

# Inadvertent flight into IMC

Mats Karlsson

Sektionen för helikopter och allmänflyg

2025-04-09

1



## ”The EPAS Volume III

The Safety Risk Portfolios are a list of safety issues that need to be mitigated at European level”

## Vilka är de största flygsäkerhetsriskerna för rotor enligt EPAS 2025?

*(SI-8024) Unanticipated yaw/loss of tail rotor effectiveness*

*(SI-8024) Inadequate airborne separation under VFR operation*

***(SI-8051) Inadvertent flight into IMC***



*(SI-8031 Inadequate obstacle clearance during any flight phase)*

### → Hazards in a context (all statuses)

Portfolio	SI ID	Safety Issue Title	Status
CAT A	SI-0034	Impact of GNSS interferences on civil aviation operations	ASSESS/ACTIVE
ATM/ANS	SI-2006	Inappropriate clearance due to undetected occupied runway	ASSESS/QUEUED
NCO A	SI-4008	Inadvertent flight into IMC/scud running	ASSESS/QUEUED
Rotorcraft	SI-8024	Unanticipated yaw/loss of tail rotor effectiveness	ASSESS/QUEUED
Airworthiness	SI-9012	Oxygen-fed fire in the flight deck	ASSESS/QUEUED
CAT A	SI-0007	Approach path management	MITIGATE/DEFINE
NCO A	SI-4023	Risks associated with parachuting operations	MITIGATE/DEFINE
Rotorcraft	SI-8031	Inadequate obstacle clearance during any flight phase	MITIGATE/DEFINE
CAT A	SI-0001	Icing in flight	MITIGATE/IMPLEMENT
Rotorcraft	SI-8028	Inadequate airborne separation under VFR operation	MITIGATE/IMPLEMENT
Rotorcraft	SI-8051	Inadvertent flight into IMC	MITIGATE/IMPLEMENT
Systemic and conjunctural	SI-5515	Airspace infringements by military UAS, aircraft, missiles, or debris spilling over from conflict zones	MONITOR/SPECIFIC

# ***SI-8051 Inadvertent flight into IMC***

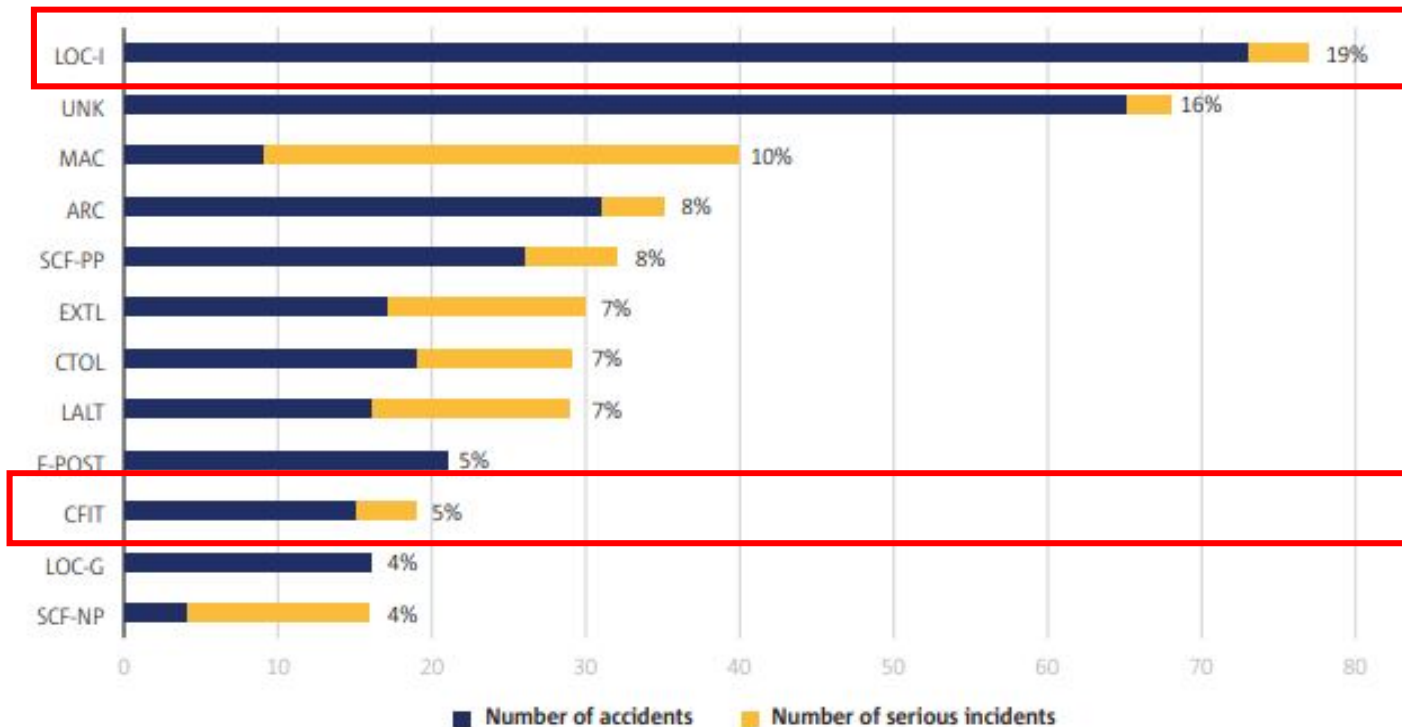
*“The safety issue is related to a disorientation scenario due to loss of horizon references and/or an accompanying loss of visual contact with the ground.*

