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Safety and Air Navigation Directors of the CAR Region Meeting (CAR/DCA/OPSAN)
Mexico City, México, 18 to 19 February 2014

Agenda Item 3: NAM and CAR Regional Safety and Air Navigation Priorities
3.2 Regional Aviation Safety Group – Pan America (RASG-PA)

RASG-PA ANNUAL SAFETY REPORTS

(Presented by the Secretariat)

EXECUTIVE SUMMARY

The Annual Safety Report is developed and published by RASG-PA. It is the first exclusive Safety Report for the Pan American Region.

The RASG-PA Annual Safety Report – Fourth Edition (2013) presents analysis related to aviation occurrences in the Pan American Region accomplished by the RASG-PA Annual Safety Report Team (ASRT) performed by extracting safety information collected from ICAO, Boeing and IATA.

<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety
<i>References:</i>	<ul style="list-style-type: none">• RASG-PA Annual Safety Reports

1. Introduction

1.1 The Annual Safety Report is developed and published by RASG-PA. It is the first exclusive safety report for the Pan American Region and is based on aviation safety data provided by ICAO, Boeing and IATA.

1.2 Analysis of the aviation safety data was completed through in-kind contributions of aviation safety personnel from RASG-PA members. This type of report, which has a consolidated vision of aviation safety using sources of information from regional stakeholders, is a key component of any RASG. This report is published annually and provides updated aviation safety information on the Pan American Region.

2. Executive Summary

2.1 Analysis of available safety information showed that the top categories to focus safety enhancements are related to:

- Loss of Control In-flight (LOC-I)
- Runway Excursion (RE)
- Controlled Flight Into Terrain (CFIT)
- Mid Air Collision (MAC)

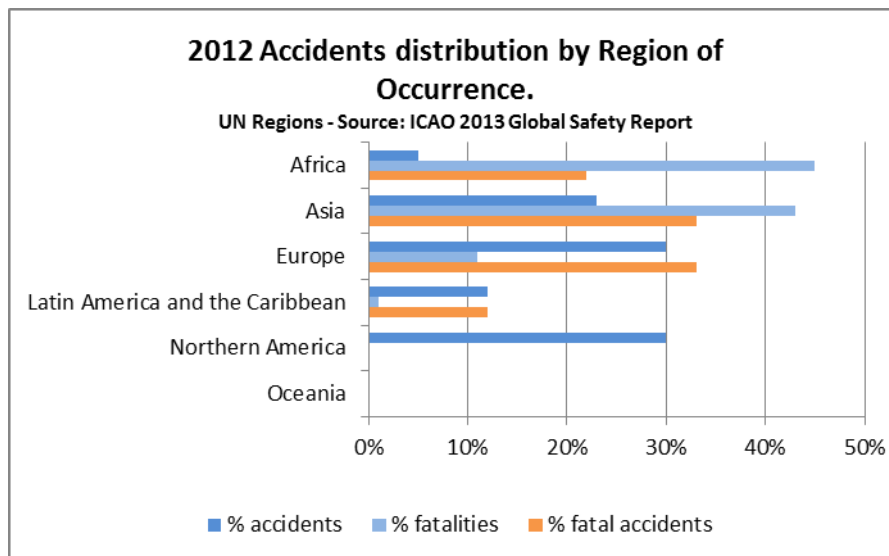
2.2 It should be noted that there are differences in the safety information provided by the participating organizations due to the amount of data available, the quality, and the criteria used in their respective analysis. Therefore, the users of this report are invited to use the information presented according to their own safety concerns and operational reality.

2.3 The distribution of global accidents, fatal accidents, and fatalities by region is shown in Table 1 and Figure 1. While Africa accounted for only 5% of total accidents, 45% of all fatalities occurred in that region. North America experienced no fatal accidents, while no accidents occurred in Oceania in 2012. Please note that United Nations Regions are used in this Table.

