

Astrogram

Communication for the Information Technology Age

UARC signals creative approach to NASA research, business

NASA and one of the nation's largest and most prestigious university systems have launched a bold new research collaboration, signaling a new way of doing business at the space agency – and throughout the country.

During a news conference held Sept. 22 in the NASA Ames Conference Center (formerly the MTCC), NASA and University of California officials announced they have signed a 10-year contract valued at more than \$330 million, a first-of-its-kind for NASA, to establish a University Affiliated Research Center (UARC).

The University of California at Santa Cruz (UCSC) will manage the UARC as the lead campus on the project. Officials say the UARC will provide a unique combination of research and educational capabilities to meet NASA's mission requirements and to develop future human resources in technology and science.

"The UARC moves NASA and university collaborations in a whole new direction," said G. Scott Hubbard, Ames center director. "Typically, universities focus on fundamental research. With the new UARC, we are breaking down traditional institutional barriers to collaborate on mission-driven research that is on NASA's critical path," he added.

"This collaboration brings together ideal partners for innovation," commented M.R.C. Greenwood, UC Santa Cruz chancellor. "This is a singular opportunity to advance important and potentially world-changing research," she added.

"Our campus' keen interest in this project is supported by recognized research achievements and previous success in multidisciplinary and collaborative projects, such as the national Center for Adaptive Optics," Greenwood continued. "The distinguished team of UC

participants and our partners at San José State and the Foothill DeAnza Community College District are eager to commence work with our NASA colleagues," she said.



NASA photo by Dominic Hart

Congresswoman Zoe Lofgren (far left) addresses the audience at the recent UARC rollout while Ames Center Director G. Scott Hubbard (second from left), UCSC Chancellor M.R.C. Greenwood (second from right) and U.C. Provost and Senior Vice President for Academic Affairs C. Judson King (far right) look on.

The creation of the UARC will surely prove to be a very significant event in NASA history. The NASA-UCSC UARC is the first significant new partnership of a federal research laboratory with a major university system in more than 45 years. Nothing like this has occurred since the birth of the Los Alamos National Lab. and NASA's adoption of the Jet Propulsion Lab.

California Congresswoman Zoe Lofgren and staff members from the offices of congressional representatives Anna Eshoo, Mike Honda and Sam Farr attended the mid-morning news conference that was followed by a festive recognition luncheon in the conference center's grand ballroom. State Senator Bruce McPherson and C. Judson King, provost and senior vice president, academic affairs, University of California, also were in attendance, as were representatives from the cities of Mountain View and Sunnyvale.

The announcement received considerable coverage in local news media, including KCBS news radio, the San Francisco Chronicle, San José Mercury News, Oakland Tribune, Space Daily, Mountain View Voice, Tri-Valley Herald, Silicon Valley Business Journal, Federal Computer Week, The Scientist, Palo Alto Daily News and Washington Fax.

NASA officials said the new UARC will provide Ames with additional research capabilities to fulfill NASA's mission requirements. The UARC's educational mission will enable students and university researchers to work side by side with Ames researchers on mission-critical problems to benefit the agency and the nation. Overall, the UARC will provide long-term continuity of top-tier research talent focused on NASA's growing multidisciplinary mission needs.

The close collaboration with an established university system will enable the UARC to offer career opportunities to attract and retain the best researchers. The UARC contract will substantially expand university participation from fundamental research under grants and cooperative agreements, to mission-driven research under task order contracts.

The total estimated cost-plus-award fee for the base period is \$119 million; the total estimated cost-plus award fee for option period one is \$82 million; the total estimated cost-plus-award fee for option period two is \$132 million.

The 10-year period of performance consists of a five-year base period followed by two-year and three-year options. The university began phase-in operations in September 2003, with full contract responsibility starting December 2003 and continuing through August 2013.

BY MICHAEL MEWHINNEY ▲

Air Expo draws in the crowds at Moffett Field

This year's show celebrated the 100th anniversary of human flight and was dedicated to the astronauts of space shuttle Columbia. Spectators were treated to non-stop action by some of the country's best aerial performers as they went head-to-head to perform their best. Many employees from Ames helped staff the NASA Ames tent next to historic Hangar One, which housed the exhibits from highlighting intelligent flight control, air traffic management tools, rotorcraft, the Stratospheric Observatory for Infrared Astronomy (SOFIA) and many other new and emerging technologies.



NASA photos by Steve Arimura



Budget formulation 'go-live' set for Oct. 27

The IFMP Budget Formulation (BF) module is scheduled to 'go-live' at all NASA centers this month. The BF module has two scheduled releases that support both center and agency budgetary processes. Release 0.5 is scheduled for release in October 2003 and will support bottoms-up budget formulation capability at each center. Release 1.0 is scheduled for February 2004 and will support top-down changes and guidance capability required by NASA Headquarters. Each of the releases will be rolled out to all NASA centers at one time—in other words, there will be no 'pilot' center or implementation in center groupings as there was with Core Financial. First use of the BF module will be the development of the FY06 Pre-POP.

To keep leaders informed of project progress and upcoming training, the BF team has attended many directorate staff meetings, presented at the program managers meeting, provided system demonstrations to user communities, and began 'download' training to prepare trainers and floaters for hands-on classroom training. In addition, a BF 'resource room' has been set up to provide end users with an opportunity to experience the system in advance of training.

End users received their individual training schedules in mid-September. The schedules outlined a suite of courses including Web-based and instructor-facilitated, full-cost training and hands-

on system role based training. The full-cost Web-based course, or full-cost 101, can be found at <https://fullcost.hq.nasa.gov>. The full-cost instructor facilitated sessions began in September and were tailored to teach BF end users how to use the module in a full-cost environment. System hands-on, instructor-led training (ILT) will begin this month. The BF project team has worked hard to balance the training requirements for the module with the multitude of other center activities associated with year-end closeout and FY04 start-up.

Currently, 338 individuals have mapped themselves to roles in the BF module at Ames, approximately 90 of whom will only access informational output of the new system in the form of reports. The Ames training strategy corresponds with functionality in Release 0.5 for bottoms-up planning and includes approximately 248 end users in training now through December. The other 90 users will be trained after Release 1.0 to correspond with the reporting functionality provided in that release. For more details regarding budget formulation schedules, roles, and training visit the Web at: <http://ifmp.arc.nasa.gov/module-budgetformulation.html>.

Questions regarding budget formulation can be addressed to: budgetformulation@mail.arc.nasa.gov

Flores receives engineer award

The Hispanic Engineer National Achievement Awards Corporation (HENAAC) and Technica magazine recently announced the HENAAC's 2003 award winners. Jolen Flores, Ph.D., chief, Advanced Aircraft and Powered Lift Branch, was selected for the Outstanding Technical Achievement Award in Government.

Winners in various categories are among this nation's best and brightest engineers and scientists. Winners are selected by the HENAAC selection committee, which is an independent group of representatives from industry, government and academia. The selection committee was chaired by the dean of the College of Engineering at the University of Texas at Austin.

This year's awards were presented Oct. 17 in Austin during the HENAAC's 15th Annual Awards Conference. A representative of Ames Center Director G. Scott Hubbard was on hand to present the award to Flores, who is the first Ames employee to receive such a prestigious award.

Ames students make West Nile Virus risk map for Monterey

A map showing the potential risk of West Nile virus being carried by mosquitoes in Monterey County is the product of four students who worked this summer at NASA Ames.

The students made ground surveys of mosquito habitats and matched their data with satellite pictures and data to make a countywide map that officials are using to help deploy mosquito abatement teams and equipment. The college and high school students used a computer program that creates maps with special color-coding to identify objects and areas on the ground as varied as specific crops, animal habitats and urban areas. This type of computer program helps scientists analyze and manage large numbers of digital images and other information.

"The students for the first time have produced a risk map for the human population in Monterey County, which includes the general area of Carmel, Calif.," said Jay Skiles, an Ames research scientist and mentor for the student team. "The map shows the location of at-risk humans who are 55 and older and their proximity to West Nile virus-carrying mosquito habitat."

The virus causes a version of the sometimes-fatal disease encephalitis that results in inflammation of the brain and spinal cord. The student study and map enable Monterey County officials to more effectively direct their mosquito abatement program to areas where the West Nile virus would most likely affect human beings, according to Skiles. The students made a presentation about their study to the county board of supervisors in September. In addition, the students made presentations to the Western Governors' Association in September in Montana and will later present to the National Mosquito and Vector Control Conference in Georgia.

