The Shuttle Radar Topography Mission system, which flew on the space shuttle last February—looks southwest, where it cuts along the base of the mountains in the Tehachapi Range near Bakersfield. The fault is the distinctively linear feature to the right of the mountains.

This image of the 1,200-kilometer (800-mile) San Andreas Fault—generated using data from the Shuttle Radar Topography Mission (SRTM), which flew on the right of the mountains.

The image is available online at http://www.jpl.nasa.gov/pictures/srtm.

The Shuttle Radar Topography Mission system, which flew onboard Space Shuttle Endeavour in February, gathered topographic elevation data over approximately 80 percent of Earth’s land mass during its 10-day flight. The results of the mission will be the most extensive high-resolution database of Earth’s topography.

After processing, data from the Shuttle Radar Topography Mission will be available for active fault zones around the world. Scientists will be able to use this treasure trove of information to study places on Earth that have never before been mapped, much less studied in detail.

The Shuttle Radar Topography Mission is a cooperative project between NASA, the National Imagery and Mapping Agency (NIMA), and the German and Italian space agencies.

JPL and Arizona State University are creating a new NASA facility that will be used by scientists and students studying Mars. ASU and JPL will jointly fund the facility, with JPL providing $1.45 million in initial funding.

The ASU Planetary Imaging Facility and Advanced Training Institute (PI-ATI) is an expansion of a facility originally planned to support the Thermal Emission Imaging System (THEMIS), a thermal infrared camera system that will fly on the 2001 Mars Odyssey spacecraft and is directed by ASU Geological Sciences Professor Philip Christensen. According to NASA and ASU scientists, the facility is “a new model” for planetary research projects that will allow greater instrument and data access to scientists outside the project, as well as to university students and even to fifth through 12th grade educators and their students. Also in the planning stages is a graduate and undergraduate program where entry-level personnel can be trained in spacecraft operations and maintenance.

“At NASA and JPL we are looking for new ways to share the adventure of exploring Mars,” said JPL Mars Program Manager Dr. Firouz Naderi. “This new facility is a great way of opening up opportunities for scientists and kids to participate in the excitement of our new Mars program.”

“This is a new and creative way of looking at doing planetary research,” said Jonathan Finn, ASU vice provost for research. “Among other things, this will allow for the first time middle school and high school students to participate directly in the scientific exploration of another planet.”

The facility will offer a new working process whereby scientists outside the instrument team, in cooperation with NASA with specific research requests and also have free access to the archive of collected data. It will also allocate a significant fraction of the instrument’s use to 5th through 12th grade student use.

Classes will submit brief proposals to take pictures of specific regions of Mars, explaining the scientific questions that they would like to answer with the data. They will then have the opportunity to come to ASU to participate in acquiring the image, analyze the data they receive and present their findings.

It is expected that approximately 150 classes will be able to participate over the course of a year, with at least one school from every state sending representative students to campus to participate in capturing their requested image and data. The facility is expected to complete next July.

“The student imaging facility is a cool idea—something that I always thought would be really neat to do when I was a kid,” said Christensen, the project’s principal investigator. “We talked to a lot of teachers, and one of the things that really excited them was the thought that Wow, my class could actually be actively involved in exploring Mars rather than just standing on the outside watching!”

“THEMIS is going to take tens of thousands, if not a hundred thousand, images. Making some fraction of those opportunities available to junior high and high school kids really only involves a tiny fraction of the data, but could have an incredible impact on education and student interest.”

Christensen said, “It will give the kids a sense that science is about participating and exploring and discovering. It’s not about going to a museum and seeing things hanging on the wall.”

JPL scores in its fiscal year 2000 Final Performance Evaluation (also known as the NASA report card) resulted in improvement in two of three categories.

The annual evaluation of the Laboratory’s performance is used to determine the amount of an award fee to paid to Caltech. In turn, some of that money is given to JPL for use at its discretion.

