IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Small Launchers: Concepts and Operations (7)

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SMALL LAUNCHER DEVELOPMENT WITH A CORPORATE VENTURE

Abstract

Mid 2018 Rocket Factory Augsburg (RFA) was incorporated as a venture backed by OHB and MT Aerospace to build their very own launcher to put small satellites into low earth orbit. The goal was to achieve greater independence from traditional launch providers and decrease costs for satellite launches globally. However, the idea was not limited to offering an entire launch service to a worldwide customer base, but to extend OHB's footprint to a space infrastructure company.

Since then RFA established a team of 80 (forecast for October, 65 as of March) New Space veterans from 20 different nationalities having a demonstrated track record from previous small launcher projects. An own turbopump prototype was developed from scratch and has undergone first successful tests mid-2019. The upper stage tank qualification was successfully conducted end 2019 and the first stage prototype shall be completed until the IAC is going to take place. At the same time, an engine test site is being implemented in Sweden, which will host the hot-fire test of our staged combustion engine from April 2020 onwards. On top, the avionics system test readiness will be given by summer 2020 and RFA will be happy to report about the first successful hardware in the loop test results. All system developments being executed in parallel, RFA is happy to present the status of the upcoming integrated stage test after IAC.

This demonstrated traction, the unparalleled performance of staged combustion combined with low-cost manufacturing and outmost industrialization aspects, combined with the sales backlog build-up from OHB satellite launches and other international customers puts RFA at the forefront of small launcher competition. We will be happy to report on the up to date funding situation at IAC.