

# Shuttle-Mir program is under threat from Congress

by Marsha Freeman

From the beginning of the Shuttle-Mir joint program in 1992, there has been a chorus of critics who have tried to stop that cooperative effort. Cold warriors, mostly in the Republican Party, thought it were best to let the “Soviet” space program collapse, along with the economy, the military, and the rest of Russian society.

Bipartisan budget cutters were aghast that the Clinton administration was proposing to spend about \$100 million per year from NASA’s diminishing budget on a joint Russian program, even though this money was to gain valuable experience on the Mir, rather than later on the International Space Station (ISS), on which NASA will spend more than \$13 billion.

And then, there are those in Congress who just do not think that the manned space program, is worth the money. Period.

But Congress, which tries, with varying degrees of success, to control its own constant urge to micro-manage the high-visibility and highly popular space program, sank to new depths on Sept. 18, during the House Committee on Science hearing on the safety of the Mir space station.

While one would assume that a committee chairman calls a hearing to learn from expert witnesses the answers to questions of import for the nation, it was clear from his opening statement, that Chairman James Sensenbrenner (R-Wisc.) had decided what he thought about the safety of Mir, before the hearing had even begun.

“What will it take for Russia to decide that Mir has passed its prime or the United States to determine that it’s not safe? Does someone have to be killed before NASA and the Russian Space Agency wake up?” Sensenbrenner railed. “Mir has reached the end of safe operations,” he stated, before anyone from NASA had given their evaluation. The rest of the hearing was orchestrated to try to prove Sensenbrenner’s statement.

A more reasoned approach was taken by ranking minority Committee member, Rep. George Brown (D-Calif.), who said in his opening statement: “I do not believe that it is appropriate for us as Members of Congress to insert ourselves into the conduct of that [Mir safety] review process. Members of this committee are not in a position to credibly evaluate astronaut debriefings, fragments of engineering analyses, and so forth—as pressworthy as some of the anecdotes that have surfaced may appear to be. We cannot be NASA’s safety engineers, and we should not pretend to be otherwise.”

NASA astronaut and Shuttle/Mir program manager Frank Culbertson was constantly interrupted during his attempt to answer questions about recent Mir accidents and equipment failures, posed by the members of the committee. When Rep. Nick Lampson (D-Tex.), whose district includes NASA’s Johnson Space Center, asked that astronaut and Mir crew member Shannon Lucid, who was in the room, be allowed to clarify statements that it was reported she had made during post-flight debriefings, Chairman Sensenbrenner, to the amazement of many in the room, denied the request.

If the chairman of the committee had been at all interested in finding out how NASA conducts safety reviews before it sends an astronaut to the Mir, and why NASA believes it is within its safety requirements to send astronaut David Wolf to the Mir on the Space Shuttle on Sept. 25 for a four-month stay, he could have allowed Captain Culbertson enough time (without interruption) to actually explain this to the committee.

Also, if the purpose of the hearing had been to actually learn enough to make any judgments about the safety of Mir, the committee would have waited to hold the hearing, until the independent safety review, *that the committee itself had requested*, were completed. The head of that review, retired general and astronaut Tom Stafford, was in Russia while the hearing was taking place, doing the safety review mandated by the Congress.

Representative Brown stated in his opening remarks: “As the chairman is aware, I asked that the hearing be delayed a week until General Stafford and his team had returned from Russia so that the committee could have the benefit of his evaluation. I regret that the chairman has decided to proceed with the hearing in General Stafford’s absence, because I believe that our ability to carry out our oversight responsibility at today’s hearing has been weakened.”

Rather than hear from the astronauts who have been on Mir, and the managers who are responsible for determining the level of risk and safety for astronauts aboard the Mir, the committee preferred to rely on exaggerated press reports, and the NASA Inspector General.

## Rumors and innuendos

On April 16, following the February fire aboard Mir, an amendment to H.R. 1275, the Civilian Space Authorization Act, passed the committee. It included a provision which read:

“The NASA shall not place another United States astronaut on board the Mir Space Station, without the Space Shuttle attached to Mir, until the Administrator certifies to Congress that the Mir Space Station meets or exceeds United States safety standards. Such certification shall be based on an independent review of the safety of the Mir Space Station.” The House passed the bill on April 23.

