SeaWinds launches from Japan’s Tanegashima Space Center on Dec. 13.

The instrument joins another satellite already in orbit to measure wind speed and direction over Earth’s oceans.

SeaWinds, which rides aboard the National Space Development Agency of Japan’s Advanced Earth Observing Satellite 2 (Ades 2) spacecraft, will complement and eventually replace a second, identical instrument that has been orbiting since June 1999 aboard NASA's Quick Scatterometer (QuickSat) satellite. Its three-to-five-year mission will augment a long-term ocean surface wind data series that began in 1996 with the launch of the NASA Scatterometer aboard the Ades spacecraft. The Japanese Space Agency is a partner on SeaWinds, along with the National Oceanic and Atmospheric Administration (NOAA).

Climate scientists, meteorologists, and oceanographers use these detailed snapshots of ocean winds in conjunction with data from other Earth-monitoring satellites from NASA and other U.S. and international entities to understand and predict severe weather patterns, climate change and global weather abnormalities like El Niño.

SeaWinds on Ades 2 will maintain a circular, near-polar orbit about 800 kilometers (500 miles) above Earth. Initial telemetry reports received by the Ades 2 team show the spacecraft to be in excellent health. The SeaWinds instrument will be powered on 27 days after launch and 17 days later will undergo a thorough checkout. A six-month calibration/validation phase will begin in mid-April, with nominal science operations scheduled to begin in October 2003.

“With its ability to ‘see’ ocean level winds through clouds, data from SeaWinds on Ades 2 will be an invaluable tool for hurricane tracking and high seas marine forecasting,” said Helen Wood, director of NOAA’s Office of Satellite Data Processing and Distribution. “NOAA will quickly process the data for weather forecasting use by NOAA’s National Weather Service, the Japanese Meteorological Agency, and other national weather agencies around the world.”

Scatterometers operate by transmitting high-frequency microwave pulses to the ocean surface and measuring the “backscattered,” or echoed, radar frequency microwave pulses bounced back to the satellite. The instrument senses ripples caused by winds near the ocean's surface, from which scientists can compute wind speed and direction.

Additional information about SeaWinds is available at http://winds.jpl.nasa.gov.

JPL 101 quiz will test your knowledge

Q: Where is the Carl Sagan Memorial Station?
   a) Ares Vallis, Mars
   b) JPL Mail Wall
   c) Abroad the Voyager spacecraft
   d) 65 N. Catalina Avenue, Pasada

Answer below

How much do you really know about the people, developers and events that have shaped the history of the Laboratory? A new and fun way to find that out will make its online debut on Monday, Jan. 13.

“JPL 101” will be featured on the Lab’s internal news site, the Daily Planet (http://daily-planet.net), and will include a new five-question quiz every week. The questions and answers in JPL 101 represent information that challenges the seastoned JPL Pier, while informing the new hire. The Q & A cover a broad array of information and are intended to help people gain understanding about areas where they may not have direct work-related exposure.

The questions are in seven categories: JPL Basics, Science, Technology, Product Development, Missions, Stakeholders, and JPL History. The answers contain supplemental material that encourages further exploration of JPL resources.

The quiz is intended as a general educational resource for the use of all Laboratory personnel. People are encouraged to share their knowledge by submitting questions and answers for inclusion in future quizzes.

The JPL 101 Quiz was developed by the Knowledge Capture Program, with the assistance of the Internal Communications Office, JPL Library, Human Resources, and Ethics Offices. For more information, contact Rebecca Nash, ext. 41752, or Lynne Cooper, 3-3080.

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JPL CELEBRATED

JANUARY

JPL astronomers gathered evidence that a shock is created when material falls toward a dust disk around a growing star. Scientists believe dust particles in these disks clump together, leading to small rocks that can join together to form planets and comets. ... The Galileo spacecraft flew past Jupiter four major moons. ... In a partnership with Norway, JPL researchers demonstrated the design of an ice-injecting rocket on a glacier far above the Arctic Circle. The probe melted down 23 meters (75 feet), establishing the viability of subsurface exploration. ... The Mars Odyssey spacecraft was raised up out of the atmosphere to conclude the aerobraking phase of the mission on Jan. 11. ... Using data from the SeaWinds instrument on the Quick Scatterometer (QuikScat), researchers dramatically improved the warning of cyclone development in the Atlantic and Eastern Pacific hurricane seasons. ... Newly appointed NASA Administrator Sean O'Keefe paid a visit to the Laboratory on Jan. 30 (above).