Students sampled standing water to gather evidence of mosquitoes that can carry the West Nile virus. The team correlated ground observations with satellite imagery to identify countywide mosquito habitat.

"We did field work to identify vegetation that is associated with mosquito habitat," said Emily Clary, a team member who is a student pursuing a master of science degree in geography at the University of New Mexico, Albuquerque, N.M.

Specific combinations of variously colored light frequencies and other energy reflected by the surface of the Earth serve as spectral 'fingerprints' that the students used to zero in on where mosquitoes breed. The satellite pictures and data enable scientists to observe and analyze wide areas that otherwise could

not be accurately surveyed without the help of thousands of volunteers on the ground.

The virus was first documented in North America in 1999, according to student Elizabeth Ballif of Utah State University. "Last year alone over 4,000 human cases were reported, resulting in nearly 300 deaths," Ballif said.

"What's really important is that students recommended additional mosquito surveillance in places where the county isn't doing surveillance," said Cynthia Schmidt, 'Develop' program coordinator at Ames. 'Develop,' a student applications and workforce development program, focuses on the community benefits of Earth science.

"The county will be forewarned of the presence of the virus before it hits populated areas," Schmidt added.

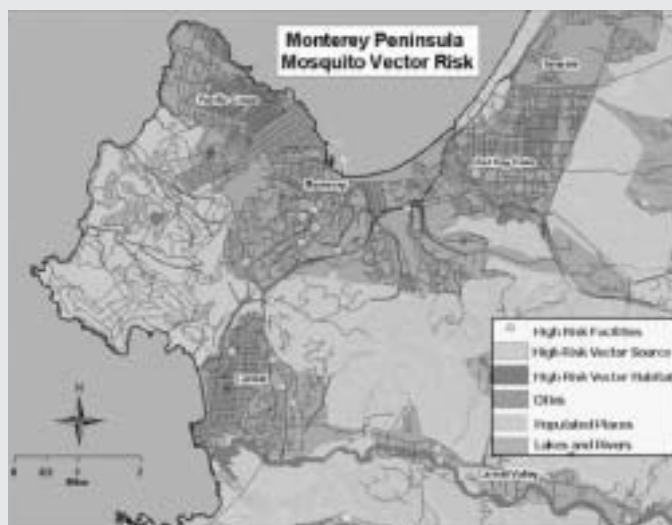
The Western Governors' Association in Denver announced in May the selection of students from western universities who received training and internships in applied Earth science, including remote sensing. Remote sensing is the use of satellite and aerial images to monitor and investigate environmental, health, agricultural and other issues.

"This summer, the students learned skills such as remote sensing, image interpretation and geographic information system techniques," Skiles said.

"It seemed like what we were doing is actually putting out a useful product," said 16-year-old Kevin Hsu, a student at Gunn High School in Palo Alto. "A lot of the NASA scientists were very helpful and willing to share. It was quite exciting to work with people at levels from high school up to graduate level," Hsu added. He is the only high school student on the West Nile virus team.

The other team members, their schools and the degrees they are pursuing are: Ballif, of Utah State University, bachelor of science, geography; and Alex Hugel, of the University of Utah, bach-

elor of science, geography. The university students took part in the 'Develop' program. Student teams research state, tribal and local problems and create 3-D computerized visualizations to help gov-



A West Nile virus risk map showing the potential risk of West Nile virus being carried by mosquitoes in Monterey County is the product of four students who worked this summer at NASA Ames as part of the 'Develop' program. The students made ground surveys of mosquito habitats and matched their data with satellite pictures and data to make a countywide map that officials are using to help deploy mosquito-abatement teams and equipment.

ernment and industry better understand how NASA technology can help with issues of community concern.

Other students working in the 'Develop' program at NASA Ames are conducting studies of the Pyramid Lake Paiute tribe reservation in Nevada. The primary objectives of this project are to use remote sensing and ground-based methods to map and monitor invasive and noxious plant species that are rapidly encroaching upon the northern Nevada territory. The project also includes organizing new and existing data to create a database of information about wildfire fuel on the reservation.

The Applications Division of NASA's Earth Science Enterprise funds the program. The Western Governors' Association is an independent, nonprofit organization representing the governors of 18 states, American Samoa, Guam and the Northern Mariana Islands.

Images of the Monterey County West Nile virus risk map and other publication-size images are available on the Internet at: <http://amesnews.arc.nasa.gov/releases/2003/03images/westnile/westnile.htm>.

BY JOHN BLUCK ▲

Safety is a 'OneNASA' ongoing endeavor

The investigation of the Columbia tragedy revealed the need for NASA to improve its ability to verify engineering and safety standards; share technical information, practices and talent; and independently assess the ability to achieve mission success.

To this end, NASA Administrator

making better risk acceptance decisions." **What the NESC is and is not**

The NESC will provide centralized management of independent engineering assessment. NESC experts will use state-of-the-art tools and methods and will have the benefit of adequate funding to perform truly independent assessments and trend analysis. Because NASA will fund the NESC at the corporate level, an unprecedented level of independence will exist.

The NESC does not relieve program managers from their responsibility for safety. Instead, NESC initiatives will complement the engineering and safety efforts of programs and centers. The NESC's credibility and its independent chain of command will assure considerable view on complex technical issues.

of all points of view on complex technical issues. **How can you help?**

The NESC will be based at the Langley Research Center, Hampton, Va., and will have a management office consisting of approximately 30-40 full-time

employees.

Another 30-50 senior engineering and safety experts will be located at the centers but assigned full-time to the NESC. This workforce will be supplemented through partnerships with external organizations.

Finally, 'ready-experts' at each field center will be a vital part of the team. From across the agency, 150-200 experts in a variety of technical specialties will be called upon for peer review and critique of flight rationale, mission requirements, testing, trending, lessons learned and the like.

Bridges has chosen Ralph Roe as his special assistant to develop the NESC's implementation plan.

"It's a tremendous responsibility but a stimulating opportunity, said Roe. "While the NESC is one of several initiatives in returning the shuttle to safe flight, its broader objectives include strengthening and expanding the agency's safety, mission assurance and engineering disciplines for major NASA programs. The NESC is a 'OneNASA' effort that will involve all NASA facilities and the top technical experts in NASA and our partner institutions."

What do you have to offer the NESC?

The NESC is currently seeking the agency's best talent to be a part of this important NASA endeavor. If you are intrigued by this career opportunity, visit the Web at: [http:// nesc.nasa.gov](http://nesc.nasa.gov)

The NESC point of contact at Ames is Tina Panontin at ext. 4-6757 or e-mail tina.l.panontin@nasa.gov

BY MARNY SKORA
LANGLEY RESEARCH CENTER

NASA photo courtesy NASA Langley



Langley Director Roy D. Bridges Jr. (right) selected Ralph Roe (left) as his special assistant to manage the implementation of the NASA Engineering and Safety Center.

Sean O'Keefe announced in July the establishment of the NASA Engineering and Safety Center (NESC). As chartered, the NESC will provide independent technical expertise to evaluate problems and supplement safety and engineering activities for agency programs and projects.

That's a big order. It's also a stimulating 'OneNASA' opportunity.

"The NESC will draw on the engineering talents of the best minds across the agency's 10 field centers," said Langley Director Roy D. Bridges, Jr.

O'Keefe has tasked Bridges with the development and start-up of the NESC.

"Roy's experience as an aviator and shuttle pilot and his intimate knowledge of the intricate shuttle system and other advanced aerospace systems make him the right person to lead this critical initiative," said O'Keefe.

The NESC will take policy direction from Bryan O'Connor, associate administrator for the Office of Safety and Mission Assurance.

"In addition to NASA expertise, the NESC will also tap the nation's top experts in industry, department of defense, national laboratories and universities," said O'Connor. "We have a responsibility to make our programs as safe and reliable as we know how. The NESC enables us to more completely fulfill our commitments for assessing risk and

Ames' Safety Suggestion evaluation



NASA photo by Tom Trower

The Ames Safety Suggestion Committee, shown here at a recent meeting, meets quarterly to evaluate employee suggestions to improve health and safety conditions at the center. The committee is comprised of representatives from each directorate. So far, the committee has presented one financial award per quarter since April. Suggestions may be sent to S. Lomas at Mail Stop: 221-10 or e-mail at: slomas@mail.arc.nasa.gov.

