SYMPOSIUM ON COMMERCIAL SPACEFLIGHT SAFETY ISSUES (D6)
Commercial Space Flight Safety and Emerging Issues (1)

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BASIS OF THE SOAR PROJECT

Abstract

Swiss Space Systems (S3) – in cooperation with many partners among them particularly the French aircraft manufacturer Dassault Aviation - is shaping the future of commercial space transportation to democratize access to space with the SOAR project.

The SOAR is an unmanned suborbital space plane carried to an altitude of 10 km by a civilian transport aircraft. The SOAR will take care of the next part of the ascent up to an altitude of 80km, the height at which the upper stage will be launched in order to place the satellites into orbit. Once this operation is completed, the SOAR will return back by gliding towards its launch airport, where it will be prepared for the next launch.

This airborne launch system is dedicated to deliver small satellites into Low Earth Orbit (LEO). The SOAR space plane will be built from the best proven technologies. The main components used during the flight will be reusable and S3 intends to develop operating mode coming from aviation such as progressive development, inspection, and maintenance activities. S3 and its partners aim to build a very reliable, economical and environment friendly space transportation system.

Thanks to its innovative approach, the SOAR will be able to serve the clients with excellence at highly competitive costs.