

Entering into Space and New Energy and Propulsion Technology (7)
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REUSABLE LAUNCH VEHICLE-CONCEPT OF MINIMIZING SPACE TRANSPORTATION COST

Abstract

The cost for accessing space exploration and space utilization is very high since the technologies have been developing day by day. We need to minimize the cost of space exploration and space utilization. Till now we are using non reusable launch vehicle to send payloads into the space which takes more cost. This paper gives a idea to launch a Reusable Launch Vehicle (RLV) to send payloads to the space. RLV is a series of technology demonstration missions that have been considered as a first step towards realizing a Two Stage To Orbit (TSTO) fully re-usable vehicle. These technologies will be developed in phases through a series of experimental flights. The first in the series of experimental flights is the hypersonic flight experiment (HEX) followed by the landing experiment (LEX), return flight experiment (REX) and scramjet propulsion experiment (SPEX). If the mission success the cost of accessing space exploration and space utilization could be minimized.