

258. MULTI-DISCIPLINARY ANALYSIS OF LAUNCH VEHICLE SAFETY METRICS

PROJECT AT-A-GLANCE

- **AST RDAB POC:** Murray, Dan
- **AST RESEARCH AREA:** 2.1 Vehicle Safety - Analyses
- **PRINCIPAL INVESTIGATOR:** Alonso, Juan
- **EXECUTION ENTITY:** Stanford
- **PERIOD OF PERFORMANCE:** Jan 3, 2011 - Jan 6, 2012
- **STATUS:** Ongoing

PROJECT DESCRIPTION

PURPOSE:

OBJECTIVES:

GOALS:

- Develop high-fidelity tool for the FAA.
- Assess the confidence in applicant's system reliability claims.
- Compute a probability of failure estimate for new vehicles using system reliability data provided by applicants.
- Partner with ULA, SpaceX, Orbital

STATEMENT OF WORK

- 1. Develop High-fidelity tool
- 2. Characterize safety, reliability, and performance for launch vehicles
- 3. Validate tools developed from #1 using existing launch vehicle flight data.