



# ICAO Runway Safety

# Programme

Aviation's #1 Safety Priority http://www.icao.int/safety/RunwaySafety

### **Michiel Vreedenburgh**

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





### **Runway Safety Programme**







## Panel 1

- David Gamper, Director, Safety, Technical and Legal Affairs, Airports Council International (ACI)
- Robert Holliday, Head Operational Safety, Safety and Flight Operations, International Air Transport Association (IATA)
- Nico Voorbach, Director, ICAO and Industry Affairs, Civil Air Navigation Services Organization (CANSO)
- Tzvetomir Blajev, Coordinator Operational Safety, Eurocontrol
- James Fee, ATO Safety and Technical Training Manager, Runway Safety Group, Federal Aviation Administration (FAA), United States





## **Runway Safety Programme Mandate**

The establishment of coordinated, *collaborative and multidisciplinary efforts* within ICAO and between ICAO and **Runway Safety Programme Partners** to promote the implementation of *strategies* to *reduce* the number and severity of *runway safety-related accidents and incidents on an ongoing basis.* 







### **Evolution of the Runway Safety at ICAO** (before GRSS2011)

- ICAO NAM/CAR/SAM Regions Runway Safety/Incursion Conference, Mexico City, October 2002
- ICAO AN-Conf/11 Recommendation 4/5 on Runway safety programmes 2003
- ICAO/ERAU Runway Safety Toolkit 2005
- ICAO Manual on the Prevention of Runway Incursions First Edition 2007
- ICAO/FAA Runway Incursion Severity Classification (RISC) 2009
- ICAO Assembly Resolution 37-6 on Runway Safety 2010
- ICAO/IATA Runway Excursion Risk Reduction Toolkit 2011
- ICAO Global Runway Safety Symposium, Montreal, May 2011





### **RSP ACHIEVEMENTS**





### **Evolution of the Runway Safety Programme** (after GRSS2011 up to 2014)

- ICAO Global Runway Safety Symposium, Montreal, May 2011
- Establishment of ICAO Runway Safety Programme in collaboration with partners – 2011
- ICAO RSP Regional Runway Safety Seminars 2011 2015
- ICAO Runway Safety Implementation Kit (I-Kit) and new web site 2014
- ICAO Runway Safety Team Handbook 2014
- ICAO Runway Safety Go-Team Methodology 2014







## **RSP Achievements - 2015**

- RASG runway Safety Enhancement Initiatives (SEI), Detailed Implementation Plans (DIP), WGs & regional publications – guidance and safety advisories/circulars
- ICAO & Partners Runway Safety Go-Team missions
- ACI APEX Airport Safety Reviews
- IATA Unstabilised Approach Guidance
- US FAA Academy ICAO TRAINAIR Standardized Training Package (STP) on "Runway Incursion Prevention"











### **RSP Achievements - 2016**

- New Runway safety team survey 216 RSTs registered
- Annex 14 Vol. I Amendment 13 Nov 2016
- PANS-Aerodromes 2nd edition (Doc 9981)
  - Nov 2016