RIACS students graduate, tour computer museum

Recently, this year's RIACS summer students toured the Computer History Museum in Mountain View. The



RIACS 2003 summer student graduates.

purpose of the Research Institute for Advanced Science (RIACS) summer student program is to provide talented university students in the information sciences the opportunity to spend a 10-week session learning with researchers at NASA Ames to address information technology challenges of future NASA missions. The student may also be invited by the mentor to return the following summer as an intern.

RIACS research focuses on four cornerstones of information technology research: autonomous systems, human-centered computing, high-performance computing and networking, applications of information technology, all nec-

certificates of completion and given a special tour of the museum by volunteer docents, ending with a reception. The Computer History Museum hosts both real and virtual exhibits. It is home to one of the largest collections of computing artifacts in the world, a collection comprising over 4,000 artifacts, 10,000 images, 4,000 linear feet of cataloged

documentation and gigabytes of software. The Computer History Museum is located at 1401 N. Shoreline Blvd. in Mountain View and opened its alpha phase to the public in June 2003. More information can be found at: <http://computerhistory.org/>

BY ANIL JINDIA ▲

Environmental Management Systems (EMS) required at NASA centers

Executive Order 13148 Greening the Government through Leadership in Environmental Management and NPG 8553.1 require NASA to have a formal Environmental Management System (EMS). An EMS is a system that (1) incorporates people, procedures and work practices in a formal structure to ensure that the important environmental impacts of the organization are identified and addressed; (2) promotes continual improvement by periodically evaluating environmental performance; (3) involves all members of the organization as appropriate; and (4) actively involves senior management in support of the environmental management program. The purpose of the agency EMS is to have a single overall agency approach to managing environmental activities that allow for ef-

ficient, prioritized program execution.

NASA and Ames' EMS procedures and guidelines (NPG 8553.1 and APG 8800.3) require that the Ames community is made aware of the EMS and the environmental impacts of Ames' activities.

The chart below describes the general distribution of environmental aspects by directorate, and thus impacts, at NASA Ames as of December 2002.

If you have specific inquiries concerning the above information, contact Christel VanArsdale, environmental protection specialist, at ext. 4-1175 or John Scarborough, EMS coordinator at ext. 4-6965. Further information is on the Web at: <http://q/qe/ems/>.



NASA photo by Astrid Terlep

The Burroughs ILLIAC IV hard disk drive, US, 1975. This was a gift from NASA Ames to the Computer History Museum.

essary to meet the future challenges of NASA missions.

The students were presented with

ASPECT	J	F	S	A	D	G
Clean Water Management - Industrial Wastewater	●	●	●	●	●	●
Clean Air Management	●	●	●	●	●	●
Hazardous Materials Management	●	●	●	●	●	●
Storage Tank Management	●	●	●	●	●	●
Hazardous Waste Management	●	●	●	●	●	●
Asbestos and Lead Paint	●	●	●	●	●	●
NEPA	●	●	●	●	●	●
Clean Water Management - Stormwater	●	●	●	●	●	●
Radioactive Materials and Non-Ionizing Radiation	●	●	●	●	●	●
PCB Management	●	●	●	●	●	●
Natural Resources Management	●	●	●	●	●	●
Noise and Vibration	●	●	●	●	●	●
Historical, Archaeological Resources	●	●	●	●	●	●
Solid Waste Generation Management	●	●	●	●	●	●
Wetlands and Floodplains	●	●	●	●	●	●
Safe Drinking Water	●	●	●	●	●	●
Pesticide and Herbicide Management	●	●	●	●	●	●

Greenleaf receives international award for research

John Greenleaf of Ames and the Ames Center for Gravitational Biology Research (CGBR) has received recognition as he was awarded 'the International Cannes and Nestle Water Institute Prize on Water and Medicine' during the International Conference on Water in France. The citation on the award reads: "attributed to Doctor John



NASA photo by Dominic Hart

John Greenleaf

Edward Greenleaf for his outstanding contribution in various research scientific fields in relation with human physiology. Greenleaf reached significant progress on hydration, fluid intake, thirst, thermoregulation, and physical exercise, acclimation and muscle physiology."

The International Conference on Water, among other topics, discussed water supply in the Mediterranean sea and drew people from many international locations including the United States, northern Africa, the Middle East and many European countries. The vice president of the Swiss company Nestle in Cannes selected Greenleaf to receive this year's award for outstanding research and contributions in medical water use.

"Most of all I would like to thank NASA Ames Research Center and the Gravitational Biology Research Branch management for giving me an opportunity to conduct physiological research in Ames laboratories over 39 years, which have contributed to this award," said Greenleaf.

Greenleaf's primary work was in the areas of life sciences, environmental and human physiology, astronaut

health, water intake and water quality during space flight, gravitational physiology, thermoregulation, deconditioning, cardiovascular and fluid regulation research and exercise physiology.

Greenleaf studied body fluid and blood parameters and temperature regulation in response to induced fluid shifts. He conducted tilt-table, water-immersion and bed-rest studies on both male and female subjects in order to study the mechanism involved in deconditioning/adaptation to microgravity. He has also formulated AstroAde, a hyperhydration fluid that has been used by astronauts.

Greenleaf received an undergraduate degree in physical education from the University of Illinois; an M.A. in physical education from the New Mexico Highlands University; and an M.S. and Ph.D. in physiology from the University of Illinois. He has held adjunct professorial appointments at San Francisco State University, the University of California, Davis and San José State University.

He has been a principle investigator and the science director for the human-powered centrifuge and has presented and published more than 380 papers in the general areas of thermal regulation and fluid balance in journals such as *Regulatory, Integrative and Compar-*

tive Physiology, Journal of Applied Physiology, publications of the Institute for Adaptive and Space Flight Physiology and many European journals. He has also edited and peer-reviewed more than 100 papers.

Greenleaf is a fellow of the Aerospace Medical Association and the American College of Sports Medicine; an associate fellow of the American Institute of Aeronautics and Astronautics; and an honorary fellow of the Polish Society of Sports Medicine. He is the recipient of the George Huff Award for Scholarship; a NASA Special Achievement award; the Aerospace Medical Association Harold Ellingson Award for best scientific paper in aviation, space, and environmental medicine; the Eric Liljencrantz award; the University of Illinois Department of Molecular and Integrative Physiology Distinguished Alumni award; and the New Mexico Highlands University Distinguished Alumni award. His other professional affiliations include membership in the American Physiological Society, the International Society for Gravitational Physiology and the Society of Sigma Xi.

BY VERONIKA SOUKHOVITSKAYA ▲

Carnegie Mellon information session set

This information session for the spring and fall 2004 semesters will provide an overview of Carnegie Mellon University's (CMU's) innovative, learning-by-doing master of science degree programs.

Date: Thursday, Oct. 30
Time: 7:00 p.m. -- 9:00 p.m.
Location: Carnegie Mellon University (CMU),
West Coast Campus
Building 23, First Floor
Moffett Field, CA 94035

These programs are designed to accommodate the needs of both working professionals and full-time students and offer several specialties, including software engineering, software development technologies, management of software systems development, e-business technology and learning sciences.

Roger Schank, chief education officer at Carnegie Mellon West, will give a presentation about the program. Faculty from software engineering, e-business technology and learning sciences will talk about the specifics of each program. A brief question-and-answer

session will be held after the talks.

Rather than working in a traditional classroom setting, students work in teams on authentic projects and 'learn by doing.' They are coached by CMU faculty and experienced industrial practitioners to learn knowledge and skills just in time, and they are evaluated on what they produce according to professional standards. Each program concludes with an intensive practicum in which students apply their newly acquired skills to a complex, real-world problem. Although the program is in its early stages, initial results are quite promising; industrial partners are happy, and as one student put it, "things you learn on Monday, you can apply at work on Wednesday."

CMU programs are available online for remote employees.

RSVP to Deniz Lanyi at (650) 603-7020 or e-mail to: deniz@west.cmu.edu

Complain and gripe

Combined Federal Campaign kicks off at NASA Ames

'United we stand, united we give.' This is the pledge that hundreds of Ames employees will make when they donate to the 2003 Combined Federal Campaign (CFC) that launches this month.

