

HQ Bulletin

NASA

National Aeronautics and Space Administration

April 4, 1994

International Space Station Builds on 'Freedom'

The international space station design underwent a comprehensive checkout late last month and got the green light to move toward assembly in 1997. "We now have an executable program," said Space Station Program Director William Trafton. "The review board gave the team the go-ahead to proceed to flight one."

The current program makes extensive use of the work done for Space Station *Freedom*. Nearly 75 percent of the hardware created for *Freedom* was incorporated into the current design, which, when complete, will be truly international and contain elements provided by:

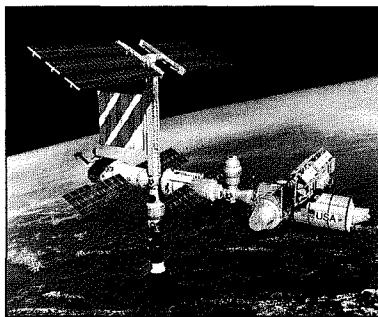
Canada • remote manipulator system

European Space Agency (ESA) • laboratory module

Japan • experiment module
• exposed facility

Russia • power platform
• service module
• functional cargo block vehicle (FCB)

U.S. • integrated truss
• habitation module
• laboratory module

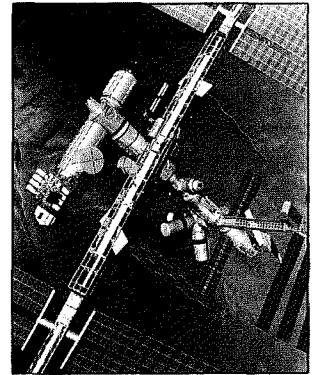


During Phase II, the human-tended space station will have elements provided by the U.S. and Russia.

Space Station Program Manager Randy Brinkley noted some of the changes announced after the system design review included use of the Ariane V booster, increasing the crew from four to six, moving the completion date from September to June 2002, and reducing the EVA (extravehicular activity) required during assembly and maintenance. Managers believe the work they'll do in coming months will bring the estimated 400 EVA hours for assembly down to under 360. "We're building on

what we learned during the Hubble servicing mission," Brinkley said. STS-61 crewmembers have been helping to make sure the station EVA activity is as "user friendly" as possible.

To put the spacecraft together will require 13 Russian flights and 16 U.S. missions, with ESA's Ariane V slated to lift the European module.



Once it's complete, the space station will have an operational lifetime of at least 10 years.

Some major milestones on the calendar for assembly are:

November 1997 – Russian FCB vehicle launch

December 1997 – First U.S. launch

January 1998 – Russian service module added, followed by the addition of the universal docking module and science power platform

May 1998 – U.S. laboratory module attached (marks the beginning of human-tended science operations)

June 1998 – Canadian-built robotic arm added

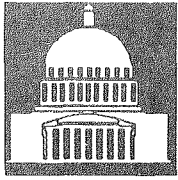
August 1998 – Addition of the Soyuz transfer vehicle

early 2000 – ESA laboratory module added

June 2002 – Assembly complete

The next hurdle comes in April 1995 when the program conducts its critical design review, a milestone that will mean the detailed engineering design is essentially complete. The international space station is rapidly moving off the design boards and becoming reality.

"We're sitting here in 1994 and the first launch is in 1997," Trafton said. "We have a lot of work ahead of us, but no show stoppers. We're confident we'll be able to proceed on schedule and on budget." ♦



Legislative Intelligence

by Dr. Dianne Lambert

MARCH 28 — It just about takes a rocket scientist to understand the procedural machinations involved in the passage of the so-called "buyout bill."

Part of the problem was caused by deficit-reduction politics. The rare occurrence of substantial projected savings in federal spending attracted members like bees to honey, anxious to dedicate that savings to other money-hungry programs.

Let's start at the beginning. NASA's push for buyouts began last spring when the space station program was restructured and it became clear that the agency would need to reduce its workforce. Subsequently, the House passed H.R. 2876 in August to provide NASA the requisite buyout authority; the Senate passed an amended version in November and sent the measure back to the House for further action.

The NASA-specific bill then took the congressional back seat to a government-wide buyout bill. Last September, the administration called for a massive cut in the federal bureaucracy's management ranks as part of Vice President Gore's effort to reinvent government. In his National Performance Review, Gore recommended the equivalent of 252,000 full-time workers be trimmed from the federal workforce by fiscal 1999 — a 12 percent cut. The result would be a federal workforce, minus the military, of roughly 1.9 million ... the smallest since the administration of Lyndon Johnson.

To eliminate the 252,000 slots without the emotional, morale and monetary cost of reductions in force, the Clinton Administration proposed an approach used by private business: cash incentives offered to middle managers to retire or resign early. A government-wide buyout bill, H.R. 3345, was introduced and quickly passed in February 1994 by both the House and Senate.

But "something happened on the way to the forum," to borrow a line from Zero Mostel.

During consideration of H.R. 3345 on February 11, the Senate accepted an amendment offered by Sen. William Roth (R-Del.) to direct most of the \$30 billion in projected savings to anti-crime programs created in the Omnibus Crime Bill which had passed the Senate last November.

The House and Senate played political hot potato with H.R. 3345 after its adoption by the Senate. Basically, the House Democrat leadership, including House Post Office and Civil Service Chairman William Clay (D-Mo.), opposed the dedication of the savings to the anti-crime trust fund, while Sen. Roth and others, notably Sen. Phil Gramm (R-Texas), strongly supported the idea.

Ultimately, a conference agreement was filed March 16 *sans* the mechanism to insure funding for anti-crime programs. On March 23, the House agreed to the conference and, on the following day, the Senate cleared the measure for the president — but only after a cliffhanger cloture vote to cut off a filibuster organized by senators upset that conferees had dropped the provision targeting savings for crime reduction. Congress finally bought off on the buyout. The president is expected to sign the bill shortly.

The conference agreement provides authority for agencies to offer employees up to \$25,000 to resign or retire by April 1, 1995. The administration hopes to cut the equivalent of 50,000 full-time positions in FY 1994, and reach the total 252,000 over the next six years. Based on funds available, NASA has initially allocated 825 agency-wide slots for the buyout incentive.

The agreement also requires agencies to contribute toward the retirement costs. Agencies will pay 9 percent of the final basic pay of buyout recipients in both FY 1994 and 1995, and \$80 for each exiting agency employee in fiscal years 1995 through 1998. Additionally, the conferees added a provision to pay \$5,000 each to up to 200 workers on the cancelled Advanced Solid Rocket Motor project in Mississippi. This provision was added by Sens. Trent Lott (R-Miss.) and Thad Cochran (R-Miss.).

The resolution of the buyout bill, however, does not settle the issue of where the projected savings from reduced personnel levels will end up. The Omnibus Crime Bill, H.R. 3355, as passed by the Senate, contains the now familiar provision to craft a Violent Crime Reduction Trust Fund and dedicate to this fund savings realized from the reinventing government plan. Also, H.R. 3400, the Further Deficit Reduction Act, which passed the House last November and currently languishes in the Senate, dedicates the savings from reinventing government to deficit-reduction purposes.

Vice President Gore's reinventing government plan made no detailed suggestion about how to handle the savings. "It's like leaving a \$20 bill out there on the sidewalk," one Senate aide wryly noted. "When you come back tomorrow, it's not going to be there."