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SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Future Space Transportation Systems Verification and In-Flight Experimentation (6)

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CRITICAL ADVANCES AND FUTURE MISSION APPLICATIONS IN RELATIVE NAVIGATION SYSTEMS

Abstract

The Sensor Test for Orion RelNav Risk Mitigation (STORRM) relative navigation sensor suite has been developed to provide risk reduction and technology advancement for relative navigation applications. Relative Navigation applications, including Rendezvous, Proximity Operations and Docking (RPOD), as well as planetary landing, surface mobility and in space servicing, has been identified as a critical element of many of NASA's future missions, and the STORRM sensor suite has been developed to provide a highly reliable, compact, lightweight solution for human and robotic mission applications. The paper will provide progress and performance results associated with relative navigation via STORRM, as well as other RelNav development objectives and future mission applications.