

























## **ICAO** Runway Safety Data – **High Level Analysis**



ICAO Air Navigation Bureau Implementation Support Officer - Safety 2<sup>nd</sup> Global Runway Safety Symposium Lima, Peru, 20 - 22 November 2017

20 November 2017























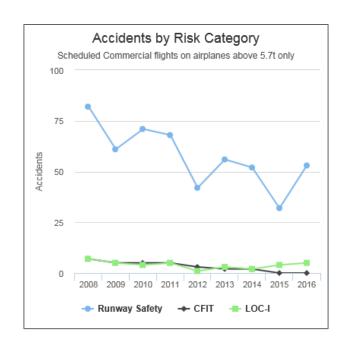
## Runway Safety Action Plan Working Group (RSAP-WG)

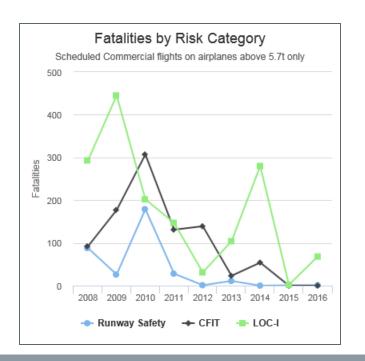
- Established February 2017
- Comprised of experts nominated by Runway Safety Programme partners
- Objectives:
  - 1) Review runway related accident and serious incident data
  - 2) Conduct a safety risk assessment of runway safety accident occurrence categories
  - 3) Identify the runway safety risk priorities and high risk accident categories
  - 4) Identify appropriate global mitigation actions
  - 5) Develop a Global Runway Safety Action Plan





## Runway Safety vs Other High Risk Categories





























## **Data Query**

#### **ICAO ADREP Data Query**

- Accidents and Serious Incidents
- Date Range: 2008 2016
- MTOW > 5700 kg
- Occurrence Categories:

Runway Safety Categories: Runway Excursion; Bird Strike; Abnormal Runway Contact; Undershoot/overshoot; Ground Collision; Loss of Control – Ground; Runway Incursion; Aerodrome; Ground Handling; Collision with obstacle(s) during take off and landing.

1124 reports analysed



ADREP et al.

Statistics and Data on Accidents and Incidents



20 November 2017

















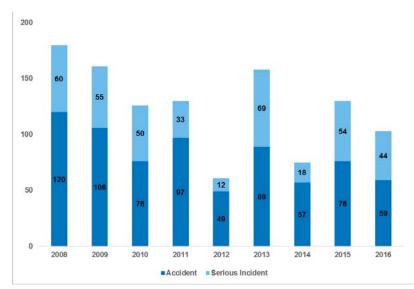








# Accident / Serious Incident Rate and Yearly Distribution



729 accidents and 395 serious incidents

	ICAO dataset (2008-2016)	ICAO Dataset for 2016
Number of reports used for analysis	1,124	103
Rate	3.50 report / 1,000,000 flights	2.56 report / 1,000,000 flights
Frequency	1 report / 285,960 flights 0.34 reports / day	1 report / 390,136 flights 0.28 reports / day















2012

2014





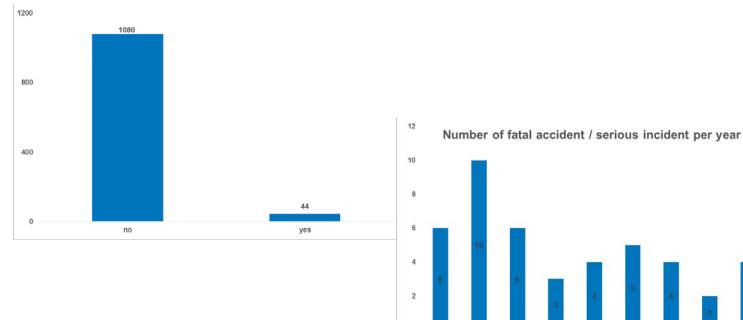












- 44 reports with fatalities (4 per cent )
  - 1080 reports out of 1124 had 0 fatalities
- Total of 446 fatalities





















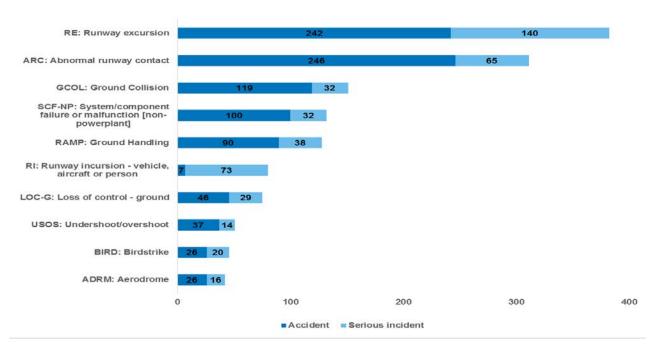








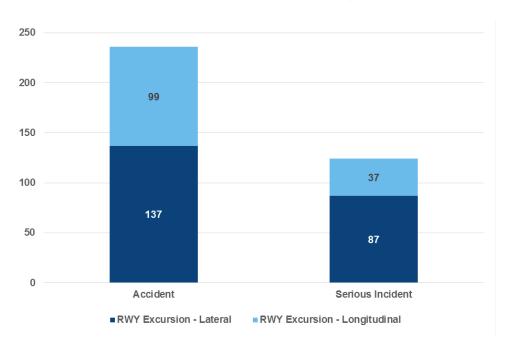
## **Breakdown by Occurrence Category**



- Runway Excursion was the top category with 34% (382) of reports.
- The next two highest categories were - Abnormal Runway Contact and Ground Collison, with 28% (311) and 14% (311) of reports respectively.
- Top 3 categories accounted for 76% of occurences.



## **Runway Excursion Type**



 62% (224) of Runway Excursion Accident / Serious Incident is Lateral, 38% (136) is Longitudinal.

























## **Summary**

- The accident/serious incident rate for 2016 is below the average rate for the period 2008 – 2016, the 2016 rate represented 0.28 reports per day.
- Runway Excursion was responsible for the highest number of Runway Safety events with 34% (382) of accident / serious incident reports.
- The working group conducted a safety risk assessment of runway safety occurrence categories, identified runway safety priorities and developed a global runway safety action plan.

































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