SPACE SYSTEMS SYMPOSIUM (D1)
Space Systems Architectures (4)

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SARA SUBORBITAL PLATFORM ARCHITECTURE AND DEVELOPMENT STATUS

Abstract

SARA (Satelite de Reeentrada Atmosferica) is a reentry satellite being developed by IAE (Brazil). Sara is structured into suborbital and orbital vehicles. The present work refers to Sara Suborbital, which is a step in the development of an orbital vehicle.

Four Subsystems compose Sara Suborbital Architecture, as follows: Structural Subsystem, Electrical Subsystem, Recovery Subsystem and the Experiment Module. Those Subsystems are in a different level of development, meaning that they are passing by different project phases. However, all subsystems have completed the preliminary design phase. In other words, all Preliminary Design Reviews were accomplished. This fact indicates the beginning of C phase, thus the primordial work in progress is the definition of the final design. Both, the Recovery Subsystem and the Electrical Subsystem have accomplished the Critical Design Review, while the Structural Subsystem and the Experiment Module have just conclude the Preliminary Design Review.

This work presents the Sara Suborbital Mission and Architecture, explains the development status and concludes giving a view of the remaining work and deadlines to be accomplished.