

Subject: Use of Balloon Pilot Restraint Systems**Ref. Publications:**

- Commission Regulation (EU) [2018/395](#) dated 13 March 2018.
- Austrian Federal Bureau Of Aircraft Accident Investigation, Accident Report [GZ: 2023-0.282.204](#) dated 06 September 2023.

Applicability:

Hot air balloons.

Description:

In a situation of a hard landing, following the first or subsequent impacts, a dynamic upward motion of the envelope may occur, which can lift-up the pilot who is holding onto the parachute line. This phenomenon may be combined also with a tilting of the basket and result in a temporary loss of control, by either releasing the parachute line and thus increasing the unwanted behaviour, or by losing proper standing balance by the pilot and, in consequence, even falling out of the basket.

The increasing number of such occurrences is of concern to both EASA and the community.

Regulation 2018/395, BOP.BAS.175 requires that when a restraint system is required under BOP.BAS.320 (balloon is equipped with a separate compartment for the pilot-in-command or/and turning vent), the pilot-in-command shall wear the system at least during landing. In many accidents, where a pilot restraint system was mandatory, the pilot either did not wear the restraint or the restraint was not properly installed.

This SIB is published to raise awareness of risks described above and to recommend the use of restraint systems for balloon pilots, even if not mandated.

At this time, the safety concern described in this SIB does not warrant the issuance of a safety directive under Commission Regulation (EU) [965/2012](#), Annex II, ARO.GEN.135.

Recommendation(s):

1. EASA recommends the owners and operators of all hot air balloons to install and use an approved pilot restraint system, even if not mandated by BOP.BAS.320.
2. Hot air balloons used for training should be equipped with two restraint systems for both the instructor and the student.

This is information only. Recommendations are not mandatory.



In accordance with BOP.BAS.175 the instructor as the pilot in command is required to wear the restraint system, however the student is supposed to operate the parachute line. The desired pilot behaviour to exercise good airmanship should be nurtured through the early introduction of the restraint system as part of the standard training syllabus.

Note that it is mandatory to perform the pilot restraint functional check as part of the pre-flight checklist.

Contact(s):

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