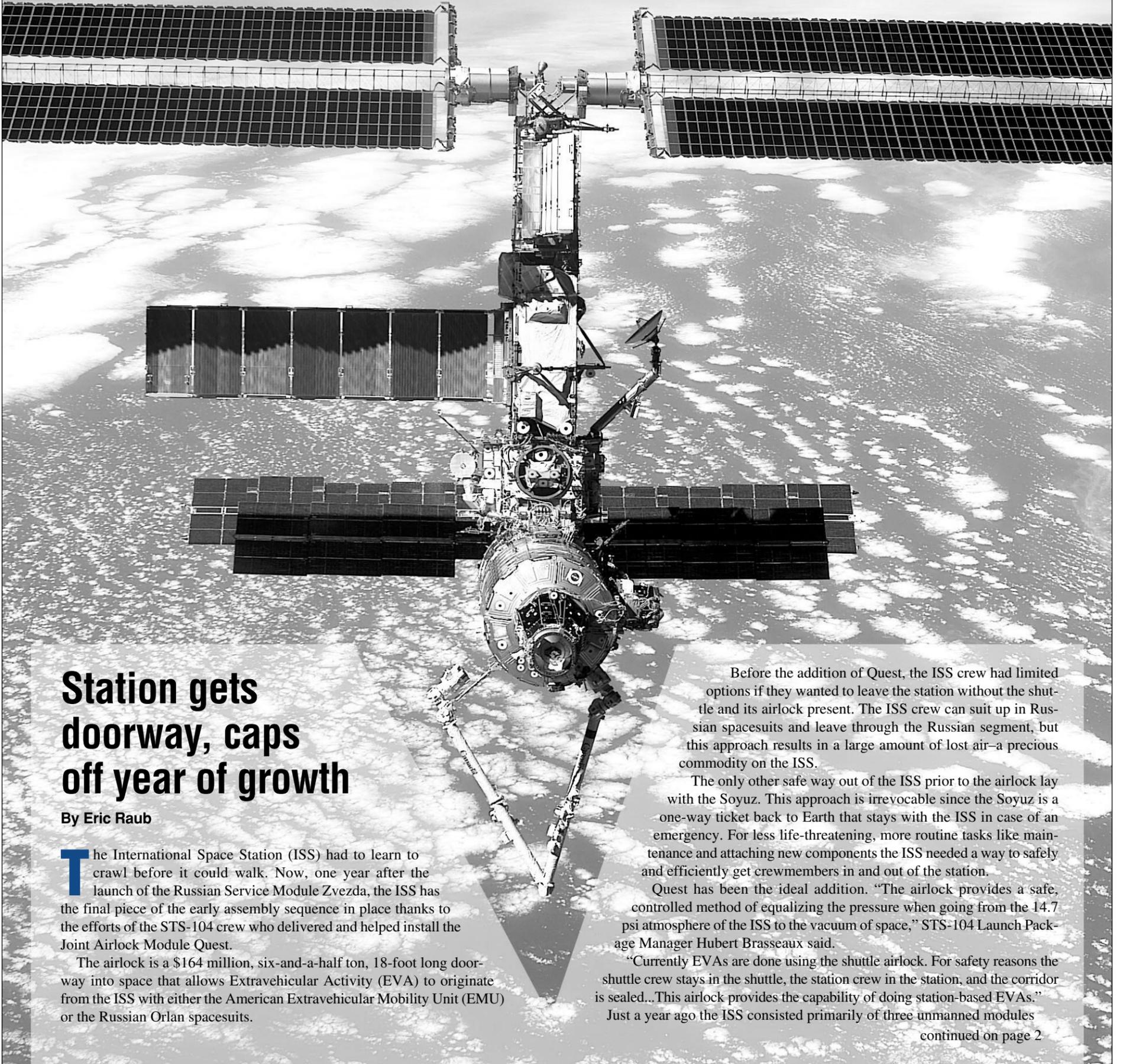




Space Center Roundup

VOL. 40, NO. 14 LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS July 27, 2001

One amazing year



Station gets doorway, caps off year of growth

By Eric Raub

The International Space Station (ISS) had to learn to crawl before it could walk. Now, one year after the launch of the Russian Service Module Zvezda, the ISS has the final piece of the early assembly sequence in place thanks to the efforts of the STS-104 crew who delivered and helped install the Joint Airlock Module Quest.

The airlock is a \$164 million, six-and-a-half ton, 18-foot long doorway into space that allows Extravehicular Activity (EVA) to originate from the ISS with either the American Extravehicular Mobility Unit (EMU) or the Russian Orlan spacesuits.

Before the addition of Quest, the ISS crew had limited options if they wanted to leave the station without the shuttle and its airlock present. The ISS crew can suit up in Russian spacesuits and leave through the Russian segment, but this approach results in a large amount of lost air—a precious commodity on the ISS.

The only other safe way out of the ISS prior to the airlock lay with the Soyuz. This approach is irrevocable since the Soyuz is a one-way ticket back to Earth that stays with the ISS in case of an emergency. For less life-threatening, more routine tasks like maintenance and attaching new components the ISS needed a way to safely and efficiently get crewmembers in and out of the station.

Quest has been the ideal addition. "The airlock provides a safe, controlled method of equalizing the pressure when going from the 14.7 psi atmosphere of the ISS to the vacuum of space," STS-104 Launch Package Manager Hubert Brasseur said.

"Currently EVAs are done using the shuttle airlock. For safety reasons the shuttle crew stays in the shuttle, the station crew in the station, and the corridor is sealed...This airlock provides the capability of doing station-based EVAs."

Just a year ago the ISS consisted primarily of three unmanned modules
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With the Earth behind it and the Canadarm2 clearly visible toward the bottom, the International Space Station (ISS) is photographed by the departing astronauts of STS-100 onboard Space Shuttle Endeavour in May. The 58-foot robotic arm is just one of the many features the ISS now sports after a year's worth of construction. For a look at the newly-installed Joint Airlock Module Quest, see page 2.

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**Open House
2001 needs
volunteers.**



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**WSTF hosts
Family and
Friends Day.**



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**Toxicology
award given
to student.**

