

BUSINESS INNOVATION SYMPOSIUM (E6)
New Space Industry Applications (3)

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COLLABORATIVE INTERNATIONAL SPACEPORT DEVELOPMENTS

Abstract

In the last ten years the vast majority of new suborbital reusable launch vehicle development programs have been based in the US. The drivers for these programs were first the funding of the 10millionAnsariXPrizein2001andla

Keeping pace with these vehicle development programs, about a dozen states began initial development efforts for creating suborbital spaceports to host the new vehicle operations. Between 2004 and 2009 five new spaceports in Virginia, California, Oklahoma, New Mexico and Florida completed the FAA/AST licensing process to be able to host some or all of the differing suborbital vehicle operators. The spaceports in Oklahoma and Florida chose to limit operations to horizontal takeoff and landing systems while Virginia, California and New Mexico can accommodate both horizontal and vertical systems. Additional spaceport sites in Hawaii, Texas, and Montana are also now in the early planning stages. In almost every case, these spaceports are being developed using a public-private partnership business model where the spaceport is a public sector lead and the vehicles are developed and operated by the private sector

In the last few years interest has been growing internationally in development of suborbital spaceport projects following the US business model. Suborbital spaceport have now been proposed in Hokkaido and Ibaraki prefectures in Japan, Singapore, Korea, Curacao, UAE, Spain, Sweden, and The Netherlands. These locations would bring in vehicles developed in the US and operate under the US space launch licensing regulatory system under FAA/AST, with the concurrence of the host country. Due to US restrictions on the export of space technology under ITAR, the operations model is to retain US physical and operational control by a majority US owned joint venture company under what is called a “wet lease” business model.

This paper will discuss the latest developments in international spaceport collaboration and the investment and regulatory challenges and the new market opportunities inherent in US vehicle operations from foreign locations.