

THE AMES

Astrogram

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

AMES RESEARCH CENTER, MOFFETT FIELD

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on-line@<http://ccf.arc.nasa.gov/dx/>

Goldin lauds agency workforce

On July 30, NASA Administrator Daniel S. Goldin addressed a nationwide television audience of agency employees. It was not the fire and brimstone message that many have come to expect in recent years.

On the contrary, a "kinder and gentler" Goldin, obviously euphoric over the vote



NASA Administrator Daniel S. Goldin makes a point during his recent upbeat address to agency employees.

on the NASA appropriations bill on the floor of the House of Representatives the previous evening, praised the "dedication" and "world-class performance" of NASA's civil servants and contractors.

Goldin called passage of the bill by a vote of 323 to 109, combined with the 66 to 33 approval voiced earlier in the Senate, "an incredible vote of confidence" and a clear "statement that members of Congress and the American people believe we are doing the right thing." He concluded "the NASA team has done an outstanding job, and it hasn't gone unnoticed by the Congress."

To learn so convincingly that "Congress still has confidence in us," given the problems of the past year, particularly with the International Space Station (ISS), is "one of the highlights of my career," Goldin said. It certainly speaks to the success of the Administrator's efforts on Capitol Hill and the dramatically improved opinion of NASA

that has resulted. This is particularly compelling when one compares the current vote to its historic 1993 counterpart during which the ISS 'survived' by the slimmest possible one-vote margin.

Speaking directly to every employee, Goldin continued, "it was a vote about you, about what you've done and what you are doing for the future of your country and, for that matter, for people around the world."

But such a vote carries with it "the obligation to continue to perform," Goldin said. "We've done a lot; a lot more remains to be done."

Goldin went on to say that NASA employees "should not look upon votes in the Congress as bad." On the contrary, he suggested, this "annual refer-

endum on the performance of NASA" is "a healthy part of our democracy . . . we should look upon it as an opportunity to demonstrate the value that NASA has to this country."

The first launch of the ISS is currently scheduled for November 1998 from Russia, followed in quick succession by a launch from Kennedy Space Center in December. Asked about contingency plans against further slips in the ISS schedule, Goldin replied that NASA is working with the Russians "at the highest levels," and is leading a 16-nation team to ensure the Station's success. He went on to explain that NASA is considering upgrading the Shuttle to do "orbit raising" on delivery missions, and is working with our European and Japanese partners on a variety of techniques and a broad spectrum of approaches. "It's going to be tough," Goldin acknowledged, "but we will have contingency plans in place."

The chief of Ames' Life Sciences division Ken Souza asked the Administrator, "with the end of Spacelab missions, will there be additional missions for the life and microgravity sciences communities prior to the time that we achieve significant capability on the International Space Station?"

Goldin replied, "In direct answer to your question: YES!" He went on to say that STS-95, the upcoming John Glenn mission, was the first of the additional life and microgravity science missions to be added to the Shuttle manifest. He said that another such mission is being targeted for 2000, and an additional two to three mis-

"I want to congratulate the wonderful NASA team on what you are doing."

-- Daniel S. Goldin

sions are under consideration beyond that. "We have to maintain continuity in order for the scientific community to keep their tools sharp," Goldin stated.

Goldin concluded by saying that, while the Agency would certainly like more money to do its work, "we will ask for it when we are ready"—when we are able to lower the cost of access to space while increasing safety even further. He said that the entire Government is going to a performance-based system, and he expressed optimism about the future of NASA in such an environment. He said that he believes, "if we continue to perform, the resources will be there to do what we need to do."

BY DAVID MORSE



see
related
story on
page 4

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

Rotorcraft flight research resumes this summer at Ames

"The Army is operating four aircraft as part of the research projects in the Army/NASA Rotorcraft Division," said Barry Smith, chief of the Flight Control and Cockpit Integration Branch (Code ARH).

The rotorcraft flight research program at Ames is composed of two UH-60A Black Hawk helicopters, an NAH-1S Flying Laboratory for Integrated Test and Evaluation (FLITE) Cobra helicopter and an OH-58C helicopter.

This summer, the rotorcraft program plans to conduct several research flight tests at Ames. "I want people to look up and see helicopters flying this summer," Smith said. "This is an active rotorcraft research program; we're not shut down."

One flight research project called Healthwatch, conducted for Dr. Ed Huff of Code IC, will involve the Cobra and will study the extent to which basic flight maneuvers influence characteristic vibration patterns of the Cobra's engine and transmission. Tests will be conducted during 14 maneuvers flown at Moffett Federal Airfield during the course of four two-hour flights.

Another flight research project led by

Luigi Cicolani, a Code ARH research engineer, will study how slung loads carried by



Photo by Sue Bowling

UH-60A Blackhawk helicopter shown during slung-load operation.

the UH-60A Black Hawks affect their stability and handling characteristics. Helicopter slung load operations are common in both

military and civil environments.

