THE AMES Astrogram
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD
February 20, 1998
online@http://ccf.arc.nasa.gov/dx/

Severe storms batter Ames; considerable damage caused

A series of severe storms that pelted California Feb. 2 through Feb. 9 left considerable damage in their wake at Ames Research Center.

Robert J. Dolci, chief of Ames' Disaster Assistance and Rescue Team (DART), said more than 20 basements were significantly flooded. "We also had damage that resulted from roof leaks and first floor flooding, and more than 180 underground vaults were flooded. Since the beginning of the storm, we've pumped over 1 million gallons of water from the vaults," Dolci said.

Flooding resulted in a loss of power to much of Ames and also caused considerable damage to the levees and storm channels. The wind also caused damage to some roofs, and uprooted a couple of trees. "While the damage was substantial, it would have been far worse if not for the efforts of the emergency responders, the functional team leaders, and the support staff," Dolci said.

Members of the Naval Air Reserve, the California Air National Guard, and the Air Force worked shoulder-to-shoulder with DART, Plant Engineering, Fire Department and center volunteers. More than 15,000 sand bags were filled and nearly three million gallons of water per hour were pumped from the storm drainage system. The pumps' normal maximum capacity is 1.2 million gallons per hour.

Emergency crews also pumped out an additional 2.75 million gallons per hour from the Lockheed channel. "If we had lost the levee, considerably more damage would have resulted at Ames and Lockheed," Dolci said.

Besides working on the levees, emergency crews also worked to plug the numerous leaks in the basements. Emergency personnel worked around the clock for the entire week during the storm. "At one point in the response efforts, we had over 400

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Photos taken of flooded areas at Moffett Field. These photos were taken from the Army/NASA NAH-1S Cobra Aircraft on Feb. 4, 1998. Pilots were Munro Dearing and Loran Haworth.

Volunteers from NASA Ames, Onizuka AFB, the Navy Reserve and the Army Reserve work together with DART members to sandbag a levee and prevent further flooding.

Ames website helps stamp out year 2000 computer bug

Ames has a website that is helping the center, government and industry to stamp out the Year 2000 computer bug that some experts say could cripple computer systems worldwide. The website is: http://george.arc.nasa.gov/year2000/

Also known as the Y2K problem, the bug results from computer codes that cannot understand dates after Dec. 31, 1999. The Ames website also links to other, non-NASA 2000 computer bug sites.

"Both the Office of Management and Budget and U.S. Rep. Steve Horn of California's 38th district, who is chairman of the U.S. House Subcommittee on Government Management, Information and Technology, last summer gave NASA a 'D-' because we weren't moving fast enough to solve NASA's Year 2000 bug problem," said Ames engineer Doug Pearson, who created the website. "So, last fall, NASA Administrator Daniel S. Goldin ordered us to speed up. We're doing a lot better now."

As of the end of January, 46 percent of the NASA programs have been corrected. Revisions must be complete by September 1998. But Pearson cautioned that throughout NASA there are still thousands of NASA computer programs that must be revised.

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Global warming to be discussed at next director's colloquium

Stephen H. Schneider will be the Director's Colloquium speaker on Mon. Feb. 23, at 2 p.m. in the Main Auditorium, Bldg. N-201. The title of his talk is, "The Road to (and from) Kyoto: Where Global Warming Science and International Politics Meet."

Stephen Schneider

Schneider, a professor in the Department of Biological Sciences and a Senior Fellow at the Institute for International Studies at Stanford University, will discuss the science and political issues and the international debate that lead to the United Nations sponsored Climate Convention in Kyoto, Japan this past December. He will analyze the significant findings from the convention and the many issues that were debated, including human impact on climate and the resultant concern among scientists, environmentalists, industrial interests and governments of developed and developing nations.

In addition, Schneider will discuss the most cost-effective, environmentally appropriate solution to curb waste and reduce emissions of greenhouse gases into the atmosphere.

Schneider has an extensive research, publishing, teaching, consulting and international print and broadcast media background in climate and environmental issues. He has served as a consultant to government agencies and the White House in every administration from Presidents Nixon to Clinton. He has received various awards for integrating and interpreting global climate research, and for furthering public understanding of environmental science related to public policy.

No tickets are required. Audience will be seated on a first-come basis. For more information, call Naz Haghbin at ext. 4-1494.