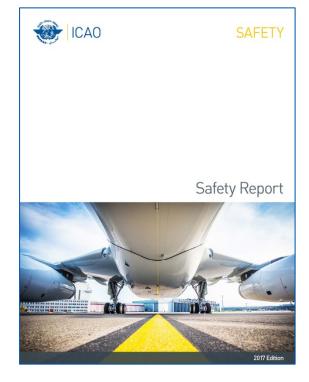






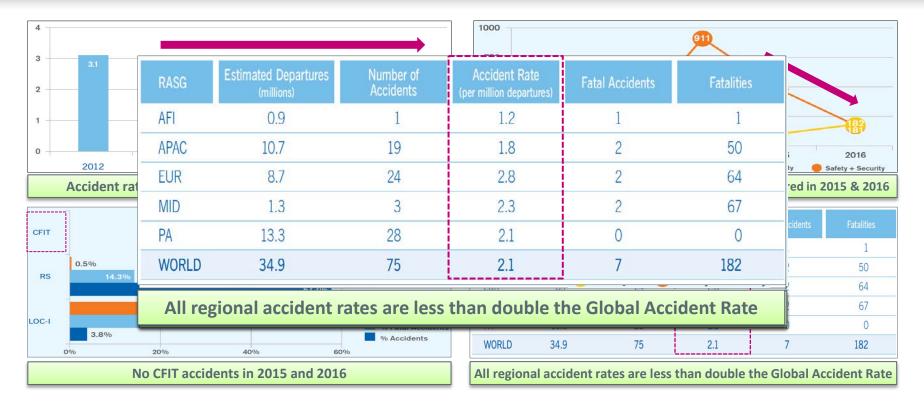


# ICAO ANNUAL SAFETY REPORT 2017 EDITION





### **STATE OF AVIATION SAFETY**

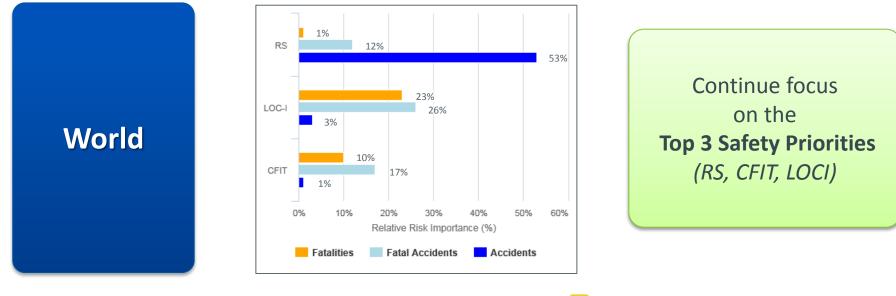


Source: 2017 Safety Report (https://www.icao.int/safety/Pages/Safety-Report.aspx)



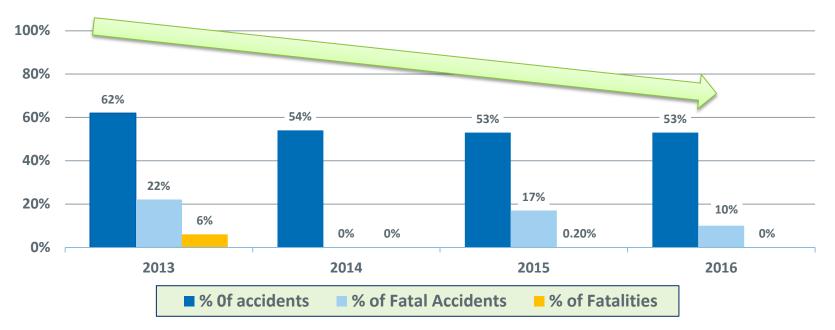
### **Risk Distribution for the Top 3 Safety Priorities**

Scheduled commercial above 5 700kg for 2012 - 2016





### **Runway Safety related Accidents**







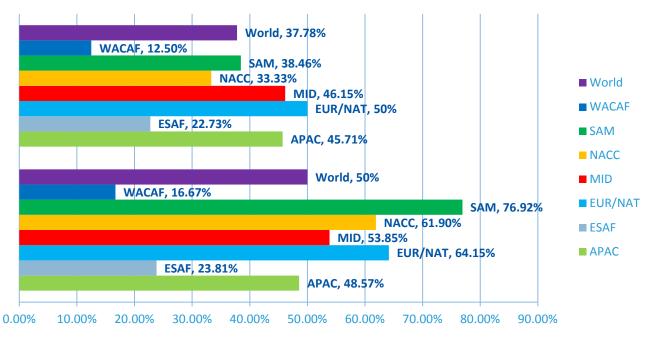
### Average Els of PQs: 7.189 & 8.205

#### PQ 8.205

Has the State established and implemented a process to ensure that an aerodrome operator's plan for lighting, signs and markings is integrated as a whole into the aerodrome's runway incursion and collision avoidance strategy, taking account of different traffic intensities and visibility conditions?