JPL Director Dr. Edward Stone, and Caltech President Dr. David Baltimore attended a Nov. 6 briefing at NASA Headquarters by a performance evaluation board chaired by Dr. Ed Weiler. NASA associate administrator for space science.

“Compared to last year, our scores dropped slightly in programmatic, reached a new high in outreach, and improved dramatically in institutional,” stated JPL Deputy Director Larry Dumas in a letter to managers. “The special areas of emphasis for the coming year include a new initiative on cost estimation and modifications to several other areas,” Dumas said.

JPL received a score of 78 out of a possible 100 in the programmatic category; two points lower than in FY ’99. In institutional management, the Laboratory received 80 points, 20 higher than the year before. Outreach scored 94, four points higher than last year.

The Lab’s weighted total score of 80.1 was about four points higher than in FY ’99. The three areas reviewed carry different weights in tabulating the percent of the award fee to be given.

“Obviously, the Mars ‘98 issues, the HESSI mishap, and the cost growth in some of our planned missions affected our otherwise strong programmatic efforts,” Dumas said. “In other areas, the rebound in financial and institutional management performance and the strong showing in a coordinated approach to outreach were clearly acknowledged. It has been a challenging year, and the Director and I want to thank you and your people for your hard work in stepping up and doing effective - ly with the challenges we faced.”

The underlying rationale for the scores is given in the subject document from the Headquarters briefing, and is available on the Director’s Office home page at http://ood under “Information of General Interest: 2000.”
Collaborates on review of multinational telescope

By Gia Scafidi

Ongoing Support Groups

By Gia Scafidi

Preservation Hall Jazz Band—The band will present its annual holiday music performed with their New Orleans Jazz style at 8 p.m. in Caltech’s Beckman Auditorium. Tickets are $25, $21 and $17. Call (626) 395-4652.

Sunday, December 3

Chamber Music—Zora Mikhalovich will perform on piano. This free concert will be held at 8 p.m. in Caltech’s Danby Lounge. Call (626) 395-4652.

Monday, December 4

JPL Stories—Norm Haynes will present “Mars 4 and the Mars World that Got Us to Mars” from 4 to 5 p.m. in the customer services area of the Library. A presentation of this 11:30 a.m. in Building 301-104.

Mon., Dec. 4–Wed., Dec. 6

Biomimetic Explorers Workshop—The second workshop on Biomimetic Inspired Engineering of Exploration Systems, sponsored by the New Millennium Program at JPL, will be held in Building 180-101 and von Kármán Auditorium. A reception with posters and demos will be held each of the next two evenings in von Kármán Auditorium. The workshop program consists of 9 sessions of the 1998 workshop and other information is available online at http://nmp.jpl.nasa.gov/.

Tuesday, December 5

Parent Support Group—Meeting at noon in Building 301-227. Call Occupational Health Services at ext. 4-3319.

Wednesday, December 6

ERC Children’s Holiday Party—The annual event will be held from 4 to 5 p.m. in Caltech’s Dabney Lounge. Call (626) 395-4652.

Thursday, December 7

New Orleans jazz style at 8 p.m. in the student lounge. Tickets are $25, $21 and $17. Call (626) 395-4652.

Friday, December 8

Travel Film—Chile Awaits Your Discovery will be held from 4 to 8 p.m. in Caltech’s Beckman Auditorium. Tickets are $9 and $7. Call (626) 395-4652.

Saturday, December 2

ERC Children’s Holiday Party—The annual event will be held from 6:30 to 8:30 p.m. at the Pasadena Ice Skating Rink. Children ages 3-11 years may participate. Tickets are $2 at the ERC (tickets will not be sold at the door). Call Sharon Chapman at 4-0294 or Marie Case at ext. 4-2202.
Suzanne Bradfield recently joined JPL as manager of employee services and recognition. The former vice president of employee benefits and corporate culture at Intymac Bank in Pasadena discusses her new position.

Q: You’ve been with JPL about three months. What attracted you to the job? What have you learned about JPL so far?
A: The job interested me because it would allow me to follow through with some programs I had created with my previous employer but never had the chance to implement.

