

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

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## CURRENT STATUS OF JAPANESE FLAGSHIP LAUNCH VEHICLE, H-IIA AND H-IIB

**Abstract**

In the fiscal year of 2012, the following four satellites were successfully launched by three H-IIAs and one H-IIB. The accuracy of the orbits were resulted in satisfactory high.

1. HTV, a cargo transporter to the International Space Station
2. Japanese government satellite
3. Earth observation satellite (GCOM-W1)
4. Korean government satellite as a commercial launch (KOMPSAT-3)

H-IIA and H-IIB, Japanese flagship launch vehicle, achieved 96% success rate by the H-IIA Flight No. 22 in January, 2013. In this way, H-IIA and H-IIB are stably supporting Japanese various space activities with its high reliability.

Mitsubishi Heavy Industries (MHI) and Japan Aerospace Exploration Agency (JAXA) are conducting program of the H-IIA second stage upgrade, in order to adapt H-IIA to various mission requirements. This program will add H-IIA a long coasting flight sequence to reduce the delta-V of spacecraft to Geostationary Earth Orbit (GEO), with relatively minor design changes. This means upgraded H-IIA will keep its reliability that has been built up until now. MHI and JAXA have demonstrate plans of this new feature in following H-IIA missions, before providing this new feature to the world's commercial satellites.

This paper will provide recent launch results of H-IIA and H-IIB, and status of upgrade program of H-IIA.