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

Author: Dr. HAZARIAH MOHD NOH Malaysia

Mrs. HASLINAWATI BESAR SA'AID Universiti Kuala Lumpur(UniKL), Malaysia Ms. Puteri Nur Syaza Wardiah Raja Zainol Universiti Kuala Lumpur(UniKL), Malaysia Mr. MUHAMED ROIHAN YUSOFF Universiti Kuala Lumpur(UniKL), Malaysia

MALAYSIA AS ASEAN FIRST SPACEPORT: THE PRINCIPLE OF ITS URGENCY

Abstract

This paper presents the viable location of Malaysia as a potential for a new ASEAN Spaceport. Malaysia's is part of Southeast Asia consists of 11 countries bordered with Thailand, Singapore, Indonesia and Brunei. With the Equatorial line with the Latitude 1 and 7 North and Longitudes 100 and 119, the side of the Earth is traveling faster and giving the rocket to launch 500km/hr faster once it has launched. This paper focuses on understanding the principle of its urgencies for demand and needs for Malaysia pursuing in new space economy. The recently approved space bills are the key indicator in showing Malaysia's stand in embarking more strategically position in space activities related. The policy gives aspiration and confidence to all current and future space players. With the astronaut program, satellite and communication, education about astronautics and astronomy are leading the space related activities in proposing the new angle and approach in making the platform and facilities for the Space launch and others like 'spaceport' leading Malaysia to be the first such facilities in the region. Malaysia has a better viable location, close to equator lines, and is the most suitable and strategic location for a spaceport, but why has Malaysia yet to have its own? The methodology includes exploratory of the communication and digitalization transformation through IoT, 5G, which creates more demand for satellite connectivity. With the suitable business model, Malaysia Spaceport can offer solutions to the faster payload sent off to orbit. More recently, this has become a huge problem that creates a long waiting time for the satellites to Space. To cater for the more launch areas with short waiting time is needed. Addressing this problem gives more private entities to launch their satellite for connectivity and to include more benefit to the targeted rural areas or even to earth observation purposes. The research paper further demonstrates the empirical studies of the diverse spaceport business models in cater to the commercial Launch Programme, where it has the potential to become one of the centers for new Space Economy derivation for communities beyond the reach and around the world. The outcomes of the studies facilitate the industries driven project supported by the local government for Space Launch that can generate beyond academic, research-development and technology, manufacturing, Maintenance-Repair, Refurbish Overhaul, community benefit, and revenue.