"The last few years have been challenging for our nation," said Victoria Steiner, CFC chairwoman. "This seems like the perfect time for all of us to come



NASA photo by Tom Trower

Sue Sermon, of EMQ Children Services, speaking at the recent Oct. 6 CFC kickoff event.

Deputy Center Director G. Allen Flynt. "By contributing to the CFC, we can make sure that these organizations will have the means to be there for us and our neighbors in the future."

Whatever is important to you, there is an organization that shares your passion. From working with children and cleaning the air, to providing shelter for animals and assisting the elderly. But feeling for someone is not enough. To make a real difference in the lives of the disadvantaged, sick and abused, you have to take action. Even a small contribution will make a difference.

CFC enables people to contribute to specific organizations that they want to

support with very little financial impact. The campaign is designed to provide an easy and convenient way to donate money by check, cash or payroll deduction.

"We have a group of great people working on the campaign and if anyone has any questions or doubts where to contribute, the CFC coordinators will guide you through the process to make sure that your contributions will go toward supporting the cause you care about," said Steiner. "We are very fortunate to have stable jobs and good pay. Now is the time to give something back."

BY VICTORIA STEINER ▲

Safety week celebrated at Ames

On Sept. 16, Ames Center Director G. Scott Hubbard started off the week-long safety celebrations with a kick-off meeting, followed by keynote speaker Brian O'Connor. On Sept. 17, Hubbard and Deputy Center Director

Allen Flynt presented the 2003 ASAPII awards. Sept. 18 was stand-down day, where all center employees were en-



NASA photo by Tom Trower

together and contribute to make this world a better place to live in."

The CFC is the best way for federal employees to support the causes that make a difference, according to Steiner. It is a collaborative way that provides employees an opportunity to improve the quality of life in their home town, in their state, across the country and internationally.

The CFC campaign started on Oct. 6 and will continue for six weeks until Nov. 14. During this time, a group of devoted volunteers will be distributing the brochures and collecting the contributions from Ames employees in their organizations.

"To succeed, we need to have the support from the entire Ames community," said Joe DeMaio, CFC's deputy chairman.

Ames' senior management encourages all civil servants to share with those in need and those who will be there to help us.

"Combined Federal Campaign is our chance to support the organizations that help each of us survive during times of need, whether it be a natural disaster or personal hardships," said Ames'

Upper left and right: safety displays at the recent safety fair.



It was the closest race ever at the Fall Fun Run and Walk event with Bruce Storms winning with a time of 9:58 minutes, one second ahead of Steve Stowers. The fastest woman was Adriane Steinwalker.

couraged to take time off from their regular duties to attend the day's activities; namely, the safety street fair, which had various safety related booths, vendors, free chair massages, music by the Ames Jazz Band and more. The Fall Fun Run and Walk was also held on Sept. 18 and special safety and health classes were offered each day of that same week.

While time rolls by

Out-of-this-world memorial for former employee Del Weathers

Del Weathers, deputy chief of the Aviation Systems Technology Office at Ames, passed away suddenly last January at the age of 51, due to a cerebral aneurism. In honor of Weathers, and for his love of space and science, his close friend Brian Day, of Code DP, a technical lead for the Ames educational technology team, decided on a unique memorial--naming a planet in his honor.

"Del had done so much in terms of making contributions that were central to NASA's missions. He was devoted. I thought that a memorial would be appropriate," said Day.

Day contacted the International Astronomical Union (IAU) who agreed. The IAU is the only body that assigns official names to celestial objects that are recognized by the astronomical community around the world. They do not sell names, but have a committee that suggests names. Lucky for Day, he knew two members on the committee, Pam Kilmarten and Brian Marsden. On May 8, 2003, the planet known as 29198 was officially named 'Weathers.'

Planet Weathers was discovered on



Del Weathers

Mount Palomar in 1991. In a bizarre twist, the preliminary designation, 1991DW, contains Weathers' initials. Planet Weathers is a small planet, estimated at 20.9 kilometers (12.95 miles) in

diameter. It falls into our sun's orbit every 4.19 years and moves between Mars and Jupiter. The planet, which can be seen by anyone with an amateur telescope, serves as a reminder of Weathers for all his friends and family.

Weathers began working here in 1987, and since then worked on several important projects at Ames. He worked on complex systems for Space Station Freedom. Weathers knew a great amount about the FAA and the National Airspace System. He had great experience in the evolution of systems, technologies and politics. He also had a significant role in the development of revolutionizing air traffic management.

Weathers was born in Fort Leavenworth, Kan. In his free time, he enjoyed adding on to or repairing his house.

"Del was quiet spoken and very direct and forceful," said Day. "He was interested in all kinds of things."

Weathers leaves behind his wife Raphine Ippoliti, son Erik and daughter Katie.

BY CONNIE WONG ▲

Ames to implement 'OneNASA' rollout with town hall meeting

Ames will roll out NASA's 'One NASA' initiative with a leader-led workshop on Nov. 4 featuring an all hands/

Taking part in each of these events will be Ames Center Director G. Scott Hubbard, Dr. Mary Kicza, NASA associate administrator for the Office of Biological and Physical Research, and Dr. Charles Elachi, director of NASA's Jet Propulsion Laboratory (JPL) in Pasadena.

"The purpose of 'OneNASA' across the agency is to apply each center's unique strengths and capabilities to the pursuit of one shared NASA vision," said Greg Schmidt, associate director for strategic planning in the Astrobiology and Space Research Di-

rectorate and Ames' representative on the 'OneNASA' team. "With the leader-led workshop, we will focus on our relationship to the NASA mission and identify and leverage our strengths," he said.

All NASA centers will implement leader-led workshops. A successful leader-led workshop was recently com-



pleted at Kennedy Space Center in August and JPL will hold theirs on Oct. 17.

Further details of Ames' rollout events will be provided in a centerwide e-mail. For more information about 'OneNASA,' visit the Web at: www.onenasa.nasa.gov



'One NASA' team members meet to discuss the 'OneNASA' rollout at Ames. Team members include representatives from NASA Headquarters, JPL, Marshall and Ames. Greg Schmidt, (fourth from left), associate director for Strategic Planning for the Astrobiology and Space Directorate, is leading the 'OneNASA' rollout at Ames.

town hall meeting. Afterwards, selected Ames staff from all codes and divisions will be invited to attend six focused breakout sessions on 'OneNASA' initiatives such as collaborative science and full-cost accounting.

Ames develops comprehensive systems analysis and optimization process

When considering design trade-offs and competing concepts in system development, each design alternative has advantages and disadvantages. For example, when new technology is introduced to identify early failures, it also introduces substantial costs such as development, training, upgrades and maintenance considerations. It is left to the systems engineering discipline to identify which alternative is better in terms of reliability, mission achievement, life-cycle cost and many other factors. The complexity of these issues is the reason a systems analysis and optimization (SA&O) process is needed.

Ames, as the lead center for Integrated Vehicle Health Management (IVHM), is supporting both the Next Generation Launch Technology (NGLT) program and the Orbital Space Plane (OSP) program. As part of that support, programmers and engineers in Codes I and F are developing tools for applying IVHM systems.

The systems engineering team in Code FES developed an SA&O modeling process to provide a means for quickly assessing the benefits of IVHM technologies and to optimize the level of application of health management to systems and subsystems. This process has initially been applied to a generic reusable launch vehicle.

IVHM is a system to continuously monitor and manage the functional health of a vehicle. Its goal is to keep a system operating safely and reliably while reducing maintenance time and costs.

The SA&O process quantifies the effects of design alternatives in terms of 25 system-critical metrics. Koushik Datta of Code QS developed the outline of this process along with the Code FES IVHM team. This process consists of a number of models that feed data from one model to another so as to quantify the changes in the desired metrics. This would include probabilities of loss of mission, turn-around time, false alarm rate, life-cycle cost and much more. The process incorporates, in a modular fashion, several models such as cost, operations, safety, reliability, false alarm rate and maintainability. The modular set-up allows the use of any available model to be

inserted in the process without forcing the user to a specific modeling software or vendor.

The SA&O process also includes an optimization strategy. This is based on targeting dominant contributors that will improve the metrics of interest. This portion of the process allows subsystem designers to focus their efforts on areas that will provide significant improvements to the baseline design.

The development team is continuing to add functionality and automation to this process. Dougal Maclise, Code FES team leader, is looking to get feedback from interested parties who want to see a demonstration of the process and provide insight for future growth. Contact him at ext. 4-4084 or by e-mail at: Douglas.C.Maclise@nasa.gov.

