



# **UPL SAFETY SEMINAR 2016**

## **Occurrence reporting**

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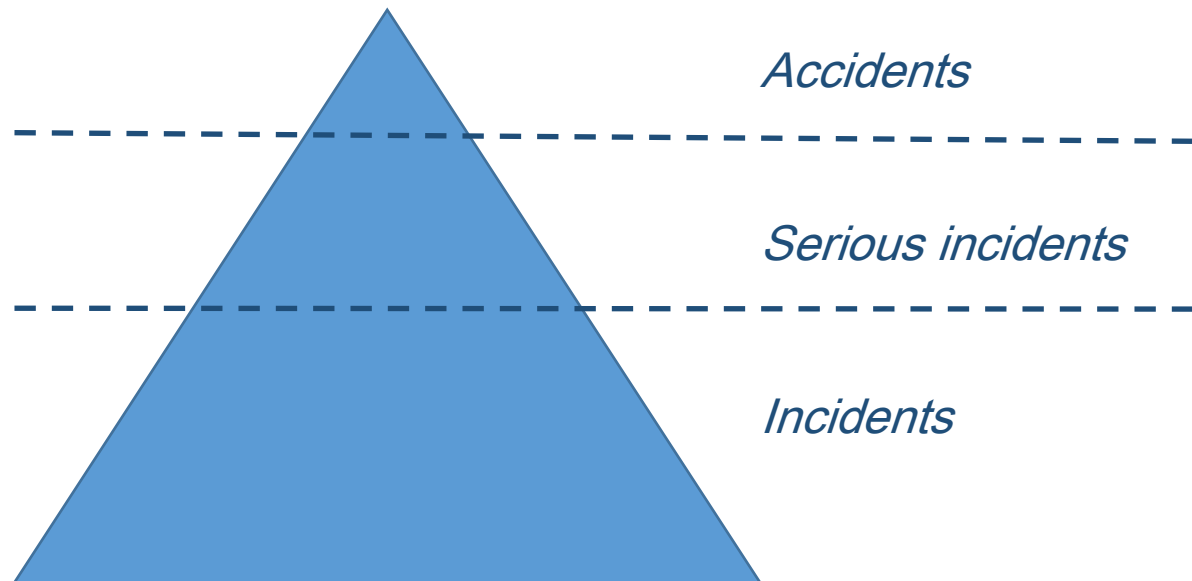
# Agenda

## Occurrence reporting:

- Why report?
- What and how to report?
- What happens to your report?
- What does NOT happen to your report? JUST CULTURE
- The outcome: Analysis at national and european level



## Why report?



***You must learn from the mistakes of others. You can't possibly live long enough to make them all yourself.***

*Samuel Levenson*



## Why report?

Occurrence reporting:

Reporting of « occurrences » to the competent authority (DAC)

- Direct reporting  
(person involved => DAC)
- Reporting through an organisation  
(person involved => employer  
=> DAC)

An obligation (and routine) for pilots, air traffic controllers, maintenance and ground handling personnel,...





## What to report?

Occurrence:

« any safety-related event which endangers or which, if not corrected or addressed, could endanger an aircraft, its occupants or any other person and includes in particular an accident or serious incident.”

- Mandatory reports for General Aviation Pilots:  
Occurrences as listed in Implementing Regulation (EU) 1018/2015, Annex V
  - Annex V.1 NON-COMPLEX MOTOR-POWERED AIRCRAFT
  - Annex V.2 SAILPLANES (GLIDERS)
  - Annex V.3 LIGHTER-THAN-AIR VEHICLES (BALLOONS AND AIRSHIPS)
- Voluntary reports: Any event or latent condition considered safety-relevant



## What to report?

Mandatory reporting – Examples:

- Runway incursion
- Runway excursion
- Airspace infringement
- Any occurrence leading to an emergency call
- A collision on the ground or in the air, with another aircraft, terrain or obstacle
- A near collision, on the ground or in the air, with another aircraft, terrain or obstacle requiring an emergency avoidance manoeuvre to avoid a collision
- Interference by laser, drones,...





