Jet Propulsion Laboratory



JP TO THE CHALLENGE

Elachi C

Despite a federal budget continuing resolution that currently holds NASA's expenditures at fiscal year 2006 levels, JPL maintains a robust series of challenges for the near term and promise for the future, JPL Director Charles Elachi told staff in a State of the Laboratory address Feb. 23.

Since Congress passed the continuing resolution for the fiscal year 2007 budget, NASA received the same budget as in the previous year. "In practical terms, this means a reduction of about \$500 million out of about \$16.5 billion," Elachi said.

President Bush's FY '08 budget request for NASA calls for a 3.1-percent increase relative to the president's FY '07 request. Elachi characterized the 3.1-percent increase as a strong show of support from the administration to NASA, "because the average raise for all discretionary budgets of federal agencies—non-military and Social Security—was only 1 percent. That's pretty good in this environment."

"So we are hoping NASA gets at least what the president requested in his FY '08 budget proposal, and that the FY '07 continuing resolution is an anomaly," he added.

Elachi also noted that the request for science funding in FY '07 represented only a 1percent increase. He indicated that some people will be disappointed. "But on the other hand, science accounts for almost one-third of the NASA budget. We're still looking at \$5.5 billion going to the sciences. So we can still have a very viable and vibrant scientific program."

Assuming Congress approves at least the FY '08 budget request, "we're going to be OK," Elachi said. "But we are expending a lot of effort on 2009 and beyond to make sure we have work and missions we need to have. I don't want to underestimate the challenges, but they are not any different than I've seen in my 20 years around the block. I have full confidence that the talent here at JPL will allow us to get through this period."

In an effort to garner new work for JPL, Elachi announced a renewed emphasis on strengthening the Lab's competitive mission activities. He said he would like to see the scientific and engineering communities propose new ideas, particularly related to planetary missions. He urged employees to contact Doug Stetson and Frank Jordan, who are leading studies in their particular directorates. outlines the state of the Lab

By Mark Whalen



From left: Executive Council members Peter Theisinger, Blaine Baggett, Bill Weber, Daniel McCleese.

An announcement of opportunity for NASA's New Frontiers program will be coming in late 2008, Elachi noted. "We are also conducting a number of studies related to potential outer-planet flagship missions, even if there is not a very specific wedge for it."

Elachi also referred to opportunities in advanced program development as potential career path options. He said many JPLers tend to think of flight projects as an ultimate work goal, "but the work that leads to flight projects is also really important for the Lab."

The director reviewed the recent changes at NASA Headquarters. Alan Stern was recently named associate administrator for the Science Mission Directorate, Jim Green was just appointed to head the Planetary Science Division, and Mike Freilich was appointed to lead Earth science activities. "Three superb leaders, three superb scientists," Elachi said. "We look forward to working with all of them."

Elachi said he believes that there is a "strong and genuine" commitment from NASA senior management to keep 10 healthy NASA centers, including maintaining JPL's current level of 5,000 employees.

Elachi outlined the Laboratory's near-term outlook.

In the Mars Program, both Phoenix and the Mars Science Laboratory are fully funded. Future opportunities include defining a Mars mission to launch in 2013 as well as for a 2016 Mars opportunity. Elachi noted an in-house team is considering the feasibility of developing small mini-landers.

Juno, a New Frontiers Program mission to orbit Jupiter's polar regions, is fully funded. The only negative outcome in the planetary area, Elachi noted, is with Space Technology 9, a New Millennium mission NASA was planning to select but delayed two years because of a budget limit.

All three of JPL's Earth science missions under development—Jason 2, Orbiting Carbon Observatory and Aquarius—are fully funded. Elachi was optimistic that a budget issue due to technical problems on Orbiting Carbon Observatory will be worked out. "We have faced problems with the development of the instrument, and Elachi Continued from page 1



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we elected to finish it in house. This is a good example of the importance of having in-house capabilities," he noted.

Also in Earth science, Elachi thanked JPL employees Randy Friedl and Stacey Boland, who recently worked with the National Research Council on its decadal survey of Earth science, published about a month ago. In their roles assisting the council, they were "firewalled," working as community advocates rather than JPL advocates.

Elachi also thanked others from JPL who proposed mission concepts via white papers in response to a National Research Council Request for Information. On the other side of this "firewall," JPL's Tony Freeman coordinated the white-paper submission efforts.

"Of the missions that were recommended in the report for the next 15 years, more than half of them are directly relevant to or related to the kinds of things JPL does and has the capability to do," Elachi said. "So when a wedge of money comes in, and NASA decides to assign them or compete them, JPL will be in a very good position either way."