BY NICK JIZE ▲

Pollution prevention/sustainability award nominations for 2003 sought

Nominations are now being accepted for the 2003 Ames P2/Sustainability Award. Do you know someone who has promoted the purchase of recycled products, reduced waste, promoted recycling, or who has conserved water, energy or resources? If so, send in a nomination form so that that person can be recognized.

Who is eligible?

Any Ames civil servant or contract employee can be nominated. Groups, teams or individuals can receive an award.

What is the award?

Code QE presents an award to a person or group that has helped Ames save waste, conserve resources, and/or prevent pollution. More than one award may be issued for a given year. Winners will receive a cash award and an official Ames P2 award certificate (contractors can only receive the certificate).

When?

Code QE will make at least one nomination call each year. You can submit nominations any time during the year, but nominations must be received by Dec. 31. All entries will be reviewed and the winning nomination(s) selected by March 1 for the previous year.

How?

Nomination forms are available on the QE pollution prevention Web site at: <http://q.arc.nasa.gov/qe/p2/Awards/p2award/>. Fill out the form completely and submit to Mail Stop 218-1, Attention: P2 award coordinator. Any questions, call Mark Lacy, ext. 4-1406.

What does it take to win?

No one wants more pollution, but many do little about it. If you do more than a little and have an example to give us, then we want to know. Saving the government resources is good for everyone.

BY MARK LACY ▲

Former employee still supports Ames



Former NASA Ames employee Dorothy Jowett (1959-1965), far left, shown with her grandson's 5th-grade class at Twin Lakes Elementary school in Federal Way, Wash., following her September presentation to the students using, in part, materials provided by Ames' Public Affairs Office.

You should try! af2m

Ames third quarter safety awards presented

Under the Ames Safety Awards Program (ASAP) II, Ames recognized 93 employees for their outstanding accomplishments in improving health and safety. ASAP II was established to recognize employee actions, behavior and/or job performance that result in improved health and safety conditions at the center.

There are four levels of awards, tier four being the highest level of achievement. The ASAP II board evaluates each nomination and selects the tier level that most represents the actions and accomplishments of that nomination.

A team of nine individuals received the highest team award. The team was recognized for its proactive effort to plan and prepare for a credible disaster. The names of the awardees are listed below.

Wind Tunnel Disaster Preparation Team

Mike Liu, Frank Kmak, Steve Ord, Dan Bufton, Phil Stich, Scott Nikodym Joe Cruz, Jim Prunty and Morrow Whitcomb

Tier Level 2 - Individual awards

Nicholas Scott, Dana Lynch, Thomas Spalding, Mark Fonda and Linda Jahnke

Tier Level 2 - Team awards

Lockheed Martin Training Data Base: Marvin Christensen and John Livacich

Tier Level 1 - Individual awards

Stephen Gila, Thomas Spalding, Marilyn Vasques, Jan Aikins, Christina Ojeda, Victor Lagman, George Sloup, Sylvia Asano, Jay Nuez, Julie Nottage, Jacob Cohen, Marcy Chaussee, Karin Perkins and Doug Fraser

Tier Level 1 - Team awards

Code JFF and JFS Building 19 Clean-up Team:

Keith Venter, Eric Kristich, Greg Bennett, David Yee and Kline (Wes) Gidcumb

SOFIA Lower Flexible Door Technical Support Team:

David Ackard and Greg Williams

Chemical Management Task Force

Bob Dorn, Julie Nottage, Doug Hudgins, Tony Trias, Jim Busby, Herman Santos, Dana Bolles, John Steen, Marilyn Vasques, Benita Kent, Charles Chamberlin, Dee Morrison, Christy Ray-Hagenau, Patrick Hogan, Liz Hills and Jay Nuez, Valerie Stone-Reeve, Suzanne

Meyer, Dan Winningham and Mike Basta

Unknown Substance Exercise - Collective Teams

Jill Moudy, Lynn Bala, Lee Bradford, Paul Brown, Rob Clark, Randy Layne, Dave Ofwono, Michael Promes, Ramsey Razik, Christy Ray-Hagenau, Erik Rockwell, Phil Ting, Simcoe Walmsley, Ted Ward, Tim Cetera, Chad Sanchez, Simon Price, Rafael Bustamante, Carl Johnson, Cameron Gazaway, Tony Fada, Scott Dutro, Mark Bingham, Dave Dejesus, Dan Nguyen, Scott Bingham, Randall Vincent, Paul Esposito, Juan Cortez and Liesel Short

Tilt rotor aircraft joins National Air and Space Museum collection

It's a helicopter, it's a plane, no, it's the XV-15. The little aircraft that helped Army and NASA Ames researchers prove that the tilt rotor concept has great potential for military and civilian use took its place in what could be called 'aviation's hall of fame,' the National Air and Space Museum's (NASM) new Steven F. Udvar-Hazy Center near Washington Dulles International Airport in Virginia.

On Sept. 16, the XV-15 dazzled the audience with its final flight demonstration before finally retiring with over 25 years of exceptional service.

"The event was spectacular! The final flight demo was as exciting as the first demo I observed over 20 years ago," said John Zuk "The XV-15 is now where it rightly deserves to be - honoring it for the seminal contributions to aviation history."

After the flight demonstration, NASA and the U.S. Army officially transferred the XV-15 to the National Air and Space Museum as Dr. Victor Lebacqz, acting associate administrator for NASA's Office of Aerospace Technology, handed the XV-15's flight logbook to Gen. J.R. "Jack" Dailey, director of the NASM.

"The XV-15 was one of NASA's most successful research aircraft and is a prime example of the cutting-edge aerospace research NASA is known for," said Lebacqz. "The transfer of the XV-15 to the National Air and Space Museum continues a NASA tradition of returning aerospace achievements to the

Code S Laboratories of Excellence

Warren Belisle, Arthur Weber, Esther Weber and Nicholas Scott

Enterprise Advisory Services (EASI) Contractor-Proactive Safety Employee Orientation

John Watkins and Stephen Voels

Ergonomic Evaluation Team

Miriam Glazer and Deborah Hunter

Each of these employees and teams was nominated by their colleagues for their outstanding actions and accomplishments in improving health and safety conditions at Ames.

American public," he said.

Tilt rotors are a unique type of aircraft that possess the take-off, hover and landing capabilities of a conventional



Four former NASA Ames XV-15 pilots who attended the recent XV-15 ceremony, from left to right: Dan Dugan, Ricky Simmons (now a BA 609 certification pilot with the FAA), Warren Hall and George Tucker.

helicopter with the range and speed of a turboprop aircraft. Tilt rotor flight research began in the 1950s with the Bell XV-3 convertiplane.

Using lessons learned from the XV-3, NASA Ames, in partnership with the U.S. Army, developed design specifications for a new aircraft to demonstrate the viability of the tilt rotor concept. After extensive ground, wind tunnel and simulator tests at Ames, the first of two XV-15s, built by Bell Helicopter Textron,

continued on back page

VIVA Technology Day program kicks off at Ames

In June, 100 San José 6th-grade students at Clyde L. Fischer Middle School participated in NASA Ames' launching of the first VIVA Technology

competitive team activities based on key aeronautic concepts such as: how wings lift the plane; laws of motion; controlling the flight of the plane; the sound barrier; and regimes of flight.

Teams of students studied and interacted with their college engineering and science captains from San José State and Santa Clara University to prepare for a 25- question multiple- choice quiz on the key aeronautic concepts. Secondly, the teams worked on the engineering design process to develop the plane of the future for the year 2103. Students had to sketch a 2-D plane, prepare a 3-D clay replication of the sketch and design a poster board concept paper.

The students also interacted with dynamic professional speakers from the technical arena such as Seth Carter, NASA Ames Robotics Education Center; Lt. Col. Edward Cabrera of the U.S. Air Force; and Patricia Romero-Cronin, V.P., Global and e-Business Services and Integrations for IBM.

The parent orientation, presented in both English and Spanish, gave parents an opportunity to learn about what their children had experienced earlier in the day. They also learned about the many career opportunities in science and engineering. Other discussions covered topics such as how best to help students prepare to pursue technical degrees, which high school courses and tests are critical to this pursuit, and effective summer programs and camps that enhance student math and science performance. The teacher orientation focused on how math and science teachers can enhance classroom learning by using the video series, Math and Science in the Real World, along with The Futures Channel teacher lesson plans and the VIVA technology student planner.

