TECHNIQUES FOR INTEGRATING GROUND AND FLIGHT TEST AND MODELING AND SIMULATION TO IMPROVE AIRCRAFT PROPULSION SYSTEM ACQUISITION

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ABSTRACT

This paper focuses on new and innovative approaches developed by the US Air Force to integrate modeling and simulation (M&S) with ground tests and flight tests throughout the propulsion system acquisition process.

The development and application of new M&S-based technologies to address advancing propulsion system technologies and complex integration requirements are presented. Best practices and lessons learned from ongoing propulsion system acquisition programs and their applicability to future projects are also discussed.