



March 12, 2003

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**TO** M-1/Deputy Associate Administrator for ISS and Space Shuttle Programs  
**FROM** M/Associate Administrator for Space Flight  
**SUBJECT** Space Shuttle Return to Flight

While the Columbia Accident Investigation Board (CAIB) and NASA continue their investigation into the cause of the Columbia mishap, it is important for NASA's Space Flight Enterprise to begin focusing on those activities necessary to expeditiously return the Space Shuttle to flight.

Although NASA will be guided by the CAIB's formal recommendations, we need to begin to identify those critical actions now that we believe need to be completed before a safe return to flight can be assured. We will adjust this preliminary planning as necessary as we receive recommendations from the CAIB.

The Deputy Associate Administrator for International Space Station and Space Shuttle Programs will establish a formal "Return to Flight" team, and provide direction for the team to address these actions and other actions determined necessary to comply with the formal recommendations of the CAIB. This team will include key representatives of the Space Shuttle Program (SSP) office and supporting Human Space Flight Centers, and other NASA center and headquarters personnel deemed appropriate. The team will plan for a safe return to flight as soon as practicable. As a goal, the SSP shall plan for corrective actions and reviews which support a launch opportunity as early as the Fall of 2003. The team will work closely with the leadership of the International Space Station (ISS) program to ensure that return to flight plans support an optimal return to the tasks of ISS assembly and continued logistics support.

Program return to flight actions should consider, but not be limited to the following:

- A through review of the adequacy and robustness of key Space Shuttle systems, such as the insulation approach currently in use on the External Tank;
- Operational concepts for on-orbit inspection and repair of TPS;
- A review of policies containing photographic and radar coverage policies of critical flight phases;
- A review of Failure Modes and Effects Analyses, Critical Items Lists, Waivers, Hazards, and their baselining and associated controls; and
- The process for identification and resolution of in-flight safety of flight issues, including the appropriate level of management visibility and decision in that process.

I am asking you to initiate these Return to Flight activities as soon as possible, establish this team, and provide a preliminary action plan no later than 1 April 2003. You will be responsible for providing the team charter and day-to-day direction.

To provide guidance and oversight of this activity, I am also establishing the Space Flight Leadership Council, consisting of yourself, the Office of Space Flight Center Directors, and the Associate Administrator of Safety and Mission Assurance. During the Return to Flight process, I have asked Dr. Michael Greenfield, Associate Deputy Administrator for Technical Programs, to serve as co-chair with me.

Much needs to be done as we move forward to fly again. I anticipate that our processes will be strengthened and that the safety of flight enhanced as we return to flight.



William F. Readdy

cc:

AD/Mr. Gregory

AA/Mr. Stadd

ADI/Mr. Jennings

ADT/Dr. Greenfield

AE/Mr. Bradley

AG/Mr. Cignaer

AM/Dr. Williams

AO/Mr. Strassman (Acting)

AS/Dr. Lucid

B/Mr. Isakowitz

C/Mr. Frelk

E/Dr. Hayden-Watkins

F/Ms. Novak

G/Mr. Pastorek

H/Mr. Luedtke

I/Mr. Schumacher

J/Mr. Sutton

K/Mr. Thomas

L/Mr. Horner

N/Dr. Loston

P/Mr. Mahone

Q/Mr. O'Connor

R/Dr. Creedon

S/Dr. Weiler

U/Ms. Kicza

W/Mr. Cobb

X/Mr. Saleba

Y/Dr. Asrar

JSC/AA/General Howell  
MA/Mr. Dittmore  
OA/Mr. Gerstenmaier  
KSC/AA/Mr. Bridges  
MSFC/BA01/Mr. Stephenson  
SSC/AA00/Mr. Parsons

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