

## 257. MASTERS LEVEL COMMERCIAL SPACE OPERATIONS INSTRUCTION CRITERIA

### **PROJECT AT-A-GLANCE**

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

### **PROJECT DESCRIPTION**

**PURPOSE:** Increases in commercial launch/re-entry and satellite operations result in the need to create an academically credible program for the education and training, both in theory and in practice, of operators for launch vehicles, space vehicles, and satellites. Such a capability, facilitated by extensive industry involvement, will insure a well trained workforce pipeline to support sustained and expanding space operations. Such operations will require trained and knowledgeable operators to maximize safety of launch and re-entry, specifically to minimize the impact of these activities on the uninvolved public and the national airspace. There does not currently exist an opportunity for such training open to commercial providers.

- OBJECTIVES:**
1. Develop a one semester course covering the fundamentals of launch and on-orbit operations.
  2. Develop a hands-on lab to follow the pre-requisite course work to provide real-world training in operations.
  3. Refine instruction techniques based on student feedback and industry input.
  4. Standardize instruction and identify required co-requisite courses for the establishment of a Certificate in Commercial Launch and Satellite Operations awarded by the University of Colorado at Boulder.

### **GOALS:**

### **STATEMENT OF WORK**

- Milestone 1: Run course-work section of program
- Milestone 2: Run lab section of the program
- Milestone 3: Review work and establish requirements for Space Operations Certificate