2011 AGENDA

Topic: Aeromedical Lessons Learned from the Space Shuttle Columbia Accident Investigation – Update 2011

Panel: Aeromedical Lessons Learned from the Space Shuttle Columbia Accident Investigation – Update 2011

Draft Panel Abstract

Title: Introduction of the Space Shuttle Columbia Accident, Investigation Details, Findings and Crew Survival Investigation Report

Author: Michael Chandler, michael.r.chandler@nasa.gov, Johnson Space Center, Medical Operations, Mail Code SD2, Houston TX 77058

Introduction: As the Space Shuttle Program comes to an end, it is important that the lessons learned from the Columbia accident be captured and understood by those who will be developing future aerospace programs and supporting current programs. Aeromedical lessons learned from the Accident were presented at AsMA in 2005. This Panel will update that information, closeout the lessons learned, provide additional information on the accident and provide suggestions for the future. To set the stage, an overview of the accident is required. The Space Shuttle Columbia was returning to Earth with a crew of seven astronauts on 1Feb, 2003. It disintegrated along a track extending from California to Louisiana and observers along part of the track filmed the breakup of Columbia. Debris was recovered from Littlefield, Texas to Fort Polk, Louisiana, along a 567 statute mile track; the largest ever recorded debris field. The Columbia Accident Investigation Board (CAIB) concluded its investigation in August 2003, and released their findings in a report published in February 2004.

NASA recognized the importance of capturing the lessons learned from the loss of Columbia and her crew and the Space Shuttle Program managers commissioned the Spacecraft Crew Survival Integrated Investigation Team (SCSIIT) to accomplish this. Their task was to perform a comprehensive analysis of the accident, focusing on factors and events affecting crew survival, and to develop recommendations for improving crew survival, including the design features, equipment, training and procedures intended to protect the crew. NASA released the Columbia Crew Survival Investigation Report in December 2008.

Key personnel have been assembled to give you an overview of the Space Shuttle Columbia accident, the medical response, the medico-legal issues, the SCSIIT findings and recommendations and future NASA flight surgeon spacecraft accident response training.

Educational Objectives:
Set the stage for the Panel to address the investigation, medico-legal issues, the Spacecraft Crew Survival Integrated Investigation Team report and training for accident response.