In astrophysics, Kepler and Wise were funded at their requested levels. "However, the Space Interferometry Mission has now been funded as an engineering risk-reduction effort," Elachi said. "SIM is very important to NASA; the only issue is having a budget wedge." Elachi mentioned an ongoing exoplanets mission task force study, for which he hopes SIM will be a leading candidate.

Elachi noted that as director he has always placed a strong emphasis on expanding JPL's reimbursable activities—particularly in the areas of advanced technology. He credited Bob Cox and his team for helping JPL acquire the Advanced Mirror Development Project, sponsored by the Department of Defense.

"The key reason is the excellent job we did on the Active Mirror Telescope Project. I want to thank the team for the excellent job they've done, which created more confidence in the customer, the Department of Defense, about JPL's ability to do some tough" technology development.

The Advanced Mirror Development Project focuses on risk reduction by performing demonstrations on a ground testbed. The effort will be part of an office in the Astronomy and Physics Directorate, called the Advanced Optical Program Office, and will be headed by Space Interferometry Mission Manager David Gallagher. Elachi said the program will require 200 to 300 work-years for each of the next three or four years. "This is a significant entrée for us into a very advanced technology that will benefit both the Department of Defense and NASA tremendously in the future," Elachi said.

There's also positive news in another non-traditional area for JPL. Elachi praised Mike Sander and his team for a great job in building NASA's confidence in JPL to be able to work in NASA's human spaceflight program, within the Exploration Systems Mission Directorate. Last year JPL contributed 202 work years and is looking to increase that to 240 work-years this year, Elachi noted. Also, NASA has named JPL Chief Engineer Brian Muirhead the Constellation Program system engineer.

Also discussed were the following institutional activities:

• Elachi thanked staff members in Human Resources, Finance and Institutional Business Systems for their hard work in implementing the 9/80 alter-





Elachi acknowledged John Casani's work in leading the Lab's effort in complying with International Traffic in Arms Regulations (ITAR) regulations "while helping people to still do their jobs."

nate workweek plan, which debuted last month. About two-thirds of JPL staff are participating.

"In my six years as JPL director I never received as many positive e-mails as I did from employees saying how great it is to do 9/80," he said. By the end of April the system will be assessed to see if any improvements can be made.

• In the 2005 employee survey, staff members placed a high priority on greater opportunities for career progression. The Lab will be incorporating two career levels, two non-managerial, individual contributor disciplines and one additional career level into its support disciplines, with a new plan to be in place by October 2008. (Editor's note: please see the accompanying article in this issue of Universe.)

• Elachi noted that recent discussions in the Executive Council produced 11 initiatives the Lab will focus on over the next year or two. One area of concern, he said, is the state of JPL's technical infrastructure, which includes hardware, software, lab equipment and facilities. "Our intent is to do the best we can to invest in our technical infrastructure so we can provide you with the tools to be able to do your job with excellence," he told the crowd.

• Elachi emphasized that JPL scientists' findings will be presented to the news media and to the public exactly as the scientists see them. He also urged JPL staff to work with the Office of Communications and Education for proper editing of science press releases. But only the scientist will be responsible for scientific content.

• Elachi acknowledged John Casani's work in leading the Lab's effort in complying with International Traffic in Arms Regulations (ITAR) regulations "while helping people to still do their jobs." He said if JPL can justify a fair amount of its activity to be classified as fundamental research, that would enable a lot of science papers to be done without having to go through many of the reviews, and will allow JPL researchers the same rules enjoyed by university researchers.

• Elachi reminded personnel about NASA's upcoming new badging system, which is due to be completed at JPL by October. The program's rules include providing fingerprints and some documentation for background investigations. "I know some are concerned about their privacy," he said. "I personally don't have an issue with the badging system, but I do respect other people's feelings. We pushed as hard as we could. But we still have to follow those directives, as long as we're working on a federal facility."

Over the next month, Office of Protective Services staff will be available to give presentations and answer questions on the badging process, he added.

• JPL's Research and Technology Development Program is planning for approximately the same budget in 2007 as it had in 2006. "This is a very important investment to help position ourselves for future announcements of opportunity," Elachi said.

• The Lab is looking at ways to improve costing and cost management. "Even though the first priority is technical success on the mission, it's equally important that we have good task management," Elachi noted.

• Elachi thanked the divisions and Human Resources on their proactive stance in pursuing early-career hires. "When we started, we were all fresh-

New framework for JPL jobs By Mark Whalen

In an effort to allow JPL to continue to attract and retain the best available talent to carry out its mission, the Laboratory is undergoing a redesign of its job classification structure. Compensation, Rewards and Recognition Section Manager Elizabeth Loftus, who recently joined JPL after holding a similar position at Caltech, discusses the redesign project and its new framework.

Why did JPL feel that this redesign is necessary? Where did the idea oriainate?