FEBRUARY

Mars Global Surveyor continued to shoot stunning pictures (left) as the spacecraft began the second extension of its successful mission. ... Scientists began studying winter snow packs on the Colorado side of the Rocky Mountains. This will improve the estimation of snow amount and forecasting of spring flooding due to snowmelt, and study the role of cold lands within Earth's climate. ... Scientists using a combination of data from Galileo and Cassini discovered an invisible whirling bubble of charged particles—the magnetosphere—surrounding Jupiter. ... The United States and Europe incorporated wind speed and direction data from QuikScat into their global weather analysis and forecast systems. Forecasters can now predict hazardous weather events over the oceans as much as six to 12 hours earlier. ... Mars Odyssey began its mapping mission. Initial measurements by the gamma-ray spectrometer showed significant amounts of hydrogen in the south polar region.

MARCH

The JPL-managed Gravity Recovery and Climate Experiment (Grace), a five-year mission to precisely measure the planet's shifting water masses and map their effects on Earth's gravity field, launched March 17 from Russia (right). NASA's JPL managed the mission in conjunction with the German Space Agency. ... Wind data obtained by QuikScat documented episodes of reversed trade winds that are responsible for unsuitable cyclone conditions in the northwest and southwest Pacific, and which may be a precursor of future El Nino. ... The New Millennium Program selected two organizations to lead the work on new technologies to control a space vehicle's flight path so the payload responds only to gravitational forces. The Disturbance Reduction System technology is scheduled to fly in 2006 as the Space Technology 7 project, designed to test and validate advanced technologies for future use on NASA missions.

APRIL

Astronomers identified a potential close encounter with Earth by an asteroid two-thirds of a mile wide. What will most likely be a miss, even without preventive measures, will come in March 2880. ... The Voyager Interstellar Mission flight team activated a backup position-sensing system, including a Sun sensor and star tracker, on Voyager 1. The spacecraft had been carrying the回馈 components and other spare parts since it was launched in 1977 on what was then slated as a four-year mission. ... The JPL-managed Next Generation Sky Survey was one of four proposals selected by NASA as candidates for the Explorer Program of lower cost, highly focused, rapid-development scientific spacecraft. The mission would discover the brightest galaxy and the closest star to the Sun. ... A team of fuel cell experts designed a compact, flat fuel cell, resulting in a portable technology that may someday operate small, portable electronic devices for hours and even days at a time without recharging or using expensive, heavy batteries.

MAY

Aqua, carrying the JPL-managed Atmospheric Infrared Sounder (AIRS) instrument, launched May 4. The mission is dedicated to advancing our understanding of water cycle and climate. ... A D.C. tribute to JPL's 40-year legacy of exploring the planets and beyond. Attending were former Lab directors Drs. William Pickering, Ed Stone, Lew Allen and Bruce Murray, and JPL's current Director, Dr. Charles Elachi (below). ... A new, cost-effective technology based on global positioning system (GPS) (left) may soon revolutionize the way Earth's atmosphere is monitored. By measuring a few trillionths of a second—the subtle changes in GPS signals as they arrive at spacecraft as they travel through Earth's atmosphere, scientists can derive data that include extremely precise profiles of atmospheric density, pressure, temperature and moisture content. ... Final observations by Galileo of Jupiter's moon Io revealed 13 previously unknown active volcanoes, bringing the total number of known Ioan hot spots to 120. Galileo images revealed 34 of them. ... Scientists using Mars Odyssey's gamma ray spectrometer instrument suite found enormous quantities of subsurface water ice in the upper meter (3 feet) of soil in a large region surrounding the planet's south pole (top). ... Infrared images by Odyssey showing Mars' layered surface are the first direct evidence that Mars experienced a series of environmental changes during active geological periods in its history.

JUNE

Thousands of acres of burned vegetation were revealed in images of Colorado's worst forest fire, taken by the Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) onboard the Terra spacecraft. ... JPL hosted a briefing for industry in Pasadena, where more than 200 business leaders gathered to learn about potential business opportunities with the Lab.
**OCTOBER**

The highest resolution mid-infrared picture ever taken of the center of our Milky Way galaxy revealed details about dust swirling into the black hole that dominates the region. The image (right) was taken by a team at the Keck II telescope in Hawaii with the JPL-built Mid-Infrared Large Well Imaging camera. ... The Oct. 4 opening of JPL’s Commercialization Center created a one-stop shop for U.S. companies that would like to work with the Lab’s Commercial Technology Program. ... Using the NASA Global Differential GPS system at JPL, researchers demonstrated the ability to very precisely navigate airplanes in real time, anywhere in the world, independent of local navigational aids or infrastructure. This promises to extend precision navigation to infrastructure-poor areas of the world, potentially enhancing aviation safety in these areas. ... Researchers demonstrated a prototype device that automatically and continuously monitors the air for the presence of bacterial spores. The result is a novel alarm capability reminiscent of smoke detectors. ... Galileo imaged reddish spots on the icy surface of Jupiter’s moon Europa, which may indicate pockets of warmer ice rising from below. This upwelling could provide an elevator ride to the surface for material in an ocean beneath the ice.

