

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

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POST-H-IIA/B LAUNCH VEHICLE IN JAPAN – ITS TARGET AND DEVELOPMENT PLANS

Abstract

The current status of the mission requirement and the system concept of the post-H-IIA/B launch vehicle are presented. The concept study of the next flagship launch system, or H-X, has been conducted for several years under the cooperation between Japan Aerospace Exploration Agency (JAXA) and Mitsubishi Heavy Industries, Ltd. (MHI). This year, it has entered into a new phase with the release of the new “Basic Plan for Space Policy” from the Japanese government that expressed the government’s will to start the discussion of the next generation transportation systems and begin development according to its conclusion. Because the mission requirement is divided between institutional needs and commercial market, the modular design approach is applied to the system concept in order to accommodate wide range of targets while keeping the launch activity’s cost much lower than the current vehicles. Simplified subsystems are adopted throughout the system including engines, avionics, structures and propulsion systems including ground facilities to provide reliable launch services while lowering manufacturing, operation, and maintenance cost. The status of the research efforts to realize the concept and the anticipated benefit for our customers with the current development plans are shown in this paper.