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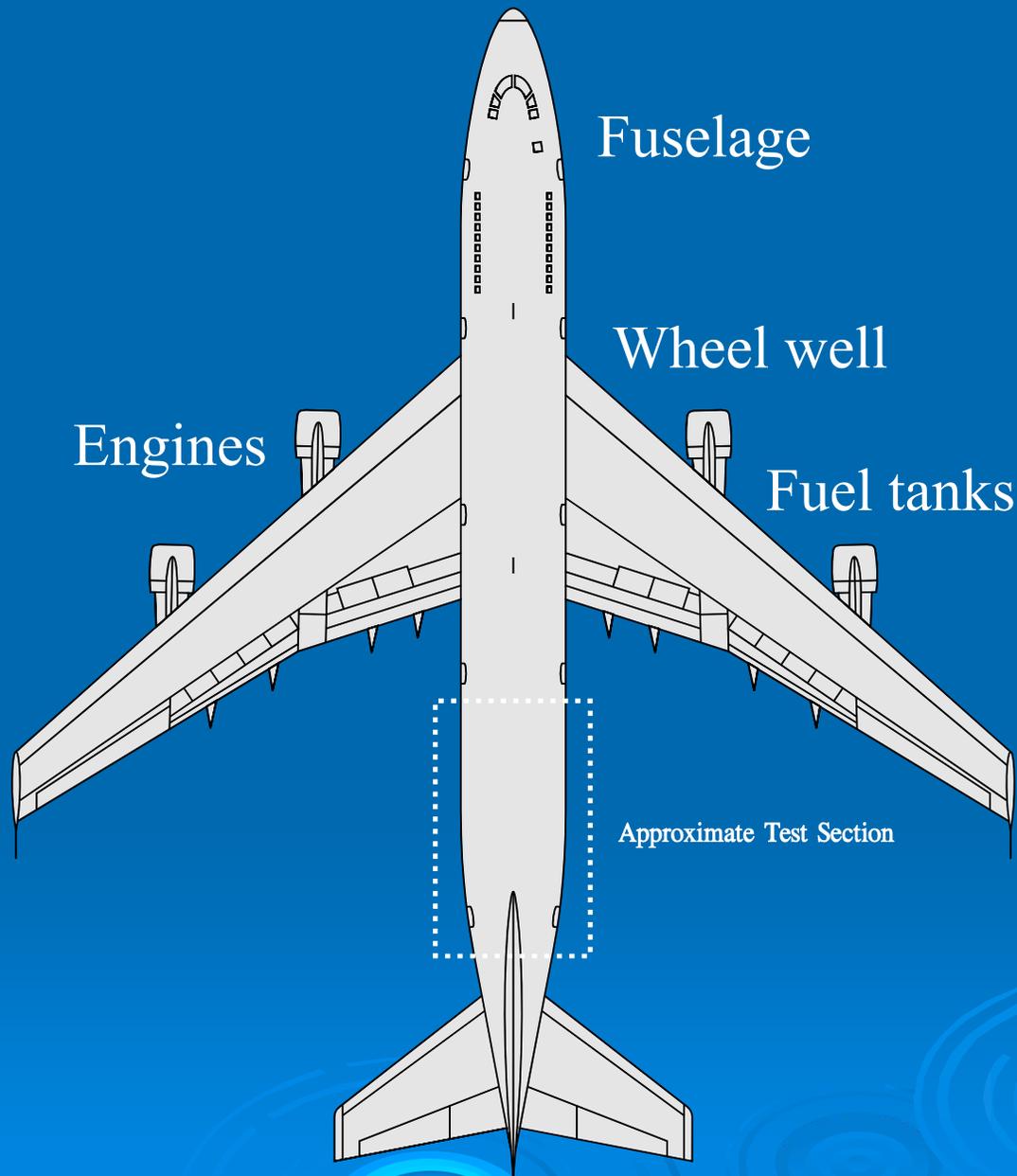
AIR TRAFFIC ORGANIZATION

Aircraft Fire & Explosion Protection With Nitrogen and Water Mist

Richard G. Hill
Program Manager
Aircraft Cabin & Fire Safety
Federal Aviation Administration

- Vulnerable Areas
- Type of Hazards
- Type of Protection Required
- Solution?





