



ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICA OFFICE

Twenty-Fourth Meeting on the Improvement of Air Traffic Services over the South Atlantic (SAT/24)

Luanda, Angola, 3-4 June 2019

Agenda Item 3.2: Review of RMA report on Traffic Statistics, Safety procedures and Operating procedures.

3.2.3 CARSAMMA TRAFFIC STATISTICS

(Presented by the CARSAMMA)

SUMMARY

This paper provides the review of the regional monitoring agencies report on traffic statistics, safety procedures and operational procedures, and document present the collision risk analysis report for the RVSM airspace in the year 2018 at the AFI, the Collision Risk Assessment (CRA) methodology was used for the airspace safety assessment as recommended by ICAO in space RVSM, and demonstrates that the safety criteria defined in ICAO Document 9574 continue to be satisfied in the RVSM airspace of the AFI FIRs.

REFERENCE(S):

Manual on Implementation of a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive, ICAO Doc 9574-AN/934, SECOND EDITION – 2002.

Related ICAO Strategic Objective(s):

Safety, Capacity and Efficiency

1. INTRODUCTION:

- 1.1. The ATLANTICO FIR RVSM airspace was treated as an isolated system, with its own statistical parameters.
- 1.2. We analyzed data from 29,767.94 flight hours related to the transit of aircraft using sections of ATLANTICO FIR airplanes between flight levels 290 to 410.



2. DISCUSSION:

Traffic Movement Data Collection

The data sample used to estimate the passage frequency and the physical and dynamic parameters of the typical aircraft to assess the collision risk was collected in the period from December 1 to 31, 2018.

After treatment, aircraft movement data received from ATLANTICO FIR were used to evaluate the safety of RVSM airspace as recommended by ICAO. The number of hours of post-processing flight of ATLANTICO FIR is shown in Table 1.

State/Agency	FIR	Flight Hour (Dec/18)
Brazil / CARSAMMA	Atlântico – SBAO	29,767.94

Aircraft Population Audit

It is essential that 100% of the approved RVSM aircraft population meet RVSM requirements. And during this safety assessment, CARSAMMA did not detect any aircraft that did not appear in its RVSM database and which used the ATLANTICO FIR space during the year 2018.

Upon receipt of aircraft movement data, CARSAMMA performed a debugging and processing on them, and the following results are then shown in Table 2, where the population of aircraft with their respective dimensions, including those of a typical aircraft, which was used as the base dimension in the risk calculation model.

ACFT Type	Length	Wingspan	Height
B738	0.021328	0.018521	0.002219
A320	0.020286	0.019330	0.002132
A321	0.024028	0.018413	0.002132
A319	0.018359	0.018413	0.002132
B737	0.018143	0.018521	0.002292
A20N	0.020286	0.018413	0.002132
B763	0.029644	0.025702	0.002921
A332	0.031517	0.032559	0.003045
E195	0.020869	0.015507	0.001479
B77W	0.039903	0.034989	0.003347
B772	0.034395	0.032883	0.003347
Typical CAR SAM	0.02635	0.02306	0.00761

3.1. The meeting is invited to:

- a) take note of the contents of this paper;

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