A third flight research project, called Sensor Fusion, will study the effects of combined low light level television and infrared sensor imagery on the ability of a helicopter pilot to conduct low-altitude flight tasks in degraded visual conditions. This project is led by Professor Kip Krebs of the U.S. Naval Postgraduate School in Monterey.

Ames is the lead center for rotorcraft research and is supported by Langley Research Center and Lewis Research Center. Andrew Kerr is the Director of the U.S. Army Aeroflightdynamics Directorate. Ed Aiken is the acting Chief of the Army/NASA Rotorcraft Division and U.S. Army LTC Chris Sullivan, who aspires someday to be an astronaut, is Chief of the Flight Projects Office, which reports to Kerr. The Ames rotorcraft research piloting staff consists of two Army (Loran Haworth and Sullivan) and three NASA pilots (Munro Dearing, Bill Hindson, and Rick Simmons).

BY MICHAEL MEWHINNEY



ER-2 simulates emergency response to natural disasters

A NASA ER-2 recently collected a variety of photographic and digital images during a demonstration of its capability to respond to emergency situations such as floods, earthquakes and fires.

As part of the Federal Response Plan, NASA provides aerial reconnaissance support to federal and local agencies in the event of a national emergency. Firefighters, disaster relief personnel and insurance agencies use the information the ER-2 gathers in several ways, including determining how to fight fires, deciding what areas to evacuate and assessing the extent of the damage.

"From its high altitude, the ER-2 offers wide-range coverage of a large area in a short time," said Gary Shelton, deputy director of Dryden's Airborne Science Branch. "This type of coverage is important for emergencies like floods when several counties can be affected."

In January 1997, the California Office of Emergency Services called on a NASA ER-2 to take images over northern California regions that were ravaged by flooding because of severe rainstorms. In August 1996, NASA and the California Department of Forestry and Fire Protection used an ER-2 with a Satellite Telemetry and Return Link (STARLink) system to provide real-time images of the Fork fire region near Clear Lake, CA, where an active wildfire had consumed almost 80,000 acres.

For the July 13 simulation, the ER-2 flew over the Edwards Air Force Base dry lakebed areas which were flooded as a result of this year's El Nino weather condition, using two high-resolution onboard cameras and a digi-



ER-2

tal infrared scanner to gather information. Mapping the dry lakebeds effectively simulated what the ER-2 would do in the case of large-scale flooding, which often occurs in the western United States.

The ER-2 transmitted information from the digital scanner in real time to a ground station at Ames Research Center using its STARLink pod. This scenario also served as

a test of the telemetry pod, which will be used during the ER-2's next mission—a study of tropical hurricane development, tracking, intensification and impact on land. Scheduled for Aug. 6 - Sept. 23, the experiment, the third phase of the A convection and Moisture Experiment, will provide additional insight to hurricane modelers and forecasters who continually strive to improve hurricane predictions. The Marshall Space Flight Center, Huntsville, AL, is the lead NASA center for this project.

During the July 13 checkout, personnel at Ames immediately uploaded the information onto the World Wide Web (http://hawkeye.arc.nasa.gov/cgi-bin/hdrm?TMS_98-083) once the ground station received information from the STARLink pod. In an emergency situation, this information could be available to firefighters and emergency personnel within three to five minutes.

This exercise also included the Ames Airborne Sensor Facility and the U.S. Department of Energy Remote Sensing Laboratory, Las Vegas, NV., which processed the film from the high-resolution cameras aboard the ER-2. Ames processed one role of film and scanned appropriate frames for posting on a file transfer protocol site (<ftp://>

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Ames Activities

Hubbard named interim manager of new Astrobiology Institute

Scott Hubbard, deputy director of Space at Ames, has been named interim manager of the agency's newly formed Astrobiology Institute.

As interim manager, Hubbard will manage and guide the Ames-based "virtual" institute, a national research consortium of 11 member organizations. He will be responsible for establishing the managerial and technical foundations of the institute. The institute plans to name a permanent director in the near future; a nationwide search is underway.

"We are very lucky to have Scott's strong management and people skills during the critical first months of the Astrobiology Institute's inception," said Ames' Center Director Dr. Henry McDonald. "I know his energy, enthusiasm and research acumen will prove essential in the initial operational stages."

In 1997, Hubbard was appointed to NASA's Senior Executive Service after 10 years in increasingly responsible positions at Ames, including: mission manager for the 1998 Lunar Prospector mission, originator of the 1997 Mars Pathfinder mission concept, and researcher in radiation detection technology for space and biomedicine. Hubbard also serves as program manager for the Stratospheric Observatory for Infrared Astronomy (SOFIA), a key element of NASA's Origins program.

NASA has developed the Origins program within its Office of Space Science to search for signs of life in the universe, both in our solar system and beyond. The Astro-

biology Institute will foster the interdisciplinary research and training necessary for future exploration of this theme.