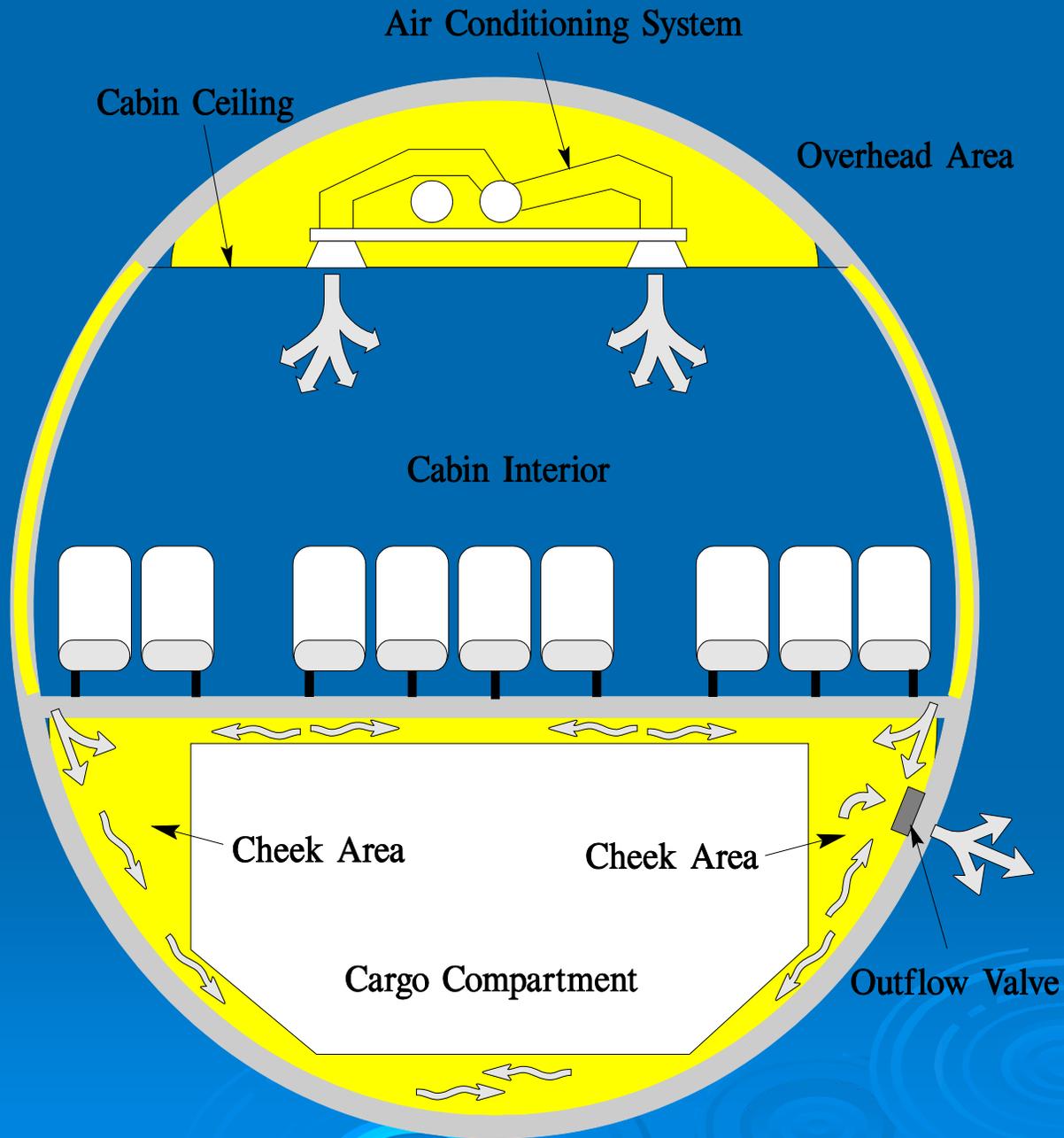
Fuselage

Wheel well

Engines

Fuel tanks

Approximate Test Section



Fuel Tanks



Trans World Airlines, B747-131, July 17, 1996



Thai Airways 737, March 3, 2001





Air France, Concorde, July 25, 2000



Wing Tank Explosion

**C-133 Wing No Inerting
21 Percent Oxygen**

Engines



Halon



BTP



Wheel Well





Cargo Compartment



ValuJet Airlines, Douglas DC-9-32, May 11, 1996