## What to report?

Voluntary reporting:

A few considerations:

- If in doubt... report
- Is it a safety concern?  
Can somebody learn something from it?
- A report can be about an « event » (something happened) or a « latent condition » (an unsafe condition that has been present since some time)





## How to report?

All reports:

- Via the European Portal  
[www.aviationreporting.eu](http://www.aviationreporting.eu)  
online or PDF form
- Via e-mail to DAC:  
[safety@av.etat.lu](mailto:safety@av.etat.lu)

Mandatory reports:

- To the authority that issued your pilot's licence
- Within 72 hours





[www.aviationreporting.eu](http://www.aviationreporting.eu)



AVIATION SAFETY REPORTING

Report to Luxembourg on my personal behalf

General information about the occurrence



When / Where

UTC date	<input type="text"/>	Local date	<input type="text"/>
UTC time	<input type="text"/>	Local time	<input type="text"/>
State/area of occ	<input type="text"/>		
Location name	<input type="text"/>		

What

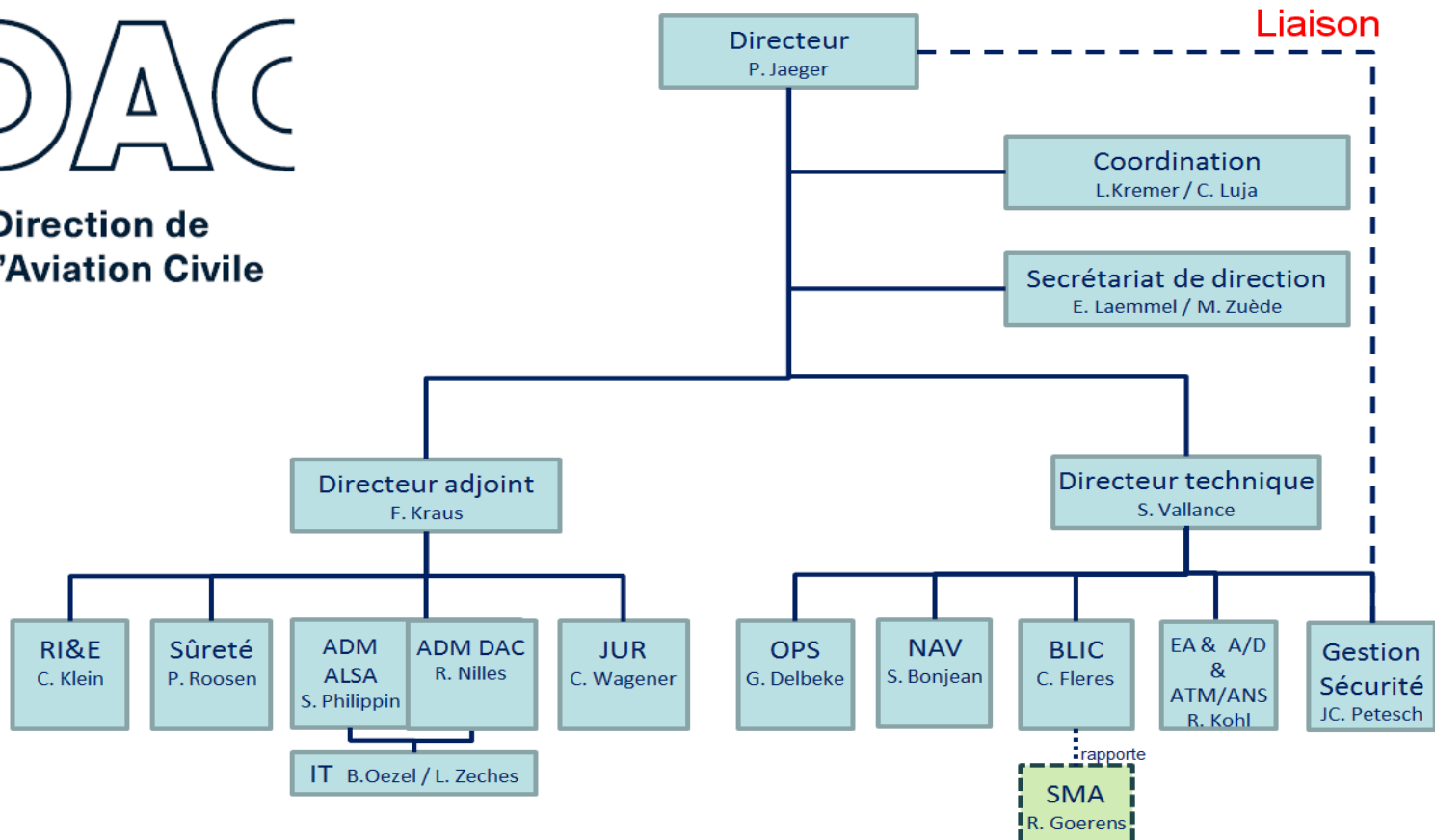
Headline	<input type="text"/>
Narrative language	<input type="text"/>
Narrative	<input type="text"/>



## What happens to your report?



Direction de  
l'Aviation Civile





# What happens to your report?

Direction de l'Aviation Civile:

