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Insuring Quality and Safety in a Cost Constrained Environment: Which Trade-Off? (1)

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INFORMED CONSENT IN COMMERCIAL SPACE TRANSPORTATION SAFETY

Abstract

In 2004, the U.S. Congress passed the Commercial Space Launch Amendments Act (CSLAA), which gave the U.S. Federal Aviation Administration (FAA) clear authority to regulate commercial human space flight. The new law did not allow the FAA to regulate the safety of those people onboard the space vehicles, as is done today in the aviation industry. Instead, the law contained an important provision that required only the informed consent of the onboard crew and passengers. Essentially, occupants must agree in writing that the U.S. Government has not certified the space launch or reentry vehicle and that they would fly on the vehicle at their own risk. The Congress stated that “the regulatory standards governing human space flight must evolve as the industry matures so that regulations neither stifle technology development nor expose crew or space flight participants to avoidable risks as the public comes to expect greater safety for crew and space flight participants from the industry.”

The FAA issued regulations to carry out the CSLAA in 2006. The FAA regulations require the space launch operator to inform the space flight participants and the crew in writing about hazards and risks associated with the space flight. The regulations also require the operator to inform space flight participants and crew about the historical safety record of all U.S. launch or reentry vehicles that have carried people onboard. There are additional regulations for crew qualification and training, a waiver of claims against the U.S. Government, and training of space flight participants. The level of detail in the information that the operator must provide participants and crew in order to satisfy these regulations has not yet been tested.

This paper will examine the roles and responsibilities of the FAA and the commercial space transportation industry for meeting U.S. law and regulations about informed consent. For countries interested in adopting U.S. commercial space transportation law and regulations, or in attracting U.S. launch operators to their spaceports that will be FAA-licensed, the informed consent regime is an important factor in understanding the risk to government regulators, operators, and occupants of commercial space transportation vehicles.