

220. SPACE OPERATIONAL FRAMEWORK

PROJECT AT-A-GLANCE

- **AST RDAB POC:** Rey, René
- **AST RESEARCH AREA:** 1.2 STM - Launch & Reentry Operations
- **PRINCIPAL INVESTIGATOR:** Hynes, Pat
- **EXECUTION ENTITY:** NMSU
- **PERIOD OF PERFORMANCE:** Jan 3, 2011 - Jan 6, 2012
- **STATUS:** Ongoing

PROJECT DESCRIPTION

PURPOSE: As the FAA is responsible for developing and enforcing regulatory requirements to provide safety oversight for the industry, a better understanding of the operation of commercial spaceports is necessary. These findings will help fill a critical gap in our understanding of the operational requirements that are necessary to ensure safe and efficient spaceport operations, as these requirements have rarely come under rigorous analysis.

Once the framework and processes are established, approved, and proven to be useful, further individual standards can be developed by the spaceport community, the launch provider community, the FAA, NASA, and other users of commercial launch services on a priority basis as needed as the industry evolves.

OBJECTIVES:

- 1. Enumerate the activities that must be performed at a “typical” spaceport,
- 2. Analyze and evaluate the structure of sub-activities that are or will be performed at a spaceport,
- 3. Identify the variables within this structure and the policies that impact them, and
- 4. Determine the ways in which changes in the relationship between these variables and spaceport policies will impact spaceport operation.

GOALS: Develop an accepted framework and approval process for international industry consensus standards for consideration and use by the FAA in regulating commercial spaceport launch operations.

STATEMENT OF WORK

- 1. Examine the available literature and operational standards.
- 2. Review the activities listed below and compare them at 3 operational launch sites.
- 3. As they are implemented, the operational activities of Spaceport America will be included in the analysis.
- 4. Review major areas of operational activities