Prior to coming to Ames, Hubbard was a staff scientist at Lawrence Berkeley National Laboratory and a research manager in private industry. Hubbard received his undergraduate degrees in physics and astronomy at Vanderbilt University and graduate training at the University of California, Berkeley.

In May, NASA selected 11 academic and research institutions as the initial members of the new Astrobiology Institute, thus launching a major component of NASA's Origins program. The selected institutions represent the best of 53 proposals submitted, according to NASA officials.

Current institute members include: Arizona State University; Carnegie Institution; Harvard University; Pennsylvania State University; Scripps Research Institute; the University of Colorado; the University of California, Los Angeles; Woods Hole Marine Biological Laboratory; Johnson Space Center, Houston, TX; the Jet Propulsion Laboratory, Pasadena, CA and Ames.

Key researchers at the newly appointed institute will remain at their home organizations; the partnership among the new members and NASA will be carried out primarily via the Internet. This electronic "virtual" institute will bring together astrophysicists, biologists, chemists, physicists, planetologists and geologists to conduct interdisciplinary research on the issue of life



Ames' Scott Hubbard with the Lunar Prospector Spacecraft, the first competitively selected Discovery-series mission.

in the Universe and its cosmic implications.

It will also help train young scientists in this emerging field. Funding for the institute will begin at \$9 million in 1999, with a proposed increase to \$20 million in 2000.

The opportunity for additional organizations to become members is anticipated within the next two to five years.

Information about astrobiology at Ames can be found on the world wide web at: <http://astrobiology.arc.nasa.gov/>

BY KATHY BURTON

Airfield Operations holds open house, July 31



photos by Tom Trower

Other visitors attending the Open House admire the now-retired Kuiper Airborne Observatory.



Youngsters checking out the P-3 Orion aircraft on display during the recent Open House.

There was an aircraft on static display for viewing, a demonstration by the Moffett Fire Department, and tours of the tower, including hands on experience on how the air traffic control tower functions. Refreshments were also served.

Steps to financial success

"Ten Steps to Financial Success" will be the title of an upcoming EAP lunchtime talk, presented by Chris Colwick, Certified Financial Planner. The presentation will take place on Monday, August 17 from 11:30 a.m. to 12:30 p.m. in Bldg 258, Room 127.

Financial success is not always dependent on income. In fact, many people earning an impressive salary struggle to make ends meet because they haven't followed the 10 basic steps to be discussed in this talk. To achieve success, one has to take a holistic approach to financial well-being. As attendees will learn, it's not how much a person makes, it's how one uses it.

All civil servants and contractors are welcome to attend. For more information on CONCERN/EAP, contact Miriam Glazer at ext. 4-5172.

Briefs

X-34 completes critical milestone

The first wing assembly for NASA's X-34 technology demonstrator has completed qualification tests and has been shipped to the prime contractor, Orbital Sciences Corporation, Dulles, VA, where it has been mated to the X-34 test article under construction there.

Integration of the wing assembly with the test article fuselage marks a major milestone in the program. Flights of the air-launched X-34 are scheduled to begin next year in conjunction with flights of its larger and more advanced sister ship, the X-33.

NASA selects Nationsbank as next credit card provider

NASA has selected Nationsbank, Charlotte, NC to be its next credit card provider for fleet, travel and purchase cards.

Nationsbank is one of six banks awarded master contracts by the General Services Administration (GSA). NASA will issue a task order agreement for all three card types through GSA, to be effective Nov. 30, for up to ten years, including options.

NASA spends approximately \$100 million per year through credit card services. This no-cost agreement with Nationsbank for all three card types will allow NASA to pursue integrated services that will streamline processes and gain efficiencies.

NASA currently uses three different GSA card providers: American Express for travel cards, Rocky Mountain Bank for purchase cards, and Wright Express for fleet cards. The existing card agreements expire on November 29.

NASA research helps mold better products for home, auto and aircraft industries

Research in a low-gravity environment has taken an important first step toward making metal products used in homes, automobiles and aircraft less expensive, safer and more durable.

Auburn University, Auburn, AL, and industry are partnering with NASA to develop the first accurate computer model predictions of molten metals and molding materials used in a manufacturing process called casting. Cast alloy parts are formed by mixing and pouring melted metals into a mold. The first commercial use of the new computer information is being made by Howmet Industries of Whitehall, MI, to more precisely design and cast aircraft turbine blades. In a similar activity, Ford Motor Company's casting plant in Cleveland, OH, is using the information developed by the new computer models to improve the casting process of automobile and light truck engine blocks.

DNV preassessment ISO 9001 audit

The Ames ISO 9001 registrar, Det Norske Veritas (DNV), performed the Center's first preassessment audit during the week of July 20-24. This was the first of two such audits to be conducted prior to the Ames certification audit scheduled for April 1999. Each directorate being considered for certification (Codes A, D, F, I, J, and S) was assessed to determine the level of compliance with the ISO 9001 standard in the areas of quality management system documentation, implementation, and effectiveness.

