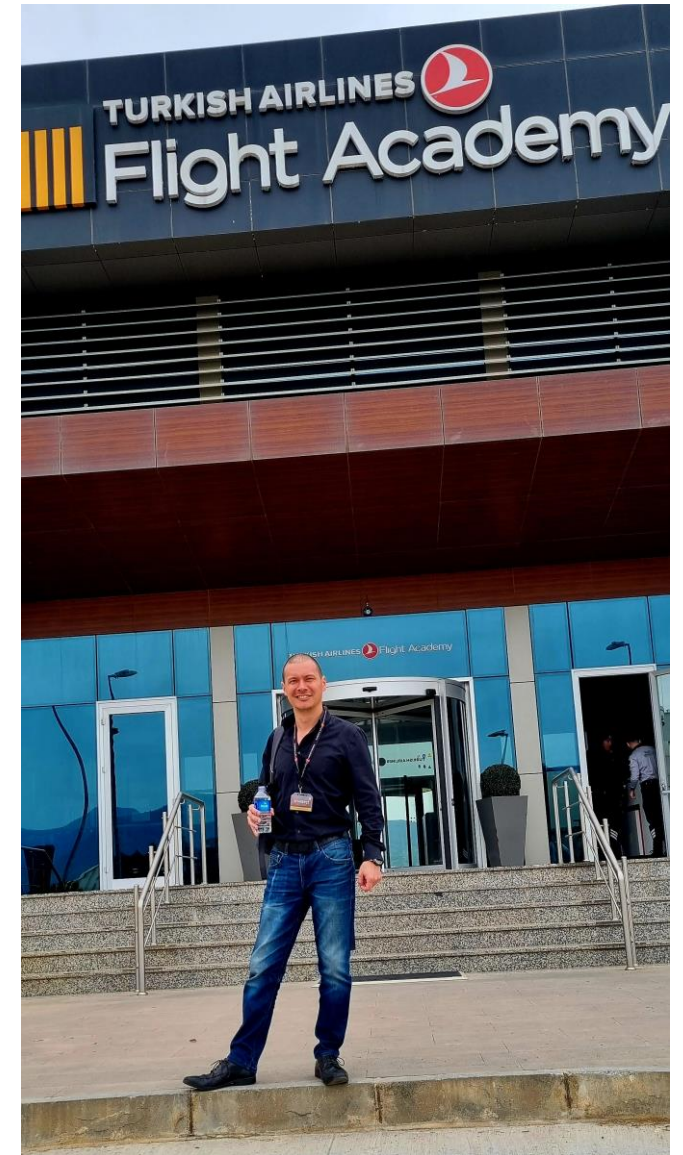


# PERSONAL BACKGROUND

ROB AKRON-PUNSELIE, B. ENG EMBA ATPL(A) CPL(H) FI-I

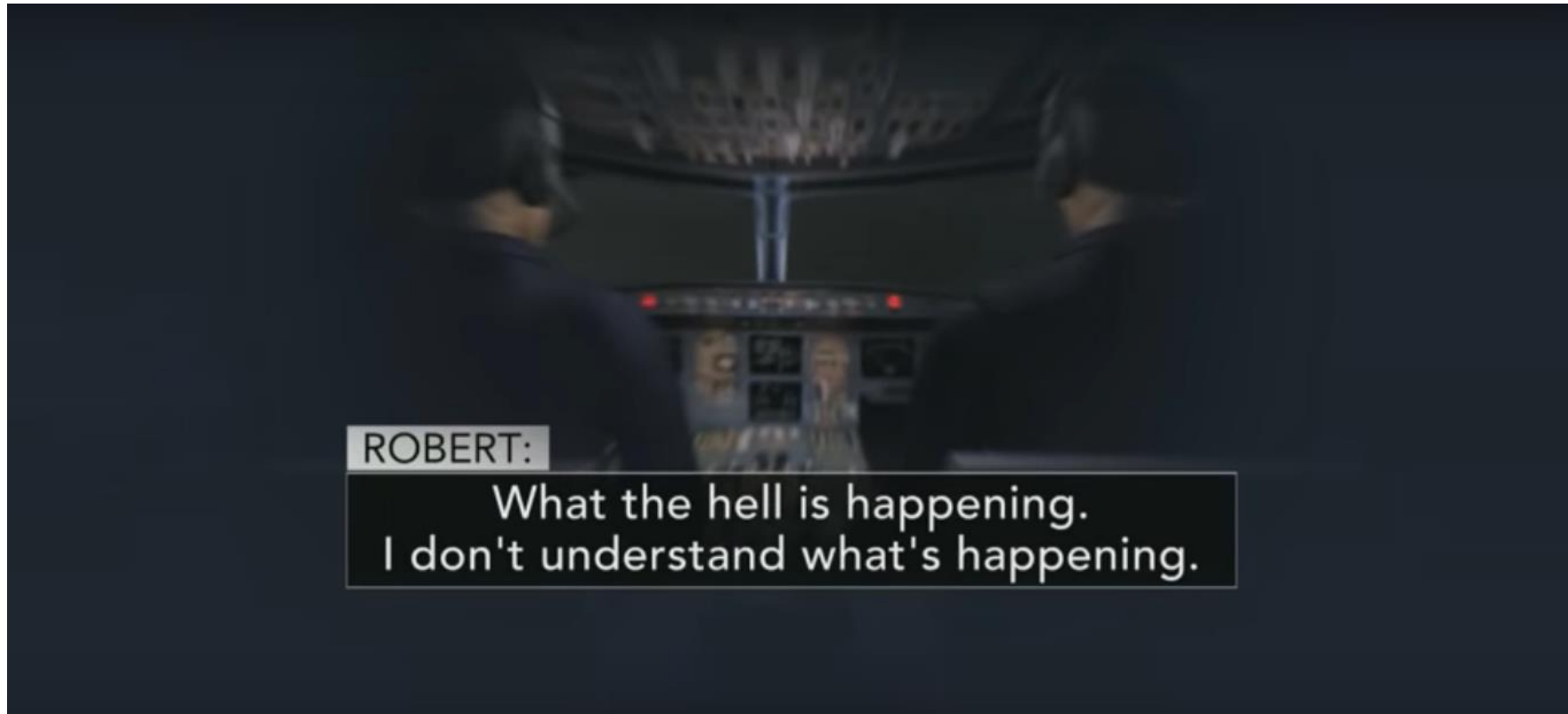
- Ex-Head of Training Aerobatic / UPRT-FI-I
- 50+ types, 5000 Hrs. t.t. 2000 Hrs. UPRT / Aerobatic
- - Vice Chairman Workgroup UAS+
- - VC Contact point Business Aviation
- - ECA Representative to EASA



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# HISTORY OF UPSET TRAINING: AIR FRANCE 447



# WHO REQUIRES UPSET TRAINING?

## FCL.720.A Experience requirements and prerequisites for the issue of class or type ratings-aeroplanes

- (b) Multi-pilot aeroplanes Applicants for the issue of the first type rating course for a multi-pilot aeroplane shall be student pilots currently undergoing training on an MPL training course or comply with the following requirements:
- (1) have at least 70 hours of flight experience as PIC in aeroplanes;
  - (2) hold or have held a multi-engine IR(A);
  - (3) have passed the ATPL(A) theoretical knowledge examinations in accordance with this Annex (Part-FCL);
  - (4) except when the type rating course is combined with an MCC course:
    - (i) hold a certificate of satisfactory completion of an MCC course in aeroplanes; or
    - (ii) hold a certificate of satisfactory completion of MCC in helicopters and have more than 100 hours of flight experience as pilots of multi-pilot helicopters; or
    - (iii) have at least 500 hours as pilots of multi-pilot helicopters; or
    - (iv) have at least 500 hours as pilots in multi-pilot operations on single-pilot multi-engine aeroplanes, in commercial air transport in accordance with the applicable air operations requirements; and
  - (5) have completed the training course specified in [FCL.745.A](#).

