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GROUND FACILITIES AND SERVICES - THE PAST AND THE FUTURE OF MT AEROSPACE AG AT THE SPACEPORTS

Abstract

MT Aerospace (MTA) has over 40 years experiences in the field of launcher ground facilities and services. Among other activities at the European Spaceport (Guyana Space Center - CSG) it has contributed to all major launch pads from Ariane 1 to Ariane 6 as well as to the Soyuz Launch Pad. Providing services at the CSG to all major primes MTA is also actively contributing to major launch campaigns. Its strategic positioning in the CSG and in Europe on both historic and new projects confer to MTA the best prerequisite to unify a solid heritage with future development challenges to answer to the continuously growing launch demand requiring small and large ground facilities providing precise, repeatable and reliable services. This paper describes the heritage of MT Aerospace in the field of launcher ground facilities and services and the status of its most relevant developments focusing on innovative applications in various fields such as mechanical systems for new space applications and its position within the future value chain up to the delivery of the launcher to the launch pad. Further this paper will give an overview of how MTA has adapted to the diversification of future spaceport needs and in particular the infrastructure and operational concept of MTA's contribution to the de-carbonization of the CSG to secure an eco-friendly spaceport and the sustainability of future launch pads for small to heavy launchers. The paper will show the recent progress in the implementation of hydrogen competence centre (HCC) in French Guiana under the responsibility of MT Aerospace to develop specialized know-how for the maintenance and operation of these new systems and to support start-ups.