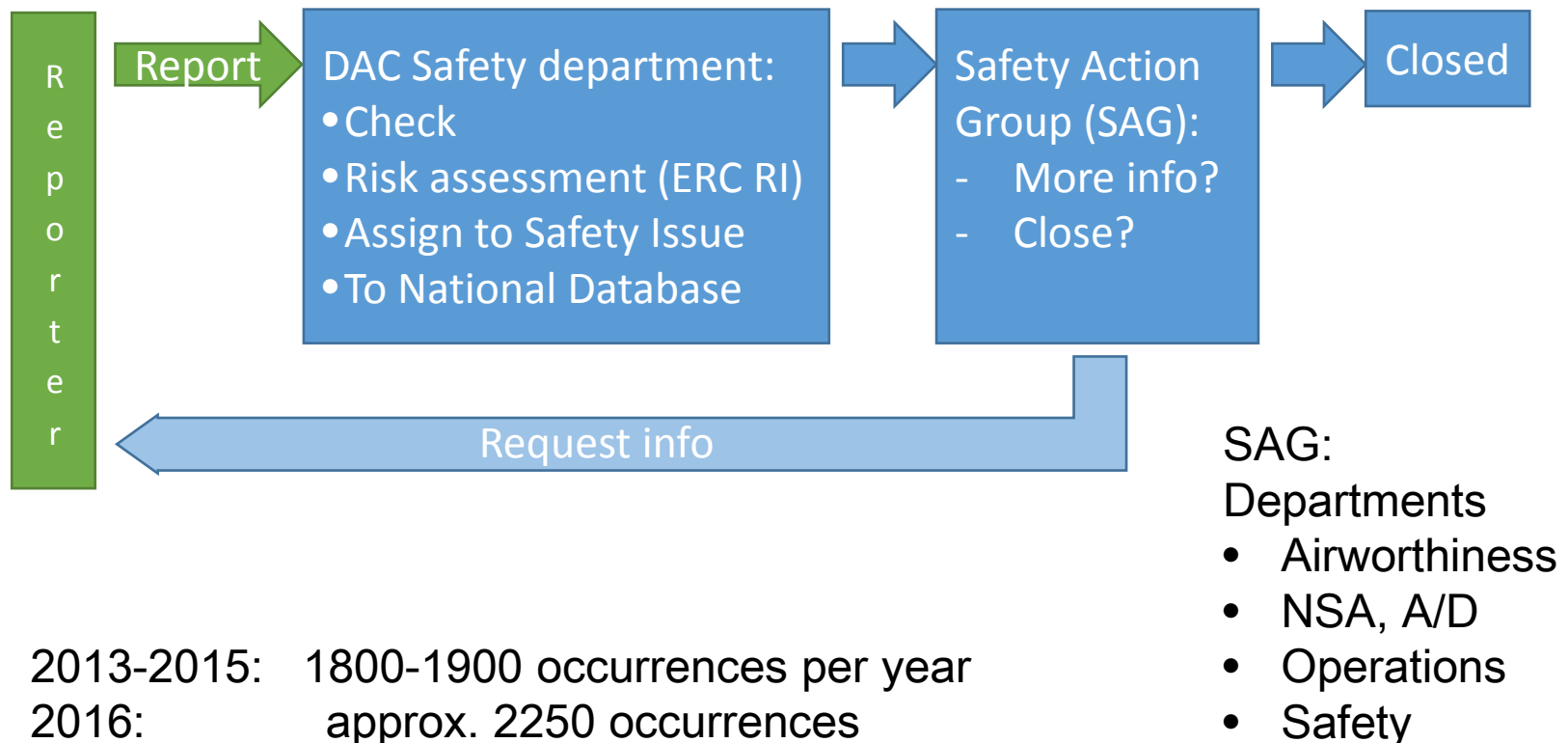
Legal obligations related to occurrence reporting:

- independently collect, evaluate, process, analyse and store details of occurrences reported
  - Quality check
  - Risk classification
  - Follow-up if required
  - National database
  - Ensure confidentiality and protection of reporters
- Exchange information with European Central Repository
- Publish an annual safety review



# What happens to your report?

## Occurrence reporting workflow at DAC





## What happens to your report?

For each occurrence: ERC – Event Risk Classification

Question 2

What was the effectiveness of the remaining barriers between this event and the most credible accident scenario?			
Effective	Limited	Minimal	Not effective
50	102	502	2500
10	21	101	500
2	4	20	100
1			

Question 1

If this event had escalated into an accident outcome, what would have been the most credible outcome?	
Catastrophic Accident	Loss of aircraft or multiple fatalities (3 or more)
Major Accident	1 or 2 fatalities, multiple serious injuries, major damage to the aircraft
Minor Injuries or damage	Minor injuries, minor damage to aircraft
No accident outcome	No potential damage or injury could occur