Back in 2005 JPL conducted an employee opinion survey. Results from that survey, subsequent focus groups with employees, and periodic meetings Dr. Elachi holds with staff groups all included a consistent message that JPLers would like to see the job classification framework expanded to offer more opportunities for career growth. Through this project we will address these findings as well as create a framework that is more open and transparent to ensure fair and equal treatment of all employees regarding job opportunities.

Where is it felt that JPL's current framework needs to be refined?

Several areas have been identified. Today, our job families are defined too broadly. That makes it harder to match JPL jobs to those in the marketplace for salary comparisons. We will add more job families and will more narrowly define them to help us in that regard.

Also, employees have told us they want more career-advancement opportunities. We want to increase the number of career levels and explain them more clearly so employees can better understand what they need to do to advance their careers.

And we need more flexibility in our framework to help create more dual career paths.

What are dual career paths? Are they available to everyone?

Dual career paths are just what they sound like-they allow employees to pursue opportunities along distinct but equal paths. One path focuses on technical or business expertise, while the other path focuses on management. Dual paths are developed to allow similar pay opportunities for employees who want to stay in their area of expertise rather than transition to management. To date, some employees have not had the dual career path option. With our new framework, in which job functions and responsibilities will be more clearly defined, dual career paths will be available to all employees.

Will this new framework also change employees' salary levels? Will anyone end up with a higher or lower salary as a result of this?

It's anticipated that on its own the new framework will not change anyone's salary. It's important to remember that this is not a compensation study. It is a job classification project that is focusing on career development and future opportunities for employees.

What are the major differences employees will notice about the new framework?

Employees will have two titles—a job title, which will be a discipline name assigned by the framework that best reflects their job duties and responsibilities, such as electrical engineer; and a functional title, a more specific name of significance to JPL that represents the individual's role at JPL, such as project element manager or project system engineer.



Members of the job classification redesign project. Front row, from left: Monica Garcia, Beth Wilson, Mae Hawk. Back row, from left: Michael Stark, Karen Jolicoeur, Elizabeth Loftus.

The new framework will also ensure that each job family (for example, engineering) is clearly defined and offers career progression opportunities. Matrices will be created at the discipline level and describe the work across all career levels, instead of at the broader job family level, where they reside today. This will allow us to streamline our classification framework so it's more useful and meaningful to employees, managers and Human Resources.

In addition, the number of career levels will increase for the support and individual contributor types of jobs. We will end up with four levels for support and six levels for individual contributors. This is in comparison to the three support levels and four individual contributor levels that exist today.

Who is working to help create the new framework?

We have created a number of "job family teams," which are groups of selected employees who will assist Human Resources with the job classification redesign project. The teams began orientation training in February. Team members were selected by Human Resources, Executive Council members and directorate managers. There are five to 10 people on each team. Each team is sponsored by an Executive Council member.

The teams will determine their job family's name and disciplines; create a matrix for each discipline that describes the job across multiple career levels; determine functional titles for each discipline across each career level; and review benchmark matches, role statements and workforce capabilities for each discipline. Each job family team is co-chaired by a Human Resources compensation staff member.

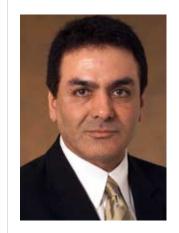
What is the next milestone in the process, and when will the redesign be implemented?

Starting next month, job family teams will begin creating discipline matrices. It is our goal that by the end of this year, the job family teams' matrices will be reviewed and finalized, and ready for release to employees in January 2008. The new framework is scheduled for full implementation in October 2008.

How can employees get more information and provide feedback?

E-mail questions to exploresuccess@jpl.nasa.gov.

News Briefs



Engineering honor for Naderi

Firouz Naderi, JPL's associate director for programs, project formulation and strategy, received The Engineers Council's Theodore von Karman Award in February. Naderi was awarded the honor during National Engi-

neering Week "in recognition of his creative, dedicated and pioneering work to advance engineering science in the promotion of space exploration, and for his leading role in planetary space flight, particularly his management of the Mars Exploration program."

The von Karman Award is bestowed "to the individual whose technical contributions continue the tradition of excellence in space exploration." The award honors the memory of JPL co-founder Theodore von Karman.

Summer camp signups March 17

The JPL/Caltech Child Educational Center will hold a signup day for its upcoming summer camp sessions on Saturday, March 17, from 9 a.m. to noon at 140 Foothill Blvd., next to La Cañada High School.