The second part of the VIVA technology launch was aimed at high school

students. Overfelt High School in East San José launched the first high school program. Surrounded by NASA posters of our magnificent galaxy, students couldn't help but feel like NASA scientists. Led by their college captains from San José State University, Santa Clara University and U.C. Berkeley, the student teams assessed and analyzed sets of images from Mars. Their objective was to answer 60 thought-provoking questions to the best of their ability and present their answers as a group, using poster-boards for their presentations.

Students listened to guest speaker Max Amaya, an aerospace engineer from NASA Ames, who talked to them about his exciting job and about his journey to becoming an engineer. Following this presentation, students worked with aeronautic and aerospace concepts to complete four assignments within one hour. Teams had to sketch the plane of the future, develop a model 3-D replica and assemble and paint a wood model plane that had a vital part missing.

Under the direction of Overfelt High School program coordinator Vito Chiala, 10 summer school teachers and over 30 parents experienced the VIVA technology teacher and parent orientations. Lupita Armendariz, NASA Ames' deputy director for the Equal Opportunity Programs Office, spoke to the parents about the wonderful opportunities available to their sons and daughters at NASA. It was also a great opportunity for the school to invite the parents to use the computers on campus and to inform them about the future development of digital lockers. Overfelt High School will soon be going completely wireless and students will be submitting and receiving homework via their own digital locker. The VIVA technology program was a perfect fit for this fast-moving technology high school.

continued on back page



NASA photo by Anna Park

Romeo Armendariz, long-time NASA and HENAAC volunteer, assists Overfelt High School students with their Viva Technology Challenge.

Day, the first phase of VIVA technology, an exciting K-12 technology awareness program developed by the Hispanic Engineer National Achievement Awards Corporation (HENAAC) and implemented through a grant from the NASA Ames Equal Opportunity Programs Office through the Minority University Research and Education Program (MUREP).

This is to be the start of a series of programs targeting middle and high school students that are seriously underrepresented in science, technology, engineering and math (STEM) fields. The VIVA technology three-day program involves a teacher orientation, parent orientation and a VIVA Technology Day for students. Local college students majoring in engineering and science are also included in the program to act as captains for the young student teams. The goal is to expose these young people to NASA and higher education in the hopes that they in turn will pursue a technical degree.

Created to bring the excitement of math, engineering and science careers to students in inner city and rural classrooms across the nation, the VIVA Technology Day challenges students through

Cushman passes on

Emma Bettini Cushman, 91, of Campbell, died July 19, 2003. Cushman was a secretary for the Life Sciences Division and retired in 1977 from Ames.

NASA commercial success stories featured in Spinoff 2003

The annual issue of NASA Spinoff is hot off the presses and available for Ames employees. The Spinoff publication documents successful partnerships from the NASA technology transfer and commercialization program. Many stories describe new products on the market in the area of health, environment, information technology and safety.

As stated by NASA Administrator Sean O'Keefe in the forward section of the issue:

"...this publication highlights NASA's extensive efforts to promote the transfer of aerospace technology to the private sector. Everyday, in an astounding variety of ways, American lives are affected positively by our nation's investment in NASA."

This year, six technologies and partnership success stories are based on Ames developed technology. Below are the titles of each Ames-related story and a brief excerpt.

To request a free copy of this edition, send an e-mail to Lisa Williams at liwilliams@mail.arc.nasa.gov or call her at ext. 4-2954.

Building Safer Systems with SpecTRM Safer Engineering Corporation, of Seattle, Wash.

This provides the information, tools, and techniques to accomplish the task of maintaining system and software design with its Specification Tools and Requirements Methodology (SpecTRM). NASA assisted in developing this engineering toolset by awarding the company several Small Business Innovation Research contracts from Ames and Langley.

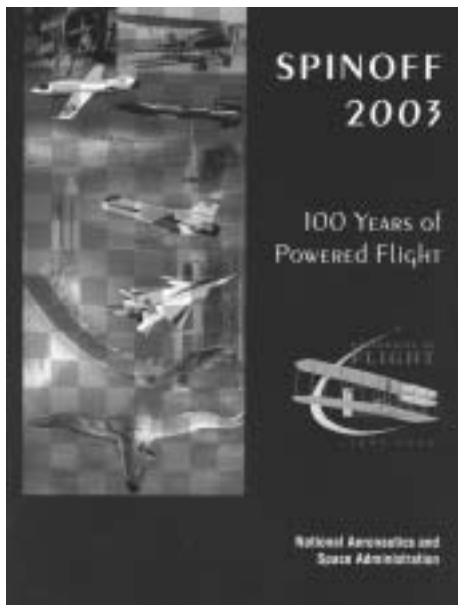
Faster Aerodynamic Simulation with Cart3D

This offers a revolutionary approach to computational fluid dynamics (CFD), the computer simulation of how fluids and gases flow around an object of a particular design. By fusing technological advancements in diverse fields such as mineralogy, computer graphics, computational geometry, and fluid dynamics, the software provides a new industrial geometry processing and fluid analysis capability with unsurpassed automation and efficiency. Cart3D was selected as 2002 NASA's Software of the Year. Ames contributors are Michael Aftosmis of Code INA, John Melton of Code APS and Marsha Berger of the Courant Institute.

Home Insulation with the Stroke of a Brush

As a manufacturer and marketer of thermal solutions for residential, commercial, and industrial applications, Hy-

Tech Thermal Solutions attributes its success to the high-performance insulating ceramic microsphere originally developed from thermal research at NASA Ames.



Mapping a Better Vintage

Winegrowers have known for centuries that environmental factors can significantly influence the overall quality of wine. Over the last decade, an increasing number of vineyard managers has utilized digital remote sensing and geographic information systems (GIS) to visualize the variability within their blocks.

New Discoveries in Nanotechnology

With NanoMatrix's liquid jet machining, there are significant opportunities in prototyping and creating smaller MEMS/NEMS devices. Emanuel Barros, a former project engineer at NASA Ames, set out to form the Santa

Cruz, California-based NanoMatrix firm and materialize the micro/nano cutting process.

Processing at the Speed of Light

Boulder Nonlinear Systems grew out of a Small Business Innovation Research contract. Over the past 15 years they have developed into one of the world's foremost spatial light modulator manufacturers through SBIR funding from multiple NASA centers including NASA Ames.

The following special sections feature NASA Ames Research Center:

One Hundred Years of Powered Flight

NASA is proud of its achievements, as well as those of its predecessor, the National Advisory Committee for Aeronautics, during the first century of powered flight. This year's 'Centennial of Flight' celebration offers a unique opportunity for NASA's 10 field centers to showcase the agency's historical and ongoing contributions to aeronautics.

The NASA Education Enterprise: Inspiring the Next Generation of Explorers

NASA's challenging and exciting missions provide unique opportunities for engaging and educating the public. It does so by stimulating people's imaginations and creativity and by meaningfully communicating the significance of our discoveries to them.

Partnership Successes

NASA cultivates partnerships with private industry, academia and other government agencies to address the challenges that face our nation. By contributing time, facilities and technical expertise, NASA brings the benefits of space down to Earth where it enriches the lives of the American public.

Tickets on sale

Tickets can be purchased at the Beyond Galileo Gift Shop Bldg. 235 (adjacent to Mega Bites) for:

- Disney on Ice, San José, Nov. 1
- On the 20th Century, San José, Nov. 8, 8 p.m.
- Oakland Raiders vs. New York Jets, Oakland, Nov. 9, 1:15 p.m.
- Sharks vs. Nashville, San Jose, Nov. 22, 7:30 p.m.
- Nutcracker, San Francisco, Dec. 13, 7 p.m.
- Oakland Raiders vs. Baltimore Ravens, Oakland, Dec. 14, 1:05 p.m.

Are you planning on working overtime?
Do you need to request some holiday leave?

The new WebTADS overtime request and leave planner is coming in November! Stay tuned for more information

Ames 2003 Honor Awards presented

The Ames 2003 Honor Awards ceremony was held in September. This event was held for Ames employees to honor their fellow employees.