The plan for the week contained detailed daily schedules of areas and persons to be audited that covered the specified directorates. Escorts accompanied the DNV auditor to assist in finding the identified areas and to take detailed notes. At the end of each day, the escorts debriefed the ISO project team on the notes taken. Starting on the second day, each morning of the audit began with a review of the findings from the previous day. Two exit reviews of the findings for the week were given on Friday — one to Center management and another to participants.

The DNV representative audited a portion of each directorate, reviewing documentation and searching for completed records to assess document implementation. The centerwide functions of management review, document control, corrective and preventive action, and internal audits

were examined as well. Corrective action requests will be generated for each of the DNV findings. Further, root cause analysis for each finding will be applied to each directorate to determine if the findings are also applicable to them.

Examples of some of the findings found throughout multiple directorates included: lower level documentation didn't match centerwide policy documents; quality records that need to be maintained were not specifically identified; many documents existed only in draft form and, therefore, were not auditible; and the implementation and effectiveness of the documents could not be assessed because many had been released just recently.

By the time of the next DNV preassessment audit in November, internal auditors will have examined most of the directorates a second time. Further, it is anticipated that more procedures will have been released and implemented by November. Consequently, DNV will have a larger pool of approved procedures and completed records from which to sample.

The current preassessment audit was a good experience in preparation for the certification audit. However, a lot of work remains to be done in preparation for the next preassessment according to the ISO team. More internal audits are scheduled starting in August, and auditors will rely on help from each directorate in preparing for and conducting the audits. Responses to the internal audit findings will be crucial for Ames to get ready for the certification audit.

BY NORA WILLIS



ER-2 simulates emergency response to natural disasters

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/asapdata.arc.nasa.gov). The facility also annotated a digital U.S. Geological Survey topographic map with an overlay of the areas the ER-2 imaged. Additionally, the Airborne Sensor Facility produced a digitized annotated aerial photograph and a similarly annotated multispectral scanner image for Internet distribution (<ftp://asapdata.arc.nasa.gov>).

The Department of Energy facility simultaneously processed an additional roll of film, demonstrating processing redundancy in the event that one of the labs

could not process the film. In an actual emergency, turn-around time from aircraft launch to receipt of the final photographic products is as short as four to six hours. The Department of Energy Lab also scanned and annotated an appropriate photo frame for Internet distribution and posted it to the site (<ftp://asapdata.arc.nasa.gov>) within seven hours after the ER-2 acquired the data.

BY MICHAEL MEWHINNEY



Ames Memorials

Wayne Harry remembered

The Ames community was saddened by the sudden and untimely death of Wayne Harry on July 16 in San Jose at the youthful age of 49.

Harry was born May 29, 1949 in Hawarden, Iowa and moved to the Bay Area as a child. He began working for the



Wayne Harry

government at the US Geological Survey in Menlo Park while still in high school. He came to work at Ames in 1971 as a physical sciences technician in support of the arc jet complex. Harry left Ames to serve in the US Marine Corps, including a tour of duty in Vietnam as an air traffic controller. After completing his military service, he returned to the Center.

Harry was a highly skilled mechanic and operator in the arc jet facility, where

he was involved in the simulation of re-entry conditions for the purpose of testing heat shield materials for spacecraft. He was a master in terms of his knowledge and understanding of the operations, modifications and re-configuration of the facility and its support systems.

Harry was promoted to facility manager technical assistant in 1989, his responsibilities expanding to include inventory and purchasing of spare parts, updating and control of engineering configuration and operations and maintenance manuals, and training of operations personnel. He was a key member of the arc jet team when it came to trouble shooting. It was commonly heard when the problem solving got tough, "Let's ask Wayne."

Harry's contributions to the American space exploration programs in the area of ground testing have been truly significant — from the early days of Apollo, to the Space Shuttle, Mars Pathfinder, and future space vehicles currently under development.

Harry was active in scouting and sports, especially water sports, as he was growing up. Many of his fellow workers enjoyed sharing Harry's leisure and sports activities with him, particularly snow skiing, bicycling, backpacking, boating and water skiing. Harry was an avid golfer and the president of the Ames golf club. He was also a long time member of the Center bowling league. He loved the challenge of sports, and was just "darn" good at everything he tried.