Summer camp sessions will be offered June 25 to Aug 29 for children entering grades one through seven and will be held on campuses in La Cañada and Pasadena. The

outs," he noted. "Somebody took a risk to tutor

you and hire you for a project. We owe it to the

Lab, to the nation and to ourselves to make sure

• "In response to employee feedback, we will

renew the effort to reduce the number of rules,"

Elachi said. "Do we need them all?" Jerry Suitor,

• Groundbreaking for the new Flight Projects

Building is set for May 7. Elachi said the build-

ing will hold about 550 to 600 people, and the

goal is to consolidate or co-locate flight projects

• JPL has established the Mariner, Explorer

and Ranger awards. For Elachi, it's important

to have new employees "understand what this

Lab did 30 years ago-because we're benefiting

now from the legacy of the people who worked

from the Office of the Management System, is

we train the next generation."

leading the effort.

in the new structure.

camp will include arts and crafts, sports, field trips, swimming, drama and science.

For more information, visit www.ceconline.org or call ext. 4-3418.

James' book available free

Copies of the second printing of "In High Regard," by former JPL manager Jack James, are available free of charge. The book chronicles James' life from the west Texas oil fields. to his service in the U.S. Navy during World War II. to his early work with radar both during and after the war to his joining JPL in the 1950s.

James managed Mariner 2, which in 1962 flew by Venus and became the first spacecraft to fly by another planet, and then managed Mariner 4, the first spacecraft to fly by Mars, in 1964. James later became assistant laboratory director for technical divisions. He also formed the Defense Programs Office, which later became Technology and Applications Programs for which he also served as assistant laboratory director. James died in 2001.

See Barbara Amago in the JPL Library for a copy of the book or contact JPL retiree Tim Scheck by sending your name and address tscheck1@mac.com or 725 Craig Ave., La Cañada, 91011, or call 818-203-0362.

on Mariner, Explorer and Ranger," Elachi said.

"We owe it to the next generation to give them a

• Elachi said that next January the Lab will

celebrate the 50th anniversary of Explorer 1,

the JPL-built spacecraft that was the first sat-

ellite ever launched by the United States. The

the 2008 Tournament of Roses Parade.

to have successful missions."

effort will be preceded by a JPL/Caltech float in

With the Lab's currently operating missions

in addition to nine scheduled launches over the

next several years, Elachi urged JPLers "to keep

our eye on the ball. It's very important we suc-

ceed. Nothing helps us get more new work than

"Hopefully you agree with me that this is the

greatest place to work," he concluded. "We are

of the nation and humankind, and I think you should feel proud of what you do every day."

very privileged to be doing exploration on behalf

Elachi

Continued from page 1



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> E-MAIL US AT universe@jpl.nasa.gov



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Passings

Dorothy Liebersbach, 87, a retired administrative specialist in Section 631, died Jan. 29. Liebersbach worked at JPL from 1969 to 1984. Services were private

etters

There are all kinds of "thank yous" for all kinds of things ... but none could mean more than the thankyou this brings. My family and I would like to thank all of you for the outpouring of prayers, love, support and the various forms of gracious donations during this difficult time. We have been comforted by all of your loving thoughts and prayers, kind words and many hugs. We believe that friends are quiet

angels who lift us to our feet when our wings have trouble remembering how to fly. God has many ways of reminding us that the beautiful spirits who have touched our lives soar higher and farther than we would ever imagine. Sometimes our lives are touched by people who stay for only a short time. How lucky we all are to have been a part of Frank's adventurous journey Having him in our lives has made us better people. He has truly touched every person's life that he ever met. No time on Earth is long enough to share with those we love, or to prepare our hearts for the pain of losing a loved one. We will always remember his caring encouragement, his humorous jokes and his infectious, cheerful laughter. As stated by one of Frank's colleagues,"losing Frank has been like robbing the world of the sun." We will all miss him immensely, but know that he will live in our hearts

forever. We will never be able to thank you all enough for the many comforting thoughts and prayers. so for now please know that we are truly blessed and ever grateful for all that has been shown to us during this time.

Susan Deligiannis

legacy."

My mom loved flowers and would have loved the beautiful orchid plant that JPL sent to our family. In my mind's eve. I could picture her smelling and caressing its soft petals. Thank you for this wonderful gesture. I would also like to thank all my friends and colleagues for your kind thoughts, prayers and deeds throughout my mother's illness and recent passing Dean Ines

Bonnie and I wanted to thank all the folks who came to my retirement lunch. It was a wonderful event for us and we sincerely

appreciate the food, the gift and the memories. It was especially nice to see some people who I worked with 10 or even 20 or more years ago. It made me appreciate the long path that I traveled at the Lab and the marvelous experiences that occurred. This could have happened at no other place, to be involved and contributing to opening new worlds, once-in-history events. The people at the Lab are truly exceptional and make this work. Thank you all.

Lee Mellinger



The following JPL employees retired in March: Leslie Compton. 28 years. Section 513; Lute Maleki, 27 years, Section 332J; Diane Garinger, 15 years, Section 2631.