Administrative Professional
 Rho Christensen
 Caroline To

Commercialization/Tech
 Transfer Award
 Dochan Kwak and Cetin C. Kiris

Contractor Employee
 Victoria R. Callor, Lockheed Martin Engineering & Sciences Co.
 Girish H. Chachad, Northrop Grumman Information Technology Inc.
 Edward P. Chan, Raytheon ITSS
 Hilda Q. Lee, Raytheon ITSS
 Melissa D. Medina, QSS Group, Inc.
 Thomas Prevot, San Jose State University
 Carl K. Stocking, Quantum Services, Inc.
 Michael A. Wilson, University of California San Francisco
 Sandra L. Young, INFONETIC

Engineer
 Rodger A. Mueller
 Parimal H. Kopardekar

Group/Team
 Aviation Data Integration System (ADIS) Team
 ARC IFMP Core Financial Project Team
 ARC STS-107 Fundamental Space Biology Project Team
 Code I MER Technology Infusion Team
 Integrated Vehicle Health Management (IVHM) Systems Engineering Team

Mentor
 Robert K. Dismukes
 Roger W. Remington
 Kristtina L. Wilmoth

Safety and Environment
 Daniel M. Bufton
 Christel I. Van Arsdale

Supervisor/Manager
 Carolina M. Blake
 Sandra M. Olliges
 Banavar Sridhar



NASA photo by Tom Trower

Ames 2003 Honor Award recipients during the recent awards ceremony.

Headquarters Employee
 Carl B. Pilcher

Student
 Brian Chang

Technical Support
 Kevin F. Kouba

Best First Paper at Ames
 Robert A. McMillan

Technology Development
 Steven D. Beard
 Xavier Bouyssounouse

'ePayroll' will improve payroll systems

NASA Ames is preparing for 'ePayroll,' an initiative that will consolidate and upgrade the federal government's many civilian personnel and payroll systems. Under 'ePayroll,' Ames and the other NASA centers will switch to a new personnel and payroll system next summer.

"Most Ames employees will see few changes as a result of 'ePayroll,' but the new system will be more efficient and allow managers to use data more effectively," said Janet Jarmann, the IT specialist for Ames' Human Resources Division and the center's project lead.



The 'ePayroll' project is nearing the end of its analysis and planning stage, which began in April. Implementation will start in October 2003, and the new payroll system will go live in August 2004. Training will be provided to Ames employees most affected by 'ePayroll.'

The 'ePayroll' project is one of the eGov initiatives under the President's Management Agenda. Currently, 22 executive branch agencies use 14 separate personnel and payroll systems. Under ePayroll, each agency will switch to the consolidated federal per-

sonnel and payroll system operated by the Department of Interior.

At NASA, the Integrated Financial Management Program (IFMP) oversees the implementation of 'ePayroll' on behalf of NASA's chief information officer. The Ames 'ePayroll' team includes experts from the center's Human Resources, Financial Management and Applied Information Technology divisions.

'ePayroll' will have its greatest impact on employees who work with personnel and payroll data. When supervisors want to make hires or promotions, they now must fill out a paper form and give it to Human Resources, which enters the data on the form into the computer system. However, under 'ePayroll,' the workflow will be computerized, speeding up the process and reducing the chances of error. Under the current plan, WebTADS will remain the center's time and attendance collection system.

The Ames 'ePayroll' team is currently working with the Department of Interior to make sure that the switch goes as smoothly as possible. In the coming months, Ames employees will learn more details about how the project will affect them through the Astrogram, e-mails, brochures and presentations. Information also is available at the Ames 'ePayroll' Web site at: <http://ameshr.arc.nasa.gov/ePayroll/index.html>.

Event Calendar

Ames Amateur Radio Club, third Thursday of each month, 12 noon, N-T28 (across from N-255). POC: Michael Wright, KG6BFB, at ext. 4-6262.

Ames Ballroom Dance Club. Classes on Tuesdays. Begin classes at 6:15 p.m. Higher-level class meets at 5:15 p.m. Held in Bldg. 944, the Rec. Center. POC: Helen Hwang, hwang@dm1.arc.nasa.gov.

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

Ames Child Care Center Board of Directors Mtg, every other Thursday (check Web site for meeting dates: <http://accn.arc.nasa.gov>), 12 noon to 1:30 p.m., N-215, Rm. 212. POC: Tom Maier, ext 4-3643.

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

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

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

Ames Mac Support Group Mtg, third Tuesday of ea. month, 11:30 a.m. to 1 p.m., Bldg. N262, Rm 180. POC: Julie ext. 4-4694 or Tony ext. 4-0340.

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

Ames Sailing Club Mtg, second Thursday of ea. month (Feb through Nov), from 11.30 a.m. -1 p.m. in the special events room in the Ames Visitor Center in N-223. All are welcome. POC: Jeff Smith, ext. 4-2586.

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

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

Jetstream Toastmasters, Mondays, 12 p.m. to 1 p.m., N-269/Rm. 179. POC: Cathy Payne at ext. 4-0003.

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

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

Chana to present colloquium

As part of Ames' Centennial of Flight celebration, William Chana, an AIAA Fellow and distinguished lecturer, will present a lecture entitled 'Understanding and Appreciating the Wright Brothers.' The lecture, which is jointly spon-



William Chana

Chana trained as an aeronautical engineer at Purdue University before beginning his aerospace career in 1941 with Consolidated Aircraft in San Diego. He played an active role in flight-testing the XB-24, XB-32, XC-99, TBY, XFY-1 POGO, XF2Y-1 Seadart and Convair Liners. In the early 1960s, he was Convair's base manager for the installation and checkout of ATLAS operational missiles at Fairchild Air Force Base in Washington. In the 1950s, he built and flight-tested three small airplanes. Chana is past president of the San Diego Aerospace Museum. In 1988, he held the A. Veruille Fellowship at the National Air and Space Museum (Smithsonian). He is the national president of the Silver Wings Fraternity, an international organization of pilots.

The presentation on Oct. 21 covers Orville and Wilber Wright's experiments from 1900 to 1910. Their glider tests at Kitty Hawk in 1900 and 1901 point out their early glider tests with low aspect ratio wings and their 1902 and 1903 tests at Kitty Hawk with their successful high-aspect ratio wing glider and finally, their high-aspect ratio powered machine. Listen to the words of Orville and Wilber as they correspond with Octave Chanute, George Spratt and other early experimenters. Understand the value of their wind tunnel tests conducted between 1901 and 1902. Their great advancements in controlled flight in 1904 and 1905 from Huffman's Prairie near Dayton, Ohio are discussed. The talk is illustrated with slides and a short video.

BY STEPHANIE LANGHOFF ▲

sored by Ames and the AIAA-San Francisco Section, will take place in the auditorium of N-201 at 2:00 p.m. on Tuesday, Oct. 21. All staff are cordially invited to attend.

Chana was chosen by the National Aeronautic Association (NAA) to receive this year's Cliff Henderson Award for Achievement. The award is given annually to "a living individual or group whose vision, leadership, or skill has made a significant and lasting contribution to the promotion and advancement of aviation or space activity."

Craftsman pays homage to space program



Raffaele Cuccarollo of Italy has an ardent interest in the space program and is quite adept at sculpting miniature models of the space shuttle out of silver and wood. His latest venture, as seen here, is of the space shuttle carved out of wood. He sent this photo to Ames recently of the wooden model to show his support to NASA, expressing his "wish that the space shuttle will soon fly again."

Ames Classifieds

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

Housing

For rent: Large 2 bd/1-1/2 ba apt. in 4-plex w/wireless Internet access included. Sunnyvale, close to Ames. \$1,150/mo. N/S. Call (408) 739-3303. See <http://www.peacham.homeip.net/rental.htm>.

Two bedroom apartment for rent. Bathroom and kitchen remodeled, new rugs and new blinds. Maria (650) 345-2069 best time to call is 5 p.m. - 10 p.m.

Room for rent, Santa Clara, maid service/gardening service provided, kitchen privileges, laundry rm, phone, cable access, furnished/unfurnished, utils included, \$600 per mo. + \$200 dep. Call (408) 752-9954 day, (650) 968-4613 eves, (408) 482-1028 cell. E-mail: pkutler9@ma.com

Transportation

'91 BMW 325i convertible, 96K mls, leather interior, 6 CD changer, auto windows, heated seats, brand new convertible top, A/C, excellent condition. \$8,600. Tim (408) 406-8242.

'91 Toyota Previa LE minivan with all wheel drive, anti-lock brakes, cruise control, captain's chairs, stereo/cassette/CD, roof rack. 132K miles. \$4,800 or B/O. Call (408) 257-3175.

