CAST Member Meetings (High Level)
Establishes Tasks and Outcomes

JIMDAT- Joint Implementation Measurement Data Analysis Team (Working Level)
Conducts activities to accomplish identified tasks and outcomes.
SE 126 Active Participants:

- Boeing
- Airbus
- UPS
- FedEx
- Kalitta Air
- ALPA
- IPA
- NACA
- Mitre Corp.
| Safety Enhancement Action | To reduce the occurrence of accidents and incidents from fires involving high-consequence hazardous materials, develop systems to contain or suppress such fires as a final line of defense for personnel, equipment and cargo. The system should be usable for both ground (e.g., cargo loading/unloading, and ramp movement) and flight operations. |
| **Description:** | Results of an analysis defining and characterizing any gaps between:  
• the causes and contributing factors of recent cargo fires that involved hazardous materials, and  
• existing technologies to contain or extinguish such fires. |
|-----------------|---------------------------------------------------------------------------------------------------|
| **Actions:**    | 1. Task a working group to accomplish the following:  
  a. Review recent cargo accidents and incidents resulting from suspected hazardous material fires, including:  
     i. the UPS DC-8 accident at Philadelphia,  
     ii. the Asiana 747-400F accident over the Pacific Ocean, and  
     iii. the UPS 747-400F accident in Dubai.  
  b. Identify the causes and contributing factors of the cargo fires.  
  c. Identify and assess current and near-future technologies capable of suppressing or extinguishing hazardous materials fires for readiness, effectiveness, and feasibility of implementation. This should include technologies currently addressed in CAST SE 127.  
  d. Perform a gap analysis to determine R&D requirements for additional system requirements by correlating causes and contributing factors against available mitigations.  
  e. Prioritize, based on risk, the implementation of available mitigations and development of new mitigations.  
  f. Document the results in a report  
  2. Based on the report from action 1:  
   a. Develop follow-on plans in SE 126 for implementing the most effective and feasible recommendations (output 2), and  
   b. Develop research and development plans for addressing any gaps discovered (output 3). |
## Output 2

### Description:

An implementation plan based on the results of output 1, to encourage deployment and incorporation of currently feasible technology mitigations that reduce the risk of cargo fires involving hazardous materials.

### Actions:

1. A subset of the WG members from Output 1 will develop an implementation plan for currently available technology mitigations for hazardous material fires. The plan will include:
   a. A risk assessment methodology to be used by operators to assess their specific operational risk
   b. A review of current and potential future regulations governing the design for and transportation of HazMat
   c. An agreement from manufacturers and operators to implement the identified technologies, as feasible
   d. A plan to assess and revise FAA guidance material and policy as necessary to support implementation
   e. ASIAS metrics to assess progress and performance of implementations
2. Affected organizations commit to carry out the implementation plan.
## Output 3

<table>
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<tr>
<th>Description:</th>
<th>Research plans for technology development to close any gaps identified in output 1.</th>
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| Actions:     | 1. Develop research plans to close identified gaps. Plans to include:  
               a. Performing organizations  
               b. R&D expected outcomes  
               c. Funding sources  
               d. Performance monitoring  
               e. Regulatory impacts  
               f. Technology readiness levels and transition to industry / manufacturers.  
               2. Affected organizations commit to carry out the research and report back periodically to CAST |
Safety Enhancement 127

Cargo- Fire Containment

This SE reduces cargo fires through new or revised standards for the construction of standardized and improved cargo containers that include fire-suppression or fire-containment systems.

Output 3

• Manufacturers will develop standardized fire suppression and/or containment systems in accordance with the standards developed in a new Technical Standard Order (TSO) for cargo containers/ULDs and/or fire containment bags/blankets.