General Stafford, who has been conducting an independent safety review for Administrator Dan Goldin before each Space Shuttle mission to Mir, appointed a special “Red Team” from among the committee members, in view of the recent series of incidents aboard Mir. The Stafford Committee report will be provided to the NASA Administrator before a decision is made to launch the Shuttle, and David Wolf, to the Mir.

On July 11, Sensenbrenner and Brown sent a letter to lawyer Roberta Gross, the NASA Inspector General, requesting that she collect and provide to the committee source documents and working-level materials related to “the suitability of Russia’s Mir space station for habitation by U.S. astronauts, and research productivity and cost effectiveness of continued NASA involvement in the Mir space station program.”

At the Sept. 18 hearing, Gross summarized some of the “findings” in her interim report, which detailed all of the familiar problems aboard Mir over the past two years. Asked by Rep. Bud Cramer (D-Ala.) whether he had been surprised by any of Gross’s findings, Culbertson said, “There were no issues in there or safety concerns that were a surprise to me at all, because we had dealt with these things in the course of the program.” He continued, “A lot of them are what I would call ‘ancient history.’ They happened in 1995 or 1996. We dealt with them immediately . . . we’ve corrected all of these.”

Most offensive to some members of the committee were “concerns” Gross says were expressed to her, in confidence, by current and former NASA employees, who questioned the adequacy of the risk and safety assessment process. The concerns Gross listed included “the chilling impact on free discussion and criticism caused by the pivotal role of the Johnson Space Center (JSC) for the human space program, [and] the lack of independence of the Stafford team due to its perceived ties to the JSC Center Director.”

This slap in the face to one of this nation’s most highly respected and senior astronauts, and commander of the Apollo/Soyuz mission in 1975, was not taken lightly. In a five-minute point of personal privilege at the end of the hearing, Representative Hall said such accusations, which “smear” General Stafford’s reputation, had been made by people who would not be named, and that the “NASA Inspector General is repeating anonymous charges against General Stafford, and he’s not even here to answer them. I think this kind of investigation is disgraceful.”

Chairman Sensenbrenner lamely responded that he had assured Brown that there would be further hearings, which would include Stafford, and also the Mir astronauts.

## When it is worth the risk

Marcia Smith, from the Science Policy Research Division of the Congressional Research Service, presented a balanced and thoughtful view of the situation. On the one hand, she reported that she believed that “NASA seems already to have achieved most of the objectives set out for the Shuttle-Mir program,” and she was not, therefore, convinced that two more long-duration flights by NASA astronauts were critical, or would accomplish that much more.

Referring to the fire and the Progress collision, Smith said, “Those emergencies, as undesirable as they were, may have had a positive aspect in terms of demonstrating how the space crews work together in an emergency, how the space and ground crews interact under tense circumstances, and intensified interaction between Russian and American personnel.”

On the other hand, Smith was critical of the way the media have treated the actual situation on Mir. “It should be borne in mind . . . that the picture may not be as bleak as what is being portrayed in the media,” she said. “While Mir is experiencing more anomalies than in the past, as would be expected with an aging system, the cosmonauts have extensive experience in space station repairs. Mir is Russia’s seventh successful space station since 1971.”

“I have studied the Russian space station program for 22 years. After seeing them salvage situations that appeared unsalvageable time and time again, it is difficult not to be impressed by the versatility, ingenuity, resourcefulness, and determination of cosmonaut crews.”

“So it is not a matter of rejecting concerns about Mir’s safety,” she said, “but more a matter of keeping the newspaper headlines in perspective. As long as a Soyuz spacecraft is available for emergency return, aging systems alone would not seem to pose immediately life-threatening risks. . . . Despite the many media reports of Mir’s imminent demise, the space station continues to function in the hands of its patient, competent crew.”

Smith also addressed the question of the ultimate risk, the death of astronauts in space, by placing it in perspective. “The ten Americans and four Russians who have died as a result of spaceflights indelibly underscore the risks experienced whenever humans venture into space. Despite these risks, the United States and Russia have conducted human spaceflight programs since 1961.

“Twenty-three other countries have accepted invitations to send representatives into space on American or Russian missions. Clearly many governments and their citizens are willing to accept certain levels of risk in order to achieve a particular end . . . the astronauts and cosmonauts who fly into space accept those risks as well.”

During the hearing, Rep. Zoe Lofgren (D-Calif.) said that she appreciated the “bravery of the American astronauts and Russian cosmonauts.” She observed that “being a congressman doesn’t require that kind of bravery.”