## Ballong seminarium

2023-04-04

## Anders och ICAO

- Under våren kommer jag att övergå till sektionen för internationell samordning
- I augusti flyttar jag till Montreal
- Kommer att vara i Montreal till 2026
- Tack för mig

THE EUROPEAN PLAN FOR
AVIATION SAFETY
(EPAS 2022-2026)


| Balloons |  |  |
| :--- | :--- | :--- |
| KRA 1 | KRA 2 | KRA 3 |
| Obstade collision in flight | Balloon landings | Fire and smoke |

KRAs bearing the highest risk are obstacle collision in flight and balloon landing. The analysis of data from accidents and serious incidents confirms that collisions with power lines and hard landings are events with a higher likelihood to cause injuries, and potentially fatalities, in ballooning operations.
The highest risk safety issues under the obstacle collision in flight key risk area, based on the coding of the occurrences, are:

- power line collisions;
- collision with buildings and trees; and
- control of flight path and inertia.

Power line collision events often overlap with the balloon landings as these collisions tend to occur in the final stages of the balloon flight. In some cases, the balloon collides with the power line after the landing has taken place.

### 8.1 Safety

This section is further subdivided to actions that are grouped per main safety issue (see 8.1.1 to 8.1.5). While the current EPAS may not include mitigation actions for each of those, the safety issue description is maintained to raise awareness.
8.1.1 Systemic enablers

Issue/rationale
This section addresses system-wide or transversal issues that affect GA as a whole and are common to several safety risk areas. In combination with triggering factors, transversal factors can play a significant role in incidents and accidents. Conversely, they also offer opportunities for improving safety across risk domains.

What we want to achieve
Reduce the number of fatalities in GA through the implementation of systemic enablers.
How we monitor improvement

## Sveriges SPAS

- 3 GA
- 3 HKP
- Ingen på ballong. Kan komma till nästa SPAS


## SPAS. SLoh,s topprisker (hela sektionen)

- 1.1 Flygning av fallskärmshoppare
- 1.2 Luftrumsintrång privatflyg
- 1.3 Ultralätt (UL)
- 1.4 SPO haverier
- 1.5 Kollision med marken
- 1.6 Luftrumsintrång övriga


## EASA Riskmatris

## Balloon Safety

Stats \& Main Safety
Issues EASA
Community
(europa.eu)
3 feb 2021


THE EUROPEAN PLAN FOR
AVIATION SAFETY
(EPAS 2022-2026)


| Balloons |  |  |
| :--- | :--- | :--- |
| KRA 1 | KRA 2 | KRA 3 |
| Obstade collision in flight | Balloon landings | Fire and smoke |

KRAs bearing the highest risk are obstacle collision in flight and balloon landing. The analysis of data from accidents and serious incidents confirms that collisions with power lines and hard landings are events with a higher likelihood to cause injuries, and potentially fatalities, in ballooning operations.
The highest risk safety issues under the obstacle collision in flight key risk area, based on the coding of the occurrences, are:

- power line collisions;
- collision with buildings and trees; and
- control of flight path and inertia.

Power line collision events often overlap with the balloon landings as these collisions tend to occur in the final stages of the balloon flight. In some cases, the balloon collides with the power line after the landing has taken place.

### 8.1 Safety

This section is further subdivided to actions that are grouped per main safety issue (see 8.1.1 to 8.1.5). While the current EPAS may not include mitigation actions for each of those, the safety issue description is maintained to raise awareness.
8.1.1 Systemic enablers

Issue/rationale
This section addresses system-wide or transversal issues that affect GA as a whole and are common to several safety risk areas. In combination with triggering factors, transversal factors can play a significant role in incidents and accidents. Conversely, they also offer opportunities for improving safety across risk domains.

What we want to achieve
Reduce the number of fatalities in GA through the implementation of systemic enablers.
How we monitor improvement

## Obstacle collision in flight.

## Flygplan

- Pilots of fixed wing transport aircraft rarely encounter passenger-carrying hot air balloons as a potential collision risk, leaving some vulnerable to complacency about this threat. Typically (though not exclusively) these encounters happen just before or soon after dawn, during the fixed-wing airplane's descent to the destination aerodrome - often at the conclusion of long-haul, night cruise flight segments. Hot air balloons also have been encountered in other scenarios. The purpose of this article is to increase flight crews' awareness of hot air balloons with the benefit of current guidance developed by the U.K. Civil Aviation Authority, which updated the guidance in the context of increased issuance of air operator's certificates to balloon operators that meet public transport standards for commercial ballooning.


## Skybrary

- Hot Air Balloon Awareness | SKYbrary Aviation Safety
- Under the Standardised European Rules of the Air, civil Rules of the Air Regulations or military Regulatory Publications, all aircraft give way to balloons (SERA. 3210 Right-of-way).


## Hinder, träd osv.

- On 8 October 2021, a Kavanagh Balloons E-240 balloon, registered VH-LUD and operated by Floating Images Aust. Pty Ltd was conducting a morning scenic flight about 45 km south-west of Brisbane, Queensland.
On board was a pilot and 9 passengers. About 55 minutes into the flight, the pilot commenced a descent to locate a suitable landing area. During the descent, the balloon entered an area of localised fog where visibility reduced to 10 m .
- The pilot continued the descent into the fog until a tree was observed in the path of the balloon. The pilot attempted to avoid the tree by initiating a climb, but the balloon collided with, and came to rest on the side of the tree, damaging the lower part of the balloon envelope. The pilot subsequently climbed the balloon off the tree and above the fog. The flight continued to an uneventful landing in a nearby paddock that was clear of fog. There were no injuries.


## Landningar. Ballon landings

- The ATSB found that the pilot rejected several suitable landing fields to avoid possible post-landing logistical and operational difficulties. This progressively reduced the safe landing sites available to the pilot.
- Wind Conditions Are To Blame For Vic Hot Air Balloon Crash Landing
- Air Accidents Investigation Branch (AAIB) found that two passengers on board were injured "possibly because they IUd ITp maintain their briefed and demonstrated landing position"


## Fire and smoke

- Olycka i Mexico i helgen
- Married couple killed after hot air balloon fire causes crash landing in Mexico

