

Senate Committee on Commerce, Science, and Transportation
House Science Subcommittee on Space and Aeronautics

Joint Hearing:

Space Shuttle Columbia Accident

Wednesday, February 12, 2003

9:30 a.m.

325 Russell Senate Office Building

1. Purpose of Hearing

On February 12, 2003, at 9:30 a.m. in the Russell Caucus Room (SR-325), the Senate Commerce Committee and the House Science Committee's Subcommittee on Space and Aeronautics will hold a joint hearing on the Space Shuttle Columbia tragedy. Senator McCain and Congressman Boehlert will co-chair the hearing. The committees will hear testimony from NASA Administrator Sean O'Keefe regarding the accident, the investigation, and any related issues.

2. Procedures

The Chairman and Ranking Members of the Senate Commerce Committee and the House Science Committee will be given five minutes each for opening statements. NASA Administrator Sean O'Keefe will have 20 minutes to provide his testimony. The question and answer period will be limited to four minutes for each member and alternate between Senate and House. Each chairman will recognize the members of his respective committee.

3. Background

At approximately 9:00 a.m. EST on February 1, 2003, the Space Shuttle Columbia broke apart during re-entry into the atmosphere while traveling at more than 12,500 miles per hour at an altitude of 207,000 feet. All seven astronauts were killed. Immediately following the accident, NASA activated a contingency plan to preserve all information related to this flight and established a Mishap Investigation Team to coordinate the identification, retrieval, and storage of debris and human remains. NASA also established the Columbia Accident Investigation Board (CAIB), and appointed retired Navy Admiral Harold (Hal) Gehman chair of the investigation Board. The Space Shuttle program is grounded indefinitely while the Board investigates the matter.

NASA chartered the Gehman Board to determine the facts, as well as the actual and probable causes of the accident and recommend actions to preclude the recurrence of a similar mishap. The Board membership is heavily weighted toward members with military experience and has few members with significant experience with space programs. Administrator O'Keefe has stated that he is open to expanding the membership of this Board.

In contrast to the Rogers Commission that investigated the Challenger accident in 1986 which was appointed by the President, the Gehman Board was established by NASA. There is some concern that the Gehman Board is not sufficiently independent from NASA and that the President should create a commission similar to the Rogers Commission. Others believe that these are not fundamental problems as long as the membership is expanded with outside experts. Also, Administrator O'Keefe has pledged to provide Congressional staff with access to the Board and its deliberations to ensure that Congress has sufficient insight into the investigation. In addition, the NASA Inspector General will be an observer to the Board to track its deliberations.

Three crew, two Americans and one Russian, are currently aboard the International Space Station (ISS). A Russian Soyuz crew return capsule is currently docked to the ISS should the crew need to return for any reason. The grounding of the Shuttle fleet will have a significant impact on the future assembly and operation of the ISS and raises significant questions about the future of human spaceflight.

Additional background information on the Columbia accident is attached in the appendix.

4. Key Questions

- Is the Gehman Board sufficiently independent of NASA?
 - Does the Board have the right mix of skills in its membership?
 - How is the Board organized?
 - Will the Board limit its scope to the immediate technical causes of the accident?
 - How will the Board interact with Congress?
 - With the Board have the authority to hire additional, non-NASA technical personnel to support the investigation?
- Did NASA propose and receive adequate budgets for the Shuttle program?
 - Did OMB create an atmosphere of controlling costs by intentionally under-funding the Shuttle program?
 - Did Congress provide sufficient funding for the program?
 - Did NASA undercut the Shuttle by shifting funds to the ISS?
- How does the grounding of the Shuttle affect the International Space Station (ISS)?
 - What alternatives is NASA examining to continue the ISS program?
 - Is it possible to support the ISS with the Shuttle grounded for an extended period?
 - How long can the current crew stay aboard ISS? What are the limiting factors?
- Should NASA accelerate plans for a replacement for the Shuttle?
 - What are the alternatives?
 - How long would it take and how much would it cost?
 - How does this change the current plan for the Orbital Space Plane (OSP)?
- Is the Shuttle's basic design unnecessarily risky?
 - What has been the history of anomalies for the Shuttle program?
 - What did NASA do to respond to the warnings from its Aerospace Safety Advisory Panel?
- What other programs and payloads are affected by the grounding of the Shuttle?
 - How long can the Hubble Space Telescope operate without a re-boost from the Shuttle before it loses the ability to maintain proper control?
 - If the Shuttle is grounded for an extended period of time is there a danger that the Hubble will re-enter the atmosphere?