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INDUSTRY STANDARDS FOR COMMERCIAL SPACE TRANSPORTATION

**Abstract**

The U.S. Federal Aviation Administration's Office of Commercial Space Transportation regulates U.S. commercial space transportation, including launch and reentry vehicle operations and U.S. commercial launch and reentry site operations. This regulatory oversight, coupled with a strong commitment toward public safety by U.S. companies conducting these operations, has resulted in an exemplary safety record, with no fatalities, injuries, or significant property damage suffered by third parties since the inception of the U.S. Commercial Space Launch Act. This legislation was passed by the U.S. Congress in 1984 and marked the beginning of the commercial space transportation era in the U.S., with the FAA being entrusted with the authority to ensure public safety during these operations.

The commercial space transportation industry is becoming more operationally diverse and innovative in serving a broader array of highly competitive global markets, which include suborbital and orbital space tourism, and scientific exploration. As the industry continues its evolution, it is imperative that a commitment to public safety be continuously upheld, while simultaneously enabling the commercial space transportation industry to meet market demands in a competitive, cost effective manner. The FAA Office of Commercial Space Transportation continues to actively address this challenge and in so doing has begun to investigate the role voluntary consensus standards have in meeting industry's increasing needs to gain and maintain market access, trim costs, and conduct safe operations. Today, in the U.S., there are few widely distributed standards for commercial space transportation operations that have been developed and are in use; the current status can in part be attributed to perceptions of associated, unnecessary regulatory burdens that might befall the industry. However, in recent months a more positive tone has been struck, as more U.S. stakeholders have expressed a desire to begin an earnest examination of the industry's standards development needs.

This paper will examine the prospects and benefits of industry-developed standards and practices in the United States for commercial space transportation, and the potential for international impact.