*It is a severe risk that can result in various accident types, notably LOC-I, CFIT, collisions with obstacles or cables.*

*This includes ‘scud running’ where the pilot flies under low clouds close to the ground to reach their planned destination.*

*It captures the ‘press-on-it’ mentality during a VFR flight where pilots put themselves into danger trying to reach their destination.”*

# EASA Annual Safety Review 2024

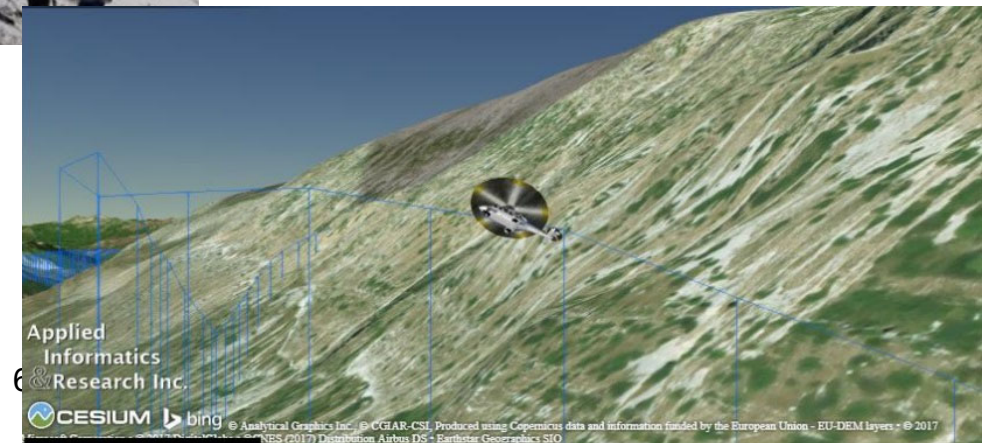


LOC-I: Loss of control – inflight; UNK: Unknown or undetermined; MAC: Airprox/ACAS alert/loss of separation/(near) midair collisions; ARC: Abnormal runway contact; EXTL: External load related occurrences; CTOL: Collision with obstacle(s) during take-off and landing; SCF-PP: powerplant failure or malfunction; LALT: Low altitude operations; F-POST: Fire/smoke (post-impact); CFIT: Controlled flight into or toward terrain; LOC-G: Loss of control – ground; SCF-NP: System/component failure or malfunction [non-powerplant]

