IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Future Space Transportation Systems (4)

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MEDIUM- TO LONG-TERM STRATEGY FOR THE RESEARCH FIELD OF SPACE TRANSPORTATION SYSTEM IN ISAS/JAXA

Abstract

The Space Transportation System Committee of the Institute of Space and Astronautical Science of JAXA (ISAS/JAXA) continuously draws up the Medium- to long-term strategy for the research field of space transportation system in ISAS/JAXA since FY2018. The committee is also considering about an ISAS' role in JAXA in cooperation with a JAXAs organization-wide activity to formulate strategy for the space transportation system field in JAXA. The strategy planning in ISAS/JAXA was begun with the three documents as the point of departure; "Long-term Vision for Space Transportation System" established by the space policy committee of the Cabinet Office, "ISAS' Missions", and "Strategic Scenario over the Next Medium- to Long-term Programs for the research field of Space and Astronautical Science" drawn up by the ISAS. As current achievements, the committee have drawn up a strategic target and scenario for the space transportation system research field at the end of last fiscal year and is continuously revising it. Based on the scenario formulated, the committee identified three major research field to be tackled. They are "reusable orbit transportation system" becoming the key to the activation of space development and utilization, "deep space and orbit-to-orbit transportation systems" effectively supporting deep space explorations, and "small flying test bed system" promoting the advancement of space transportation system technology. The authors introduce the summary of the medium- to long-term strategy and some medium-term research activities toward the realization of it.