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SPACE STATION PROGRAM MARKS MAJOR MILESTONE

The International Space Station Program will cross a major milestone next week when program managers from NASA, the international partners and the contractor community meet to review and evaluate the design status of the orbiting laboratory.

At the System Design Review (SDR), set for March 23 and 24 at the Johnson Space Center (JSC), Houston, program managers will validate overall technical requirements for the space station and take a preliminary look at how the requirements will be accomplished.

"This is where we move from concepts to hardware implementation," said Randy Brinkley, Space Station Program Manager. "This is by far the most important technical milestone in the program since last year's redesign of the station. The SDR will lock in the key technical elements of the system as well as the schedule and cost."

The SDR will include managers from NASA; the Canadian Space Agency; the European Space Agency (ESA); the Italian Space Agency (Agenzia Spaziale Italiana); the Japanese Space Agency (NASDA); the Russian Space Agency; the prime contractor Boeing; and Tier I subcontractors Rocketdyne and McDonnell Douglas.

The SDR will establish the technical baseline of the entire program and is an extension of the SDRprocess conducted in December. The SDR documentation has been reviewed concurrently by program analysis and integration teams and integrated product teams. NASA, the international partners, Boeing and the Tier I subcontractors all have participants on the teams developing the SDR documents. The 2-day meeting is intended to be an executive summary and overview of the SDR process results. Participants will review the operation and utilization concept, the baseline assembly sequence and assembly operations. For the international space station, this includes the specifications for the U.S. on-orbit components, U.S. ground components, ESA's Columbus Laboratory Module and the Japanese Experiment Module.

Participants also will look at the basic design of the station's core systems including electrical power; thermal control; life support; guidance, navigation and control; propulsion; command and data handling; communications and tracking; and extravehicular activities. Risk and affordability also will be assessed. The analysis at SDR will demonstrate the feasibility of the requirements and establish the physical and functional interfaces between system elements including software and hardware.

The overall objective of the meeting is to reach a consensus among program managers on the technical validity, design and completeness for the space station system specifications; the operations concept; requirements for interfaces with the Space Shuttle and Russian launch vehicles; and to refine cost and program schedules. This is an important checkpoint for the program, Brinkley said. "This review gives us an opportunity to assess the developing design to ensure that it meets program objectives and requirements."

Over the next year, the space station team will refine the design to more detailed levels and finalize it at the Critical Design Review currently scheduled for April 1995.

"Since last year's redesign of the space station, NASA has made significant progress with the international partners and contractor team to provide -- on schedule and within budget -- a world-class, space-based research facility," Brinkley said.

"By using about 75 percent of the hardware planned for Space Station Freedom, NASA has been able to maintain its investment to date while redesigning the system to be less expensive and more capable," he said. "The international community of researchers, scientists and industry that comprises the International Space Station users will have access to an unprecedented amount of power, volume and crew time to conduct investigations in the microgravity environment of space," Brinkley concluded.

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NOTE TO EDITORS: Managers from NASA, the international partners and Boeing will meet with the press at JSC to discuss the review on March 24 at 4 p.m. EST. The press conference will be carried on NASA Select TV.

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NASA Select Television is carried on Spacenet 2, transponder 5, located at 69 degrees West longitude, frequency 3880.0 MHz, audio 6.8 MHz. Video of the SDR in progress and animation of the current design will be broadcast on NASA Select immediately following the press conference.

Photographs of the three phases of the International Space Station Program are available from JSC's Still Photo Library by calling 713/483-4231. Animation of the station configuration also will be available March 23 from the Film and Video Distribution Library at 713/486-9606.