

SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)

Enabling safe commercial spaceflight: vehicles and spaceports (3)

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NEXT STEPS FOR THE SPACEPORT IN JAPAN - AFTER THE NEW SPACE ACTIVITIES LAW IN JAPAN

Abstract

Now is the age of commercial space big bang. In this commercial space innovation with agile ways, spaceports where they support commercial space activities also should have innovation. Smallsat constellation businesses have been announced one after another. Ride share launch have been accomplished with record number of satellites deployed, on the other hand dedicated small launchers have developed according to users' requirements. Responsiveness and reusable capability also should be included as a spaceport capability as well. Spaceports have adjusted for not only vertical but also horizontal and air launch including brand new suborbital vehicles. Meanwhile, ISS cargo logistics traffic has been increased. Commercial crew expects operation within a few years. Even it has been already active that ISS transition, post ISS developments such as cis-lunar commercial projects and even Mars spaceflight. New spaceports are also expected in Japan according to this increase in space utilization activities.

In Japan, the new space activities law has been passed in November 2016, which enables private companies to launch commercial rockets in Japan. It is expected to open the door for commercial space activities and create and broaden the space market. Spaceports are inevitable to support these activities. The Japanese government has been researching policies to have additional spaceports in Japan along with the space activities plan for a few years. It has a plan to call for announcement to have spaceport proposals in 2017.

There are several places to invite spaceports including Okinawa, Ibaraki, and Shizuoka in Japan. Taiki, Hokkaido is the most leading place for the spaceport. Taiki started spaceport activities in 1986 and restarted in 2002 by HASTIC, the Hokkaido Aerospace Science and Technology Incubation Center. Hokkaido Space Committee was established in 2014 to drive their activities with local government, organizations and companies. Also, a local only steering committee was established in 2015 as well. Hokkaido Spaceport aims to be established based on existing flight test facilities with proposed funding of \$100M until 2022. Hokkaido is currently a tourism hub and the food valley for Japan and so on. There are lots of related infrastructure and resources already. Hokkaido Spaceport expects to attract users from the wider Asian market as well. This paper will introduce the current status of the Hokkaido Spaceport and the Japanese regulatory system and discuss plans for future development.