AIAA dinner meeting set for Mar. 18

"How the Russians Tried to Beat Us to the Moon" will be the topic discussed by James J. Harford, American Institute of Aeronautics and Astronautics (AIAA) Executive Director Emeritus, at a dinner meeting of the AIAA San Francisco Section.

The dinner meeting will be held on Wed., Mar. 18, at 6:30 p.m. in the Wyndham Garden Hotel, 1300 Chesapeake Terrace, Sunnyvale. The program is being jointly-sponsored by the Silicon Valley Engineering Council and is open to the public.

Cocktails will be served at 6:30 p.m., followed by dinner at 7 p.m. Cost is $18 per person; $14 for students and includes a buffet dinner. Deadline for reservations is Mon., Mar. 16. Space is limited. For more information or to register for the dinner meeting, contact Daniela Cambie at (510) 883-9450 or send email to: daniela@webbnet.com

NASA to study total eclipse visible Feb. 26

The Feb. 26 total eclipse will be visible from a narrow corridor which begins in the Pacific, continues through the Caribbean and ends off the Atlantic coast of Africa. Much of the south and eastern U.S. will see a partial eclipse.

NASA's plans to study the eclipse include: Researchers from NASA's Goddard Space Flight Center, Greenbelt, MD, will be among international teams of scientists who will observe the eclipse from Curacao, Guadalupe, and Aruba, using solar telescopes to analyze the structure and magnetic activity of the Sun's corona. Scientists are available to discuss the upcoming solar eclipse.

The NASA/European Space Agency's (ESA) Solar and Heliospheric Observatory (SOHO) spacecraft will assist eclipse expeditions from around the world by making simultaneous observations during the eclipse that will reveal a more complete picture of what is occurring on the Sun.

The NASA/ESA Ulysses spacecraft, now in polar orbit around the Sun, will give scientists a "birds-eye view" of huge loops of solar material tearing away from the Sun's corona. These ejections of solar mass can be seen from ground-based observatories during solar eclipses, but Ulysses' orbit above the Sun's poles gives scientists another perspective from which to better understand these potentially dangerous storms.

NASA TV plans to run a eclipse preview video file on NASA-TV several times in February. Elements in the video file will include animation showing the path of the eclipse, some safe eclipse viewing tips and examples of how scientists use 'artificial' eclipses to study the Sun's corona.

A time-lapse movie of the moon's shadow as it sweeps across the Earth will be taken by the GOES satellite during the four-hour event. If the images can be processed in time, NASA TV will broadcast a special edition of the video file around 4 p.m. to 5 p.m. EST. NASA Television is available through the GE-2 satellite, transponder 9C located at 85 degrees West longitude, vertical polarization, with a frequency of 3880 MHz, and audio at 6.8 MHz.

NASA scholarships available

Applications are now available for the NASA College Scholarships. Dependents of NASA and former NASA employees agencywide qualify. Candidates must have graduated from an accredited public, private, or parochial high school, or be enrolled currently in college with good academic standing. An applicant must have a combined high school grade point average of 2.5 on a 4.0 scale.

Five scholarships will be awarded in the amount of $2,000 each during the 1998-99 school year. The scholarship is renewable for a maximum of $8,000 over six calendar years.

Applicants must be pursuing a course of study in the science or engineering field that will lead to a recognized undergraduate degree at an accredited college or university in the United States.

The scholarship fund was established as a direct result of a substantial unsolicited gift from noted Pulitzer Prize winning author James A. Michner. He gave as his reason for the gift that he held the people of NASA in such high esteem for their good work through the years and that he thought it important for education to go forward in this country.

Applications forms and further information are available from Janine Ciffone, at ext. 4-4948, M/S 19-22, or email: jciffone@mail.arc.nasa.gov

Application forms and related paper work are due in Houston no later than Mar. 31.

Administrator's Export Control Policy Outlined in Memorandum

"As a U.S. Government Agency on the forefront of technological development and international cooperation in the fields of space, aeronautics, and science, the National Aeronautics and Space Administration will strive to fulfill its mission for cooperative international research and civil space development in harmony with the export control laws and regulations of the United States. Due to heightened proliferation challenges facing the United States and the world, including risks posed by the spread of missile technologies and weapons of mass destruction, and in view of the significant criminal, civil, and administrative penalties that may affect the Agency and its employees as a result of a failure to comply with U.S. export control laws and regulations, it is the responsibility of every NASA official and employee to ensure that the export control policies of the United States, including nonproliferation objectives, are fully observed in the pursuit of NASA's international mission."