**AUGUST**

The JPL-managed Stardust mission (below) began to collect tiny interstellar dust grains on its mission to collect and return the first samples from a comet. ... Five JPL proposals were among those selected by NASA for the Earth Science Enterprise’s Advanced Component Technology Program, which will provide core component and subsystem technology developments that will enable new science measurements and visionary concepts. ... Three principal investigators from JPL were among those chosen by NASA to develop sensor technology to detect and quickly analyze hazardous materials in the field.

**SEPTEMBER**

JPL scientists confirmed the first known capture of an object into Earth orbit from a Sun-centered orbit, thanks to continuing observations of what was most likely the third stage of a 1969 rocket to the moon. ... Building upon more than a decade of work on a standard called the linear ion trap, JPL’s Frequency Standards Laboratory team developed and installed a new trapped ion atomic clock for the U.S. Naval Observatory in Washington, D.C. Recent JPL innovations are expected to provide 20 times improved stability over previous trapped ion clocks.

**NOVEMBER**

After 37 close encounters with various planets, asteroids and Jupiters four large moons, Galileo dashed through Jupiter’s inner radiation belts past the moon Amalthea (below) on Nov. 5, its last flyby before impacting the planet next September. ... The test of the camera on the Cassini spacecraft produced images of Saturn 20 months before the spacecraft arrives at that planet. The image shows the shadow of the planet falling across its rings and includes Saturn’s largest moon, Titan. ... All systems on the Stardust spacecraft performed successfully when tested in a flyby of asteroid Annefrank, highlighting anticipation for Stardust’s encounter with its primary target, comet Wild 2, in late 2003.
Special Events Calendar

Supporting Groups

Admissions Anonymous—Meetings are available. Call the Employee Assistance Program at 4-3680 for time and location.

Caregivers Support Group—Meeting Jan 9 at noon in Building 187-111 (The Wellness Place). This is the first meeting of the third Thursday of the month. For more information, call the Employee Assistance Program at 4-3680.

Codpendents Anonymous—Meets on the first and third Thursday of the month in Building 101-308. For more information, call the Employee Assistance Program at 4-3680.

Working Parents Support Group—Meets the third Thursday of the month in Building 101-308. For more information, call the Employee Assistance Program at 4-3680.

Monday, January 6

JPL Toastmasters Club—A joint meeting with the Advanced Communication Training and Leadership Institute. For more information, call 362-3436.

Speakers Bureau of Pasadena will be on site. For more information, call 362-3436.

Tuesday, January 7

JPL Amateur Radio Club—Meeting at noon in Building 169-111. For more information, call 239-2474.

Wednesday, January 8

Meetings:

Wednesday, January 15

Social Security—A representative will be here to answer questions. For more information, call 395-4652.

Friday, January 10

JPL Amateur Radio Club—Meeting at noon in Building 169-111. For more information, call 239-2474.

Galilei in concert at 8 p.m. in Caltech's Beckman Auditorium. For more information, call 719-7277.

Wednesday, January 15

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Team X notes milestone
Advanced Projects Design Team reaches 500 studies
By Mark Whalen

The Advanced Projects Design Team started its work in 1995 under Spartan conditions. Created out of the need for JPL to keep up with its increasing number of mission studies in the 1990s, the team that was in on the advent of concurrent engineering didn’t even have computers in its work room at the outset.

Once it got going and proved its worthiness over the years to follow, however, there’s been no stopping Team X, as it has come to be known. Now equipped with networked workstations, teleconferencing capabilities, technical support and more, the team recently celebrated its 500th study in support of pre-phase A mission development.

“Team X is now part of the JPL lexicon,” Elachi said at a commemoration last week. “Everyone now knows what Team X means, not only within NASA but in the broader scientific community as well. Team X knows what Team X means, not only within NASA but in the broader scientific community as well.”

Many of the studies were critical to the selection or solidification of JPL missions approved for development, including CloudSat, Dawn, Kepler, Aquarius and several Mars Scout missions, to name a few. The team has also conducted studies for other NASA centers as well as for international partners, including ideas for a Venus lander and a Europa ocean mission.

Team X members are nominated by the technical divisions, and now number more than 100. Oberto said the studies are thorough but quick, most of them completed in just three three-hour sessions.

“Customers found they could come to the team with almost any sort of mission and walk away with a design, all at about 10% of the cost of a traditional mission study.”

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“I can run an end-to-end study in one week, a capability that is unique throughout the agency,” Prusha complimented the team’s “agility and nimbleness, the ability to go from a Venus lander study one week, to an observatory the next week, to an Earth mission the week after that.”

Team X and its work at the Project Design Center have been emulated at several other NASA centers and in the aerospace industry, Oberto said. The approval for the Team X concept was signed in 1994 by Space and Earth Science Programs Director Dr. Charles Elachi, who is now the Lab director.

