

C O M M U N I T Y N E W S**NASA premiers at National Council of La Raza Conference**

A team of NASA astronauts shared space flight experiences with thousands of attendees at the 1999 National Council of La Raza Conference. La Raza is the nation's largest Hispanic civil rights organization. The conference took place July 24 -28 at the George R. Brown Convention Center in Houston.

Veteran Astronaut Ellen Ochoa spoke to attendees about the influence of Hispanics in the space program at the National Affiliate Breakfast on July 25. Ochoa played a key role in this spring's STS-96 mission to the International Space Station. At the breakfast, she recognized La Raza, related the drama of the first mission to the space station and emphasized the importance of math and science for youth who aspire to space exploration.

As part of NASA's participation in La Raza's conference, astronauts Tammy Jernigan and John Olivas engaged visitors in question and answer sessions and signed autographs in the Latino Expo USA at the conference site. ■

A potential future astronaut marvels at the astronaut spacesuit while attending the La Raza conference.



JSC Photo S99-08628



JSC Photo S99-08626



JSC Photo S99-08627

NASA Astronaut Candidate Dr. John "Danny" Olivas autographs hundreds of pictures for very pleased attendees at the National Council of La Raza Conference.

Connie Sartor of JSC's Technology Transfer and Commercialization Office made quite an impression on attendees who were surprised to know how much of NASA's space program translates into everyday, down-to-earth use.

Team completes upgrades to station mockups

To assist the International Space Station Program Office in managing stowage assessments and to enable crewmembers to train on the stowage configuration they should see on orbit, the Zarya and Service Module mockups in the Space Vehicle Mockup Facility in Bldg. 9 at JSC have been upgraded and modified.

This work was first completed for the crew of STS-96, ISS assembly flight 2A.1 flown earlier this year, and more modifications have recently been completed for STS-101, assembly flight 2A.2, scheduled for December. The mockup panels, panel doors, stowage areas, and hardware protruding into the open areas have been modified to reflect the flight configuration.

John Sims, chief of the Space Vehicle Mockup Facility, commented, "We are well on our way to having a first-class facility to augment the high-fidelity mockups at Star City, Russia."

Tommy Capps, Russian mockup manager for the Space Vehicle Mockup Facility in the Mission Operations Directorate, has been instrumental as the project engineer and lead for the upgrades to the mockups. Capps integrated the requirements with the ISS Program Office and is currently working with the Russians to integrate future upgrades and the development of higher fidelity mockups of the Russian modules.

"This has been a tremendous team effort on behalf of the NASA and contractor force," said Capps. "Having worked from the onset of the Shuttle-Mir Program, I am very pleased now to see the transition of a lot of the lessons learned from Phase I into the ISS Program. Much of the hardware, stowage, and operational problems are the same. It has been very rewarding to watch this effort develop and to see the JSC community come together to support the ISS Program. Although we have a lot of work to do to get to the fidelity level we want in the mockups, this is a great start."

The Zarya and Service Module mockups provide a means for NASA to develop operations concepts for the activities on board the International Space Station. Using these mockups, the crewmembers have the opportunity to train on the stowage configuration they should see on orbit and procedure personnel are able to verify the accuracy and workability of their procedures.

In addition, the mockups of Zarya and the Service Module serve as tools to ensure crew safety, mission success, and communication within NASA and with the public. Capps explained that "by using mockups we in NASA can evaluate such things as the workability of a procedure, the safety of a process or procedure, and the environment in which the crew must perform work. It is often important to explain concepts and on-orbit problems to both the technical community and the public. Mockups provide the visual cues needed to facilitate this communication process." ■

**International Space Station Update**

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Shown in the FGB mockup are front: Tommy Capps manager, Russian Module Mockups, Space Vehicle Mockup Facility, MOD; left back: Liz Kalla, ISS Program Office, stowage manager and Ursula Callaway-Stockdale, MOD Cargo Operations manager.

ISS viewing opportunities from the ground can be found on the Internet at: <http://spaceflight.nasa.gov/realdatasightings/>