



Cabin Safety Guidance Three-Point Restraint Systems

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Section 1—Background

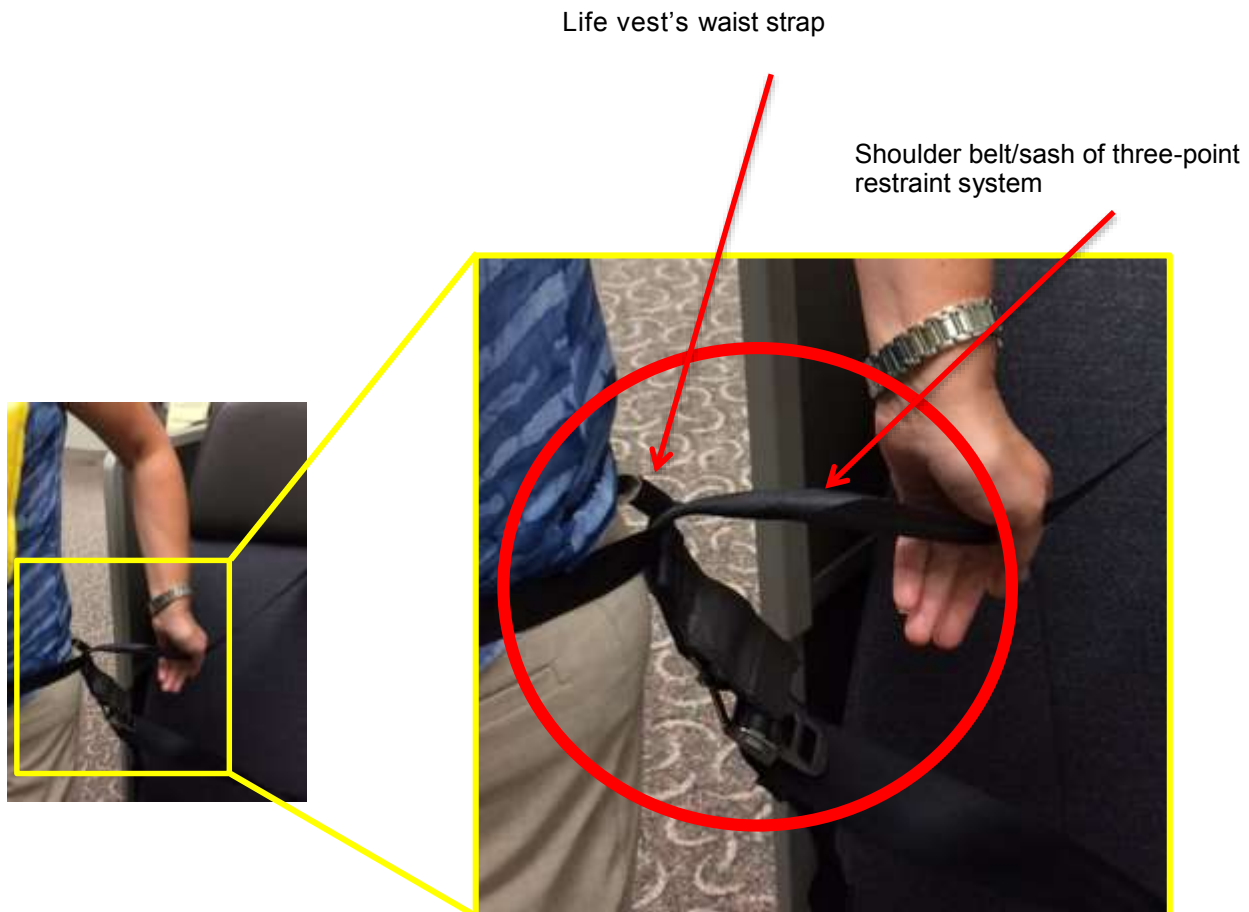
With increased regulation aimed at reducing the likelihood of head injury during an impact on board an aircraft, additional safety features have been introduced on some aircraft seats, particularly where the seat is angled away from the forward/aft axis of the aircraft or the occupant is seated in an enclosed environment.

Where the standard two point seatbelt does not provide adequate protection to minimize injury from impact with the screen, bulkhead or partition in front or to the side of the seated passenger, additional measures are required which can include the installation of:

- An airbag system in either the seat belt or bulkhead;
- A two point seatbelt with additional anchor points (known as “Y belt” fixing);
- A three point seatbelt similar to those installed in automobiles.

Three point seatbelt harnesses were first introduced as a safety improvement in automobiles in 1959 and have become standard over time. For aircraft however, the two point lap belt remains the norm, therefore passengers are not always familiar with the differences when used on board an aircraft.

During a review of water landing emergency procedures, one IATA carrier identified that, in certain specific circumstances, it was feasible for a passenger to don a life vest on top of an already fastened three-point restraint system such as the shoulder belt/sash with a lap belt. This caused the life vest’s waist strap to become entangled with the shoulder belt/sash of the three-point restraint system. This entanglement could interfere with the passenger’s ability to evacuate following a water landing.



Section 2—Recommendations

Based on this review, IATA recommends that airlines operating with three-point restraint systems review and evaluate the following:

- Passenger briefing cards, demonstrations, announcements and/or videos (where applicable);
- Water landing procedures;
- Water landing evacuation commands.

To help prevent the risk of entanglement, airlines should include procedures to ensure that passengers in seats with three point harnesses do not fit life vests while seated with their seatbelts fastened.

This could be achieved by including information on safety cards, safety demonstrations/videos and;

In the case of an anticipated water landing;

- Including instructions in the emergency briefing to passengers;
- Including procedures for cabin crew to confirm that the shoulder belt/sash is secured over the top of the life vest.

In the case of an unanticipated water landing;

- Ensuring evacuation commands stress the release of the seatbelts prior to fitting a life vest (e.g., “Open seatbelts. Put on life vest.” or “Seatbelts off. Fit life vest.”).



