



ICAO

SAFETY

Seventeenth Scrutiny Working Group Meeting (GTE/17)

Eddian Méndez

*Regional Officer, Air Traffic Management and Search
and rescue (ATM-SAR)*

Mexico City, Mexico, 29 – 30 November 2017





ICAO

SAFETY

GTE/17

Lima, Peru, 30 October to 03 November 2017

Vertical Collision Risk (CRM) for 2016 in the CAR/SAM Regions*

- ✈ All aircraft operating in reduced vertical separation minimum airspace should be RVSM certified
- ✈ Aircraft certification should be current
- ✈ The target level of safety (TLS) of 5×10^{-9} fatal accidents per flight hour should continue to be met
- ✈ Additional effective safety measures should be adopted to meet safety targets and to reduce collision risk to due to operational errors and contingency procedures
- ✈ There should be evidence of stability of the altimetry system error (ASE)
- ✈ Air traffic control procedures should continue to be effective



ICAO

SAFETY

GTE/17

CAR/SAM airspace

✈ CAR/SAM airspace for CARSAMMA consists of 34 FIRs

✈ Each part of the airspace treated as an isolated system, with its own statistical parameters

✈ A significant portion of the data received from some States could not be used in the CRM

✈ Errors in RVSM airspace entry and exit times

✈ incomplete information

✈ data sent beyond the deadline



GTE/17

LHD reports

- ✈ 1,065 LHDs were considered valid in the CAR/SAM Regions
- ✈ LHDs whose causes involved human factors would be assessed in the CARSAMMA Safety Management Systems analysis (1,024 events)
- ✈ 58 LHDs analyzed by CRM parameters
 - ✈ 16 code F (coordination errors due equipment failure or technical problems with ATC system)
 - ✈ 11 code I (turbulence and/or weather related deviation)
 - ✈ 8 code B (climb /descend without ATC authorization)



GTE/17

Region	Flight hours	%
CAR	329,143.16	28.36 %
SAM	831,471.50	71.64 %
CAR/SAM	1,160,614.66	100.00 %

CAR/SAM RVSM airspace Estimated flight hours = 1,160,614.66 hours			
Source of risk	Estimated risk	TLS	Remarks
Technical error	0.0261×10^{-9}	2.5×10^{-9}	Below
Operational error	1.1956×10^{-9}	-	-
Risk	1.2203×10^{-9}	5.0×10^{-9}	Below



ICAO

SAFETY

GTE/17

Safety Assessment

- ✈ LHDs reduction trend did not meet the goal of 20% annually
- ✈ Development of numerical indicators for TCPs
- ✈ Safety assessment for FIRs
- ✈ Root cause analysis
 - ✈ Erroneous FPL filling
 - ✈ AIDC implementation issues
- ✈ State aircraft entering RVSM
 - ✈ RVSM approval?
 - ✈ Erroneous FPL filling



ICAO

SAFETY

GTE/17

- ✈ The work from CARSAMMA and the GTE has a great potential to enhance safety performance analysis in the region
- ✈ Established mechanism that could be expanded to develop regional SPIs for ANS
- ✈ Mechanism to share data with RASG-PA should be agreed and established



ICAO

SAFETY



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU