

**The Testimony of
The Honorable John McCain
Chairman, U.S. Senator (R-AZ)**

Last week, the Columbia Accident Investigation Board released its report on the causes of the Space Shuttle accident that occurred seven months ago, and today, the Committee will begin a thorough examination of its conclusions.

The Board's final report is one of the most comprehensive ever produced concerning the management and operations at NASA. It must serve as a wake-up call to NASA and to the nation that we have for too long put off hard choices, and forced the space program to limp along without adequate guidance or funding. As stated in the report A...unless the technical, organizational, and cultural recommendations made in this report are implemented, little will have been accomplished to lessen the chance that another accident will follow.

The report reminds us that we are still in the developmental stages of space transportation, and that space is an unforgiving environment which challenges our technical expertise. It also raises a number of important issues that will have to be considered as we plan for the future of the space program. Most importantly, we will have to figure out where we want the space program to go, and what we expect to get out of it. Then, we will have to ensure that adequate and unearmarked funds are provided for these missions. It is imperative that we eliminate wasteful spending and make efficient use of those resources we commit to space exploration.

The Board worked tirelessly to identify and clarify the causes of this accident, and I am deeply grateful to its members for their dedication. Although the technical causes of the accident have been suspected for some time, the Board's findings concerning the role that NASA's organizational structure and culture played in this tragedy are as troubling as they are valuable.

As the Board reported, Acomplex systems almost always fail in complex ways. The many factors that contributed to the accident largely demonstrate how far NASA has regressed: its incomplete and invalid impact analysis; its rejection to seek satellite images of the damaged Shuttle; its reliance on past success as a substitute for sound engineering practices; its organizational barriers that prevented effective communication of critical information and stifled professional differences of opinion; and its lack of integrated management across program elements. The report further describes NASA's culture as including Aflawed decision making, self deception, introversion and ... diminished curiosity about the world outside. We will want to hear from Administrator O'Keefe about precisely how and when this culture can be changed.

I welcome Administrator O'Keefe and Admiral Gehman and look forward to hearing from them on the Investigation Board's findings and recommendations, and NASA's plans to return the Space Shuttle program to flight.