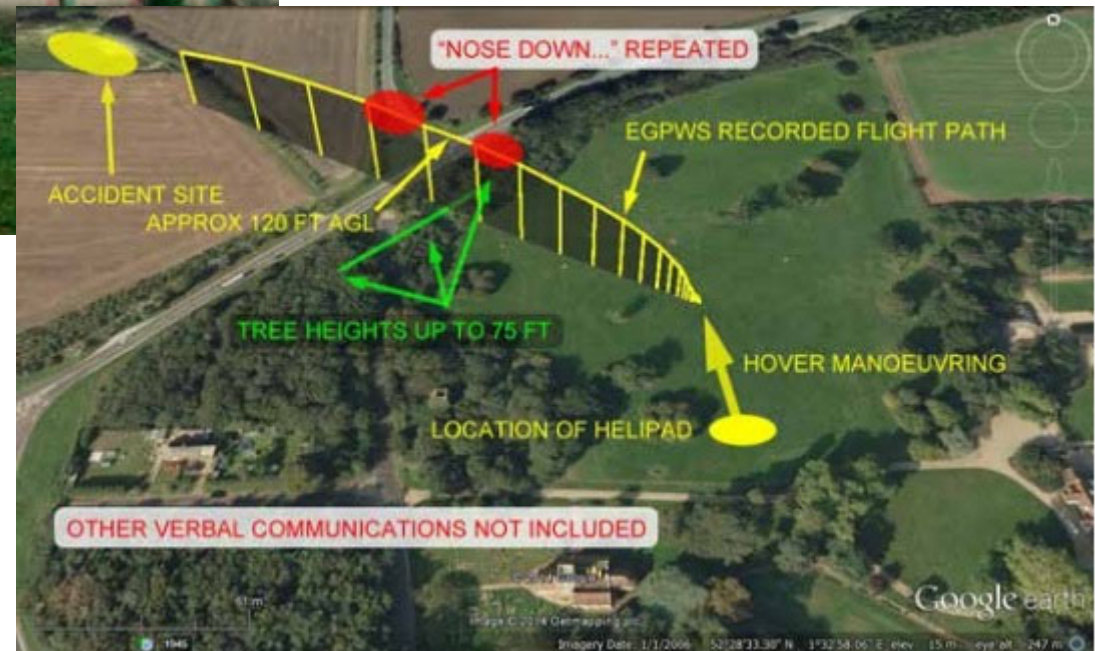
2025-04-09 **Figure 3.4** Numbers of occurrences by occurrence category and occurrence class for all helicopter operations



2025-04-09







2025-04-09



ARTICLES

## The story of Stevie Ray Vaughan tragic death



2025-04-09



 **TRANSPORT  
STYRELSEN**



# Vad säger regelverket?

## Aircrew 1178/2011

- LPC

	specified headings					
2.5.1	Turns with 30° bank, 180° to 360° left and right, by sole reference to instruments	P	---		M	
2.6	Autopilot descent	P			M	

## Air Operations 965/2012

- SPA.HEMS samt SPA.NVIS - Krav på träning (och riskhantering) enligt
- AMC1 SPA.HEMS.130(d) Crew requirements *“The training should be sufficient for the pilot to demonstrate competence in recovery from inadvertent entry into IMC conditions..”*
- Vad gäller för övriga då?
  - Inte mycket. Utöver ORO.GEN.200(a)(3)..

2025-04-09

## Operator conversion training ((AMC1 ORO.FC.220(e)(1))

For helicopters, the operator proficiency check that is part of the operator's conversion checking should include at least the following emergency/abnormal procedures as relevant to the helicopter and operations:

- (i) engine fire;
- (ii) interior helicopter fire or smoke;
- (iii) emergency operation of undercarriage;
- (iv) hydraulic failure;
- (v) electrical failure;
- (vi) flight and engine control system malfunctions;
- (vii) recovery from unusual attitudes;
- (viii) landing with one or more engine(s) inoperative;
- (ix) instrument meteorological conditions (IMC) autorotation techniques;

# Diskussion

- Hur är verkligheten?
  - Inadvertent IMC som en topprisk?
- Är det beskrivet i manualer och procedurer?
  - Finns behovet?
- Ingår det i utbildning och kontroll av piloter?
  - Lärdomar från simulator
- Finns mer att göra?

## Mer info

- [Workshop on Inadvertent entry into IMC \(IIMC\) - Rotorcraft & VTOL Symposium 2022](https://www.youtube.com/watch?v=JCSwZw7gWiY)  
(youtube.com/watch?v=JCSwZw7gWiY)
- [Safety Video - Unintended IMC - UIMC / IIMC with Claude Vuichard](https://www.youtube.com/watch?v=LId0EeuyF-0) (youtube.com/watch?v=LId0EeuyF-0)
- [56 Seconds to Live](https://www.youtube.com/watch?v=ERUveRF7xC4)  
(youtube.com/watch?v=ERUveRF7xC4)