

Loss of Signal, Aeromedical Lessons Learned from the STS-107 Columbia Space Shuttle Mishap

Loss of Signal, a NASA publication to be available in May 2014 presents the aeromedical lessons learned from the Columbia accident that will enhance crew safety and survival on human space flight missions. These lessons were presented to limited audiences at three separate Aerospace Medical Association (AsMA) conferences: in 2004 in Anchorage, Alaska, on the causes of the accident; in 2005 in Kansas City, Missouri, on the response, recovery, and identification aspects of the investigation; and in 2011, again in Anchorage, Alaska, on future implications for human space flight. As we embark on the development of new spacefaring vehicles through both government and commercial efforts, the NASA Johnson Space Center Human Health and Performance Directorate is continuing to make this information available to a wider audience engaged in the design and development of future space vehicles. *Loss of Signal* summarizes and consolidates the aeromedical impacts of the Columbia mishap process—the response, recovery, identification, investigative studies, medical and legal forensic analysis, and future preparation that are needed to respond to spacecraft mishaps. The goal of this book is to provide an account of the aeromedical aspects of the Columbia accident and the investigation that followed, and to encourage aerospace medical specialists to continue to capture information, learn from it, and improve procedures and spacecraft designs for the safety of future crews. This poster presents an outline of *Loss of Signal* contents and highlights from each of five sections – the mission and mishap, the response, the investigation, the analysis and the future.