Airplane Seatbelt Airbags

A Guide for Fire Fighters

The Response Hazard

Some aircraft models are equipped with optional seatbelt airbags. These seatbelts are noticeably thicker than normal seatbelts due to the airbag mechanism. These seatbelt airbags, as shown in the following graphic, may be located anywhere in the passenger seating areas.

The seatbelt airbag firing system is fully contained under the passenger seat and contains a high pressure (up to 7,400 psi) compressed gas cylinder and an electronics module (with battery) that is independent from the aircraft power. The electronics module has an accelerometer that fires the squib to the inflator (a compressed gas cylinder inside the seat pan) and deploys the airbag in the event of a sudden deceleration event.

Un-deployed Aircraft Seatbelt Airbags can pose a hazard to firefighters working around them, particularly if the seat is damaged or partially separated from the airframe. In extreme cases, the inflator might become a projectile if the airbag system was damaged and subsequently activated.

Passenger Seatbelt Airbags

NOTE: Some models have optional seatbelt airbags. These seatbelts are noticeably thicker due to the airbag mechanism.

CAUTION: AVOID AREA IN FRONT OF THE UNDEPLOYED AIRBAG SEAT. DO NOT PLACE EQUIPMENT ON OR NEAR THE SEAT, STAND CLEAR OF UN-DEPLOYED AIRBAGS.

WARNING: DO NOT ATTEMPT TO DISABLE THE SYSTEM AND NEVER ASSUME THAT DISCONNECTING POWER WILL DISABLE THE AIRBAG SYSTEM. THIS SHOULD ONLY BE DONE BY PROPERLY TRAINED MECHANICS.
Recommended Response Tactics:

1. Avoid area in front of the un-deployed seatbelt airbag
2. Do not place equipment on or near the seat
3. Firefighters should never attempt to disable the seatbelt airbag system
4. Never assume that disconnecting power will disable the airbag system
5. Recommend cutting through the thin section of the seatbelt if needed
6. The seatbelt airbag will not deploy if you cut through the thick section of the seatbelt

WARNING - Disengagement or any work on the airplane seatbelt airbag system should only be done by a properly trained airplane mechanic.

Additional questions concerning this issue should be directed to the Boeing Fire Department as follows:

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