

Aerospace Medical Association



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Executive Director
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Russell B. Rayman, M.D., M.P.H.
Association Home Office

February 01, 2006

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Re: Docket Number: FAA-2005-23449;
Notice Number – 05-17

TO WHOM IT MAY CONCERN:

The Aerospace Medical Association (AsMA) respectfully submits to you our response to the above Docket entitled Human Space Flight Requirements for Crew and Space Flight Participants. With the coming of commercial space flight, we applaud the foresight of the Federal Aviation Administration (FAA) in publishing this NPRM. As practitioners of aerospace medicine, we are particularly pleased by the Administration's attention to physical examination requirements not only for crew members, but also for space flight participants (space tourists). Furthermore, we support the Administration's position calling for performance standards tailored to the stresses (for example acceleration) imposed by the space vehicle and agree that across the board standards would be undesirable. We also support the Administration's recommendations regarding environmental controls, life support systems, and human factors related applications.

Nevertheless, we are extremely concerned that the NPRM is ambiguous regarding orbital and suborbital flights. It is essential that a clear distinction be made because the flight profiles and stresses of flight are very different. In many parts of the narrative, it was difficult to ascertain whether a recommendation applied to either a suborbital or orbital flight. Consequently, the NPRM must be explicitly clear in its recommendations in this regards.

As written, the NPRM calls for a Class II FAA Medical Certificate for the crew members. Although this might be acceptable for suborbital flights of several hours duration, we feel strongly that more stringent physical standards should be applied to orbital missions that could last days, weeks, or even months. As the NPRM is written, it would be acceptable to have only one crew member without an age limit. This makes it all the more compelling to require reasonably stringent physical standards beyond those of a Class II Medical Certificate.

It is not our intent at this time to recommend specific medical standards but only suggest that the examination require a physician encounter (one with aerospace medicine training) as well as

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appropriate screening tests consistent with prudent aeromedical practise and recommendations of the U.S. Preventive Services Task Force.

Regarding the physical examination for passengers or space flight participants, we believe that a traditional medical examination is not necessary. Rather, the space flight participant should complete a standard health assessment form in consultation with a physician trained in aerospace medicine. Should there be pertinent findings or a relevant past medical history, the physician should then complete a medical examination and order appropriate diagnostic tests at his/her discretion. Once a diagnosis is made, recommendation for flight clearance should be made by the examining physician to the company sponsoring the flight leaving the decision for qualification or disqualification to that company. Certainly informed consent and a full explanation of the flight profile with emphasis upon the stresses of flight should be made known to the space flight participant.

Thank you for the opportunity to comment on this NPRM. The Aerospace Medical Association stands ready to assist in any way and would be very willing to participate in further forums regarding commercial space flight.

Sincerely,

A handwritten signature in black ink that reads "Russell B. Rayman, M.D." in a cursive script.

Russell B. Rayman, M.D.
Executive Director