



Ninth Regional Aviation Safety Group — Pan America Plenary Meeting (RASG-PA/9)
Panama City, Panama, 23 June 2016

Agenda Item 4: Pan America – Regional Aviation Safety Team (PA-RAST) Report

PA-RAST STATUS REPORT

(Presented by Brazil and IATA)

EXECUTIVE SUMMARY

This paper presents an overview of the mitigation strategies developed by the Pan American Regional Safety Team (PA-RAST) since its establishment in 2008. Also, the current work plan and the Fatality Risk numbers for LATAM/CAR Region between 2010 and 2015 are presented.

PA-RAST is focused on the establishment of achievable projects based on prioritized mitigation measures with well-defined deliverables in a specific timeframe.

Action:	Suggested action is presented in Section 7.
<i>Strategic Objective:</i>	<ul style="list-style-type: none"> • Safety

1. Introduction

1.1 RASG-PA’s Mission is defined as: “To reduce fatality risk in commercial aviation by ensuring prioritization, coordination and implementation of data driven safety enhancement initiatives in the Pan-American Region through the active involvement of all civil aviation stakeholders.”

1.2 Fatality Risk is a measure of the exposure of a passenger or crew to a catastrophic accident where all people aboard perished. The equation to calculate the Fatality Risk is $Q = V/N$, where:

- **N** is the number of flights or sectors conducted during the period;
- **V** is the sum of all “full-loss equivalents” calculated for all N flights. A full-loss equivalent for a given flight is the proportion of passengers and crew that do not survive the accident.

1.3 RASG-PA has defined its objective as: “Using 2010 as a baseline, reduce Fatality Risk for Part 121 or equivalent operations by 50% by the year 2020 in Latin America and the Caribbean.”

2. Detailed Implementation Plans (DIPs) 2008-2014

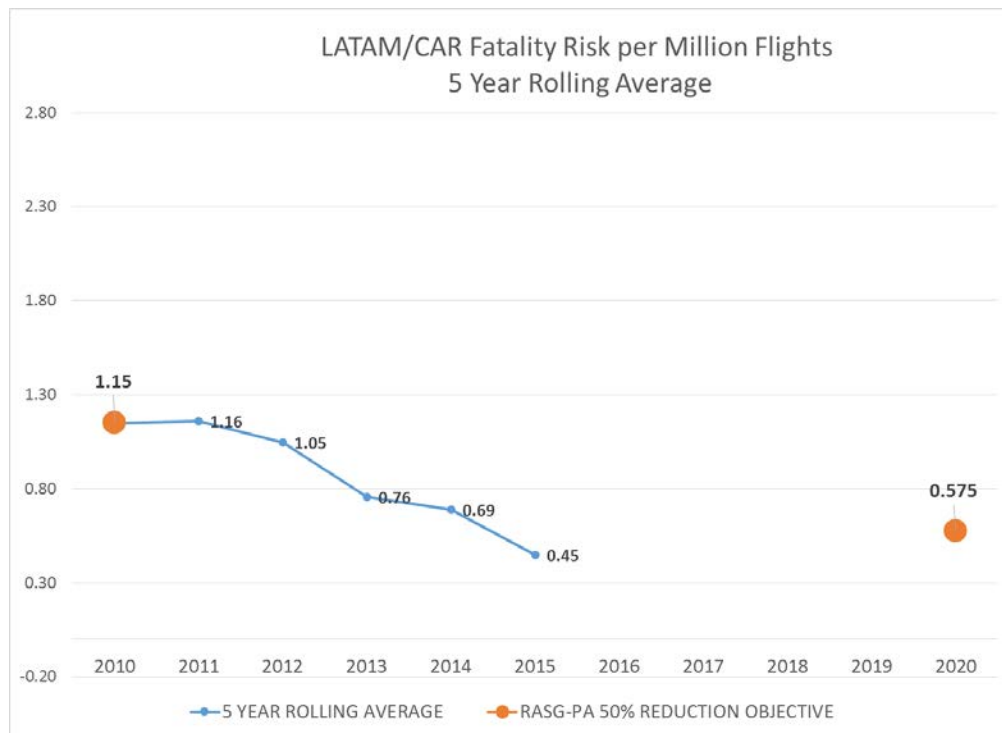
2.1 Between 2008 and 2014 there were developed 9 DIPs: 2 related to CFIT, 4 to RE and 3 to LOC-I. From the 9 DIPs developed, there are 27 associated outputs.

3. New Detailed Implementation Plans

3.1 There are 10 new DIPs being developed: 1 related to CFIT, 4 to RE, 5 to LOC-I (1 completed). Additional DIPs are expected to be developed by the recently established Mid-Air Collision Team.

4. Fatality Risk Status in The Region LATAM/CAR

4.1 The Fatality Risk curve in a 5-year rolling average criteria for the Region LATAM/CAR confirms a downtrend in the 2010-2015 period. The value associated to 2015 (0.45) is located below the Fatality Risk pursued for 2020 (0.575):



5. Accident and Incident Trends

5.1 Loss of Control In Flight (LOC-I): In the period from 2005 to 2014 it is verified a downtrend on the total occurrences distribution per year.

5.2 Controlled Flight Into Terrain (CFIT): In the period from 2005 to 2014 it is verified a downtrend on the total occurrences distribution per year. During 2013 and 2014 it is verified a slight uptrend on GPWS rates.

5.3 Mid-Air Collision (MAC): During 2013 and 2014 there is a substantial monthly variation in the number of TCAS RA events, and the numbers until December 2014 show a slight downtrend. However, available LHD events distribution between 2005 and 2014 show a constant uptrend.

5.4 Runway Excursion (RE): In the period from 2005 to 2014 it is verified a downtrend on the total RE occurrences distribution per year. Data from 2013 and 2014 also shows a downtrend on unstable approach rates.

6. Conclusions

6.1 DIPs developed between 2008 and 2014 contributed to lower the Fatality Risk numbers in the Region, which currently supersede RASG-PA's safety objective defined for 2020. However, an additional effort is still needed to consolidate this result over the next 4 years.

6.2 The continuous decrease and control of Fatality Risk numbers rely on the implementation, at a national level, of available DIPs by the States and Industry. State/Industry Safety Groups like BCAST in Brazil, and PASO in Costa Rica, are essential to achieve this goal. PA-RAST will keep working to support them and foster the creation of similar ones in other States.

6.3 The development and implementation of the additional mitigation strategies by PA-RAST, through the creation of new Detailed Implementation Plans, in the four areas: CFIT, LOC-I, RE and MAC, will ensure the 2020 fatality risk objective is met.

7. Suggested Action

7.1 The RASG-PA/9 Meeting is invited to:

- a) Note the information provided in this WP;
- b) invite States and Industry stakeholders to actively participate on PA-RAST and provide any additional resources to maintain the Fatality Risk low in the Region; and
- c) invite States to support the creation and/or continuity of local safety groups to drive the continuous implementation of Safety Enhancement Initiatives in a National level.
