



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

GTE/14 — WP/07  
21/11/14

**Fourteenth Scrutiny Working Group Meeting (GTE/14)**  
Mexico City, Mexico, 1 – 5 December 2014

**Agenda Item 1: Review of the previous CARSAMMA and Scrutiny Groups Meetings  
Conclusions and Recommendations**

**RESULTS OF THE CARSAMMA FOCAL POINTS MEETING**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
The purpose of this working paper is to present the results of the CARSAMMA Focal Points Meeting, held in Rio de Janeiro, Brazil, from 11 to 13 August 2014.	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Seventeenth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/17) Cochabamba, Bolivia 21 to 25 July 2014</li></ul>

**1. Introduction**

1.1 CARSAMMA has identified that, taking into consideration the errors in the completion of the forms submitted to the Agency by CAR and SAM States, only 42% of the information of SAM Region States and 78% of CAR Region States has been used. Details on such information are included in Appendix A to working paper GREPECAS/17-WP/07 presented to GREPECAS/17 meeting.

1.2 Likewise, CARSAMMA identified that in the CAR and SAM Regions, a high percentage of LHD (58%) is verified, which could not be used in the safety assessment calculations in view of the lack or failure of the information filled out in the LHD form, thus significantly affecting the estimated risk calculation for the RVSM airspace.

1.3 More information on the number of LHD not used in the CRM was included in Appendix A to working paper GREPECAS/17-WP/07.

**2. Analysis**

2.1 As an urgent measure and with the purpose of mitigating problems identified in the filling of air traffic movement and LHD forms, CARSAMMA took the initiative to meet with focal points of CAR and SAM States. This meeting was held in Rio de Janeiro, from 11 to 13 August 2014.

2.2 The results on said meeting are included as **Appendix A** to this working paper.

**3. Suggested Action**

3.1 The Meeting is invited to:

- a) note the results on CARSAMMA Focal Points meeting; and
- b) identify the conclusions of said meeting which should be analysed and approved by GTE/14 and GREPECAS.

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**APPENDIX A**  
**TITLE**  
**SUMMARY OF THE CARSAMMA FOCAL POINTS MEETING**

The CARSAMMA Focal Points Meeting was held in Rio de Janeiro, Brazil, from 11 to 13 August 2014, under the auspices of the Departamento de Controle do Espaço Aéreo (DECEA). Its main objective was to instruct responsible focal points for States on the flight data and height deviations (LHD) collection process, as well as on the importance of a timely submission of the required information, considering that the failure or lack of data for this collection, would significantly impair the work to be performed by CARSAMMA, preventing to obtain the results expected by the Regional Monitoring Agencies Manual (RMA), in detriment of regional and inter-regional safety.

The CARSAMMA Focal Points Meeting was attended by 31 experts from 10 States and 1 Territory, as well as 10 experts from International Organizations and the Industry (CARSAMMA, COCESNA, CSSI and IATA). Participants were experts in administration, responsible for the management and collection of air traffic data in the RVSM airspace, as well as for the analysis and submission of LHD forms to CARSAMMA.

During the opening of the CARSAMMA Focal Points Meeting, Ten. Brig. Ar Rafael Rodrigues Filho, Director- General of the Departamento de Controle do Espaço Aéreo, welcomed the participants of the meeting and emphasized the importance of data quality for the work to be performed by CARSAMMA. Mr. Julio Pereira, ICAO South American Regional Office ATM/SAR Officer, briefly explained the objectives of the meeting and thanked DECEA for the efforts in holding this important event, as well as for their logistical and human resources support for CARSAMMA's operation.

In the course of the meeting, CARSAMMA made 7 presentations aiming to achieve the objectives of the event. Conducted visits to CARSAMMA's facilities as well as to DECEA's Instituto de Cartografia Aeronáutica (Aeronautical Cartography Institute) Offices, were also performed.

At the first presentation, "*History of the RVSM*", information was given on the operational process of the CAR/SAM Monitoring Agency (CARSAMMA), with regard to the procedures of maintaining safety in the RVSM airspace.

The second presentation focused on the exhibition and discussion of CARSAMMA actions with regard to aircraft RVSM approval status monitoring activity, as well as on the role of civil aviation authorities in the composition of RVSM approved aircraft/operators database.

The third presentation was directed for focal points to understand the complexity of calculation involved in the CRM methodology, as well as to be aware of the invaluable assistance they can provide by submitting aircraft movement data and LHD filled out correctly.

