SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6) Enabling safe commercial spaceflight: vehicles and spaceports (3)

Author: Ms. Misuzu Onuki Space Frontier Foundation, Japan

THE RECENT STATUS OF SPACEPORTS AS THE ANCHOR FOR SPACE ACTIVITIES IN JAPAN

Abstract

The important roles of spaceports as the anchor for space activities have rapidly increased in recent years, driven by advancing space utilization and expanding space industries such as space transportation, space tourism, small sat launch and utilization, and microgravity experiments. Spaceports are a gateway to space, a foundation for space activities to broaden the market, and ultimately are nodes for future point to point transportation via space. More new commercial spaceports will be approved in the US in addition to the existing nine FAA-AST licensed facilities. Also, there are several spaceport plans and concepts around the world. Particularly, the UK has announced eight candidate spaceports in 2014 to be down-selected later this year, and this selection process is becoming highly competitive. There appears to be a developing global "Land Rush" to create commercial spaceports. Japan has been very active in spaceport development, beginning with activities that started in Hokkaido in 1986. HASTIC, Hokkaido Aerospace Science and Technology Incubation Center, has conducted studies and business development aiming at creating Spaceport Hokkaido since 2002. The Hokkaido Spaceport Committee was established, which members include Hokkaido governmental organizations, companies including banks and a senator as advisor in 2014. SpaceLand, which has a spaceport concept at the middle of the main island about an hour northeast of Tokyo, has tried to start with space business such as space technology spin offs, airships, and so on to encourage more space and related business creation as a user base. Okinawa had solicited business applications to use the airport which had been used as testing and training facility by commercial airlines and closed the RFP with ten applications at the end of 2014. Okinawa didn't choose to pursue a spaceport project but instead a luxurious resort development project. However, private jet, pilot training, and multi-copter have been also selected so that there seems to be potential for a spaceport use in the future. Some of other places in Japan based on existing airports also have spaceport concepts. The government issued the new Space Basic Plan in January, 2015. New places for realizing these commercial space activities including new launch pads for small sat and observation rockets, runway suborbital space transportation, UAV, high altitude balloons, airships and RD airplanes not only for space utilization but also homeland security. This paper will review current spaceport development activities in Japan and future plans to compete in the global spaceports marketplace.