

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Interactive Presentations (IP)

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ADVANTAGES AND PROSPECT OF MULTI-SATELLITE LAUNCHING UPPER-STAGE

Abstract

Multi-satellite launching upper-stage is a new means of transport between payload and launch vehicle. It can autonomously launch different loads to different orbit. Compared with the traditional launch vehicle, "base-stage combined with upper-stage" can directly launch the payload into the working orbit, simplified procedures of spacecraft transfer orbit. Multiple payloads in one launch can reduce the cost of launching, upper-stage can provide energy and data transmission services for the payload, so it can reduce the threshold of entering space, upper-stage can be used as space technology verification platform. The future of upper-stage will be moving towards short-term in orbit, seriation, and flexible combinations.