

Commercial Aviation Safety Team. Safety Enhancement 126. Hazardous Materials Fires.



International Aircraft Systems Fire Protection
Working Group.
Toulouse, France

David Blake, Federal Aviation Administration
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Federal Aviation
Administration



CAST Process



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Organization and Procedures

Senior-level safety officials from CAST organizations meet regularly. This group, under the direction of a government and industry co-chair, sets overall policy and oversees the activities of the following working groups:

Joint Safety Analysis Teams (JSATs) perform data analyses.

JSATs perform in-depth analysis of a particular accident category. A JSAT examines the sequence of events leading up to each accident studied and then identifies ways to eliminate potential precursors and contributing factors. The intervention strategies are then evaluated for their potential effectiveness.

Joint Safety Implementation Teams (JSITs) develop safety enhancements.

JSITs determine the feasibility of the intervention strategies identified by the JSATs. Each JSIT then develops and recommends a detailed plan of action for industry and government to implement the recommended safety enhancements.

Joint Implementation Measurement Data Analysis Team (JIMDAT) develops a master safety plan, measures effectiveness and identifies future areas of study.

The JIMDAT examines the proposed enhancements and assembles these into an integrated CAST Safety Plan for approval by CAST.



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Senior-level safety officials from CAST organizations meet regularly. This group, under the direction of a government and industry co-chair, sets overall policy and oversees the activities of the following working groups:

- **CAST process is designed to be a voluntary agreement to implement recommendations without formal regulatory rulemaking activity.**
- **CAST establishes SE 126. Mitigation of Hazardous Material Fires.**
- **JSAT is formed.**



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- **JSAT members include airframe manufacturers, operators, regulatory agencies, and pilot unions.**
- **Inflight Cargo Fire Accidents Analyzed:**
 - ❑ **UPS DC-8 Philadelphia 2006**
 - ❑ **UPS 747 Dubai 2010**
 - ❑ **Asiana 747 Crashed at sea near Jeju, Korea 2011**
- **JSAT analyses is completed.**

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JSITs determine the feasibility of the intervention strategies identified by the JSATs. Each JSIT then develops and recommends a detailed plan of action for industry and government to implement the recommended safety enhancements.

- **JSIT comprised mostly from previous JSAT.**
- **The detailed implementation plans (DIPs) includes cost to implement the various recommendations.**
- **Recommendations can be directed at manufacturers (aircraft design), operators (procedures), and/or regulators (guidance material).**
- **JSIT DIP development mostly completed. (Some JIMDAT feedback and refinement under consideration)**

Joint Implementation Measurement Data Analysis Team (JIMDAT) develops a master safety plan, measures effectiveness and identifies future areas of study.

The JIMDAT examines the proposed enhancements and assembles these into an integrated CAST Safety Plan for approval by CAST.

- **Process is currently at this stage with JIMDAT review of previous work.**
- **Once JIMDAT plan is developed, it is presented to top level CAST for approval and implementation.**
- **Extensive recommendations were proposed and included research into fire detection and suppression.**
- **JIMDAT plans and CAST approvals are still unknown at this stage.**

