

INFO TO KNOW**A letter from the
Information
Systems
Directorate**

Tackling the job of replacing nearly 14,000 telephones across the Center was a daunting one for the Information Systems Directorate (ISD). However, the OAO and Siemens' implementation of the Center's new phone system is nearing a successful completion, with only a few clean up activities and the removal of the old Rolm system remaining. The Rolm system will be removed sometime during the middle of June.

Many users at JSC liked the features of the old Rolm system and were well acquainted with its capabilities. The system served the Center well for nearly 15 years. What most were not aware of, however, was how unreliable the system was becoming. Parts were becoming impossible to find. It was nearing the end of its useful life. *On the new system—even during periods of peak activity associated with major activations—the rate of trouble calls is significantly less.*

The willingness of JSC civil servant and contractor personnel to work with ISD during the changeover period played a significant role in the ultimate success of this conversion. Implementing the new system took an orchestrated effort between Center personnel (including facility managers, CTS coordinators and security personnel), ISD, OAO, Siemens and their subcontractor IDEX.

The result was a good one: A new, more reliable, phone system—one that provides JSC with a more robust system with potential for even more capability in the future.

Now fully functional, the new telephone system gives JSC a nonproprietary digital system equipped with a whole host of features, like call forwarding, redialing, speakerphone and conference call capabilities. It also provides a new voice mail system that gives every user onsite voice mail—something that many users were without.

Additionally, the arrival of the new system brings with it new local area network cabling that will allow desktop computer users to take advantage of increased bandwidth as the Center network upgrade progresses. And, since the new telephones can be reconfigured by a software download technique, in most cases, moves and changes can now be done without a technician visit.

For more information or questions, contact the ISD Customer Support Office at (281) 483-4716. For problems with the new phone, be certain to contact the Help Desk at (281) 483-4800, or users can access an electronic users guide at <http://jsc-bbs 01.jsc.nasa.gov/CTSINFO/default.htm>.

Thank you JSC for your support.

Managers delay future launches

The launch of STS-104 is now targeted for no earlier than July 12. The change in launch date will give the managers more time to address problems with the International Space Station's new robot arm, Canadarm2. The station's arm will be used to lift STS-104's primary cargo, the Joint Airlock, out of the *Atlantis* payload bay and attach it to the station. Because of the delay, STS-105 will launch no earlier than early August.



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Technology connects Space Station residents to JSC phone system

However, the phone, as well as other advanced communication capabilities, could not exist without the help of the Orbiter Communication Adapter (OCA). The name is now something of a misnomer, since the little computer card and routing equipment have revolutionized data transfer, networking and communications with vehicles in orbit.

The OCA "tricks" old NASA satellite links into thinking they are a modern Ethernet network, just like the one linking all of the computers together at JSC.

The OCA can be built into almost any communication system, and can serve as a relatively inexpensive basis for communication systems that used to cost millions. The OCA team expects to have as many as

75 of their custom-built cards ordered. As long as their work makes things like the IP phone possible, Schadelbauer, Parrish and the rest of the OCA team plan to continue improving the system and giving it more capability.

"It's an ongoing, continually improving project," Parrish said.

"We've got a card with a new data interface that will allow data to travel 10 times faster. We could possibly send them DVD movies or High Definition TV." ■



NASA JSC 2001e18080 photo by James Blair
The Softphone was made possible by the Orbiter Communications Adapter team, pictured here. Front row from left is Hector Deleon, Bao Bui and Bob Villarreal. Back row from left is Brett Parrish, Gene Gribbin and Steve Schadelbauer.

**Local student named one of seven NASA College
Scholarship Fund recipients**

The objective is to help ensure that a few of today's gifted high school students become some of tomorrow's leading scientists and engineers. That's just what some students—including one from Clear Brook High School in Friendswood—are well on their way toward achieving thanks to some assistance from the NASA College Scholarship Fund, Inc.

Nicholas Singhal, son of NASA Johnson Space Center employee Anil Singhal, has been named one of seven recipients nationwide of this year's NASA College Scholarship Fund. Scholarships were awarded in the amount of \$2,000 each. The scholarship is renewable annually for a maximum of \$8,000 over six calendar years.

A recent graduate of Clear Brook, Nicholas will attend Washington University in St. Louis, Mo., in the fall. He plans to study biology.

"I am very happy that the NASA College Scholarship Fund chose me for this award," he said. "I will continue to work hard at Washington University and hope to pursue a medical career in the future."

"Nicholas is a very good athlete

and actively participated in various extracurricular activities at Clear Brook, but he remained focused on his academic objectives," said Anil Singhal, Operations Integration Manager, International Space Station Avionics and Software Integration Office.

Applications were restricted to dependents of NASA employees who are planning to major in science or engineering. "All NASA centers across the nation were well represented among the candidates with 85 eligible applications received. All had exceedingly high grade point averages, high Scholastic Aptitude Test scores and were actively involved in their community," said Karl Schuler, president of the NASA College Scholarship Fund, Inc.

Other winners of this year's NASA College Scholarship Fund are Linda Hung, daughter of Ching-cheh Hung of the Glenn Research Center, Cleveland, Ohio; Sarah Zaman, daughter of Dr. Khairul Zaman of the Glenn Research Center; Christopher Malow, son of Deborah Malow of the Glenn Research Center; Bobbie Chern, son of Engmin Chern of the Goddard Space

Flight Center, Greenbelt, Md.; Swati Saini, daughter of Subhash Saini of Ames Research Center, Moffett Field, Calif.; and Jyothi Natarajan, daughter of Murali Natarajan of Langley Research Center, Hampton, Va.

"On behalf of the Board, we appreciate all the interest in the NASA College Scholarship Fund," said Greg Hayes, chairman of the Board of Directors.

"This scholarship program takes an active interest in our young people and is another way we're promoting higher education across NASA."

The NASA College Scholarship Fund, Inc., a Texas nonprofit corporation, was established to award scholarships agencywide to qualified dependents of NASA and former NASA employees. The fund was established as the direct result of a substantial unsolicited gift by the noted Pulitzer Prize-winning author James A. Michener. Many NASA employees have contributed to the fund directly or through the Combined Federal Campaign. Other major contributors include the Freedom Forum and the JSC Chapter of the NASA Alumni League. ■