AIAA Houston Section
2016 Annual Technical Symposium
JSC – Gilruth Center
May 6, 2016

Using an Integrated Distributed Test Architecture to Develop an Architecture for Mars

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The creation of a crew-rated spacecraft architecture capable of sending humans to Mars requires the development and integration of multiple vehicle systems and subsystems. Important new technologies will be identified and matured within each technical discipline to support the mission. Architecture maturity also requires coordination with mission operations elements and ground infrastructure. During early architecture formulation, many of these assets will not be co-located and will required *integrated, distributed test* to show that the technologies and systems are being developed in a coordinated way. When complete, technologies must be shown to function together to achieve mission goals. In this presentation, an architecture will be described that promotes and advances integration of disparate systems within JSC and across NASA centers.