Table 1. Accident Statistics and Accident Rates - 2012. Source: ICAO 2013 Global Safety Report

UN Region	Accidents	Accident rate	Fatal accidents	Fatalities	% accidents	% fatal accidents	% fatalities
Africa	5	4.8	2	167	5%	22%	45%
Asia	23	2.7	3	161	23%	33%	43%
Europe	30	4.2	3	42	30%	33%	11%
Latin America & the Caribbean	12	3.8	1	2	12%	12%	1%
Northern America	29	2.8	0	0	30%	0%	0%
Oceania	0	0.0	0	0	0%	0%	0%
World	99	3.2	9	372			

Figure 1. 2012 Accidents by Region of Occurrence



2.4 According to ICAO Accidents/Incidents Reporting System (ADREP) and European Coordination Centre for Aviation Incident Reporting System (ECCAIRS) statistics¹, the number of fatal

¹ The ICAO ADREP/ECCAIRS data used in this report was consulted on July 19th, 2013.

accidents and total fatalities in 2012 in the Pan American Region for both scheduled commercial air transport operations involving aircraft with maximum take-off mass (MTOM) above 27,000 kilograms and general aviation operations involving aircraft with MTOM above 2,250 kilograms remained below the previous 10-year moving average (2002-2011). The following Tables provide the specific numbers for both types of operations.

Table 2. Scheduled Commercial Air Transport Operations Accidents (Aircraft MTOM above 27,000 kilograms)

PAN AMERICA Scheduled Commercial Air Transport Operations ² Accidents Aircraft Maximum Take-off Mass above 27,000 kilograms Sources: Boeing - ICAO ADREP/ECCAIRS			
Year	Total Accidents ³	Fatal accidents ⁴	Total fatalities
2002-2011 avg.	23.9	1.2	59.9
2011	27	0	0
2012	4	0	0

Table 3. General Aviation Operations Accidents (Aircraft MTOM 2,250 to 27,000 kilograms)

PAN AMERICA General Aviation ⁵ Operations Accidents Aircraft Maximum Take-off Mass 2,250 to 27,000 kilograms Source: ICAO ADREP/ECCAIRS			
Year	Total Accidents	Fatal accidents	Total fatalities
2002-2011 avg.	219	57.4	137.4
2011	110	27	58
2012	18	5	16

2.5 Notably, LOC-I and CFIT occurrences showed decreasing trends, especially at the end of the period; however, they continue to represent the highest fatality risk type of accident, while System-Component Failure/Malfunction (non-powerplant) (SCF-NP) is an emerging category in the Region, accounting for 50% of 2012 accidents as depicted in Table 1.

2.6 Markedly, many occurrences were categorized as Unknown (UNK) or did not correspond to a category, even when in most cases the reports contained sufficient information to code them under a proper category. This is an indication of the need to improve data quality in the Region, especially in regard to general aviation related occurrences.

2.7 By contrast, the proactive safety information in the ASR, extracted from the results of the ICAO Universal Safety Oversight Audit Programme (USOAP), showed 11 States in the Pan American Region that maintain low levels of effective implementation (EI) of ICAO Standards and Recommended

² Scheduled Commercial Air Transport Operation: an air service open to use by the general public and operated according to a published timetable or with such a regular frequency that it constitutes an easily recognizable systematic series of flights, which are open to direct booking by members of the public, according to ICAO DOC 9626.

³ Accidents as defined in ICAO Annex 13.

⁴ Fatal accident: an accident where at least one passenger or crewmember is killed or later dies (within 30 days following the accident date).

⁵ General aviation: for this report, general aviation operation includes all civil aviation operations other than scheduled and non-scheduled commercial air transport operations.

Practices (SARPs). Lack of effective technical staff qualification and training represents the most significantly affected USOAP Critical Element (CE) in the Region. It would be worthwhile to determine if a correlation exists between this CE and the UNK categorized occurrences, which show an increasing trend for general aviation during the latest 10-year period, in order to develop strategies related to the ICAO Global Aviation Safety Plan (GASP) Global Safety Initiative - *Effective Incident and Accident Investigation*.

2.8 Of particular significance is the fact that the technical areas showing lowest levels of EI were Air Navigation Services (ANS), Aerodromes and Ground Aids (AGA) and Accident and Incident Investigation (AIG). Improvements in these areas should have priority in the CAR Region due to the continuous forecast growth of commercial air transport.

2.9 IATA Operational Safety Audit (IOSA) results revealed the main findings to be personnel training and qualification processes. This, coupled with the findings of the USOAP/Central Monitoring Agency (CMA), indicates that this area not only involves States but also operators/service providers.

2.10 RASG-PA is committed to improving aviation safety and enabling seamless cooperation and communication among the main aviation safety stakeholders in the Pan American Region.

3. Conclusion

3.1 The Meeting is invited to review the safety information presented and to review previous editions of the RASG-PA Annual Safety Reports and other RASG-PA related documentation, including training material that can be downloaded at: www.rasg-pa.org. For additional information contact: info@rasg-pa.org. RASG-PA members are encouraged to share their safety data.