

IAF SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)  
Commercial Spaceflight Safety and Emerging Issues (1)

Author: Dr. Shawna Pandya

International Institute for astronautical Sciences (IIAS), Canada, shawnapandya@gmail.com

SPACE SAFETY AND RESCUE IN HUMAN SPACEFLIGHT: WHERE ARE THE GAPS?

**Abstract**

The rise of human spaceflight amongst governmental space agencies and commercial entities means that more humans are traveling to space via suborbital and orbital flight than at any other time in history. In addition, multiple commercial entities have announced plans to launch commercial space stations this decade. Despite this, there are no current frameworks for emergency rescue operations for crew or spacecraft in distress. This current presentation will cover the history of spaceflight rescue and emergency retrieval operations, historical and current regulatory frameworks addressing the same, and existing proposed solutions for astronaut rescue. The presentation will conclude by addressing existing gaps within the international space safety and rescue framework in the context of human spaceflight, and propose a path towards building an international, interdisciplinary, collaborative framework going forward.