# INTENT OF THE REGULATION: EASA AMC'S

## AMC 1 FCL.745.A Advanced UPRT course - aeroplanes

### COURSE OBJECTIVE AND CONTENT

#### COURSE OBJECTIVE

- (a) The objective of the course is for the pilot under training:
  - (1) to understand how to cope with the physiological and psychological aspects of dynamic upsets in aeroplanes; and
  - (2) to develop the necessary competence and resilience to be able to apply appropriate recovery techniques during upsets.

## INTENT OF UPRT

1. To improve the Pilot's ability to **Recognize** and **Avoid** an Impending Upset Situation
2. To enhance the Pilot's ability to **Recover**, *should* an Upset Situation occur.

(And have a bit of fun in the process...)



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# EASA GUIDANCE MATERIAL

## GM 1 FCL.745.A Advanced UPRT course - aeroplanes

- (d) Aeroplanes used in this course should be:
- (1) appropriately certified and operated by the ATO in a manner that takes into account the effects of repeated training manoeuvres on airframe fatigue life; and
  - (2) provide sufficient safety margins to cater for student and instructor errors.
- (e) This course complements UPRT in FSTDs by providing exposure to psycho-physiological conditions, which cannot be delivered by the motion systems of today's qualified FSTDs. At completion of the course, the student should pilot to be able to:
- (1) recognise and confirm the upset-situation;
  - (2) manage stress response;
  - (3) apply the correct recovery strategy timely and effectively;
  - (4) stay within the defined training envelope;
  - (5) stabilise the flight path after recovery; and
  - (6) become competent and confident in recovering from upsets.

# A NOTE ON STANDARDIZATION: *INTERPRETATIONAL DIVERGENCE OF REGULATORY INTENT*

BETWEEN AUTHORITIES

NO TRAINING REQUIRED  
FOR INITIAL ISSUE OF UPRT-FI  
RATING UPON NEW CERTIFICATION  
OF AN ATO!

BETWEEN ATO'S

AN AEROBATIC RATING IS NOT  
REQUIRED

BETWEEN INSTRUCTORS

STANDARDIZATION OF PILOTS WITH  
MILITARY VS AEROBATIC OR ATP  
BACKGROUND IS NOT REQUIRED!



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# EXAMPLES OF (DANGEROUS) MISINTERPRETATION

A-UPRT ON C152/C172

A-UPRT ON PIPISTREL VIRUS



EASA Advanced UPRT 2020 - the cheapest in Europe

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Upset Prevention and Recovery Training (UPRT) in Portugal

903 subscribers [Subscribe](#) [11](#) [Share](#) [Download](#) [Save](#)



