

National Aeronautics and Space Administration

International Space Station Advisory Committee

**December 4, 2008
NASA Headquarters
Washington, DC**

OPEN MEETING REPORT




J. Donald Miller
Executive Secretary


Thomas P. Stafford
Chairman

NASA INTERNATIONAL SPACE STATION ADVISORY COMMITTEE

December 4, 2008
NASA Headquarters
Washington, DC

TABLE OF CONTENTS

Meeting Report:		Page 1-2
Attachment A:	Advisory Committee Membership	Page 3
Attachment B:	Meeting Attendees	Page 4

NASA INTERNATIONAL SPACE STATION ADVISORY COMMITTEE

December 4, 2008
NASA Headquarters
Washington, DC

MEETING REPORT

Dr. J. Donald Miller, Executive Secretary of the NASA International Space Station (ISS) Advisory Committee (AC), welcomed the participants and called roll. Dr. Miller introduced Lt. Gen. Thomas P. Stafford, USAF (Ret.), Chairman of the Advisory Committee, who then gave the following remarks:

Good afternoon and thank you for participating in this open meeting of the NASA International Space Station Advisory Committee. To review the areas that were covered in this assessment, I'm going to refer to the findings from the Committee's recent fact-finding trip to Johnson Space Center where we met with the Russian Advisory Expert Council to review the ongoing preparations to train crews and prepare the ISS for manning of a six-person crew scheduled to begin in May 2009.

At the direction of NASA and Roscosmos management, outlined in letters of February 14, 2008, and March 12, 2008, the NASA International Space Station Advisory Committee – Roscosmos Advisory Expert Council Joint Commission met at the NASA Johnson Space Center in Houston, Texas, October 14-17, 2008, to continue the evaluation of six-person crew on the ISS with specific focus on the challenge to the ISS program in preparing for six-crew operations currently targeted for May 2009. The Joint Commission initiated this evaluation at its previous meeting in Korolev, Russia, May 13-15, 2008.

The meeting opened with a comprehensive ISS Program Overview by the ISS Program Manager which discussed challenges, accomplishments, tactical goals, and strategic goals.

The Commission received detailed briefings by technical experts on the root causes of Soyuz-TMA ballistic entries and on the measures taken to preclude reoccurrence. Having discussed the information available to date, the Joint Commission concurred with the measures taken and the program management decision to accept Soyuz TMA-13 for launch and ISS operations, as well as Soyuz TMA-12 to complete its mission and return increment 17 crew on October 24, 2008.

Concern was raised at the Joint Commission's meeting in May 2008 over ISS operations schedule risk due to the lack of approval by all parties for several key documents which determine the necessary International Partners coordination for ISS six-person crew operations. Little progress had been made since that meeting. The current ISS assembly sequence referenced in Multi-Increment Manifest, Rev. J, shows that the six-person crew capability starts in May 2009, which is only six months from now. These fundamental documents, therefore, must be agreed upon soon in order to protect timely completion of all the technical and logistical work needed for the new stage of ISS operations. The Joint Commission is also concerned that this situation exists in other areas affecting six-person crews and believes the impacts across the program can only be fully determined when fundamental strategies are made final. The recent

meetings in Houston have led to significant progress in six-person crew documentation. The concerns raised by the Joint Commission are being addressed, and have come a long way toward being resolved.

The Joint Commission received a briefing by the Micrometeoroid/Orbital Debris (MMOD) experts at JSC. Based on this briefing and the ensuing discussion on MMOD shielding, the Joint Commission believes it would be worthwhile to conduct a damage survey of the ISS exterior to improve the confidence in modeling and analytical assessments. The Joint Commission also believes that the ISS Program should continue all reasonable efforts to increase the confidence in all analytical models, as well as continue to reduce the risk of penetration to the most vulnerable elements.

The Joint Commission recognized and commended the ISS Program and the International Partners for the enormous efforts and accomplishments in the extremely complex and difficult task of assembling, operating, and preparing the ISS for an international crew of six.

The Joint Commission agreed to meet again in Moscow to continue its review of the above issues. In preparation for that meeting, the Joint Commission will request additional information on the above mentioned topics from the appropriate Program points of contact, as well as any other issues that may arise in the interim.

That concludes the current report and summarizes the highlights of the work accomplished by the Working Group during the recent meetings in Houston.

Given this report, do any Advisory Committee members have any questions? Let the record show, there were no questions.

Are there any objections to the report? Let the record show there no objections to the report.

Fine, then based on our fact-finding meetings, the full Advisory Committee and Joint Commission concur with the assessment outlined here today.

General Stafford expressed his appreciation for the Committee's expertise and asked Dr. Miller, the Committee's Executive Secretary, to conclude the meeting.

Dr. Miller added his gratitude for the Committee's work on the assessment and adjourned the meeting at 2:15 p.m.

NASA INTERNATIONAL SPACE STATION ADVISORY COMMITTEE

December 4, 2008
NASA Headquarters
Washington, DC

Attachment A

ADVISORY COMMITTEE MEMBERSHIP

Chairman

Lt. Gen. Thomas Stafford, USAF (Ret.)

Members

Col. James Adamson, U.S. Army (Ret.)
Mr. Percy Baynes
Mr. Joseph Cuzzupoli
Dr. Charles Daniel
Dr. Michael Duncan
Dr. Daniel Heimerdinger
Maj. Gen. Ralph Jacobson, USAF (Ret.)
Mr. Jim Lloyd
Capt. Michael Lopez-Alegria, USN
Dr. Ronald Merrell

Technical Advisors

Maj. Gen. Joe Engle, USAF (Ret.)
Maj. Bob Maiberger, U.S. Army (Ret.)

Executive Secretary

Dr. J. Donald Miller

Asst. Executive Secretary

Ms. Holly Stevens

NASA INTERNATIONAL SPACE STATION ADVISORY COMMITTEE

December 4, 2008
NASA Headquarters
Washington, DC

Attachment B

MEETING ATTENDEES

Members

Mr. Percy Baynes – via teleconference
Mr. Joe Cuzzupoli – via teleconference
Dr. Michael Duncan – via teleconference
Dr. Daniel Heimerdinger – via teleconference
Mr. Jim Lloyd
Dr. Ronald Merrell – via teleconference
Lt. Gen. Thomas P. Stafford – via teleconference

Technical Advisors

Maj. Gen. Joe Engle – via teleconference
Maj. Bob Maiberger – via teleconference

Executive Secretary

Dr. J. Donald Miller

Asst. Executive Secretary

Ms. Holly Stevens – via teleconference

NASA

Mr. Michael Braukus, Office of Public Affairs, NASA Headquarters

Others

Mr. Allen Li, United States House of Representatives Science and Technology Committee,
Space and Aeronautics Subcommittee
Ms. Pam Whitney, United States House of Representatives Science and Technology Committee,
Space and Aeronautics Subcommittee
Professor Ernst Wilson, Assistant Professor, Aviation Technology/Space Science Coordinator,
Elizabeth City State University