

IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)  
Technologies for Future Space Transportation Systems (5)

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## VERIFICATION AND VALIDATION ACTIVITIES FOR THE SPEAR MISSION

**Abstract**

The supersonic Parachute Experiment Aboard REXUS (SPEAR) is an experiment flown on the REXUS sounding rocket as part of the REXUS/BEXUS program. Being part of the REXUS/BEXUS program means that the design cycle of the experiment is set to be 1.5 years. To ensure the experiment has the highest chance of success an extensive verification and validation campaign was done. Wind tunnel tests, deployment tests and full sequence tests were performed. This paper provides an overview of the subsystem and system level testing that was done and the results gathered. Furthermore, a discussion is held on the success and contribution of the various verification and validation activities. Finally, the paper describes tests and test approach that are recommend for similar missions.