## National Aeronautics and Space Administration

## Headquarters

Washington, D.C. 20546-0001



Reply to Attn of: M October 20, 2000

TO: W/Inspector General

FROM: M/Associate Administrator for Space Flight

SUBJECT: Assessment of the Crew Medical Transport (CMT) Barter

Arrangement, G-00-015

The Office of Space Flight has reviewed the recommendations related to the subject CMT barter arrangement. Our responses to the recommendations are enclosed. Thank you for the opportunity to respond. If you wish to discuss further, please call Mr. John Watts at (202) 358-0101.

## Original signed by:

Joseph H. Rothenberg

CC:

A/Mr. Goldin

Al/Dr. Mulville

I/Mr. Schumacher

J/Mr. Sutton

JM/Mr. Robbins

M-1/Mr. Readdy

M-4/Mr. Hawes

MI/Mr. Watts

MX/Ms. Gabourel

W/Mr. Mellerio

JSC/AA/Mr. Abbey

JSC/BA/Ms. Ritterhouse

## OFFICE OF SPACE FLIGHT (OSF) RESPONSE TO THE OIG ASSESSMENT OF THE CREW MEDICAL TRANSPORT BARTAR ARRANGEMENT, G-00-015

**Recommendation 1:** NASA should conduct an independent analysis of the most appropriate approach to providing its astronauts emergency and post-mission medical support. In this analysis, the use of a dedicated aircraft available 24x7 should only be considered one possible approach and not a requirement.

<u>OSF Response</u>: <u>Non-concur</u>. Under the ISS international agreements, NASA has the lead responsibility for International Space Station (ISS) crew health and safety. NASA is similarly responsible for providing a crew rescue capability for a minimum of 4 crew. This emergency crew recovery capability is essential to the health and safety of the ISS crew in the event of a launch abort or emergency landing.

In the event of an emergency de-orbit, the crew will likely be in a de-conditioned state due to the effects of an extended stay in the ISS' microgravity environment. NASA's crew health and crew safety experts have carefully studied the operations scenarios and concluded that this emergency recovery capability is a requirement for the ISS crews. These results were presented to the ISS Program Requirements Control Board, which concurred. Following this process, independent experts reviewed the findings and concurred with NASA's conclusions. The mission demands that for the next 15 years, we be able to respond with a properly outfitted aircraft within 24 hours to anywhere in the world and the only way to provide that support is to have a dedicated aircraft.

**Recommendation 2:** NASA should consider alternatives to the proposed barter arrangement to procure a crew medical transport, including cost sharing from International Partners.

<u>OSF Response</u>: <u>Concur.</u> NASA did, in fact, consider alternatives to the barter arrangement, such as the direct procurement of the aircraft with appropriated funds instead of trading away a right received under an existing international agreement with NASDA. However, the barter approach was deemed by the ISS Program to be the best use of the NASA H-IIA asset obtained in the MOU and the most expeditious means of obtaining the capability.

NASA is obligated to provide the US Crew Return Vehicle and is responsible for rescuing a minimum of 4 crew. This rescue capability includes not just the rescue vehicle itself, but the retrieval of the crew. NASA received a share of the other ISS partners' labs in return for providing this rescue capability, which is ISS infrastructure. However, NASA may deem it appropriate in the future to raise CMT cost sharing with the ISS partners in the context of common system operations cost obligations under the ISS Memoranda of Understanding.