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# EASA GUIDANCE MATERIAL

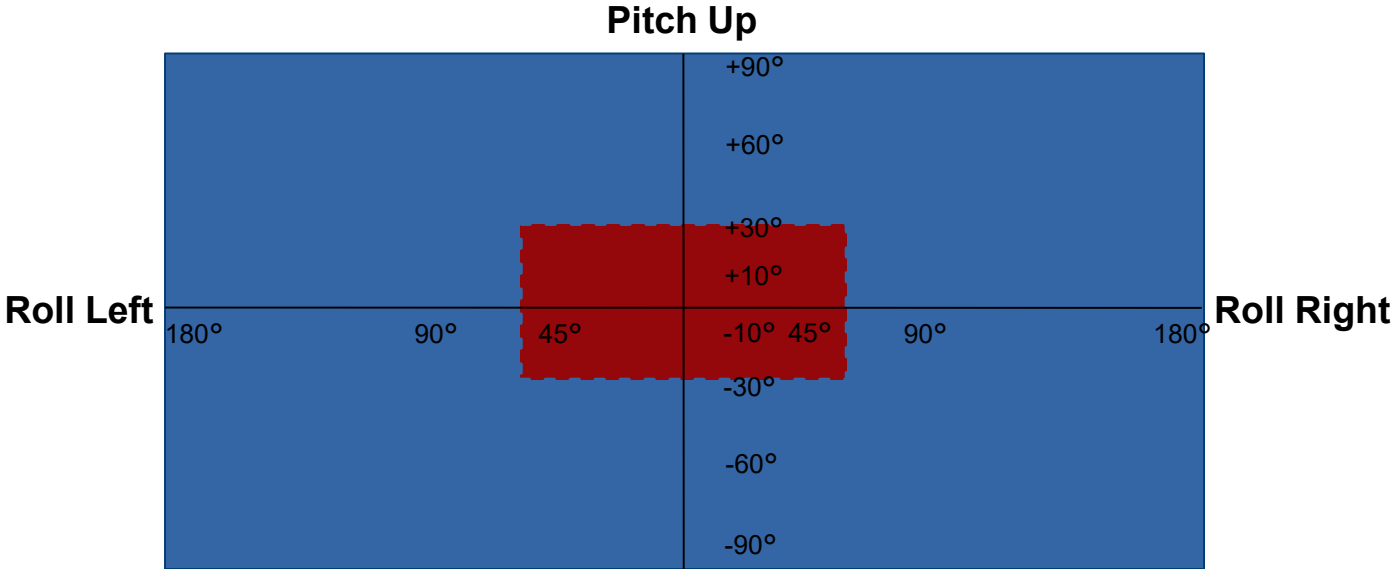
## GM 1 FCL.915 (e) General prerequisites and prerequisites for instructors

### TRAINING ON SPIN AVOIDANCE AND SPIN RECOVERY

- (a) While the purpose of advanced UPRT course is to expose students to psychological and physiological effects, students' responses and actions on controls may take any conceivable variations, including some which can initiate spin entry or, most importantly, can highly aggravate the upset or loss-of-control they are supposed to recover from.
- (b) The advanced UPRT course in accordance with point [FCL.745.A](#) is not aerobatic training and only requires training for the incipient spin as well as uncoordinated side slipped stalls which are prone to initiating spins. Full spin training or the development of spin recovery proficiency is reserved for the training course in accordance with point [FCL.915\(e\)](#).
- (c) Even though most flights will go exactly as planned without an unanticipated departure from controlled flight, the instructor is responsible for the safety of flight despite anomalies or unexpected student inputs.
- (d) Even in a case where an aeroplane is not certified for intentional flat or aggravated or inverted spins, it does not mean that mishandled student recovery avoids placing the aeroplane in such a situation. Some student inputs will take the aeroplane uncontrolled far beyond the normal scope of the aerobatic rating as defined in point [FCL.800](#). Those situations might also have the potential to draw the aeroplane outside its certified flight envelope (e.g. overloads, snap-roll departures above limit speed, spin or inverted spin when not certified for, flat spins, etc.). Most importantly, those resulting situations could startle the instructor.

