

IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
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SPACEPORTS: GATEWAYS TO SPACEFLIGHTS OF THE FUTURE AND CASE STUDY OF
PRIVATE SPACEPORT FEASIBILITY

Abstract

One of the most important reasons why aviation boomed so much in 1930's and 1940's was the construction of new airports all across the world. This made it possible for airplanes to land in various regions all across the world as compared to landing on sea or on seaports. Furthermore, the availability of airports also enticed the development of more advanced aeronautical technologies which made it possible for new airplane types to be constructed. Advancement of spaceflight also depends on a similar learning curve as more spaceports need to be constructed across the world to make it possible to advance space flight and to advance space tourism. All of these are linked to each other and involvement of the private sector is sacrosanct for space technology and space flight. This paper is continuation of past studies and explains about the necessary logistics for creation of spaceports including the orbital mechanics involved along with ground logistical requirements. Furthermore, case studies of various locations chosen across the world are provided as examples to pave the way for future feasibility analysis of potential space ports. In addition, various challenges are also highlighted in the case study of a feasibility analysis for a potential spaceport location.