



ICAO

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WORKING PAPER

GTE/21 — WP/02  
12/08/21

**CAR/SAM Planning and Implementation Regional Group (GREPECAS) Twenty First Working Group Meeting (GTE/21)**  
Zoom Meeting, 23 – 26 august 2021

**Agenda Item 1: Review of the previous CARSAMMA and Scrutiny Group meetings Conclusions and Recommendations**

**REVIEW OF PREVIOUS CARSAMMA AND SCRUTINY GROUP MEETING CONCLUSIONS AND RECOMMENDATIONS**

(Presented by Secretariat)

**EXECUTIVE SUMMARY**

The GREPECAS Scrutiny Working Group updated conclusions list is presented in the **Appendix** to this working paper.

The status and follow-up comments for each conclusion is the result of a review made by the Secretariat, based in the available information at the moment of preparation of this working paper. The status of each conclusion is designated as valid, completed or superseded.

It is important to consider that the GREPECAS meeting will be held in 2022, so it is necessary to carefully analyze the progress made in each of the tasks so that it can adequately report to the meeting the progress made by the GTE.

<b>Action:</b>	The Meeting is invited to review and comment, providing updated information on the status and follow-up for the implementation of the previous meetings pending conclusions presented in the Appendix.
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<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Economic Development of Air Transport</li><li>• Environmental Protection</li></ul>
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<i>References:</i>	<ul style="list-style-type: none"><li>• Final Report of the Twentieth Meeting of the GREPECAS Scrutiny Working Group (GTE/20)</li></ul>
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**APPENDIX**

