

Secure Cabin Exercise Briefing

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Secure Cabin Objective

- *To determine the estimated time required to configure a commercial aircraft cabin for safe transit of atmospheric turbulence.*

Cabin Secure Time

- The time from first announcement of hazard until the cabin is declared secure.

- Approach

- Conduct series of timed aircraft cabin preparation simulations on wide-body and narrow-body aircraft
 - Professional cabin crew staff from United and American
 - Paid passenger subjects
 - Guidance from Cabin Evacuation Drill experience
- Use team of experienced operational staff to develop plans and procedures

Secure Cabin Participating Organizations

- **Flight Attendants**
 - AFA, APFA
- **Air Carriers**
 - United, Jet Blue, American, Delta, Continental
- **Airframe Manufacturers**
 - Boeing
- **Government Agencies**
 - FAA/CAMI, NASA

Simulation Variables

- **Passenger load and Flight Attendant compliment**
- **Cabin Class (first class, business class, main cabin)**
- **Cabin Activities (food service, beverage service, lavatory utilization, night conditions)**
 - **Scenarios**
 - **Full Meal Service**
 - **After movie restroom call**
 - **Long Haul night situation**

Responsibilities

- **Scenario Development - Secure Cabin Team**
- **Cabin Crew Staffing - UAL/American**
- **Pax Staffing - NASA funded**
- **Experiment Coordination - NASA**
- **Data Collection/Analysis - NASA/CAMI**
- **Report/Conclusions - Secure Cabin Team**

Draft Plan

- **Perform Wide-body exercise in the FAA/CAMI Cabin Evacuation facility at Oklahoma City in mid-September 2001**
- **Obtain passenger subjects from CAMI contractor**
- **Utilize CAMI Cabin Evac. facilities and expertise for exercise support (video, cabin set-up, test experience)**
- **Plan & conduct Narrow-body exercise at future date**

CAMI 747 Cabin Evacuation Facility



Exercise Status

- **Team Established and Functioning (3 meetings, conference calls)**
- **Approach defined, developing detailed scenarios**
- **Facilities Identified**
- **Experiment Protocol Approved**
- **Defining Space Act agreement**
- **Defining PAX participant staffing**

Schedule

- **Revise Draft Plan** 10 June 01
- **Complete 747 Configuration** 1 July 01
- **Finalize Plan** 15 July 01
- **Conduct Wide-body Exercise** 10-14 Sept. 01
- **Draft Report** 15 Nov. 01
- **Final Report** 15 Jan. 02
- **Conduct Narrow-body Ex.** 4Q FY-02

Risks/Mitigations

- **Process Logistics**
 - **CAMI / NASA Ames IRB Approval**
 - Closely coordinate with CAMI Staff
 - Expand/Augment CAMI Role in Exercise
 - **Recent MOA funds transfer uncertainty**
 - Located a second MOA for backup
- **Exercise Injury Liability**
 - IRB review of Exercise plan
 - CAMI partnership with Cabin Evac Experience
 - Injury insurance from Pax supply contractor

Risks/Mitigations

- **Passenger Seatbelt
Unfamiliarity**
 - Passenger training
 - Pre-exercise
demonstrations