 a.m. to 1 p.m., N-262/Rm. 100. POC: Greg Sherwood, ext 4-0429. Web site: http://sail.arc.nasa.gov

Java User Group, Mar. 17, 1:30 p.m. to 2:30 p.m., Bldg 258, Rm. 127. POC: Sharon Marcacci, ext 4-1059; http://jug.arc.nasa.gov. Speaker - IBM's Java Technology Program Director.

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

Housing

Part time or full time roommate needed to share expenses. 2 bd/1ba apt in S'vale off Mary Ave. near El Camino. Rent negotiable for part time rentee. Available now. Barrie Anne (408) 736-8961.

Duplex for rent: Santa Clara (Linden Dr & Washington St), 2bd/1ba w/backyard, 1 car ga, laundry rm, storage. Avail: Mar 1. $1,400. Call (650) 814-8666.

Wanted: furnished room close to Ames, with kitchen privileges, for Ames Associate who will be visiting during May through July. Desired price is $500 per month or less. Wendy at ext. 4-6358.

Transportation

'81 Mazda Rx-7, 50K mls on rebuilt engine, runs good, $1,000. Call (408) 257-5492.

'86 Diplomat Executive motorhome, GM 454 engine, Koler 7kw generator, air suspension, hydraulic leveling, rear view camera, 2 awnings, color TV, multi-battery system,tow package w/hitch, new tires, sleeps 6 and much more...like new, 39,000 mls, $30,000 or B/O. Dan (408) 969-9916.

'87 Mazda 626, 4 cyl, 5 speed manual, 125K. New brake system, new water pump and timing belt, all tires less than 25K. AC system recently charged. Very solid, runs great. $2,100 or B/O. Kerry (408) 378-6628.

'89 Honda Accord LX sedan. Only 25K mls! $7,500. Joan or Bill at (408) 867-7511.

'92 Explorer, Eddie Bauer, V6, AT, fully loaded. A/C, p/windows and locks, leather, moon roof, tow package, AM/FM/cassette, rack. Exc. cond., $12,500. Lesley (650) 424-9824.

'94 Nissan Sentra LE sedan "Limited Edition" 4 Cyl., A/T, A/C,Cruise Control , p/windows, p/locks, AM/FM/cassette, clean, well-maintained, low miles (53K). $8,500 or B/O. Call 209-369-0274 (Lodi).

'95 Chevy Blaser , 4.3 Vortec , 4x4 , fully loaded , leather int. 70K mls. $17,500 or B/O. Bob at (408) 736-4039.

Vacation rental

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

Miscellaneous

Upholstered sofa and chair: contemporary, ivory, $300. Call (408) 295-2160.

64MB ram: Four 16M, 60nS, 72pin SIMMs, $45. Call (408) 295-2160.

6 month old washer $600 and gas dryer $400. Also, queen size futon bed, 6 years old, but only been used as a bed for 2 years. Wooden, bifold frame with arms, cotton/wool mattress, and mattress cover. $175. Call (408) 446-4096.

Bike rack, REI Rhode gear $50; tire chains $20; car cover for 14-15' car $20; quilted car cover for Toyota Celica $30. Call (408) 629-7889.

Fireplace insert--woodburning, Convector Zero brand, glass door, good cond. Attractive unit makes warm fire with less wood. $600 or B/O. Shelley (408) 225-7495 after 7:30.

Maytag washer, exc. cond., $300. Sears Kenmore dryer, good cond., $75. Call (650)738-2967.

Vitamaster ski machine/exerciser. $50. Call (408) 248-4402.

Futaba Conquest 6 channel radio-control system, broad band (ch38), barely used, includes four FP-S38 servos and all packaged accessories. Transmitter battery pack dead but everything else in full working order. $45. Tobias (650) 965-8768.

Maple dining table/Formica top with 2 leaves, 6 chairs. $225. Maple Hutch $325. Call (408) 253-9074.

The Office of External Affairs invites all Ames employees to visit the new California Air and Space Center (CASC) web site at: http://casc.arc.nasa.gov

CASC is a key component of the new Ames Research Complex (see feature article in December 11 Astrogram). The goal of the CASC is "Inspiring Education for the Next Millennium". This unique facility will enhance training for elementary and secondary teachers and their students in the disciplines of math, science and technology.

You can be among the first to volunteer to help launch this exciting endeavor by contacting the "Friends of CASC" at IM4CASC@aol.com.