“Team X is now part of the JPL lexicon,” Elachi said at a commemoration last week. “Everyone now knows what Team X means, not only within NASA but in the broader scientific community as well. Team X has significantly exceeded our expectations.”
Service awards bestowed

For the period from October 2002 through January 2003, the following JPL employees completed 25 or more years of service were invited to attend a luncheon and ceremony in their honor on Jan. 14.

30 years
Charles Acton Jr., Bonnie Cantrell, Edward Contreras, Larry Hovland, Patrick Janmaat, Michael Keesey, John Lathan, Robert Kinkade, Kenneth Klaassen, Michael Markucci, David Mather, Michael McDaniel, Michelle Marquardt, Robert Moore, Kenneth Olson, Charles Porter, Susan Robb, Michael Sacco, Alexander Sato, John Selders, Barbara Smith, Michael Street, Charles Taylor, James Test, James Toomey, and Robert Young.

Ongoing Support Groups

Alcoholics Anonymous—Meetings are available. Call the Employee Assistance Program at ext. 4-3680 for location and location.

Caregivers Support Group—Meets the first Thursday of the month at noon in Building 167-121 (The Wellness Place). For more information, call the Employee Assistance Program at ext. 4-3680.

Codpendents Anonymous—Meeting at noon every Wednesday. Call Occupational Health Services at ext. 4-3680.

Gay, Lesbian and Bisexual Support—Meets the first and third Fridays of the month at noon in Building 121-117. Call the Employee Assistance Program at ext. 4-3680 or Randy Herrera at ext. 3-0064.

Working Parents Support Group—Meets the third Thursday of the month at noon in Building 167-117 (The Wellness Place). For more information, call Carol Anderson at (818) 790-8175.

“Do Aliens Cause Global Warming?”—Renowned author Michael Crichton will deliver a free lecture at 6 p.m. in Beckman Auditorium. For more information, call (626) 395-4652.

Sunday, January 19
Chamber Music—The Emerson String Quartet will perform at 11 a.m. in Beckman Auditorium. Tickets are $12, $25, and $57. Call (626) 395-4652.

“Who is Science Writing For?”—Author Margaret Wertheim will give the Skeptics Society-sponsored lecture at 2 p.m. in Caltech’s Baxter Hall. Donations: $5 for members, $8 for nonmembers, Caltech/PI community free.

Tuesday, January 21
Hall. Donations: $5 for members, $8

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“Do Aliens Cause Global Warming?”—Renowned author Michael Crichton will deliver a free lecture at 6 p.m. in Beckman Auditorium. For more information, call (626) 395-4652.

Sunday, January 19
Chamber Music—The Emerson String Quartet will perform at 11 a.m. in Beckman Auditorium. Tickets are $12, $25, and $57. Call (626) 395-4652.

“Who is Science Writing For?”—Author Margaret Wertheim will give the Skeptics Society-sponsored lecture at 2 p.m. in Caltech’s Baxter Hall. Donations: $5 for members, $8 for nonmembers, Caltech/PI community free.

Tuesday, January 21
Hall. Donations: $5 for members, $8

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By Mark Whalen

NASA, AS WELL AS MANY OTHER FEDERAL agencies, is now operating under a continuing resolution; that is, we’re all able to do our work as long as we do not spend at a rate greater than last year’s rate of spending.

This scenario is not at all uncommon, explained Dr. Richard O’Toole, manager of the Legislative and International Affairs Office, during a Nov. 14 talk in the auditorium. He explained the inner workings of the budget cycle and discussed the impacts of November’s midterm elections.

NASAs budget is allocated as part of a package that includes the Veterans Administration, Department of Housing and Urban Development, and other independent agencies.

Of the 13 appropriations bills submitted for approval for FY 03, only two have been approved, O’Toole said. “I expect that appropriations sub-committees will have their conference during the month of January in order to complete the bill by the end of the month. The continuing resolution is now in effect through Jan. 30 and the goal is to complete all the appropriations bills prior to the President’s budget address for FY ’04 on Feb. 3.”

JPL has a new congressman, O’Toole noted. Last month, voters overwhelmingly reelected Democrat Adam Schiff (61%) and Republican David Dreier (63%). But due to redistricting, JPL is now in Dreier’s district, while Caltech remains in Schiff’s district.

“This is the best possible outcome for JPL,” O’Toole said. “Congressman Schiff has supported JPL extremely well, and since he retains Caltech, he won’t forget about us.”

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Dreier, in his 12th term, is chair of the House Rules Committee. Dreier also went for a seat in the House last month, noted O’Toole. “In fact, he came by and showed his support during the search for Mars Polar Lander in late 1999.”

“20 races resulted in victories for non-incumbent and some of these were “open seats” where no incumbent was running.