Typical accident scenarios
Loss of control, mid air collision, uncontrollable fire on board, explosions, total structural failure of the aircraft, collision with terrain
High speed taxiway collision, major turbulence injuries
Pushback accident, minor weather damage
Any event which could not escalate into an accident, even if it may have operational consequences (e.g. diversion, delay, individual sickness)



## **What happens to your report?**

### **Safety Issues:**

- Identified by DAC, linked to occurrence reports  
example Safety Issues :      Birdstrikes at ELLX  
   Laser interference
- Risk assessment by SAG (recurring)

### **Annual Safety Report:**

- Sum of ERC Risk numbers of linked occurrences
- Highest sum of ERC Risk Indexes: Top 10

### **National database:**

Access: DAC Safety Department and AET



## What does not happen to your report?

Protection of reporters and persons mentioned in reports:

- No names or personal information are ever recorded in the national or European database  
*REG. (EU) No 376/2014, Art. 16(3)*
- Occurrence reports are confidential  
*REG. (EU) No 376/2014, Art. 15(1)*
- Information from occurrence reports shall not be used
  - (a) in order to attribute blame or liability; or
  - (b) for any purpose other than the maintenance or improvement of aviation safety*REG. (EU) No 376/2014, Art. 15(2)*



## What does not happen to your report?

### 'JUST CULTURE'

means a culture in which front-line operators or other persons are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training,

but in which gross negligence, wilful violations and destructive acts are not tolerated

REGULATION (EU) No 376/2014





## The outcome: Analysis at national level

Annual safety reports 2014, 2015

TOP 10 SAFETY ISSUES 2015	Accident Severity	CFIT	LOC-I	MAC	GCOL	RWY-EXC	Injury or damage	
							in flight	on ground
Cargo moving/shifting during flight	Catastrophic		X					X
Risk of MAC (Mid-Air Collision)	Catastrophic			X				
Risk of collision with drone	Catastrophic			X			X	X
Mismatch between calculated and actual CG	Catastrophic		X			X		X
Engine failure or problems - single engine aircraft <b>GA</b>	Major		X			X	X	
Airspace infringement	Catastrophic			X				X
Icing	Catastrophic		X			X	X	
Aircraft not correctly configured for takeoff	Catastrophic		X			X		
DGR handling	Catastrophic		X					
Technical - pressurisation system	Catastrophic	X	X					



## The outcome: Analysis at national level

### General Aviation 2015: Top 2

SAFETY ISSUE	Accident Severity	CFIT	LOC-I	MAC	Collision on ground	RWY-EXC	Injury or damage in flight	Injury or damage on ground
Engine failure or problems - single engine aircraft	Major		X			X		X
Loss of control during landing	Major					X		

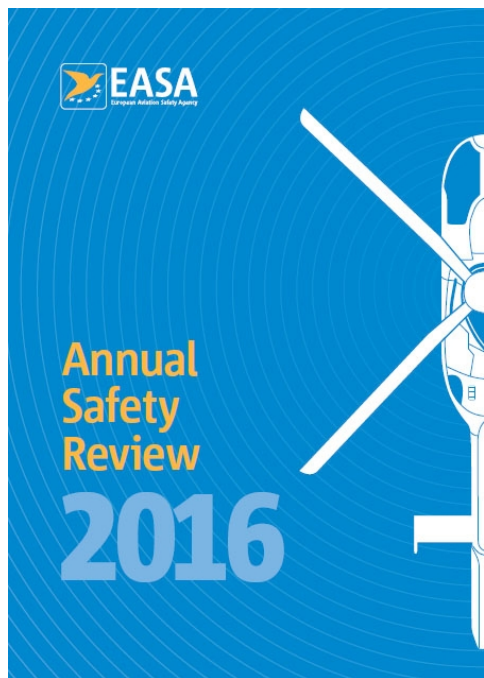
### General Aviation 2014: Top 3

Loss of control during landing	Major		/			X		X
Engine failure or problems - single engine aircraft	Major	/	X			X		
Hot Air balloon failed landing	Major		/		X			X



## The outcome: Analysis at European level

EASA Annual Safety Review, European Plan for Aviation Safety, ...





**Thank you for your attention!**

**Any questions?**





## **Backup slides**



## JUST CULTURE 1940

**Not entirely  
a new idea**

A fault revealed  
voluntarily will be  
treated leniently but  
a fault concealed may  
lead to serious  
consequences for the  
workman, not to  
mention the pilot

Hurricane production  
1940

