IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Launch Vehicles in Service or in Development (1)

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DEVELOPMENT OF INTERNATIONALLY COMPETITIVE SOLID ROCKET BOOSTER FOR H3 LAUNCH VEHICLE

Abstract

The H3 launch vehicle is Japan's new flagship rocket aiming at achieving high flexibility, high reliability, and high cost performance. Its maiden flight is set for JFY2020. IHI AEROSPACE Co., Ltd. (IA) is participating in the development of the Solid Rocket Booster -3 (SRB-3) as a booster of the H3 launch vehicle, as a key technology manufacture under development contract with JAXA. The development of the SRB-3 will be completed and delivered by first half of JFY2020. The paper consists of three parts. First of all, this paper describes the main features of SRB-3, its specifications for cost reduction and high reliability by pursuing a simple configuration, such as a reduction in the number of parts/componets and simplification. Secondly, the results of the development including full-scale ground combustion and separation tests are presented. Finally, a future plan to enhance the international competitiveness being studied is presented.