

SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)
Commercial Space Flight Safety and Emerging Issues (1)

Author: Dr. George Nield

Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

Mr. John Sloan

Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

Mr. Michael Wiktowy

Federal Aviation Administration Office of Commercial Space Transportation (FAA/AST), United States

EXPECTATIONS FOR COUNTRIES HOSTING FAA-LICENSED COMMERCIAL LAUNCHES

Abstract

Several nations are developing regulatory frameworks for commercial space transportation vehicles and spaceports. For vehicles operated by companies from the United States in non-U.S. locations, the U.S. Federal Aviation Administration (FAA) has authority to license launches and reentries. The FAA Office of Commercial Space Transportation has licensed over 250 launches. The FAA has some flexibility in working with other countries as well as limitations on the level of insight into non-U.S. activity. As a result, the scope of regulations for U.S. domestic launches and reentries differs slightly for non-U.S. launches and reentries.

While individual license cases vary and each country with existing or new regulatory frameworks will have different national laws and safety rules, there are some general FAA areas that countries may consider when hosting U.S. vehicles.

One such area is ground safety. Under FAA regulations, launch processing and post-launch operations for launch points outside the U.S. may be subject to the requirements of the governing jurisdiction (i.e., the host country). However, there are certain pre-flight activities to protect the public that the FAA requires.

Another area is the launch site. Unless the launch site operator is a U.S. person (or the site is operated by the U.S. launch operator as a sole-user site), the FAA would not license the launch site operation. Under an FAA license, the launch site operator would be responsible for control of public access, explosive siting, lightning protection, and other items.

In addition, there may be other areas where the host country can satisfy FAA regulations, such as adoption of existing environmental reviews. As part of FAA regulations, air traffic agreements are required between the launch operator and the local civil aviation authority.

This paper will describe differences in how the FAA regulates a launch outside the United States compared to inside the United States. The paper will also offer suggestions on other areas to consider. The purpose of the paper is to provide governments and companies a greater understanding of regulatory responsibilities a host country may want to consider in order to accommodate a U.S. launch or reentry.