

Making the Case for Space

May 2006

Volume 1, Issue 1

NASA Technology Spinoff Watch

A video headset called the Low Vision Enhancement System (LVES) has been developed by NASA Stennis Space Center, Johns Hopkins University and the USA Dept of Veterans Affairs. LVES contains two eye-level cameras that can compensate for low vision limitations, allowing people with macular degeneration, diabetic retinopathy and glaucoma and eyesight of 20/70 or worse, to be able to read. The technology has been spun off to a company called Enhanced Vision, which has developed the Joint Optical Reflective Display (JORDY) using the LVES Technology.

Inside this issue:

Congressional Reception May 16	2
NASA Budget News	2
Project Constellation Status	3
Shuttle Program Status	3
International Space Station Status	3
Congress Space Watch	4
Who We Are	4
WWW Links	4

May 15-18 Annual Washington DC Trip

Citizens for Space Exploration (CSE) makes our annual trip to Washington D.C. this spring. We meet with legislators to discuss the benefits of the human space flight program and the need for continued financial support.

In addition to one-on-one office visits, special meetings and receptions, including a breakfast reception hosted by the Space Alliance Technology Outreach Program, are held to further build relationships with key legislators and garner their support for the space program.

Among the citizen advocates for space taking part in the trip, students from around the country will travel with the group to personally

share with legislators the importance of the space program in their lives.

Last year, 100 citizens made 273 office visits with members of Congress. Teams consist of three to four citizens who spend 15 to 30 minutes reviewing the positive impacts of America's space program and learning about the Member's position.

The 2006 trip is planned for May 15 through 18. We are currently putting together our teams and scheduling congressional office visits.

If you have any questions about this trip or CSE, please contact Brian Freedman at 281-486-5535 or via email at brian@bayareahouston.com.



Students attending the Citizens for Space Exploration 2005 DC trip. [Image credit: CSE](#)



CSE members visit the Capitol building during the DC trip. [Image credit: CSE](#)



"Don't tell me that man doesn't belong out there. Man belongs wherever he wants to go-- and he'll do plenty well when he gets there." -- Wernher von Braun, Former NASA Deputy Associate Administrator and Marshall Space Flight Center Director during development of the Saturn V Rocket

Congressional Reception on May 16

As part of the annual DC congressional visit, Citizens for Space Exploration sponsors a congressional reception. This year, the reception will be held on Tuesday, May 16, at 5pm. The location this year is the Montpelier Room of the Library of Congress Madison Building.

Last year, the reception was well attended

NASA Budget

NASA's approved budget for Fiscal Year (FY) 2006 was \$16.5B, which was 0.7% of the total federal budget. Additional emergency supplemental funding was allocated last year to deal with damage to NASA facilities from Hurricane Katrina in September 2005. This supplemental funding was critical to preserving the skilled workforces at the affected centers.

NASA's FY07 request totals \$16.8B. This is a 1% increase over last year, when the supplemental funding is accounted for.

Project Constellation

Constellation is the name of NASA's project to develop the spacecraft and systems needed to go beyond low Earth orbit, including the Crew Exploration Vehicle (CEV), Crew Launch Vehicle (CLV), Cargo Launch Vehicle (CaLV) and related exploration systems.

The elements of Constellation will evolve over time, based on exploration goals, budgetary priorities, and other factors.

Superficially, the CEV looks like the Apollo spacecraft. However, the new craft will be significantly larger and have much greater capability due to improvements in technology.

The next element of Constellation is the CLV. This launch vehicle will most likely incorporate elements of both the Shuttle and Saturn V. The CLV will be used to launch the CEV into orbit, where it will rendezvous with the Space Station or other exploration system elements launched on the larger Shuttle-derived heavy lift CaLV to be designed later.

The first stage of the CLV, which is a modi-

by congressional members, including Tom DeLay, Dave Weldon, Ted Poe and Gene Green, as well as then-NASA Associate Administrator for Space Flight Bill Readdy.

If you are a member of Congress or a staff member, please make plans to attend the reception this year!

NASA's budget request submitted by the White House for FY2007 continues to be 0.7% of the total budget, and this is anticipated to continue for the foreseeable future.

All funding for the Vision for Space Exploration is included in this budget.

CSE is requesting that Congress support no less than full funding of the NASA budget for FY07.

fied Shuttle Solid Rocket Booster (SRB), has been awarded to ATK, the company currently making the SRBs for NASA.

The CEV is currently being competed by NASA. Proposals from the competing contractors were due in March 2006, with contract award expected in early fall 2006.

NASA recently made several changes to their design requirements, including a decrease in the diameter of the capsule from 5.5 meters to 5 meters in order to save weight.



CEV being launched into orbit on the CLV.

Image credit: NASA

Shuttle Status - Launch Delayed to July 2006

The next Shuttle mission, STS-121, will carry supplies and equipment to the International Space Station, repair a robot arm carrier on the station's truss and get the station ready for resumption of assembly operations later this year.

The External Tank (ET) that will be used for STS-121 has completed construction in Michoud, Louisiana and has been delivered to Kennedy Space Center in Florida.