In just the short time I’ve been at JPL, I’ve seen how much Human Resources is respected, and that’s one of the things I had not experienced very much in my past. HR is the objective voice of the people, and without that voice at the executive level, much less gets listened to and thus accomplished.

Q: In your experience, how do JPL’s programs for recognizing and rewarding employees measure up to those in the private sector?
A: It’s been very surprising to me, because as a not-for-profit organization, I didn’t think there would be as many employee service and recognition programs as there are. The private sector has a lot of money to dedicate to employee programs, yet so much is done for the employees here that it mesmerizes me sometimes.

I mean, what is JPL’s biggest asset? It’s our employees. And how are we going to keep our employees happy? We can only pay them so much and give them a certain amount of benefits. But what we can afford to do, in terms of service and recognition programs, is really above and beyond anything I’ve ever experienced.

Q: JPL’s “Employer of Choice” initiatives are fairly new. Is that term retaining employees at JPL—that people can do many different types of projects now than ever before—is that part of the thought process in creating the system?
A: Exactly. It isn’t unusual in industry today to switch jobs after two to four years; however, as you point out there are many more interesting projects at JPL than ever before and we hope employees will find it attractive to stay for many years.

Q: What has been the affect of the Employer of Choice initiatives? Are employees happy with things so far?
A: One of our newest initiatives is Rainbow Retreat. This is a childcare facility in Pasadena that provides care for mildly ill children at half price. JPL employees pay a discounted fee of $3.25 per hour. This service was received very well and I received a number of e-mails from people who thanked us for offering this service.

Employee Appreciation Day on Oct. 27 was also very well received. People really enjoyed receiving the free lunch and free gift. One thing that really warmed my heart that day was all the smiles I saw. It was freezing cold and threatening rain, but people were happy and exuberant, and that was great for me.

We’re never going to get a 100 percent reaction that says, “You guys are awesome!” However, that’s not what I’m striving for. What I’d hope for is the majority of the population enjoys the programs and events we’re putting on.

Q: Have you found that people at JPL are fully aware of what’s available in terms of employee service and recognition programs?
A: One of the things I’m trying to do is streamline all of our programs and better communicate them. We’re considering a universal, online nomination form for all of the recognition programs—the Award for Excellence, NASA Honor Awards, Bonus Awards, NOVA (Notable Organizational Value-Added), STAR (Special Thanks and Recognition) and the Space Flight Awareness Program. We’re targeting this system for next fall.

Q: You’re also responsible for overseeing JPL’s cafeteria operations. Is there anything new on the horizon?
A: We are looking at refurbishing the 167 cafeteria. We’ve planned for construction to begin in March 2002.

Another big thing we’re working on for Building 167, Room 111, is the creation of an employee recreation room. Yoga, aerobics, and other types of physical activity will be offered, and we will continue to try to find uses for this space that will meet the need of our employees.

We’re planning to break ground on this facility in mid-December, and anticipate completion and a kickoff in March 2001.

Also, there’s a proposal in to renovate the 190 cafeteria into a “trattoria” of sorts—offering specialty items like pasta and pizza.

Q: What other services do employees take advantage of?
A: Child care is a benefit many employees are interested in. We continue to provide funds to the Child Educational Center, which affords a discount to JPL employees, and our Child Care Assistance Program provides assistance to JPL families in need of financial support to acquire quality care for their children while they work.

Employee Family Day has also proven very popular. We’re going to have it every other year, starting in 2001. And of course, people really enjoy the free lunch certificate they receive on their birthday.

Q: All this sounds like quite an investment. How are all these activities funded?
A: The Employer of Choice programs are funded by the award fee given to JPL by Caltech for its performance each year. In 1999, about $1 million was dedicated to the effort, and we’re expecting continued support.

Q: Another area you’re responsible for is the Employee Recreation Club. What’s new there?
A: Bridget Marshall is the new ERC administrator. We’ll be working on ways to give the ERC a new look and feel while bringing in new types of merchandise. One thing we will be offering for the upcoming holiday season is a gift-wrap service for items purchased at the ERC.