'93 Chev. Cheyenne, Vortex 4.3 engine, auto. trans., overdrive, cruise, AM/FM/cass., Leer shell, camper bed liner, tow hitch, Michelin tires, new batt., brakes, A/C recharged, extra clean. \$5,495. Lou (650) 583-3046.

'94 VW Jetta GL, 125K mls, extremely dependable city/commute car, white w/ black interior, 5-speed, AM/FM stereo, dual front air bags. Well maintained, have all records. New clutch, tires, brakes, battery \$2,900. Call (650) 827-0731; e-mail: swangelich@yahoo.com

'94 Ford F150 XLT extended cab, low mileage, Drake rack, new brakes, toolbox, dual tanks, trlr pkg; one owner. \$6,000 or B/O. Sal Rositano (408) 238-5310.

'99 red Mitsubishi Eclipse Spyder convertible, \$12,000, 47K mls, grey interior, 5 spd man'l, ext'd warranty--5 years/85K mls, alloy wheels, autom. convert. top, 10 CD changer, cruise control, rear spoiler, driver & passenger air bags, A/C. Call (650) 996-1975.

Safety Data

	Civil Servants	Contractors
Not recordable first aid cases	6	8
Recordable no lost time cases	1	5
Lost time cases*	2	1
Restricted duty days	0	0
Lost work days	10	45+

Data above is for August and Sept. 2003. *(Under new OSHA rules, lost time is defined as lost work days, restricted duty of work transfer.)

Miscellaneous

Rockwell-Delta 9" table saw and 4" jointer combo, excellent cond., \$350; Old Sears scroll saw, \$30. David (408) 296-3326.

Boy's light weight Schwinn mountain bike, aluminum frame and wheels (24" dia.), shocks, V brakes, 21 speed, excellent cond., \$175; Yakima roof-mount bike rack \$50. David (408) 296-3326.

Credenza/hutch, 20in x 30in x 46in, beautiful honey-lacquered finish, exc. condition, \$350. Call (650) 473-0604.

Leather top cherry wood desk, good condition, \$200. Bench, white hard wood, bl. vinyl seat, \$50. Pro Dawn hanglider, best offer. Elizabeth (650) 948-4678.

Graco baby stroller. Great condition. \$25. Alice (650) 322-1380.

Saw table for use w/circular saw. Good cond. \$10. Steve (510) 790-3363 eves.

DUAL-CPU computer, P2/333MHz, integ. U/W SCSI, sound, AGP slot, SVGA monitor. \$100. Mike (510) 278-2601.

Macintosh laser printer with two new cartridges: \$55. Works very well. Call (408) 230-4212.

Right Start double jogging stroller. All-terrain, w/ retractable canopy. Folds for easy storage. Exc. cond., \$75. Call (925) 485-4940.

Kid's ergonomic double computer desk, two chairs, winner: 'Juvenile Products Manufacturer Assoc. 2000 Best in Show New Product.' \$125. To view, visit: www.kidstation.com, select 'furniture.' Azi (650) 740-3671.

Twin chest/captain's bed. Solid wood finished, 4 drawers and large compartment. Like new, \$150. Call Dave (408) 378-7388, or e-mail: DCFoyle@aol.com for picture.

Newport 27S sailboat, newly re-rigged stays and shrouds, furling jib, 4 winches, GPS map. Sleeps 5 wide cabin. \$8,000 or B/O. Call (408) 448-1024.

Oak entertainment center with built-in desk. \$125. Call (408) 735-7333 after 6 p.m.

TI-83 calculator for sale. 1 month new! Taken out of the package but never used! \$75. Call (408) 259-7990.

F. L. Neumann upright piano from Hamburg, Germany, plays fine, over 100 yrs old. Needs someone who can afford the tune ups since it's an antique and needs to be painted. \$200. E-mail at: falcon7777@earthlink.net

BMI exercise/wght machine, cable/pulley system for pecs, leg ext curls, lat bar. \$35 or B/O. Call (408) 257-3175.

Astrogram deadlines

<i>Deadline:</i>	<i>Publication:</i>
<i>Oct. 27</i>	<i>Nov. 2003</i>
<i>Nov. 24</i>	<i>Dec. 2003</i>

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.

Car Pool

Carpool from Berkeley/Oakland/Alameda to Ames, leaves around 8 a.m. and 5:30 p.m. We share driving so must have 4 seat car. Call David Hollenbach at ext. 4-4164 or e-mail hollenbach@ism.arc.nasa.gov

Exchange Information

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

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ext. 4-6873

Ask about NASA customized gifts for special occasions. Make your reservations for Chase Park

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

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

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Tickets, etc... (N-235, 8 a.m. to 2 p.m.)
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Check web site for discounts to local attractions, <http://exchange.arc.nasa.gov> and click on tickets.

NASA Lodge (N-19) 603-7100

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

Vacation Opportunities

Lake Tahoe-Squaw Valley Townhouse, 3bd/2ba-equipped, balcony view, horseback riding, hiking, biking, golf, river rafting, tennis, ice skating and more. Call (650) 968-4155, DBMcKellar@aol.com

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

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

Big Sur vacation rental, secluded 4bd/2ba house in canyon setting. Fully eqpd kitchen. Access to priv. beach. Tub in patio gdn. Halfway between Carmel and Big Sur. \$175/night for 2; \$225 for 4 and \$250 for more, plus \$150 cleaning dep. Call (650) 328-4427.

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

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

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

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

Ames emergency announcements

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

Tilt rotor aircraft joins National Air and Space Museum collection

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took its maiden flight on May 3, 1977. In the decades following the XV-15's maiden flight, a small but very dedicated group of engineers, designers and pilots from NASA, the U.S. Army and Bell Helicopter Textron accumulated many world records, industry accolades and NASA firsts. The XV-15 holds speed and altitude records for its class and awards from the American Helicopter Society and the American Institute of Aeronautics and Astronautics. In 1981, at the Paris International Air Show, the XV-15 became the first NASA experimental aircraft to perform demonstrations before an international audience. The success of the XV-15 has led to the development of the V-22 Osprey and the world's first civil tilt rotor, the nine-passenger Bell Agusta 609, now under development and scheduled for delivery in 2007. The aviation hangar at the National Air and Space Museum's Steven F. Udvar-Hazy Center will be home to the museum's extensive vertical flight collection, which includes the first helicopter to carry a president of the United States (Dwight D. Eisenhower), the first

helicopter powered by a turbine engine and the oldest surviving helicopter. The center at Washington Dulles International Airport in northern Virginia eventually will display 80 percent of the national air-and-space collection not currently housed at the building on the Washington Mall or on loan to other museums and institutions. The center opens to the public Dec. 15. The National Air and Space Museum, comprised of the Udvar-Hazy Center and the museum's building on the National Mall, will be the largest air-and-space-museum complex in the world. The flagship building is the world's most popular museum, attracting more than nine million visitors each year. For information and images of the XV-15, visit the Internet at: <http://amesnews.arc.nasa.gov/releases/2003/03images/xv15/xv15.html> For more information regarding the Steven F. Udvar-Hazy Center, visit: the Web at: <http://www.nasm.si.edu/nasm/ext/hazycenter.htm>

BY JONAS DINO ▲

VIVA kicks off at Ames

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NASA Ames' commitment to preparing more students to fill critical positions in our nation's future technical work force has led to increased support for VIVA Technology Days in the Bay area and in key locations throughout California. At least 10 additional schools will participate in the program this coming school year. All schools have a high percentage of Hispanic students and most schools have below-average test scores. NASA expects that the implementation of this program will help to increase the number of students that go on to college and will inspire them to become the next generation of explorers.

BY GABRIELLA GANNON AVILA ▲

Annual health fair set

The 2003 health fair will be held on Wednesday, Oct. 29, in the ballroom of Bldg. 3, from 10:00 a.m. to 1:00 p.m. All federal civilian employees and retirees are invited to attend. POC: Lita Que, ext. 4-1019.



National Aeronautics and Space Administration

Ames Research Center
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Editor-in-Chief.....David Morse
Managing Editor.....Ann Sullivan
Editor, Layout and Design.....Astrid Terlep

You can reach the Astrogram Office at:
astrogram@mail.arc.nasa.gov or by phone at
(650) 604-3347.

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