# BOUNDARIES OF TRAINING

## Pilot Competency Envelopes

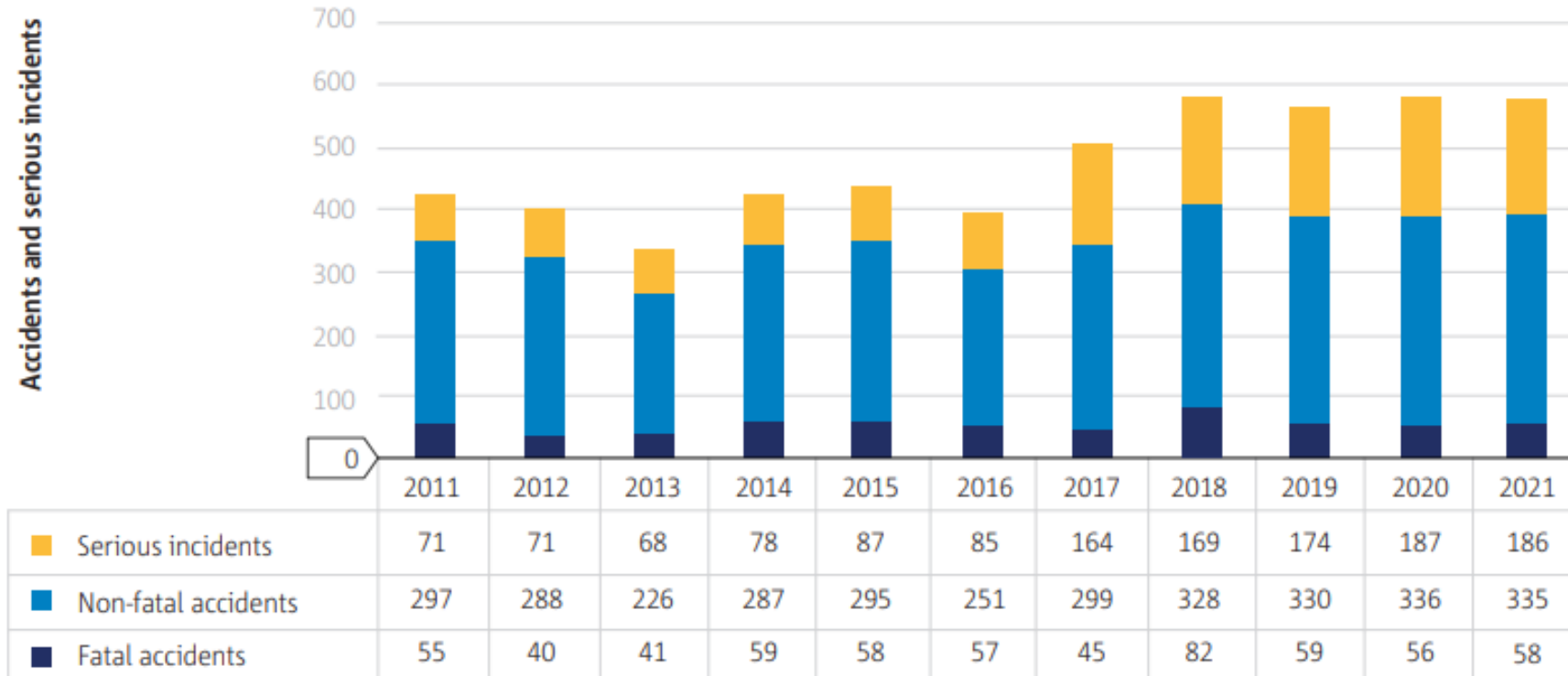


Typical Flight Instruction: ~11% of Flight Envelope



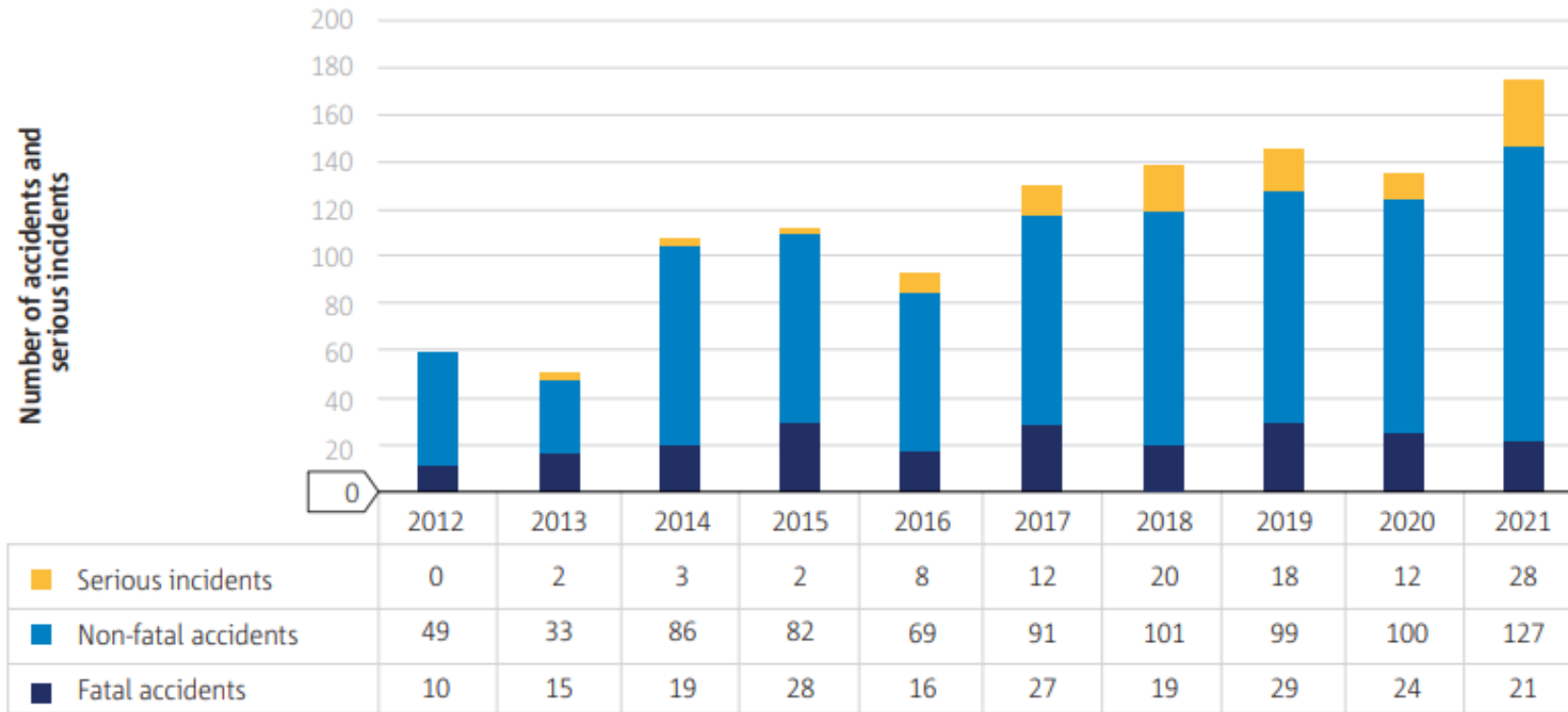
Aerobatic / UPRT Instructors: 100% of Flight Envelope

