

HUMAN SPACEFLIGHT SYMPOSIUM (B3) Commercial Human Spaceflight Programs (2)

Author: Ms. Margaret Roberts
National Aeronautics and Space Administration (NASA), United States

Ms. Sumara Thompson-King
National Aeronautics and Space Administration (NASA), United States

LEGAL CONSIDERATIONS FOR FLYING ASTRONAUTS ON COMMERCIAL SPACE VEHICLES

Abstract

Space flight and exploration are part of the fabric of America. Undertaken initially only by governments, the commercial industry has been able to operate very effective space flight and exploration programs for U.S. Government customers. The Commercial Space Launch Act (CSLA), which became law in 1984, supported the development of a commercial space sector by establishing one Agency, the Department of Transportation, with federal oversight of commercial space launch activities. In 1995, this authority was delegated to the Federal Aviation Administration (FAA).

Since 1984, the CSLA has evolved with the maturation of the industry, which is operating in ways unforeseen at that time. In 1988, Congress expanded the authority to cover reentry vehicles, and added risk mitigation measures aimed, in part, at protecting the emerging industry. In 2004, Congress established a framework for limited regulation of humans on commercial space vehicles – crew and space tourists (identified as Space Flight Participants in the CSLA). During that time, NASA would continue to operate its own space program, flying astronauts on the Space Shuttle for several more years, until July 2011.

Most recently, in December 2015, at the request of the President, Congress added provisions to the CSLA addressing astronauts on commercial vehicles. This requirement is timely because, while not contemplated during passage of the CSLA legislation, NASA plans to utilize commercial vehicles to fly NASA and International Partner astronauts (Government astronauts) to the International Space Station (ISS). These flights are being implemented under NASA's Commercial Crew Program. The new CSLA provisions were required because of constraints in the CSLA and FAA regulations created specifically as a result of NASA's planned flight of Government astronauts on commercial vehicles. Under the CSLA, Government astronauts would have been required to fly as Space Flight Participants. This paper will provide an explanation of how these constraints were ameliorated through the cooperative efforts of NASA and FAA, and the assistance of the Congress. Particularly noteworthy is the recent enactment of the U.S. Commercial Space Launch Competitiveness Act, which created a separate category of persons on FAA licensed flights, Government astronauts, in addition to crew and Space Flight Participants. The author hopes the lessons learned may provide useful insight for the increasing number of international communities that are participating in human space flight programs.