Wherever President Bush showed up to campaign, his presence was able to move 20 to 30 percent of the undecided vote,” noted Jeff Lawrence, former Democratic party chair and author of “The Democrats couldn’t counter-balance.”

“In the House, majority rules,” O’Toole said.

Again, due to redistricting, GOP can operate with more rigidity and party discipline; all that is needed is a 218 to 217 vote to pass legislation.”

The result is a more hard-line stance and more party-line votes. “Over the last few elections, the House has become more polarized and a bit more acrimonious,” O’Toole said.

In the California House delegation, 20 are Republicans, 33 are Democrat (including one new seat). In addition to the breakdown along party lines, California doesn’t vote as one block,” O’Toole observed.

“In Northern and Southern California don’t often have a lot of interests in common,”

No changes are expected for the leadership of the Appropriations Committee of the Republican-led

House. As for the Senate, the new Appropriations Subcommittee chair is Rep. Chris Bond (R-Mo.). The former chair, Rep. Barbara Mikulski (D-Md.), is now the ranking minority member of the sub-committee. Even with this new leadership, “Don’t expect a lot of changes,” O’Toole said. “Sen. Mikulski will be taking the lead on NASA as before.”

The Senate now counts 51 Republicans, 48 Democrats and one independent. This is not expected to have a huge impact on NASA. O’Toole said. “The three-vote margin seen in the Senate isn’t worth as much as the larger majority enjoyed by Republicans in the House,” he said, “because it takes 60 votes in the Senate to bring legislation to a vote on the floor.”

O’Toole noted the top issues that will be tackled by the 108th Congress—and NASA isn’t among them. “The main issue will be homeland security,” he said. “Other priorities will be further tax cuts, prescription drug benefits, and free trade.”

O’Toole termed as “winners” the areas of defense, health and education, with “losers” as “everything else.” “We’re not a priority,” he said, but “we are also not a target for cutting.”

O’Toole noted that, “‘the space program was not even mentioned in the last presidential election.”

When it comes to allocating NASAs budgetary resources, it’s all relative. Maryland, for instance, receives by far the most per capita in government NASA funding than California, mostly because JPL’s FY 03 budget of $1.4 billion is “lost in the noise of the economy” in California, where it represents only 1/10 of 1 percent of the economy. In contrast, Marshall Space Flight Center’s budget represents about 2% of Alabama’s economy.

When the FY ‘03 budget process is completed, O’Toole expects the NASA budget to be about $15.3 billion. But budget planners must also deal with the growth of “earmarks,” projects of local interest such as science centers, libraries, etc., that are not authorized by a policy committee but are funded as additional programs in the appropriations process.

Often, these projects have little or nothing to do with NASA projects or needs, but the agency must find a way to fund them. “They’re nice for the district,” said O’Toole, but it’s difficult for agencies to fund these programs.”

O’Toole expects that the NASA budget for FY03 could total $15.3 billion after additions for earmarks, but that the new earmarked programs will leave NASA with a $200 million shortfall in funding. “We’re hoping our budget increases will stay above inflation for the next 5 years beyond 2003,” he said.
Advertisements require that the following issue.

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Antennas spared damage in Australia fire

By Guy Webster

Canberra blaze comes close to DSN facility

Smoke billows near an antenna at the Canberra, Australia, Deep Space Network facility.

Australian antennas of NASA's Deep Space Network used for communicating with spacecraft are back in normal operation after a close call with wildfires that destroyed hundreds of homes and took four lives in the Canberra area.

Brush fires surrounded the network's Canberra complex on Saturday, Jan 18. Workers used hoses to douse spot fires on the site Saturday and were still extinguishing flare-ups on Monday, Jan 20.

"A group of staff performed magnificently, successfully ensuring that no fires took hold at the site," said Peter Churchill, director of the Canberra antenna complex. "They also assisted the local fire service in their efforts to protect homes and farm infrastructure in the Tidbinbilla Valley."

HANCOCK COUNTY, Miss.—Since coming to work for NASA in 1995, engineer Karen Vander has seen the basis for the One NASA ideals at work every day.

As the executive secretary for the Rocket Propulsion Test Management Board, NASA's decision-making body for the agency's rocket propulsion testing, Vander provides the daily coordination of the board comprised of NASA staff members from White Sands Test Facility, Las Cruces, N.M.; Marshall Space Flight Center, Huntsville, Ala.; Glenn Research Center - Plum Brook Station, Sandusky, Ohio; and Stennis Space Center. Hancock County, Miss.; Vander believes the team approach used by the board is an example of what can work for the whole agency.

"The management board is the One NASA concept," she said. "The board works openly in an atmosphere of trust. Everyone has a say, but the goal is to find the best mix of assets for propulsion test programs."