Q: Besides Bridget, who is on your team? Where are your offices?
A: Nancy Kapell is our employee services administrator. She works closely with the cafeterias, child care, employee events and is the Space Flight Awareness coordinator. Bertha Hines is responsible for service awards, birthday certificates and Web design. Nellie Vidaca is responsible for NOVA and retirement awards, pizza certificates, web design and is the United Way Campaign coordinator.

We’re located in Trailer 1720B right now, and will move to the second floor of Building 310 early next year. We’ll share offices with the Employee Assistance Program.

Q: How do you plan to measure the success of the various programs?
A: I plan to start doing target surveys to learn how effective our employees feel the programs are, as well as find out some new things people want. We can’t create anything without the employees’ input. NASA and Caltech have shown that they believe in us, and we want JPL employees to agree that these programs and services contribute to our being an Employer of Choice!
A new book by a former senior NASA official chronicles United States space program in an eight-year period between the Apollo and space shuttle era, when 12 robotic spacecraft were launched from Cape Canaveral. Most of these were JPL missions, and the book is largely about JPL and JPLers.

Beyond The Moon: A Golden Age of Planetary Exploration 1971-1978, was written by Robert Kraemer and published by the Smithsonian Institution Press. It is the first comprehensive, authoritative, and first-hand account of planetary programs in the 1970s, and first became familiar with the Laboratory and its people during his days as a Caltech graduate student in the early 1950s.

Kraemer touches on the planning, struggles, successes and disappointments associated with missions beginning with 1971’s Mariner 9—the first spacecraft to orbit another planet—and continues through the Pioneer Venus 1 and 2 orbiters in 1978. In between were Pioneer 11 and 10 in 1972 and 1973, Mariner 10 (1973), Viking 1 and 2 Mars orbiters (1975-1976) and the “grand tour” flybys of four of the outer planets. Kraemer also discusses the financial, political and technical hurdles facing each mission as well as the associated instrument development and launch.

The challenge of trying to do something dif- ferent, something one has never done before, has always been a mainstay of JPLs—and scientists,” he noted. “As unexpected problems threaten the very life of a spacecraft in deep space you can count on these people [JPLers] to work feverishly around the clock to save the machine and the mission.”

The book is available for loan at the JPL Library.

Letters

My family and I are grateful to my many friends and colleagues at JPL for their kind words and thoughts after my mother, Alta, passed away on October 4. She remained my inspiration especially for the passion my wife, Jan, and I have for the Laboratory and her love for her family. God bless you all and thank you.

Gary Glass

Pasadena, CA 91109.

I want to thank my colleagues in the Contract Administration Office, Contract Management Office, and our 12 floor mates for their flowers, cards and kind, comforting words when my treasured mom passed away on October 4. I deeply appreciate the support, as does my brother, Christopher Creely, with whom I shared many happy and impactful years at the ERC for the loving “lady plant” they sent. One plant had pink flowers and one had pink leaves—to very nice memory. Thank you.

Cerise Bess

I thank the ERC and the JPL “Family” on behalf of my brother Randi for the beautiful plant in memory of Randi’s mom. She was so proud of Randi.

Alice Wesen

Classifieds

For Sale

BEDROOM FURNITURE: dresser with mirror, walk-in closet, 4 drawers, dresser mirror, 4-drawer dresser, 10 drawers, queen bed w/wood headboard, nightstand, dresser mirror, 16 drawers, fully refinished hardwood floors in dining area, $700. 626/354-2358.

For Rent

ALTADEANA, large house to share. 1 mile to JPL, ipc, near Master bedroom with private bath, 200+ sq ft, 3 bd, 2 ba. 1780 Huntington Dr., rear parking, no adm. charg e , community; monthly mixer the third Wed. of the month, 790-8523, vivdavies@starquest.net.

DOMO, Goldie Golden Retriever mix, rescued, spayed, 1 year old, medium personality - good with children, dogs, cats, and especially very good with children. 626/207-8433.

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