Year 2000 computer bug

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He said the government-wide Year 2000 computer bug is bad enough that President Clinton recently created a powerful council to fix the problem. The Year 2000 Conversion Council is tasked with making sure that government services are not disrupted by the bug.

"In concept, the Year 2000 problem is very simple. What makes it complex, though, is that it appears in so many places," Pearson said. He is a member of a three-person Ames team from the office of the Ames Chief Information Officer, which is attacking the Y2K problem at Ames. The two other team members are Cyndi Martinez and Ray O'Brien. O'Brien will take over Pearson's duties after Pearson retires in March. There are several other committees devoted to eradicating the Year 2000 bug at Ames.

"Each group is working on the problem from the viewpoints of its members' disciplines and organizations," Martinez said.

"We have a large number of people here who don't know the Year 2000 bug affects them," Pearson said. "They include not only computer experts, but scientists, engineers and people in services. We have easy procedures listed on our website that will help people to check their computers for the problem," he said.

"Most questions about the bug can be answered by visiting the website," Martinez said. "A lot of bug busting information is available, and there are links to many other websites that deal with the Y2K problem."

The site includes Ames' plan to attack the problem. The plan is accessible only to Ames employees.

NASA Lewis Research Center, Cleveland, OH, is looking for the Year 2000 problem in all desktop software used by NASA. Lewis software engineers will decide how employees will be asked to handle that problem. The Ames team intends to email information to the Ames staff with Lewis recommendations.

"The email messages will let folks know what desktop software needs to be replaced, upgraded or retired," O'Brien said.

The Ames website also has non-NASA site links. Those sites include information about other date-related bugs. They can also have serious consequences.

"For example, in August 1999, the global positioning system time cycle changes from 1,023 weeks since GPS began to zero weeks. GPS receivers have to be able to use the new setting," Pearson said.

GPS is a system of 24 earth-orbiting satellites that allows people with GPS receivers to find their locations on Earth. "GPS receivers that are not properly reset will not work correctly," Pearson said. He is asking Ames employees to send any information about the Year 2000 computer bug and other date-related problems to his group through the website or by telephone. Pearson's phone number is ext. 4-6854 (until his March retirement). Martinez is at 4-0905, and O'Brien is at ext. 4-6875.

The team also plans a series of events to inform Ames people about aspects of the Y2K problem. The first event is a Silicon Graphics, Inc. presentation, "Strategies for Year 2000 Compliance focusing on IRIX 6.5," scheduled for Feb. 26 at 9:30 a.m. to 11:30 a.m. in Rm. 127, an auditorium in Bldg. N-258.

BY JOHN BLUCK

Briefs

Deadly virus combated

A joint research effort between NASA and industry biotechnology researchers has taken an important step toward developing a treatment for a life-threatening virus that causes pneumonia and severe upper respiratory infection in infants and young children.

According to Dr. Daniel Carter, president of New Century Pharmaceuticals in Huntsville, AL, "...we have determined the three-dimensional atomic structure of a potentially very important therapeutic antibody to this virus."

Carter's research team used the viral antibody to grow larger and better quality antibody crystals in microgravity aboard the Space Shuttle Columbia in June and July of 1997.

Using highly specialized X-ray equipment and computers, scientists at New Century Pharmaceuticals located the key positions of individual atoms in the crystal structure and constructed a model of the antibody.

New AA for Earth Science

Dr. Ghassem Asrar has been selected as the new NASA Associate Administrator for Earth Science.

"Dr. Asrar brings first-class interdisciplinary research skills and the respect of the scientific community to this challenging position," Goldin said. "Our Earth Science program is poised to enter a new era with the launch of the first Earth Observing System mission this summer."

Asrar currently serves as the chief scientist for the Earth Observing System in the Office of Earth Science at NASA Headquarters.

Space Station Assembly Crew

Astronaut Brian Duffy (Col., USAF) will command the third U.S. assembly flight, designated Shuttle mission STS-92, to the International Space Station. Joining Duffy will be Pilot Pamela Ann Melroy (Major, USAF). Melroy marks her first space flight with STS-92.

Mission Specialists Koichi Wakata (NASDA); Peter J. K. (Jeff) Wisoff, Ph.D.; Leroy Chiao, Ph.D.; William (Bill) McArthur, Jr., (Col., USA); and Michael Lopez-Alegria, (Cmdr., USN), were previously named to the flight in June 1997.

Working in teams of two, Chiao, Wisoff, McArthur and Lopez-Alegria will conduct four space walks over the course of the mission, while Wakata has primary responsibility for operating the Shuttle's Remote Manipulator System robot arm.

