



National Transportation Safety Board

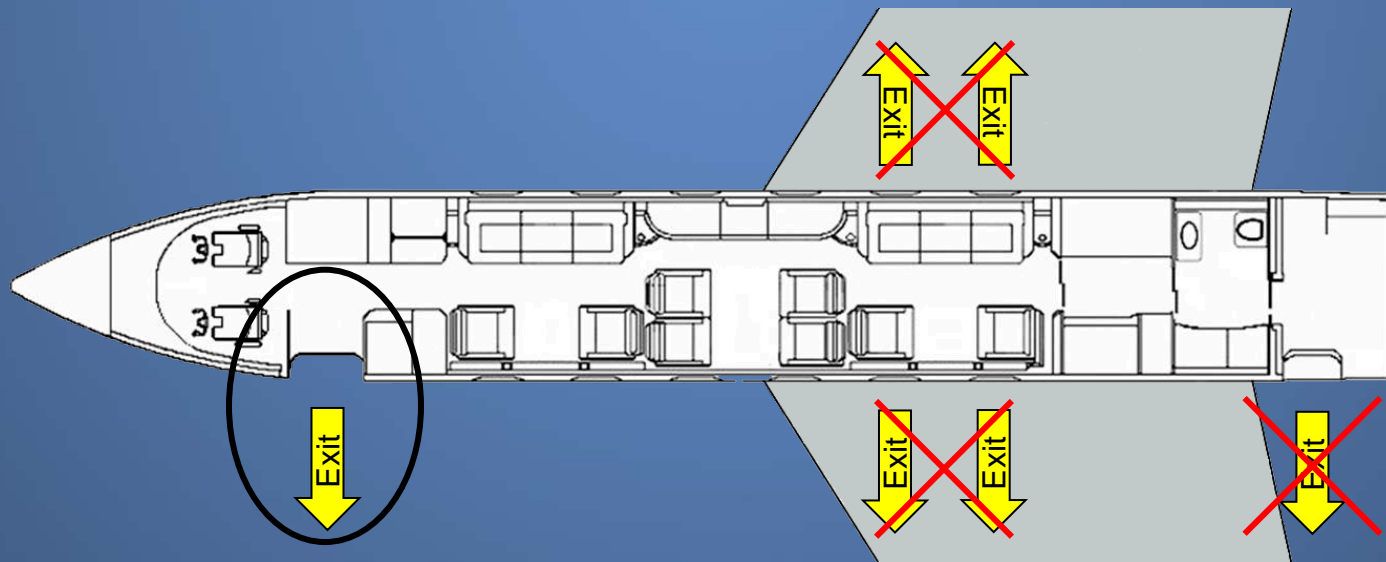
Occupant Survivability, Emergency Response, and Frangible Structures

Survival Factors presentation



Occupant Survivability

- Fire erupted “almost instantaneously” likely near wing root area



Emergency Response

- BED: joint civil/military airport
 - Hanscom Air Force Base performed firefighting services under contract with Massachusetts Port Authority
- Emergency response issues
 - Vehicles' water supply exhausted after 25 minutes, then 14-minute period without firefighting
 - Resupply hose not dropped at fire hydrant while en route to scene
 - Airport grid map did not contain all perimeter gate locations

Airport Structure Frangibility

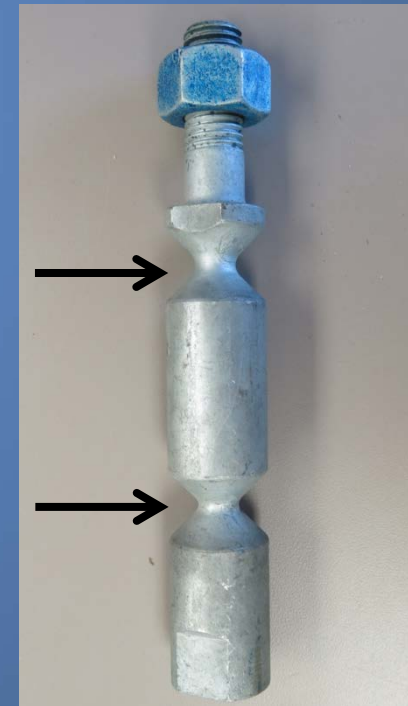
- Airplane struck approach lighting system, localizer antenna, and perimeter fence outside runway safety area (RSA)
- Fittings were not frangible
- Only structures inside RSA must have frangible fittings
- Structures likely substantially damaged airplane

Frangible Support Structures

Frangible localizer antenna support



Frangible connector



Frangible Structures

- FAA used frangible fittings for replacement at BED
- FAA encourages incorporation of frangible fittings in areas adjacent to RSAs
- No current method for identifying nonfrangible structures outside RSAs



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