NASA Administrator Sean O'Keefe introduced the One NASA concept in December 2002 by asking employees to help shape the effort through their thoughts and ideas. One NASA will require each employee to consider all decisions within the context of what is best for the agency rather than for any one organization.

"Mr. O'Keefe's support will help the agency achieve the One NASA goal," said Vander. "With his leadership and his knowledge of federal administration, there's no limit to what we can accomplish."

Although Vander sees One NASA ideals at work daily, she says the initiative can be fully realized only through hard work and cooperation. "We're doing it now," said Vander, "We just have to strengthen what we have. We have to continue to find ways to do our jobs better.

We have to work as a team."

Part of achieving the One NASA goals will mean overcoming old-fashioned, center-centric ideas. "Even though we sit in different states or come from different places, we're still one organization, and we should work that way," said Vander. "What center we come from should be nearly invisible. We all need to be working toward a common goal to meet NASA's mission."

The NASA community can help further One NASA, said Vander, by being flexible. "We're going through a lot of changes now. But as long as the communication lines keep flowing, that's going to help."

As One NASA ideals improve inter-agency cooperation, Vander noted, the practice will also benefit the agency in its interactions with other federal organizations. "We're building relationships," Vander said. "We have to build on our commonalities to strengthen the agency."

"Karen has risen to meet every challenge we have put in front of her," said NASA's Mike Dawson, assistant director, Stennis Space Center, who has seen Vander put the One NASA values to work to help.

Karen Vander of NASA's Stennis Space Center.
This month in aeronautics and astronautics history

111.63 60 years ago • Franklin Delano Roosevelt became the first U.S. President to fly while in office.

111.58 45 years ago • Explorer 1 lifted off, the first satellite launched by the United States.

117.68 35 years ago • [JPL] Surveyor 7 moon lander was launched.

125.78 25 years ago • The [JPL] Infrared Astronomical Satellite was launched.

128.96 17 years ago • Space Shuttle Challenger exploded shortly after lift-off. Killing the entire crew of seven. A truly cringy was blamed for the disaster.

146.98 5 years ago • NASA’s Lunar Prospector satellite was launched to an orbit of the moon. Ames Research Center managed the project.

Lab honors Dr. King

JPL celebrated the birth of civil rights leader Dr. Martin Luther King Jr. the week of Jan. 20. To the left are guest speakers Dr. Julian Earlis (left), deputy director of NASA’s Glenn Research Center, and Dr. Perry Clark, superintendant of the Pasadena Unified School District. A panel discussion with seven JPL African American Ph.D.s was also offered.

Security clearances reduced

The Defense Department’s mandate to reduce security clearances held by the Department of Defense-managed aeronautics and astronautics organizations.

The conference will focus on sub-contracting and marketing opportunities for small, minority-owned and veteran-owned businesses in high-tech industries. It includes several ‘how-to’ workshops featuring information on major programs, small-business initiatives and other topics.

Attendees will have the opportunity to interface with approximately 250 corporate, federal, state and city government representatives to discuss potential contracting and subcontracting opportunities. One-on-one counseling to discuss potential business opportunities is available with more than 100 exhibitors. There is no fee to attend. In addition, small companies are limited to prime contractors and government agencies. For further details, e-mail AMIRTHA DURAN or call ext. 7531.

Special Events Calendar

Wednesday, February 5

Ongoing Support Groups—Alcoholics Anonymous—Meetings are available. Call the Employee Assistance Program at ext. 4-3680 for time and location.

Caregivers Support Group—Meets the third Thursday of the month at noon in Building 167-111 (The Word Place). For more information, call the Employee Assistance Program at ext. 4-3680.

Conference Management—Meeting at noon every Wednesday. Call Occupational Health Services at ext. 4-3319.

Gay, Lesbian and Bisexual Group—Meeting at 2 p.m. in Beckman Auditorium on the Thursday of the month at noon in Building 112. Call (626) 395-4652. 

Working Parents Support Group—Meets the third Thursday of the month at noon in Building 167-111 (The Word Place). For more information, call the Employee Assistance Program at ext. 4-3680.

Saturday, February 1

“Unlocking the Mysteries,” a video overview of NASA’s Discovery Program and the 10 ground-breaking science missions selected to date, has won two honors in The Communicator Awards 2002 Video Competition.

The video, written and produced by SHARON ASPLUND of JPL’s Discovery Program Office (SPO) in collaboration with RICHARD L. GOLDBERG at the Johns Hopkins University Applied Physics Laboratory, won a Crystal Award of Excellence in the Government Category and an Award of Distinction for writing in the Creative Category.

The 23-minute production looks back at the program on its 10-year anniversary and highlights the achievements of missions such as Mars Pathfinder and near Earth Asteroid Rendezvous that are enhancing our understanding of the solar system. The video was also a finalist in the New York Festivals International Film and Video awards competition in the Sciences category.

