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IAF SPACE SYSTEMS SYMPOSIUM (D1)
Lessons Learned in Space Systems: Achievements, Challenges, Best Practices, Standards. (5)

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EMIRATES MARS MISSION (EMM) CONTRIBUTION TO THE SPACE SYSTEM CAPABILITY DEVELOPMENT IN THE UAE

Abstract

In 2014, the United Arab Emirates (UAE) announced the first outer-planetary Arab mission. The Emirates Mars Mission's (EMM) Hope Probe will launch in 2020 to explore the dynamics in the atmosphere of Mars. This paper will discuss how directly the mission increased the capacity of the UAE in term of Space engineering topics, Space grade manufacturing, the upgrade on our space labs facilities and facility enhancement to perform such mission in the future. Furthermore, it will highlight the increased engagements of the UAE interest in space project and the in-direct effect. The paper will also present how the UAE engineers engaged, participated and contributed to the development of a new engineering product that at space grade level with such complexity have never been done before. Moreover, it will explain how this collaboration with the Laboratory for Atmospheric and Space Physics (LASP) as a university system helped the technology and know-how of development with challenging regulations such as ITAR and export control limitation and how the development of a space mission is an international effort.