



Cabin Safety Bulletin

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Cabin Safety Bulletin No. 1 - Seatbelt and Safety Harness Serviceability

A Cabin Safety Bulletin is an advisory document that alerts, educates and makes recommendations about Cabin Safety matters.

1. Purpose

The purpose of this bulletin is to highlight the importance of operating crew checking and reporting on the condition of passenger seatbelts and safety harnesses.

Seatbelts on aeroplanes consist of non-metallic webbing materials and metal parts, for example, buckles. These materials endure a wide range of conditions like:

- high frequency use
- UV and humidity.

The above factors may decrease seatbelt performance and passenger safety.

The bulletin does not seek to replace formal training for preflight equipment inspections or safety reporting.

The aim is to alert and educate crew on cabin safety matters. The bulletin describes examples of compliance with regulations and standards.

Advice in this bulletin is not mandatory.

2. Target audience

This bulletin applies to:

- Australian air transport operators
- Flight and cabin crew members.

3. Definitions

Term	Definition
safety harness	A webbing-based restraint consisting of at least three anchor points restraining both the pelvis and upper torso. (ICAO Doc 10086)
seatbelt	A webbing-based restraint consisting of two anchor points restraining the pelvis. It is also referred to as a lap belt. (ICAO Doc 10086)



4. Background

The information in this bulletin is from CASA surveillance events and feedback from the travelling public.

This bulletin is a reminder for airline staff to check and inform, if needed, the condition of passenger seatbelts and crew safety harnesses.

5. Importance of serviceable restraints

Statistics in both motor vehicle and aircraft accidents show that 'seatbelts save lives'.

Seatbelts prevent injuries in moderate to severe turbulence and abnormal inflight conditions. They must be in good condition to be effective.

The report from the United States National Transportation Safety Board on the Asiana accident highlights the value of seatbelts in an aircraft accident.

Asiana Airlines flight 214 crashed into the end of the runway in San Francisco on 6 July 2013. This resulted in the fatality of 3 people with hundreds of people injured. What is not well known is that of the persons that perished, 2 of the 3 were not wearing their seatbelts:

'The two ejected passengers (one of whom was later rolled over by two firefighting vehicles) were not wearing their seatbelts and would likely have remained in the cabin and survived if they had been wearing their seatbelts (National Transport Safety Board accident report, 2013)

6. Reporting

CASA inspectors have collected examples to show faulty restraints. The images below show unreported poor seatbelt and harness conditions.



Frayed passenger seatbelt. Source: CASA



Damaged crew harness. Source: CASA



7. Seatbelt and harness inspection

Checking seatbelts and harnesses need not wait for a maintenance cycle. It is important that operating crew check seatbelts and safety harnesses in concert with standard operating procedures and add any issue to the operator's reporting system.

For example, some operators have a cabin condition log process where the cabin crew will record issues to transfer into the aircraft maintenance log.

Signs that restraint systems may need inspection or servicing by engineering staff, include:

- frayed webbing, torn, creased or crushed; obvious holes
- broken stitching or missing stitches
- buckle is defective; shows excess wear or deformity
- unadjustable buckle (hard to pull through)
- anything else that may impede normal use of the restraint.

8. Additional Resources

- [European Aviation Safety Agency \(EASA\) Research Project EASA.2010/5 SEBED – Seat belt degradation \[1OCT2012\].](#)
- [International Civil Aviation Organisation \(ICAO\) Doc 10086 Manual on Information and Instructions for Passenger Safety First Edition \[2018\].](#)

9. Enquiries and more information

- View the [cabin safety](#) page.
- Contact us from Monday to Friday 8:30am to 5:00pm (AEDST), excluding national public holidays. Use +61 2 6217 1449 if overseas or contact [CASA online](#).
- Subscribe to the 'Cabin Safety Bulletins' [mailing list](#).