# WHERE WE ARE FAILING: GA



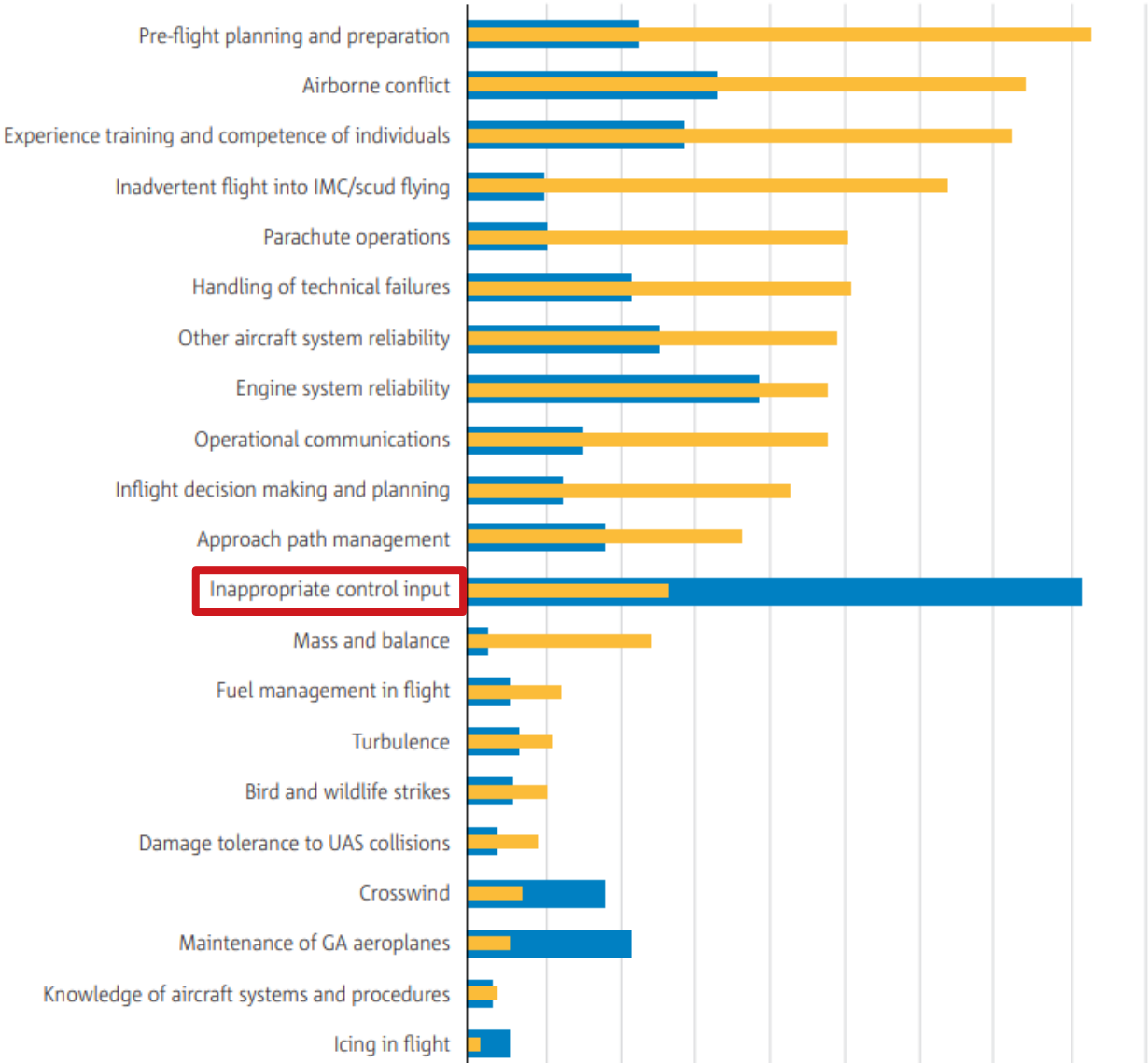
► **Figure 34** Fatal accidents, non-fatal accidents and serious incidents per year involving non-commercially operated small aeroplanes

# WHERE WE SHOULD BE ASHAMED: LSA



► **Figure 45** Numbers of fatal accidents, non-fatal accidents and serious incidents per year involving non-commercially operated microlights

# CAUSAL ANALYSIS



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# WHAT IS EASA DOING ABOUT IT?



## Types of Accidents and Safety Issues in GA Aeroplanes

**More accidents and serious incidents occurred during landing than any other flight phase**

The highest Key Risk Areas (KRAs) for GA aeroplanes are;

- Aircraft upset
- Terrain collision
- Airborne collision

**The most common accident outcome was runway excursion**

the.aviators.club Original audio

the.aviators.club The results of the EASA Annual Safety Review are out and the news is good. Fatal accidents in GA are down by 23%.

More accidents happened during landing than any other phase of flight. Losing control, terrain collision and airborne collision are the most risky situations. Check out the safety review on the EASA GA Community Site at the link in the comments.

#pilots #pilotlife #instapilot #theaviatorsclub #flying #aircraft #accidents

4w

the.aviators.club <https://www.easa.europa.eu/community/topics/easa-annual-safety-review-general-aviation>

4w Reply

5 likes AUGUST 18

Add a comment...



# CONTACT AND DISCUSSION:

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- Connect on: [LinkedIn](#), [FB](#)



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