



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office
INFORMATION PAPER

GTE/22 — IP/02

02/09/22

**CAR/SAM Planning and Implementation Regional Group (GREPECAS) Twenty Second Scrutiny
Working Group Meeting (GTE/22)
Mexico City, Mexico, 26 to 30 September 2022**

**Agenda Item 4: Activities and tasks to be reported to GREPECAS
4.2 Review of tasks to be reported to GREPECAS**

RVSM AIRSPACE AUDIT IN THE CAR/SAM REGIONS

(Presented by CARSAMMA)

EXECUTIVE SUMMARY	
This information paper presents information related to the work of the aircraft audit of the RVSM Airspace in the year 2021 and the estimated workload to comply with the Minimum Monitoring Requirements (MMR).	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety
<i>References:</i>	<ul style="list-style-type: none">• Doc 9937, Operating Procedures and Practices for Regional Monitoring Agencies in Relation to the Use of a 300 m (1 000 ft) Vertical Separation Minimum Between FL 290 and FL 410 Inclusive.• 2021 Large Altitude Deviations (LHD) Reports

1. Introduction

1.1 The Caribbean and South American Monitoring Agency – CARSAMMA –, in its audit process of the approval status of aircraft in RVSM airspace, has effectively begun to receive, since the beginning of 2021, the data of the plans of flight sent by the States, as stated in item 2.2 of the final report of the GTE20.

1.2. Simultaneously with the verification of the RVSM approval status of the aircraft, CARSAMMA, in accordance with Annex 6, since mid-2021, began to review the status of the aircraft present in the database of this agency with RVSM approval for two years, maintaining constant communication with the Civil Aviation Authorities of the Caribbean and South American States to, if necessary, update the RVSM approvals of new monitoring flights, and thus adapt its database to the latest Minimum Requirements of Monitoring – MMR.

2. Discussion

2.1 CARSAMMA verifies the status of approved aircraft in RVSM airspace on a monthly basis, analyzing the data filled in the flight plans, in particular the “equipment” and “other data” fields.

2.2. Until 2020, of all the relevant States for CARSAMMA, provided for in Doc 9937, the only one that provided the necessary flight plans for data verification was Brazil. In 2021, according to item 2.2 of the final report of the GTE20, CARSAMMA expanded the audit process, starting to receive data from other States of the CAR/SAM regions, as shown in the table below, where a monthly average of 2 and 3% of flights belonging to registrations not cataloged as RVSM approved:

	JAN	FEB	MAR	APR	MAY	JUN
<i>ARG</i>		6.341		6.050	4.773	4.033
<i>BOL</i>	9.195	9.860	11.205	8.260	9.699	9.774
<i>BRA</i>	65.414	54.888	55.520	86.025	96.414	133.193
<i>CHL</i>	8.806		6.774	5.042	6.443	4.426
<i>CUB</i>	17.818					21.403
<i>ECU</i>						841
<i>HTI</i>	1.154	954	1.228	1.263	1.132	1.154
<i>VEN</i>		264	237		270	254
TOTAL	102.387	72.307	74.964	106.640	118.731	175.078

Identified FPL's	2.949	2.053	1.986	2.541	2.739	3.302
Identified Records	346	258	234	276	269	384
Percentage	2,88%	2,83%	2,64%	2,38%	2,3%	1,89%

	JUL	AUG	SEP	OCT	NOV	DEC
<i>ARG</i>	6.373	7.049	7.312	8.534	10.475	
<i>BOL</i>	10.614	9.633	6.078	9.210	6.336	
<i>BRA</i>	106.276	104.336	102.580	100.098	102.264	
<i>CHL</i>	8.888		10.556	11.886	12.235	
<i>CUB</i>	22.890	21.269	19.788	21.208	23.539	
<i>ECU</i>		1.752	1.678	1.874	1.762	
<i>HTI</i>	1.168	1.166		1.176	1.246	
<i>VEN</i>	231		391	494	497	
TOTAL	156.440	145.205	148.383	154.480	158.354	

Identified FPL's	4.197	3.262	3.534	3.755	5.652	
Identified Records	431	357	408	249	481	
Percentage	2,68%	2,25%	2,50%	2,43%	3,57%	

Table 1 – Air movement and aircraft without RVSM certification

2.3 In mid-2021, in order to comply with the Minimum Monitoring Requirements (MMR), CARSAMMA began a review process of the RVSM approvals contained in its database. In July of that year, CARSAMMA had 1,106 aircraft with an approval date of more than two years. Until April 2022, this Agency, in parallel to normal activities, maintained a constant dialogue with the Civil Aviation Authorities of the States and territories of the Caribbean and South America to verify said records, as described in the following table:

STATEESTADO	APPROVAL PERIOD	TOTAL OF RECORDS AS OF JULY 2021	CONVERSATION WITH THE CAA	TOTAL OF RECORDS AS OF JULY 2022
EL SALVADOR	2005-2014	21	SET/21-MAR/22	21
JAMAICA	2000-2002	04	SET/21-FEV/22	04
COSTA RICA	2012-2014	09	SET/21-FEV/22	00
PANAMÁ	2013-2018	77	SET/21-FEV/22	74
ARGENTINA	2013-2018	99	SET/21-OUT/21	65
EQUADOR	2005-2017	43	FEV/22	40
BRASIL	2004-2018	154	ABR/22-JUN/22	134
CHILE	2003-2011	40	ABR/22	40
PARAGUAI	2016-2017	02	ABR/22	02
COLOMBIA	2006-2011	26	ABR/22	26
BOLIVIA	2005-2012	12	ABR/22	12
PERU	2012-2015	26	ABR/22	00
URUGUAI	2016	01	ABR/22	00
VENEZUELA	2008-2012	17	ABR/22	17
ARUBA, CURAÇAO E ANTILHAS HOLANDESAS	2005-2014	10	ABR/22-MAIO/22	01
TOTAL		541		436

Table 2 – Aircraft with homologation greater than 2 years

2.4. In the twelve-month work period, of 541 aircraft with approvals issued between 2000 and 2018, we updated our database with the withdrawal of 105 records, which represents a reduction of 19.4% compared to the initial total, which represents an average analysis of 11 records per month, in the midst of the other activities of CARSAMMA. In the column “CONVERSATION with the CAA”, the lines in red mean that an email was sent to the Civil Aviation Authority requesting information on the subject, but there was no response until the completion of this IP.

3. Conclusion

3.1. The Meeting is invited to take note of the information contained in this information document.