This fifth Station assembly flight will build on previous American and Russian assembly flights beginning with the launch of the Control Module (FGB) in the summer of 1998.

KPIX-TV Channel 5 News Anchor draws large crowd to Black Heritage luncheon...

Barbara Rodgers, featured speaker at the recent Black Heritage Month luncheon, inspired the spill-over crowd by sharing the story of her struggles to achieve anchorwoman status at a major network affiliate.

Photos by Tom Trower

Severe storms batter Ames, considerable damage caused

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people involved," Dolci said.

During that week, emergency crews provided responses to several different emergencies, including shoring up levees, increasing the pumping capacity in the Ames and Lockheed channels, restoring power, removing flood water from basements, cleaning up a PCB spill, a gas spill and stopping numerous water leaks.

The response teams included DART Rescue, DART HazMat, DART Communications, DART Damage and Utility Control, Plant Engineering, Fire Department, Protective Services, and volunteers from Ames and Resident Agencies. The support elements included procurement, logistics, medical, communications, Emergency Operations Center, protective services, engineering, flight operations, and the Ames Exchange Council. Coordination was also required between Ames and the Resident Agencies, Lockheed, FEMA 9, the county emergency operations center, state agencies, and the American Red Cross.

Many people provided key leadership support and a dozen others also played significant roles in the emergency response to the storm. Some people went without sleep for 36 hours, while many others averaged only 3 or 4 hours of sleep each night.

Based on his many years in disaster response, Dolci said this was the longest and most intense emergency situation he's ever been associated with, including the Loma Prieta Earthquake and the Oklahoma City bombing. "We can all be very proud of all the people who responded to this emergency," said Jana Coleman, Director of Center Operations.

BY MICHAEL MEWHINNEY

Flood damage as seen from eastern Perimeter Road looking southwest towards Hangar Three in upper right corner.

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 Ballroom Dance Club Every Tuesday 4:30 p.m., MTCC, Bldg. 3, POC Steve Zeleny at ext. 4-6326 or Rosalyn Jung at ext. 4-5609

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.

National Engineers Week Feb. 22-28, POC: Brenda Collins at ext. 4-3540 or Sheila Johnson at ext. 4-5054

Native American Advisory Committee Feb. 24, 12 noon to 1 p.m., Ames Café, POC: Mike Liu at ext. 4-1132.

American Heart Association talk on "Risk Factors of Heart Disease and Stroke," February 25, 1998, 11:30 a.m. - 12:30 p.m., Building 258, Room 127. POC: Miriam Glazer at ext. 4-5172.

Ames Amateur Radio Club Feb. 26, 12 noon, N-260/conf. room, POC: Walt Miller, AJ6T at ext. 4-4558.

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

Hispanic Advisory Committee for Employees Mar. 5, 11:45 a.m. to 12:30 p.m., N-239/Rm. 177, POC: Carlos Torrez at ext. 4-5797.

Ames African American Advisory Group Meeting Mar. 5, 11:30 a.m. to 12:30 p.m., N-241/Rm. 237, POC: Ross Shaw at ext. 4-0175.

Ames Sailing Club Mar. 12, 11;30 a.m., to 1 p.m., N-262/Rm 100, POC: Greg Sherwood at ext. 4-0429.

Ames Multicultural Leadership Council Monthly Meeting, Mar. 18, 11:30 a.m. to 1 p.m., Galileo Room/Ames Café POC: David Morse at ext. 4-4724 or Sheila Johnson at ext. 4-5054.

NFFE local 997 Union General Meeting Mar. 18, 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 Mar. 19, 11:30 a.m. to 1 p.m., N-213/Rm. 261, POC: Daryl Wong at 4-6889 or Brett Vu at ext. 4-0911.

Please send any updates and new submissions for the calendar of events to: astrogram@mail.arc.nasa.gov.

Ames Classifieds

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

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

Housing

Mt. View near Castro. Share kitchen, bathroom, laundry, garden + treehouse. Easy transport Bike/bus/train- Central Expressway - El Camino/HWY 101-237-85. All inclusive rent, $560. Leave message for Olivia at (650) 969-3932.

Carpool

Looking for someone to rideshare from Fremont Tues. and Thurs. work hours 7 a.m. to 4 p.m. Contact Margaret at (650) 604-1003.

