

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

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CURRENT STATUS AND FUTURE PROSPECT OF JAPANESE FLAGSHIP LAUNCH VEHICLE

Abstract

Current status and future prospect of Japanese flagship launch vehicle, i.e., H-IIA, H-IIB, and their successor to be developed, is described.

H-IIA and H-IIB launch vehicle achieved 20 consecutive successful launches with the launch of Japan's 4th ISS cargo vessel (HTV-4) on August 4th, 2013. Mitsubishi Heavy Industries, Ltd. (MHI) is the manufacturer and the launch services provider of H-IIA and H-IIB. The demonstrated reliability of the vehicles helped to receive its first commercial launch services order from Telesat last year to launch Telstar 12 Vantage satellite in 2015. Japan Aerospace Exploration Agency (JAXA) and MHI also successfully finished the H-IIA upgrade development program with the Post Qualification Review (PQR) in January, 2014. The program is to lower the delta-v of the payload from GTO to GEO and focuses on upper stage modifications to provide better services for customers. The qualified technologies are ready for flight and will also be applied to Telstar 12 Vantage mission.

In parallel with workhorse operation, in 2013, the Japanese government officially decided to develop the successor of H-IIA/H-IIB launch vehicle with its targeted inaugural launch in 2020. JAXA will start to conduct the conceptual study of next-generation launch vehicle in fiscal 2014. MHI is willing to take part in the project with our technical and business expertise.