Ames Retirements

Name	Code	Date
Patricia H. Coburn	JAB	1/30/99

JASON '99

Bring your children (ages 8 and up) to this year's JASON Project.

Tues, 3/2	8:30 a.m.
Wed, 3/3	1:00 p.m.
Sat, 3/6	11:30 a.m.
Tues, 3/9	11:30 a.m.
Fri, 3/12	8:30 a.m.

For more information, call Lisamarie at 4-2046 or at lmgonzales@....

Lost & Found

Moffett Field Lost and Found may be reached via ext. 4-5416 at any time. Residents and employees at Ames may also use Internet browser at: http://ccf.arc.nasa.gov/codejp/pages/lostFound.html to view a list of found property and obtain specific instructions for reporting lost or found property and how to recover found property. You may also contact Moffett Field Security Police Investigations Section at ext. 4-1359 or email at: mfine@mail.arc.nas.gov.

Astrogram deadlines

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

Deadline	*Publication*
Mon, Feb 15	*Fri, Feb 26*
Mon, Mar 1	*Fri, Mar 12*
Mon, Mar 15	*Fri, Mar 26*

Bay Area Backroads scales Hangar One

Have you ever agreed to do something and then asked yourself later, "What was I thinking?" Such was my predicament on January 28, the day Ames hosted a film crew from KRON TV's "Bay Area Backroads." My public affairs instincts leapt at the chance to see Ames featured on such a popular show. But, local TV is not without risks. Your friends and colleagues might be watching. Even worse, you might be tempted to peek yourself. And that wasn't my only concern. My objectives were different than the TV producers. They craved great visuals and history, while I wanted to talk about the California Air and Space Center and Ames' new directions.

So with trepidation and a growing sense of nervousness, I met the TV crew on the appointed day. My concerns were eased by the enthusiasm and friendliness of the entire team, from cameramen, to producer, to the host Doug McConnell, himself. Everyone was pleasant. Eager to get started, we proceeded to our first location — historic Hangar One.

We had agreed to the crew's request to shoot footage from the roof. Perhaps that's why Hangar One seemed so cavernous and imposing on this particular day. Climbing through the roof of an over 200-foot high building that's little more than a steel-covered scaffolding didn't seem like such a good idea any more. At least, we didn't have to climb most of the way; we rode the elevator up. It is pulled on wheels up the curved inside wall by pulleys operating within a steel framework. It carries no more than three people at a time, with a maximum load of 600 pounds. You chose your riding partners carefully, opting to make this trip with the thin people. The ride is smooth and uneventful — you see only the wall going by. It's when you exit from the relative safety of the confined lift that you get the first sense of how really high you are. And the gloves that provide some protection from the dirt and bird presents don't prepare you for that!

Photo courtesy of KRON

Bay Area Backroad's host Doug McConnell on top of Hangar One.

The next shock is seeing how narrow the catwalks are. Probably two to three feet across, they look more like a gymnast's balance beam at that altitude. The first few connecting walkways are the tiniest of all. Coming out of the cage nearly 200 feet in the air, you must first reach for a small guard rail. Stepping gingerly onto the catwalk, you tred very carefully on the slatted old wooden boards which does nothing to soothe your nerves.

Our veteran guide, Carl Honaker, tried to calm us. "These boards are 65 years old and haven't broken yet," he proclaimed. I wondered if that was the good news or the bad. Looking down on the tiny airplanes below, I would have preferred to think that the boards had all been freshly replaced. "I weigh more than you," Honaker said, reassuringly. Then keep your distance, I thought, let's not test the resolve of these old planks.

Seeing no obvious mechanism for ascending the final distance to the roof from the catwalk, I wondered what was next. And then I saw it — a steel ladder going straight up to a small trap door. Worst of all, the ladder doesn't even come down to the catwalk. You have to climb the side support railings of the wooden walkway to reach the first step of the ladder. After that, it's a hand-over-hand climb, one rung at a time, some 15 to 20 feet straight up, through the narrow hole and onto the roof above. One glance convinced me I wasn't going up. But, everybody else did it. Plus, I'd come this far and probably never would again. So, pride, peer pressure and specious reasoning finally got me up that ladder and onto the roof, suit and all.

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THE AMES Astrogram

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Editor.....Astrid Terlep

THE AMES Astrogram

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