Transportation

'87 Honda Accord LXi - HB, AT, A/C, CC, PW, v gd cond, 1 owner, well maint, 139K mi, $4150, call (408) 356-2156.

'87 Dodge Caravan - AT, AC, PW, all maintenance records, 107K miles, $3,700 B/O. (408) 294-9289.

'88 Cadillac Cimarron - leather, all power, 95K miles, light blue, maintenance records, $3,500 B/O. (408) 978-1118.

Miscellaneous

Encyclopedia Britannica, 1964 Ed., 24-vol. + bkcase., $120 B/O; brn. plush contour lounge-sofa for two, $60. (650) 254-1986.

US Airmail stamp collection in Scott binder w/G&K slipcase. Complete set of pages, many stamps, $22 all. (650) 851-5290 after 6 p.m.

486-66Mhz cpu & VLB motherboard w/256k cache & manual, $45. (408) 295-2160.

Remodeling??? American Standard Toilet, not low flush, $35. (408) 264-4627 after 3 p.m.

Sears Kenmore portable washer and dryer set. w/ sink attachment. Excellent condition, $90 ea. B/O. 408-749-9643 after 5 p.m.

SVGA VLB video card: Orchid Fahrenheit 1280 w/ 2MRAM + driver software, $25. (408) 295-2160.

Vacation rental

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

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

So. Lake Tahoe home rental. 10 min. from casinos and skiing. Sleeps 14,4brdr. 2bath. Fireplace, cableTV. Rates: $450 per week. $200 weekend. $75 per day. Holidays $100 per day. (408)-248-4861

Astrogram deadlines

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram.*

Stories should be sent as enclosures in MS Word to astrogram@mail.arc.nasa.gov

If you have questions, submit them by email to the above address.

Deadline	*Publication*
Mon., Feb. 23	*Fri., Mar. 6*
Mon., Mar. 9	*Fri., Mar. 20*
Mon., Mar. 23	*Fri., Apr. 3*
Mon., Apr. 6	*Fri., Apr. 17*
Mon., Apr. 20	*Fri., May 1*
Mon., May 4	*Fri., May 15*
Mon., May 18	*Fri., May 29*

Volunteers Sought for Engineers Week

Ames is in urgent need of volunteers to participate in the support of National Engineers Week. Due to the overwhelming response from the educational community, Ames is over 40 engineers, scientists and researchers short of the total required to support local schools. We really must redouble our efforts. Your help is desperately needed — now.

Don't let your code down. Remember, this is a competition among the various Ames directorates. Latest data is listed on the website.

Please contact Brenda Collins of the Office of External Affairs at ext. 4-3540 to arrange for your participation, or visit the project website at: http://eweek.arc.nasa.gov

Correction

The Astrogram wishes to acknowledge Doug Baker, DC-8 Flight Engineer, as the orginial designer of the Flight Operations logo that was depicted on page 5 of the Feb. 6, 1998 Astrogram issue. The Astrogram regrets this oversight.

Hypersonics conference scheduled

The American Institute of Aeronautics and Astronautics (AIAA) will host a conference on hypersonics at the Waterside Marriott Hotel Norfolk, Virginia, on April 27-30.

Aerospace planes with capabilities for hypersonics flight in the atmosphere and for earth-to-orbit missions are in various stages of planning, research, and development in several nations worldwide. The objective of the Eighth International Spaceplanes and Hypersonic Systems and Technologies Conference is to provide a forum for discussion and exchange of information of these technologies.

The conference is designed to bring together from throughout the world engineers, designers, managers, and technologists who are involved in the development of aerospace plane class of vehicles and hypersonics technologies, as well as decision makers from the international aerospace community, and future aerospace plane users.

To register for the conference, go online at: http://www.aiaa.org/calendar/hyper98reg.html

Blood drive set for Mar. 12

The Stanford Blood Center will hold a blood drive at Ames on Thurs., Mar. 12 from 7:30 a.m. to 3:30 p.m. in Building 3, the Moffett Training and Conference Center. All medically eligible donors are invited to participate.

Resident staff including contractors, students and civil service are encouraged to donate blood to maintain blood supply. Registration will be made via the World Wide Web. To make an appointment, please go to the location site: http://128.102.89.2454d.acgi$pickclass?16111 to select a donation time. Click on available time slot and type in your name. It's that easy. Those interested in participating in the Bone Marrow Donation Procedure are also welcome. For more information on the Bone Marrow Donation or to participate, please contact Chaz Czaplicki at ext. 4-6942.

THE AMES Astrogram

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