

183. SPACEFLIGHT CREW MEDICAL STANDARDS AND PARTICIPANT ACCEPTANCE CRITERIA

PROJECT AT-A-GLANCE

- **AST RDAB POC:** Graham, Doug
- **AST RESEARCH AREA:** 3.1 Human Spaceflight - Physiology & Medicine
- **PRINCIPAL INVESTIGATOR:** Vanderploeg, Jim
- **EXECUTION ENTITY:** UTMB
- **PERIOD OF PERFORMANCE:** Jan 3, 2011 - Jan 6, 2012
- **STATUS:** Ongoing

PROJECT DESCRIPTION

PURPOSE: A number of standards documents and guidelines publications have been produced by various organizations. However, there has not been a consolidation and integration of these various recommendations, guidelines and standards into a cohesive approach that can be relied upon by space launch operators and passengers. The anticipated outcome of this research project is a consolidated set of recommendations, guidelines, and forms that will be useful to both operators and passengers embarking on a space flight.

OBJECTIVES: The three objectives for this research project are: (i) development of recommendations for the medical standards for suborbital and orbital space vehicle crew members, (ii) development of recommendations for passenger acceptance criteria for suborbital and orbital space flight, and (iii) development of a model passenger 'Informed Consent' document for use by space launch operators to convey the risks related to personal medical status to their passengers.

GOALS: The anticipated outcome of this research project is a consolidated set of recommendations, guidelines, and forms that will be useful to both operators and passengers embarking on a space flight.

STATEMENT OF WORK

1. Collection and review of the existing literature addressing pilot medical certification, passenger medical evaluation guidelines, and recommendations about testing and training for both crew members and passengers;
2. Convene a working group of previous authors of these documents, experts in space medicine and physiology, operational support personnel, training experts, and safety professionals to draft a consolidated set of recommendations for the medical certification of crew members, medical clearance of passengers, and training procedures; and
3. Conduct a study of the information that is required for passengers to complete an 'Informed Consent' declaration. In addition to the content of an 'informed consent' document, we will analyze and test the language reading level most appropriate for these forms to be easily understood by both individuals with English as their primary language and those for who English is a second language.