The fourth presentation showed information on the analysis process of LHD reports by the CAR/SAM Monitoring Agency (CARSAMMA), highlighting as well on how focal points could assist in the process of maintaining safety in RVSM airspace by filling out data correctly for its due codification and future studies.

The fifth presentation included some practical examples on possible scenarios for the time calculation (duration) of RVSM airspace occupation by aircraft, to be inserted in the LHD forms at the time of filling, and reviewed by focal points to ensure their correction and harmonization.

The sixth presentation, provided information on the application of the Manual-Guide on the Assessment of Large Height Deviations (LHDs) based on an ATS Safety Management System (SMS) methodology for the CAR/SAM Regions, developed by the Scrutiny Working Group (GTE) and the CAR/SAM Monitoring Agency (CARSAMMA), and approved by GREPECAS/17, aiming to increase safety level in RVSM airspace in the CAR/SAM Regions. This methodology allows an assessment of the risk level for each event individually and helps to identify trends and critical points of occurrence.

The seventh presentation, aimed to show the shortcomings of air traffic movements data sent to CARSAMMA and to emphasize on the need of depurating the information during the collection, preparation and analysis phases. In this regard, it was noted that the analysis of data consistency of data movement is done by reading each record of the samples by a specific software, developed by the Instituto de Estudios Avanzados, discarding those records that are not within the logic established.

In addition to the presentations made by CARSAMMA technicians, participants had the opportunity to practice in an exercise guided by instructors, in order to identify the main questions on the various processes of data collection and filling out of forms, thus ensuring the reduction of errors in the process of collecting and sending data to CARSAMMA.

Based on the presentations, questions and comments/discussions made, the meeting adopted following conclusions:

1. **States:**

1.1. Focal points duties and responsibilities:

Train and instruct air traffic controllers, supervisors and ATM personnel in general, in the correct filling of forms and in the importance of the data to be sent to CARSAMMA;

- Supervise and ensure the quality of data sent to CARSAMMA;
- Maintain close contact with ACCs in order to ensure the delivery of F2 and F3 forms, as well as to solve any doubts regarding RVSM aircraft and operators status of approval;
- Urge ACCs to take measures against operators that distort their status of approval;
- Periodically check other means of obtaining data for filling LHD form (mainly others than “E” type errors).

1.2. Submit comments on CARSAMMA Manual by **21 November 2014** to ICAO NACC and SAM Regional Offices and to CARSAMMA.

1.3. Collect air traffic movement data from 01 to 31 December 2014 and send same to CARSAMMA until **15 February 2015**.

1.4. Use LHD data to prioritize the implementation of mitigation measures, new concepts and equipment/systems.

1.5. The insertion of the ACFT record in the air traffic movement spreadsheet is optional for airlines.

1.6. Evaluate eLHD (CARSAMMA site - password: carsamma2014) and submit comments to ICAO NACC and SAM Regional Offices and to CARSAMMA.

**2. CARSAMMA:**

- 2.1. Perform CRM calculation for year 2013 not including South Atlantic LHDs, aiming to identify the impact of such LHD in the CAR/SAM Regions' safety assessment and specifically, in the SAM Region.
- 2.2. Standardize the causes of LHD in Excel forms (pop-up window) and in the eLHD.

**3. ICAO:**

- 3.1. Ask IATA to analyse the feasibility of integrating TCAS data (“RA”) of FOQA in the CARSAMMA safety assessment.
- 3.2. Include in the GTE/14 Meeting Agenda, an item related to lessons learned by States regarding the collection of data to mitigate risk associated to LHD.
- 3.3. Verify the feasibility of training English-speaking States by teleconference.
- 3.4. Management of teleconferences:
  - Plan dates in advance;
  - Submit LHD data for its previous analysis;
  - Invitation to “go-to-meeting” at least 1 week in advance.
- 3.5. Application of the Manual-Guide on the Assessment of Large Height Deviations (LHDs) based on an ATS Safety Management System (SMS) methodology for the CAR/SAM Regions.
  - Urge States to obtain “reliable data” on the various types of LHD;
  - Identify the feasibility of conducting a regional workshop to elaborate a “model” document for the risk assessment and mitigating measures, which could be used as an example by States;
  - Develop a process of sending the analyzed LHDs under the SMS methodology, for States to develop corresponding mitigating measures.