Another of Harry's loves in life was dancing. He and his wife Lynette shared this love together, and to see the two of

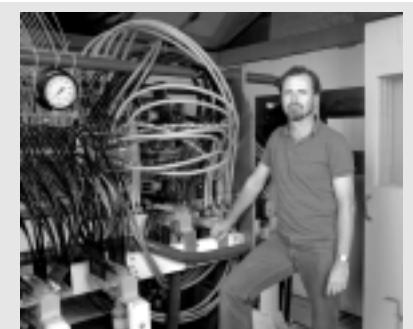


photo by Eric James

Harry in the Panel Test facility, one of the units of the arc jet complex in Bldg. N-238.

them on the dance floor was a pleasure. They taught country western dancing for 15 years. They even founded the group, Wayne and Lynette and the Country Western Dancers, which they soon changed to the KEEN Country Dancers.

Harry enjoyed life and loved the people around him. All of his co-workers at Ames will miss him, not only for his exceptional work and organizational skills on the job, but for the fine person he truly was.

Harry leaves behind Lynette; daughters Dawn Loder and Christine Cuilla; sons Michael Harry, Steven Shepherd and Jason Shepherd; nine grandchildren; his mother Marie Harry; and brothers Chuck, Jay and Mark and sister Debbie.

A memorial service was held in Harry's honor on July 23, at the Cambrian Park United Methodist Church in San Jose. Tributes in memory of Wayne Harry can be made to the Cassie Caldwell Hearing Trust, c/o South County Country Dancers, 836 English Walnut Way, Morgan Hill, CA 95037.

Ames astrobiology pioneer Oyama passes away

Vance I. Oyama, a principal scientist and one-time chief of the Ames Office of Planetary Exploration, died at his home in



Vince Oyama

Middleton, CA on July 27 following a year-long bout with colon cancer. He was 76.

Oyama was born in the Boyle Heights region of Los Angeles, CA, on June 6, 1922,

the son of Japanese immigrants Chiyo Iwamoto and Zengoro Oyama. He received his B.S. and M.S. degrees in chemistry and biochemistry, respectively, from George Washington University. During the early stages of his education, he was sent to the Jerome, AK, internment camp at the start of WW II. Shortly thereafter, he met his future wife, Rosella Waller, they married in 1945, and moved to Bethesda, MD. There Oyama completed his education while working on experimental studies in medicine and tropical diseases at the National Institutes of Health.

After a three-year stint at the Jet Propulsion Laboratory, Oyama came to Ames Research Center in 1963. His work focused on the development of experiments and instrumentation for the exploration of planetary soils and atmospheres. Perhaps Oyama's greatest claim to fame was his pioneering work on soil samples taken by the Viking spacecraft lander in 1976. Oyama's analysis indicated that the Mars samples were void of any organic sub-

stances and did not support the contention that life had ever existed on the Red Planet.

According to Dr. Harold Klein, former Life Science directorate chief at Ames and leader of the Mars biological science team for Viking, "Vance's experiments on Mars . . . were among the most important, the most critical, the most exciting."

Oyama retired from Ames and Federal service in 1980, but continued to pursue his scientific interests, taking courses and staying abreast of developments in his chosen field. He was the recipient of numerous awards and honors, including the NASA Exceptional Service Medal and the Apollo Achievement award.

Oyama is survived by his wife, Rose; his son, Jerry of Alta, UT; daughters, Denise Miller of Fremont, CA, and Judy Olson of Chiloquin, OR; and brother, Jiro Oyama of Cupertino, CA. He also leaves four grandchildren. Memorial services for Oyama will not be held at his own request. Donations in his memory may be directed to the American Cancer Society.

Information Technology at Work

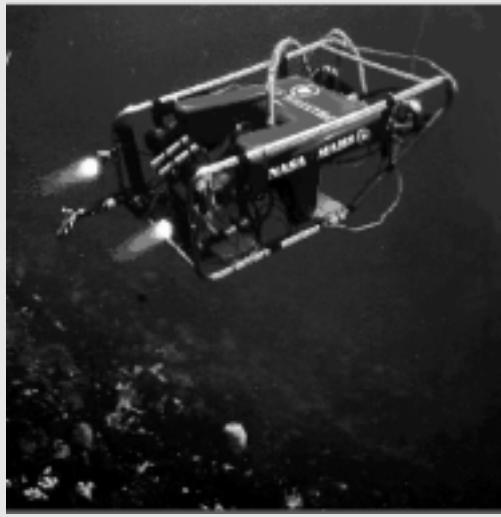
NASA technology to aid in search for sunken fleet

Using technology originally developed for the Mars Pathfinder, NASA scientists will begin a search next month for a whaling fleet lost in 1871 beneath the frigid waters of the Arctic Ocean.

Scientists from Ames will use an underwater telepresence remotely operated vehicle (TROV) equipped with a pair of stereo video cameras to record underwater footage in 3-D. Computer software developed for Pathfinder by the Intelligent Mechanisms Group (IMG) at Ames will be used to produce a virtual-reality computer simulation of the underwater environment. Scientists believe these marine maps could be used for astrobiology hydrothermal vent research as well as marine biology and archaeology research.