Sunday, February 2

Chamber Music—The Calder Quartet will give a free concert at 3:30 p.m. in Caltech’s Dabney Lounge. For more information, call (626) 395-4652.

Monday, February 3

“A Conversation With David Baltimore”—Join the Caltech president in a live interview with Larry Mantle, host of KPCC’s AirTalk, at 4:45 p.m. in von Kármán Auditorium. Some questions from the audience will be taken, but you are encouraged to submit questions in advance so Marote can make the discussion as relevant to the Caltech community as possible. Send questions to cma@kunc.org. This program is sponsored by the Caltech Management Association. For more information, call Michael Eastwood, ext. 4-9273.

Tuesday, February 4

Meet John Doe

— This 1941 classic, starring Ray Milland and June Allyson, will be shown at 7:30 p.m. in Beckman Auditorium. A panel discussion will follow; see the Free Film guide for more details.

JPL Genealogy Club—Meeting at noon in Building 167-111 (The Word Place). For more information, call (626) 395-4652.

Wednesday, February 5

Career-Related Events—TIAA/CREF representative will be available for one-on-one counseling. For an appointment, call (787) 203-3340, ext. 2014, visit http://www.tiaa.edu.

Investment Advice—TIAA/CREF representatives will be available for one-on-one counseling. For an appointment, call (800) 642-7131.

Thursday, February 6

JPL Toastmasters Club—Meeting at 5 p.m. in conference room 167.

Investment Advice—TIAA/CREF representatives will be available for one-on-one counseling. For an appointment, call (800) 642-7131.

For the record: American Geophysical Union honor

An article in the News Briefs section of the Jan. 17 issue of Universe contained incorrect information about [JPL] Dr. Giles Peltzer winning the American Geophysical Union’s William Bowie Medal. In fact, Peltzer was not awarded the Bowie Medal, but did deliver the Bowie Lecture at the organization’s fall meeting last December.

For more information, log on to http://www.agu.org/webcast/archive.html.

Tuesday, February 11

Caltech Credit Union Annual Meeting—To be held at 5 p.m. in Beckman Auditorium.

JPL Stamp Club—Meeting at noon in Building 383-328. Meet Joc de—This 1941 classic, part of Caltech’s Frank Capra Film Festival, will be shown at 7:30 p.m. in Beckman Auditorium. A panel discussion will follow; see the Free Film guide for more details.

Wednesday, February 12

The Chauvet Cave Now: the Oldest Rock Art Site in the World”—Rock art expert Dr. Jean Clottes will deliver this lecture at 8 p.m. in Beckman Auditorium. Tickets are $10 for adults, $14 for adults, $10 for high school age and younger. For more information, call (626) 395-4652.

JPL Amateur Radio Club—Meeting at noon in Building 238-543.

JPL Toastmasters Club—Meeting at 5 p.m. in conference room 167. For more information, call Roger Carson, ext. 4-2295.

Thursday, February 13

“Getting Started”—This workshop is for employees just starting or not yet participating in the Caltech benefits program. It includes coverage of savings and compounding, and the benefits of starting early will be discussed. It will be held from 8:30 to 10:30 a.m. in conference room 167. For more information, call (626) 395-4652.

THE BIG FIVE-O

Two JPL employees recently commemorated half a century at JPL. Universe talked with Carl Sauer and Jay Bondi, about their careers, retirement, and how life, and the Lab have changed over the last 50 years. Bondi retired from the Lab in December, but Sauer continues in his job as a Trajectory Specialist in Advanced Studies.

BY SUSAN BRAUNHEIM-KALOGERAKOS

What compelled you to stay at JPL so long?

CS. It has been a combination of a few things. I think the main reason I have stayed so long is because my family got settled in the area. Also, when I arrived, JPL maintained a very academic climate. For someone in a technical field, it was really a very exciting place to be.

JB I just never got around to changing jobs. I guess. In all seriousness, I have enjoyed the opportunities that JPL has provided me. It has been an honor to work the people here. JPL has been a great place for me.

How did your employment begin?

CS I graduated from Caltech with a physics degree and I always thought that I would end up here. I was hired on as just a simple engineer. When I applied for the job I was informally interviewed by the Lab director at the time, Dr. Louis Dunn. He sincerely knew it, JPL had put me in on the swing shift so long? Was there a defining moment telling you it was time to move on?

JB I don't really have any regrets. I have never even given my time at JPL a second thought. I decided to retire when I "suddenly" turned 70. Time really does fly. I didn't want to go out of here feet first so I decided to walk out.

CS Surprisingly, the first time I met Jay was at the 50-year commemoration luncheon last month. We worked in separate areas. I was completely unaware that there was another employee with 50 years. I don't think either of us knew that there was another person with so many years at JPL until we met at the commemoration ceremony. It is difficult to believe that our paths never crossed in all of the 50 years we were on Lab together.