Replacement of a failed liquid hydrogen Engine Cut Off (ECO) sensor, similar to the sensor that caused slips in the STS-114 launch date, will now result in the STS-121 launch to slip from May to July. A Shuttle fueling test is being planned for early June to verify performance of new sensors.

Wind tunnel testing of new External Tank foam ramp designs is continuing in Tullahoma, Tennessee.

Meanwhile, launch preparations are continuing at both the Kennedy Space Center in Florida and the Johnson Space Center in Texas, as well as other supporting NASA Centers in Virginia, Ohio, Mississippi, Tennessee and Alabama.



STS-121 Crew - From left to right are astronauts mission specialists Stephanie Wilson and Michael Fossom, mission commander Steven Lindsey, mission specialist Piers Sellers, pilot Mark Kelly and mission specialist Lisa Nowak.

Image credit: NASA

Space Station News

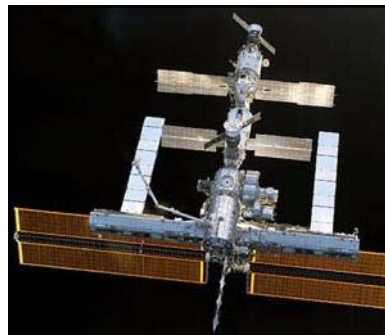
High-ranking officials of the space agencies from Canada, Europe, Japan, Russia and the United States met at Kennedy Space Center on March 2, 2006, to review International Space Station cooperative efforts and to endorse a revision to the Station assembly sequence and the final configuration.

During this meeting, the agency officials were briefed on the status of ongoing International Space Station operations and flight hardware development activities across the partnership. The partners reaffirmed their commitment to meet their mutual obligations, including doing what is needed to allow six person crew operations in 2009 and provide enough Shuttle flights to complete the assembly of the Station by the end of the decade.

The partners also affirmed plans to use a combination of spacecraft provided by

Europe, Japan, Russia, and the United States to complete Station assembly in order to guarantee full use of the unique capabilities of the Space Station throughout its lifetime.

The current plan calls for a total of 16 Shuttle flights to reach Assembly Complete.



International Space Station.

Image credit: NASA

"The dinosaurs became extinct because they didn't have a space program. And if we become extinct because we don't have a space program, it'll serve us right!" -- Larry Niven, science fiction author



CITIZENS FOR
SPACE EXPLORATION

Citizens for Space Exploration

**2525 Bay Area Blvd, Suite 640
Houston, TX 77058**

Telephone: 281.486.5535

Fax: 281.486.5068

**Contact: Brian Freedman
brian@bayareahouston.com**

Additional Information on the World Wide Web

Citizens for Space Exploration at
<http://www.citizensforspaceexploration.org/index.htm>

The Vision for Space Exploration at
http://www.nasa.gov/mission_pages/exploration/main/index.html

NASA's budget information at
<http://www.nasa.gov/about/budget/index.html>

Citizens for Space Exploration Members
Bay Area Houston Economic Partnership at
<http://www.bayareahouston.com/Home/>

Cocoa Beach Area Chamber of Commerce at
<http://www.cocoabeachchamber.com/>

Huntsville Madison Chamber of Commerce at
<http://www.huntsvillealabamausa.com/index.html>

Partners for Stennis at
<http://www.partnersforstennis.org/>

Other Links

Space Alliance Technology Outreach Program (SATOP) at
<http://www.spacetechsolutions.com/>

Coalition for Space Exploration at
<http://www.spacecoalition.com/>

Congress Space Watch

Congressman Tom DeLay (R-TX) has announced that he is resigning from Congress. DeLay, who represents the district encompassing the NASA Johnson Space Center, has been an avid proponent of NASA and the Vision for Space Exploration.

Congressman Sherwood Boehlert (R-NY), third-ranking Republican on the House Transportation Committee and chairman of the House Science Committee, has announced that he will not seek reelection at the end of this year, according to the Utica Observer-Dispatch, a local newspaper in his district. Also of note, The Hill newspaper recently ran a story in which it indicated that House GOP leaders are currently considering a plan to eliminate the Science Committee as part of a plan to reorganize the House committee structure.

NASA Deputy Administrator Shana Dale spoke at a Space Transportation Association breakfast on March 22. She had several talking points that provided insight into NASA's plans to support the commercial space industry, involve our international partners in NASA's exploration plans, and reward innovation in support of exploration system development.

Who We Are

The Citizens for Space Exploration mission is to promote awareness of the benefits of human exploration of space and support for NASA and the Vision for Space Exploration.

We are taxpayers who support America's investment in space exploration. We are citizens - small business owners, students, teachers, business leaders, and county and municipal representatives.

To advocate continuation of funding for human space operations and development each year, the Bay Area Houston Economic Partnership (TX), the Cocoa Beach Area Chamber of Commerce (FL), the Huntsville/Madison County Chamber of Commerce (AL), and the Partners for Stennis (MS) formed a national coalition in 1992.

Today, Citizens for Space Exploration has several hundred members across the nation. These members include municipalities, educational institutions, corporations, professional and civic organizations, students and private citizens.

Citizens for Space Exploration is a credible and reputable organization on the Hill, having visited congressional offices numerous times since its inception to discuss and promote the merits of human space exploration programs from the viewpoint of voting constituents across the U.S.