#### PQ 7.189

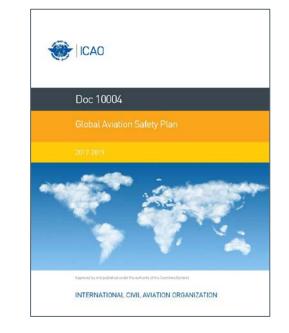
Has the State promulgated a regulation requiring the establishment and implementation of a runway safety programme?





## GASP 2017-2019 Edition

- Runway safety related events identified as one of the top 3 highrisk accident categories
- **Highest proportion of the accidents worldwide** during the 5year period (2010 - 2014) involved runway safety events
- Runway safety was the **prevalent accident category** for all the regions
- **Runway safety-related events** include, but are not limited to: abnormal runway contact, bird strikes, ground collisions, events related to damage from ground handling operations, runway excursions, runway incursions, loss of control on the ground, collision with obstacle(s), undershoots and overshoots











## RSP ACHIEVEMENTS AND PLANS (from 2017)





### **RSP Achievements 2017**

- Planning & coordination meeting April & November
- Runway Safety Action Plan Working Group
- Input to GASP Study Group
- New runway safety Go-Team missions site
- 23 Runway Safety Go-Team missions completed
- 1<sup>st</sup> Runway Incursion Prevention course November
- 2<sup>nd</sup> Global Symposium November
- New SMM (Doc. 9859) December
- Runway safety panel during SANIS December













### Runway Safety Action Plan Working Group Scope

- Review Runway Safety Programme achievements, objectives and priorities
- Develop a Runway Safety Action Plan for the future
- Make recommendations to the GASP Study Group to assist the development of the next 2020-2022 edition





Yes

### **Working Group Recommendations**

- Is Runway Safety still a global priority?
- If so, what category(ies)?

### **Runway Excursion**

- $\rightarrow$  Highest total risk weight
- $\rightarrow$  Highest number of events
- → Harmonized with international organizations (e.g IATA)

### **Runway Incursion**

- $\rightarrow$  High number of incidents
- $\rightarrow$  1 incident report per day
- $\rightarrow$  High fatality risk





### Global Airport Runway Safety Teams – 216 Teams Reported to ICAO



Please visit the following link to complete survey and see the complete list of reported Runway Safety Teams: https://www.icao.int/safety/RunwaySafety/Pages/Runway%20Safety%20Team%20Register.aspx

#### 20 November 2017





### Global Runway Safety Go-Team missions – 23 completed by ICAO & Partners



Please visit the following link to see the completed Runway Safety Go-Team missions: https://www.icao.int/safety/RunwaySafety/Pages/RS-Go-Team-Missions.aspx

#### 20 November 2017





## ICAO RSP Activities/Plans - 2018 and beyond

- Disseminate, Promote and Implement new Runway Safety Programme Action Plan
- Runway Safety Action Plan Working Group continues
- Support RASGs for regional implementation
- PANS-Aerodromes (Doc 9981) 3<sup>rd</sup> edition (new RS Chapter) – 2018
- Annex 14 Vol. I Amendment Nov 2018
- New USOAP audit protocol questions on runway safety provisions based on AR 37-6, 9870, 9981) – 2018
- New GASP 2019
- Revised Doc. 9870 2019









## Partner Activities/Plans - 2017

- ACI APEX, new SMS Handbook, incident data collection
- CANSO SEANS, RS maturity checklist update
- Eurocontrol RI Studies, EAPPRI v3.0
- FSF Go-Around Decision-Making and Execution Project
- IATA RE & RS Studies, Airport Analyses
- IFALPA RS manual update, new position paper
- IATA, CANSO, IFATCA and IFALPA Unstable Approaches Risk Mitigation Policies, Procedures and Best Practices