Scientists will deploy the TROV from aboard the U.S. Coast Guard cutter Polar Star, one of the world's most powerful non-nuclear ice-breakers. The ship will depart from Seattle and travel north along the Canadian and Alaskan coasts to Point Barrow. During its journey, the Polar Star will pass through the waters near Icy Cape, where the New Bedford whaling fleet sank

the ships," said Jeff Ota, an Ames research engineer and the project leader. "TROV's stereo cameras along with the software developed by the IMG promise to attain a



NASA's telepresence remotely operated vehicle (TROV)

new level of 3-D accuracy, detail and realism that has not been achieved to date in the underwater realm," Ota added.

During the July 29 to Aug. 30 Arctic expedition, NASA scientists will work with the National Oceanic and Atmospheric Administration (NOAA) West Coast and Polar Regions Undersea Research Center, Santa Clara University and the U.S. Coast Guard to try to locate the sunken whaling fleet. They will also search for the remains of a mastodon or mammoth, extinct mammals resembling giant elephants.

The expedition also includes educational outreach components, including the Learning Technologies Project led by Mark Leon of Ames and the "Jeremy Project." Named after Jeremy Bates, Santa Clara University's student principal investigator, the Jeremy project will use NASA's latest technological advances such as robotic underwater rovers, stereo imagery and computer software, to make the marine environment more accessible.

Project students plan to disseminate information from the expedition to schools throughout the nation during "Live from the Arctic" Internet web chats in an effort to stimulate interest in marine research.



"It is our hope that NASA's technology will make underwater research more efficient and more accurate and give us a better picture of how we have historically related to the sea," Bates said. "We want to make it easier for scientists to map marine archeological sites more accurately and efficiently."

In addition to Bates, student participants include Aaron Weast, Santa Clara University, Santa Clara, CA; Alex Derbes, Case Western University, Cleveland, OH; Damien Canerot, Aptos High School, Aptos, CA; Jamie Silva, Broadway High School, San Jose, CA; and Seth Carter, a Raytheon Corp. contractor from Ames.

During the expedition, project team members will stop at towns and villages along the Alaskan coast and discuss environmental concerns with residents in Kodiak, Nome, Chuckchi and Point Barrow.

"More than anything else, it is our hope that this cooperative project will be used as a stepping stone for scientists in the future in order to learn about humankind's past and continuing relationship with the sea," Ota said.

Total cost of the project is \$31,500. NASA is contributing \$7,500 and a Silicon Graphics computer to the project; NOAA is contributing \$15,000 and Santa Clara University is contributing \$9,000. Deep Ocean Engineering, Inc., of San Leandro, CA, is providing a Phantom XTL remotely operated vehicle (ROV) for the expedition.

Further information about the Jeremy Project may be obtained at its website: <http://quest.arc.nasa.gov/arctic>

BY MICHAEL MEWHINNEY



U.S. Coast Guard's Polar Star

in September of 1871 after becoming trapped in the ice and abandoned.

"We will attempt to locate the sunken fleet, reportedly situated at a depth of between 27 and 52 feet of water, and deploy the TROV to take images of at least a few of

Events & Classifieds

Calendar

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

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

JAVA Users Group Meeting, Aug 12, 10:00 a.m. to 11:30 a.m., NAS Auditorium, B258, Room 127. POC: Sharon Marcacci, ext. 4-1059.

Professional Administrative Council (PAC) Meeting, Aug 13, 10:30 a.m. to 11:30 a.m., Location TBD. POC: Janette Rocha, ext. 4-3371.

Ames Sailing Club Meeting, Aug 13, 11:30 a.m. to 1 p.m., N-262/Rm. 100. POC: Greg Sherwood at ext. 4-0429.

Ames Multicultural Leadership Council Meeting, Aug 19, 11:30 a.m. to 1 p.m., Galileo Rm./Ames Café. POC: David Morse at ext. 4-4724 or Sheila Johnson at ext. 4-5054.

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

Ames Asian American Pacific Islander Advisory Group Meeting, Aug 20, 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, Aug 20, 12 noon, N-260/conf. rm. POC: Walt Miller, AJ6T at ext. 4-4558.

Native American Advisory Committee Meeting, Aug 25, 12 noon to 1 p.m., Ames Café. POC: Mike Liu at ext. 4-1132.

Ames Contractor Council Meeting, Sept 2, 11 a.m., N-200/Comm. Rm. POC: Greg Marshall at ext. 4-4673.

Hispanic Advisory Committee for Employees, Sept 3, 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, Sept 3, 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, Sept 3, 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, Sept 4, at the Elk's Club, 44 W. Alma Avenue, San Jose. Social hour: 10:30 a.m. Program & business mtg. follow lunch at 11:30 a.m. POCs: Mrs. Leona Peery, President, (650) 967-9418 or Earl Keehner, Public Relations, (408) 241-4459.