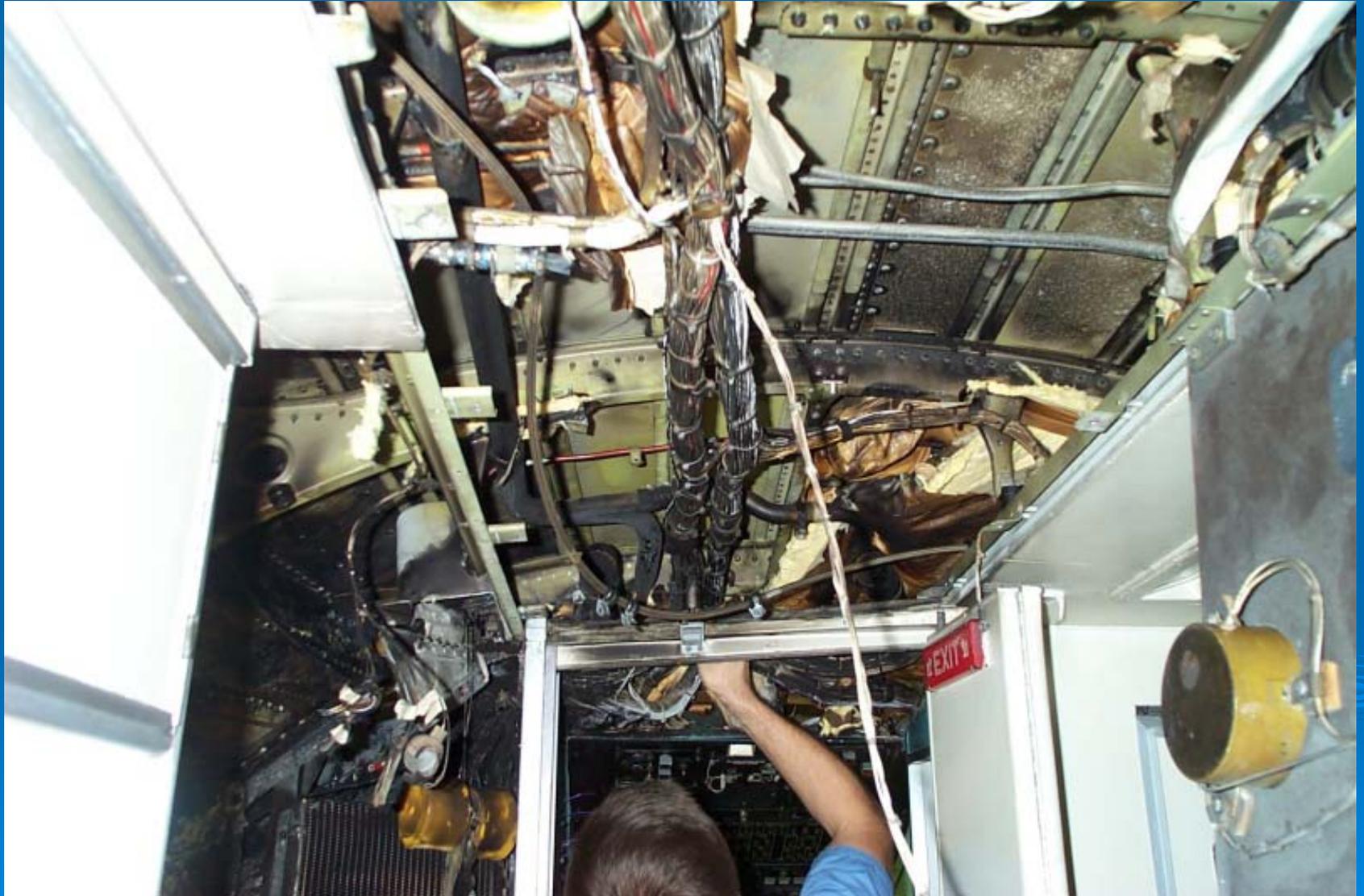
Hidden Areas



Fire in Hidden Area Below Cabin Floor (Cheek)



Fire in Bulkhead, Spread to Area Above Cabin Ceiling (Overhead)





SAS, MD-87, November 24, 1993

Swiss Air, McDonnell Douglas MD-11, September 2, 1998



Cabin







LTU L1011 in Germany



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危険!
DANGER!

Solution?

Water & Nitrogen

