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

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COMMERCIAL SPACEPORTS AND VEHICLE DEVELOPMENT STATUS IN JAPAN

Abstract

Japan is the third country of number of VC investment in space venture companies after US and China according to the Spart-up Space by Bryce Space and Technology. There are around one hundred space venture companies in Japan and a pretty good number of them have gotten VC funding. Corporate venture capital, CVC is one of the most characteristic traits in commercial space in Japan. Space development is now a burgeoning commercial growth industry. In addition to space venture companies, non-space companies, SMEs, experts, investors have also gotten into the space business. Furthermore, traditional space companies and local aerospace clusters have been active. All these factors have created and broadened a borderless industry blast off for space commerce.

Two new space laws had been passed in 2016 and have been implemented in 2018. The Space Industry Vision 2030 was issued in 2017 to expand the space the industry from the current 12Bto25B by 2030. The amendment of the Basic Plan for Space Policy for the next 5 years targeting the next 10 years was issued in June, 2020, which strongly advances commercial space including spaceports.

There are six rocket venture companies in Japan including two manned suborbital spaceplanes, and there are several spaceport activities. Spaceport Kii, in Wakayama prefecture, has been the first commercial spaceport since 2019 as a private spaceport for Space One which will launch what is called Canon rockets, a dedicated smallsat launcher starting in 2021. Oita spaceport decided to invite Virgin Orbit partnered with ANA to launch smallsats by the LauncherOne. PD Aerospace announced the operating agreement with Okinawa spaceport in 2021. Hokkaido spaceport is the anchor for Interstellar and Spacewalker. The Spaceport Japan organization is a trade association which was established in 2018. The commercial human suborbital space transportation committee was the first opportunity to discuss the law and policy for suborbital human space flight. It was established in 2019 and has started the government committee to make a proposal to begin the law making process.

Japan has a big potential to become the center of gravity in Asia and ultimately in the emerging global P2P market both unmanned and human space flight. This paper will update the status of spaceports and launch vehicles in Japan.