HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3)
Human Space Endeavour - Overview (1)

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JAPAN'S ISS PROGRAM STATUS

Abstract

Last year was a memorable one in the history of Japan's manned space development. Last March, the KIBO Pressurized Logistics Module, the first of the Kibo modules, was launched to the ISS by STS-123. Following STS-123, the core of the KIBO system, called the Pressurized Module, was launched with the Remote Manipulator System by STS-124. Japanese astronauts have assembled these elements to the ISS, giving birth to the first Japanese manned space facility on orbit. It was a historical moment when our Japanese manned space development efforts over a quarter of a century were finally rewarded. The systems have been activated and initial check out completed, and utilization activities have gradually been ramped up in the KIBO Pressurized Module since last August. Long-term space environment utilization that could not be achieved by space vehicles such as Space Shuttles has now become possible aboard KIBO, and epoch-making results and achievements in various fields such as physics, material science, medical science and culture/arts are expected in the near future.

This year also will be a most exciting and challenging year in the history of Japan's manned space development. First, a Japanese astronaut will stay on board the ISS for a couple of months. It will be our first experience of a long-term stay in space. It also will be the first step for our future manned space program such as manned exploration and utilization on the Moon, Mars and beyond. Second, the last KIBO element, the Exposed Facility, will be launched, and KIBO assembly will finally be complete. Third, the H-II Transfer Vehicle (HTV1), which can launch both pressurized cargo and unpressurized cargo, is planned to be launched from Tanegashima Space Center this summer. The HTV is expected to play a critical role after the Shuttle retirement in 2010 since it will become the only transfer vehicle other than the Space Shuttle with these capabilities.

This paper will present the progress in and accomplishments of Japan's ISS program, such as operation status of KIBO, current results of utilization in KIBO, and the status of HTV1. This paper will also introduce an overview of our KIBO utilization plan, and the future vision led by the KIBO program in our human space activities.