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

Wanted: Temporary housing (3 - 6 mos) for visiting researchers (3 - 9 men and women). January - June, 1999. Reasonable rates needed! J.E. Greenleaf, ext. 4-6604, or S.R. Simonson, ext. 4-3256.

Studio apt, \$670, one mile from Ames. Call (650) 965-0775.

Rooftmate needed to share 2bd/1ba apartment in Sunnyvale near Mary/El Camino. Pay half the rent \$502.50/month + 1/2 utils. Avail. 9/1. Barrie (408) 736-8961.

Rooftmate wanted to share a 3bd/2ba house with one other. Close to Livermore airport (KLVK), pool, AC, W/D. Quiet, NS professional. \$600 month + dep. Call (925) 456-8324.

For sale: town house in North San Jose. 2bd/1 1/2 ba, 988 sq. ft end unit in quiet neighborhood. Two car carport. Includes washer/dryer/dishwasher/refrigerator, and wall to wall carpeting. Low HOA. Priced to sell at \$166,000. Nelly or Paul (408) 926-4033.

Transportation

'66 Buick Skylark, Classic w/375 Wildcat engine \$1,200. Jim/Jenny (408) 263-2109.

'72 VW Westfalia camper w/Adventurewagen top. 1.9L engine 35K mis, Hydraulic cam. Stock emissions equipment. 5K mis on new trans. New clutch. Sleeps four w/sink, icebox, water tank and lots of storage. Great for family traveling and camping. \$4,499. Call (408) 378-2064.

'85 Toyota Tercel Deluxe Liftback, 5D a/c, AM/FM Radio, exc. cond., Orig. Owner. Only 80K mis, \$2,750 or B/O. Wardell (510) 471-2570.

'88 Chevy Suburban, Silverado package, towing package, 4WD, fully loaded, A/C, new transmission, 130K mis. Grey interior and exterior. \$9,500. Jim/Jenny (408) 263-2109.

'89 Plymouth Grand Voyager LE minivan, 3.0 V6, auto, 64K mis, AC, pwr strg & windows, remote security sys w/auto dr lock, cruise control, AM/FM/cass, tint windows, one owner, exc. cond. \$6,750. Brian (510) 489-7055.

'92 Toyota Tercel, 2D, only 42K mis, 4 spd, new tires and battery, AM/FM/cassette, gd. cond., service history records, \$3000. David (650) 988-7051.

'93 Honda Prelude, 4WS, 5 spd., new tires, new battery, 55K mis, exc. cond. Selling due to move. \$13,000. Call (650) 969-7827.

'95 Jeep wrangler, best model year, immaculate, upgraded tires and detachable CD, 40K mis, \$13.5K (408)464-3036.

Miscellaneous

Will mouse for food. Wanted - homes for Ames cats. Sterilized, vaccinated Ames colony cats, some friendly and some feral, urgently need homes or they will be euthanized. Lv msg. Call (650) 327-0631.

Baby Grand Piano, \$500. Call (650) 988-1773.

Brass Bed -- quality American made antique reproduction; solid brass headboard and footboard; side rails included; very good cond, no dents; needs a little polishing. Cost new \$800/will sell for \$250 or B/O. Dave (510) 471-3466.

Roland Digital Piano, 88 full size keys, weighted action, superb condition. \$750. Dana (408) 378-3645.

Small block Ford boat engine with V-drive...first \$200. You pick up. Call (408) 335-4801.

Ames Retirements

Name	Date	Code
Carolyn M. Burrous	4/3/98	JAC
Thomas D. McFall	8/1/98	W

Nintendo game cartridges: N64 - Diddy Kong Racing \$38; SNES: Super Mario Kart \$30; Paper Boy \$20; Castlevania IV \$20; Buster Busts Loose \$15; Pocky & Rocky \$15; Super Baseball Simulator \$7. Goosebump books, assorted volumes 1 thru 45 and Scare Yourself vols 1 thru 8, \$1.25 each or \$35 for all books. Call (650) - 964-3834.

New coffee table w/two matching end tables, couch w/matching love seat, \$500 or B/O. Call (408) 733-5057.

Aerobic Rider, \$150; Nishiki Cross-bike w/upgraded Shimano Deore XT parts, 16" frame, \$200; picture frame Cherrywood curio cabinet, \$300; stuffed loveseat futon couch, converts to guest bed, white, \$200. Call (408) 249-5180 after 8pm, lv msg if no answer.

Yakima(www.yakima.com) roof rack. Q-towers and 48" crossbars. Fits many types of cars. \$120 or B/O. Phil (650) 366-5157 or email philcruz@ix.netcom.com.

Antique Oak Roll-Top desk, in very gd cond. Includes antique oak desk chair. Asking \$950. Call after 6 p.m. M. Moore (408) 739-5373.

Whirlpool electric clothes dryer. 4 yrs. old, exc. cond. Heavy duty, XL capacity, front loading, 5 cycles, 4 temps, white. \$200. Shawn (408) 999-0416.

