SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)

Future Space Transportation Systems Verification and In-Flight Experimentation (6)

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FLIGHT DEMONSTRATION RESULTS OF H-IIA UPGRADE PROGRAM

Abstract

The H-IIA launch vehicle is currently under operation in Japan with a reliable and assured access to space as a Japanese Flagship Launch System. The H-IIA launch vehicles have matured in reliability with the total of 29 successful launches and achieved 97 percent of success rate since its test flight in 2001. The "H-IIA upgrade project" aims at improving the GTO mission capabilities and shock environmental of flight as the first step of the evolutionary approach of Japanese Flagship Launch System. An onboard navigation sensor technology for range safety has been also developed to reduce infrastructure maintenance cost. The flight demonstration of these technologies is executed in JFY2015. This paper describes the overview of the system design ,development test and flight demonstration results.