JB Carl, when are you going to retire?

CS When they stop giving me work, I'll retire. When I do, I plan to spend some time with my wife and my teenage granddaughter.

JB Jay, how are spending your time now?

CS I have never really thought about being anywhere other than here.

JB I don't really have any regrets. I have never given my time at JPL a second thought. I decided to retire when I "suddenly" turned 70. Time really does fly. I didn't want to go out of here feet first so I decided to walk out.

Did the two of you know each other during your time at the Lab?

CS Yes.

JB No, I don't have any regrets. If I wasn't here I don't know what else I would be doing. I am a Caltech graduate so I have always felt linked to JPL. I have never really thought about being anywhere other than here.

CS Outside of the vast increase in size, JPL has become a lot more top heavy in management. At one time, I could work directly with someone at NASA Headquarters on certain things. Now there are several levels of management in between. It makes it much more difficult to get things done now than it was back then.

JB In the 1950s the Lab was like one big family. Back in those days we had one or two projects and everybody knew what everybody else was doing. Today, it is less like one big family but more like several smaller ones. JPL was and still is a great place to work. The software that was used in the Deep Space 1 mission that few a few years ago. I take a great amount of pride in that. Also, in 1999, I had the honor of having an asteroid named after me.

JB The most important thing that the Lab has given me is my wife, Carol. We met on Lab, and worked in the same section. As far as work goes, I was also involved in creating a set of configuration management procedures tailored to JPL's unique needs. I feel that has been a sizeable contribution to the Lab.

For you, how has the Lab changed the most over the years?

CS I was privileged to see a lot of exciting things that occurred in the early days of the Lab. When I first started working here I went out to White Sands, N.M., to see the Corporal launches. To a young engineer just out of college that was thrilling. There were all these amazing people showing me the most amazing things. I will never forget it.

JB It has been the friends I have made through the years. JPL is an interesting place filled with interesting people. I still play poker with the same group of JPLers I played with back in 1958. It just shows what a strong bond all of us share.

What do you consider to be your greatest accomplishment at JPL?

CS As a Trajectory Specialist in the Advanced Studies area, I got to work on part of the software that was used in the Deep Space 1 mission that few a few years ago. I take a great amount of pride in that. Also, in 1999, I had the honor of having an asteroid named after me.

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I’d like to express my gratitude to the entire Universe staff for their support and thoughts regarding the loss of my brother.

Lauri Meyer

Thank you so very much for the everlastig plant that was sent to our home for the loss of our son, our first child that God brought down to share with us for six months. The thoughtfulness and generosity exuded in it will never be forgotten. We know he is with God and we will see him again. I would like to thank my co-workers for the support you have given my family and me during this difficult time. I would also like to thank PL for the beautiful plant. Thank you again.

Susan Braunheim-Kalogerakos
Chief Photographer

I would like to thank the JL community for the beautiful plant that was sent to acknowledge the passing of my mother. This gift is so appropriate and meaningful at this time.

Jim Kulick

My family and I would like to thank all of you who brought flowers, the card and beautiful plant sent to my home in the memorialization of the passing of my father. My dad has transferred the plant to his garden where it is flourishing nicely.

Ray and J. Stagner

I would like to thank my friends and co-workers for their care and support during his long hospital stay and subsequent passing of my dear friend, In-laws Marie. (She had a good life at 104.) You made the rough times easier.

Law Marie.

Her heartache shall never be forgotten. We know he is together with his Creator and the Lord.

I would like to extend sincerest thanks to all my friends and colleagues for the kind gesture during a difficult time.

1654, Heather.

CONCERT TICKETS, 4, L.A. Phil., Feb. 15, 8 p.m.; FRI, 10 p.m.; SAT, 8 p.m. c.1950, $500. 323/255-3226.

CHAIRS, side (4), wrought iron, designer unknown, $30/obo. JeffreySBoyer@netscape.net or 626/797-9846, after 6 p.m.

SPEAKERS, Eminent-Technology LFT-8, $150, good cond., exc. cond., $125. 323/945-6132.

PIANO, Yamaha digital, YDP121, in rosewood-mahogany finish, extra-thick 9” pad, 6721.

GUITAR, Takamine, 6 string, acoustic, with electronic, very versatile and comfortable, $200/obo; COUCH, shades of gray/blues, with oak trim, $200/obo. 248-1793.

VACUUM CLEANER, Sears Kenmore, canister, $30-50/obo. 626/424-6713.

ELEVATORS, LIFT TYPE, used or new. 562/693-1189, Leo.

LA CANADA, private rm. in, home with, private bath, kitchenette, good cond., $750/night or $4,500/week. 626/351-9641.

LA CANADA, private rm. in, home with, private bath, kitchenette, good cond., 1 bedroom, $750/night or $4,500/week. 626/351-9641.