1920's in-wall, full-height hutch w/three upper cabinets, spice drawers, cutting board and lower drawers. Victim of remodel. \$100. Call (408) 295-2160.

Two cane-back oak swivel bar chairs w/beige leather seats (both for \$135/or B/O); full bedroom set \$350 or B/O; sofa/foyer tables (one oak/one cherrywood) \$70 or B/O ea; small antique maple desk, \$120 or B/O; china sets, other numerous misc items(ask). Call (408) 378-5434.

Full-size washer, gas dryer, good cond. \$125 ea. or \$200/pair; gas self-propelled lawnmower, 2yrs old \$100; four drawer desk, 30"x42" \$40. Robert (408) 279-8922.

Oval, brass shower curtain rod for hanging above claw foot tub. \$20. Call (408) 295-2160.

Vacation rental

Rent 3 room ocean front suite in Cozumel. Sleeps 6, 2 baths, kitchenette. Easy walk to town. August 22 to 29. \$450. Bob (408) 253-3903.

Houseboat for rent on Claire Engle Lake ("Trinity" Lake in No. CA). Sleeps eight, kitchen, bathroom w. shower. Floating heaven. \$1,200/week. Web URL: www.wildhorses.com/houseboat.html. Call (650) 941-3396.

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

Carpool

Looking for someone to carpool with from Fremont to Ames and back. Hours are: Mondays 8 a.m. to 6 p.m. and Tuesdays through Thursdays from 7:30 a.m. to 12 noon. Pls. call ext. 4-5560.

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, AUG 10	FRI, AUG 21
MON, AUG 24	FRI, SEP 4
MON, SEP 7	FRI, SEP 18

Ames Information

Exchange to host employee appreciation day

The Ames Exchange will host its first Ames Employee Appreciation Day on August 19, from 11 a.m. to 1:30 p.m. in front of Bldg. N-200 at Bush Circle. Live music will be provided by the group 'Jazz Quartet.' Complementary lunch will be served. Choices will include Cajun chicken, Italian sausage and garden burgers, with potato salad, corn on the cob, soda, cookies, and ice cream. No tickets are required.

Employees will be able to enter a free drawing. The Exchange will be giving out free travel mugs with a chance to win a big prize. Winners need not be present to win jewelry (14K gold necklaces), a mountain bike, baseball tickets and lots of other wonderful prizes!

Smaller drawings will be held every few minutes with chances to win t-shirts, caps, wineglasses and lots more!

Informational booths will feature Exchange-sponsored activities and programs, including sports and recreation as well as the Golden Bay Federal Credit Union, Space Camp, the Commute Alternative Program, the NFEE Union, EEO groups, the Child Care Center and the Travel Office!

Join in for a noon-time of fun, food and entertainment.

Research participants needed

The perceptual and behavioral adaptation group needs the assistance of Ames employees. They are conducting a visual perception experiment and need research participants. In this study, participants will view a visual array in different orientations and will perform three simple tasks --they will place a target at eye level, upright, and straight ahead.

Researchers are interested in determining how altered environments affect visual perception. The experiment, which will take place in Bldg 239, Room 218, and will take approximately one hour of participant's time. Malcolm Cohen, Ph.D., from Ames and Lawrence T. Guzy, Ph.D., National Research Council Senior Fellow, are conducting this research.

Those interested in participating in this study, may contact Jason Rogers or Jeannine Mealey at ext. 4-0511, or email them at: jrogers2@mail.arc.nasa.gov or jmealey@mail.arc.nasa.gov.

Book sale scheduled

The Ames Exchange will be hosting a book fair on August 10 and 11. It will be held from 11 a.m. to 2 p.m. in the Ames Cafe.

Books make wonderful gifts and employees can save up to 70%. Various kinds of books will be available, such as best sellers, cookbooks, educational, hobby, reference and children's books.

Payment by cash, check or credit card will be accepted.

PAC picnic set

The Professional Administrator's Council invites all secretaries and administrative staff to the Second Annual Summer BBQ on September 17, at Chase Park, from 11:30 a.m. to 1:00 p.m.

Civil servants and contractors are welcome. Please RSVP by September 3 to: Sandra Owen at ext. 4-5062 or Janette Rocha at ext. 4-3371.

Volunteers sought

Researchers at Ames are currently recruiting healthy male and female volunteers for a study entitled "Physiologic Response of Multiple Sclerosis (MS) patients to Hypothermic Therapy using Commercially Available Cooling Garments." These studies are designed to find medical applications for NASA technologies which were originally developed for life support systems and extra vehicular activities (EVA).

Volunteers are needed for 5 sessions, 5 days apart, for 3 hours each session. If you are between the ages of 22 to 65 years old, a non-smoker, non-obese person with no vascular disease, please consider volunteering. Please call Tricia Burchell at ext. 4-6106 to volunteer for this study or for further information.



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