**REVIEW OF PREVIOUS CARSAMMA AND SCRUTINY GROUP MEETING CONCLUSIONS AND RECOMMENDATIONS**

<b>Conclusion</b>	<b>Title</b>	<b>Text</b>	<b>Responsible of action</b>	<b>Completion date</b>	<b>Deliverable</b>	<b>Status (valid, completed or superseded)</b>
Conclusion GTE/14-2	<b>ORIENTATION HANDBOOK FOR CARSAMMA ACCREDITED POINTS OF CONTACT</b>	That, CAR/SAM Regions States use the Orientation Handbook for CARSAMMA Accredited Points of Contact attached in Appendix B to this part of the Report, with a view to train their Points of Contact (PoC), as well as to improve the submission of the needed data, so that CARSAMMA can perform its responsibilities.	CAR/SAM Regions States			<b>COMPLETED</b>
Conclusion GTE/14-3	<b>MITIGATION MEASURES FOR REDUCTION OF OPERATIONAL RISKS CAUSED BY LHD</b>	That, considering that the CAR/SAM Regions are significantly above the maximum acceptable operational risk values caused by LHD, the following measures to be taken: requesting the correspondent mitigation actions, considering the urgency that risk caused by LHD requires:				<b>COMPLETED</b>
		a) that the CAR/SAM States adopt mitigation measures to reduce operational risk caused by LHD as soon as possible, considering the best practices attached as Appendix A to this part of the report.	CAR/SAM States			<b>COMPETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		b) that the CAR/SAM States present Operational Risk caused by LHD Mitigation National Plans, as well as adopted mitigation measures to the GTE/15 meeting.	CAR/SAM States			<b>COMPETED</b>
		c) that the ICAO NACC and SAM Offices send an individual letter to each CAR/SAM State and ANSP informing the situation of LHD that affect operational safety in their airspace, based on detailed data obtained from CARSAMMA, and	States and ANSP			<b>COMPLETED</b>
		d) the States and ANSP present a report on mitigation measures implementation progress, based in SMS to ICAO NACC and SAM Regional Offices.	States and ANSP			<b>COMPLETED</b>
Conclusion GTE/14-4	<b>IMPLEMENTATION OF REGIONAL MONITORING AGENCY (RMA) FOR THE CAR REGION</b>	That, considering infrastructure and qualified personnel, Dominican Republic in coordination with CAR States, develops a project for the implementation of a Regional Monitoring Agency (RMA) venued in Dominican Republic for the CAR Region in accordance with ICAO requirements and provides this project to GREPECAS by 31 December 2015.			31 December 2015	<b>COMPLETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/16-1	<b>USE OF CARSAMMA PROCESS HANDBOOK IN CAR/SAM AREA CONTROL CENTRE (ACCs)</b>	That, States and International Organizations of the CAR/SAM Regions use the CARSAMMA Process Handbook, attached in Appendix B to GTE/16 report, to train ATCOs of ACCs to improve the submission of LHDs data to CARSAMMA.	States and ANSP			<b>COMPLETED</b>
Conclusion GTE/16-2	<b>USE OF HANDBOOK CERTIFICATION AND OPERATION OF STATE AIRCRAFT IN THE CAR/SAM RVSM AIRSPACE</b>	That, States and International Organizations of the CAR/SAM Regions use the Handbook Certification and Operation of State Aircraft in the CAR/SAM RVSM Airspace attached in Appendix D to GTE/16 report, for certification and approval of height-keeping performance requirement for State aircrafts.	States and ANSP			<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/16-3	<b>MITIGATION MEASURES TO IMPROVE TARGET LEVEL OF SAFETY IN THE RVSM AIRSPACE</b>	<p>That,</p> <p>a) States and International Organizations of the CAR/SAM Regions adopt the reactive, proactive and predictive actions related to the implementation of SMS in the RVSM airspace; and</p> <p>b) The ICAO NACC and SAM Regional Offices, in coordination with States and International Organizations, encourage bilateral meetings to analyse and implement measures to reduce LHD events that affect safety in their airspace; the impact of these measures shall be presented in the GTE/17 meeting.</p>	States, ANSP and Regional Offices			<b>COMPLETED</b>
Conclusion GTE/16-4	<b>URGENT ACTIONS TO IMPROVE FLIGHT PLAN PROCESSING AND COORDINATION IN THE CAR/SAM REGIONS</b>	That, States and International Organizations of the CAR/SAM Regions take urgent measures to require operators the correct use of established standards for timely processing and coordination of flight plans based on ICAO provisions.	States and ANSP			<b>COMPLETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/16-5	<b>AGREEMENT BETWEEN MEXICO AND THE NORTH AMERICAN APPROVALS REGISTRY AND MONITORING ORGANIZATION (NAARMO) FOR DATA EXCHANGE REGARDING SAFETY ASSESSMENT IN THE RVSM AIRSPACE</b>	That, Mexico and the NAARMO exchange data information regarding aircraft movement, Large Height Deviations (LHD) reports in the RVSM airspace, as well as register of aircraft with RVSM approval, according to the information of Appendix F to GTE/16 report, and present this activities progress to the next GTE/17 meeting.	Mexico and NAARMO			<b>COMPLETED</b>
Conclusion GTE/17-1	<b>COLLECTION OF AIRCRAFT MOVEMENT AND LHD DATA</b>	<p>Taking into account that aircraft movement and LHD data is indispensable for measuring RVSM airspace performance in the CAR/SAM Regions, the States and international organisations must ensure the timely and regular delivery of this data in the form established by CARSAMMA and the GTE.</p> <p>Accordingly, the ICAO Regional Offices will follow up on the timely and proper delivery of data by the States and international organisations.</p>	Secretariat, States and ANSP			<b>COMPLETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/17-2	<b>REVISION OF CARSAMMA AND GTE TERMS OF REFERENCE</b>	<p>That, having agreed on the importance of continued monitoring of horizontal deviations, the Secretariat request GREPECAS to revise the terms of reference (TORs) of the Regional Monitoring Agency (CARSAMMA) to include such monitoring as part of the functions of the Agency, leading to the exchange of such information with ICAO, the States and international organisations through the appropriate channels.</p> <p>Accordingly, that GREPECAS be requested to revise the terms of reference of the GTE to account for the expanded functions of CARSAMMA.</p>				<b>COMPLETED</b>
Conclusion GTE/17-3	<b>TRAINING FOR FOCAL POINTS</b>	<p>That, taking into account the need to schedule training activities through CARSAMMA for LHD focal points of the CAR/SAM Regions, the Secretariat request the support of GREPECAS for the conduction of these activities in 2018.</p>				<b>COMPLETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/17-4	<b>OPERATION OF STATE AIRCRAFT IN CAR/SAM RVSM AIRSPACE</b>	<p>That the ICAO Regional Offices coordinate with the States under their responsibility to ensure that State aircraft operating in RVSM airspace have the required approval to operate in such airspace, or complete the flight plan as established in the Manual on Certification and Operation of State aircraft in CAR/SAM RVSM airspace.</p> <p>CARSAMMA will keep the Regional Offices informed, on a monthly basis, of occurrences involving State aircraft operating without certification in RVSM airspace.</p>				<b>COMPLETED</b>
Conclusion GTE/17-5	<b>OPERATION OF NON-CERTIFIED AIRCRAFT IN CAR/SAM RVSM AIRSPACE</b>	<p>That CARSAMMA inform the ICAO Regional Offices, on a monthly basis, of any occurrence involving the operation in RVSM airspace of a non-RVSM aircraft with registry of a CAR/SAM State, so that the corresponding ICAO Regional Offices may contact the State in order for it to take the necessary measures to ensure that this type of operations are not carried out.</p>				<b>COMPLETED</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/18-1	<b>REVISION OF CARSAMMA TERMS OF REFERENCE</b>	<p>Based in the GREPECAS Conclusion 18/22, that approved the amendment of the CARSAMMA Terms of Reference and the fact that there was not enough time to present a project by CARSAMMA at GTE/18 in order to include the safety assessment for lateral and longitudinal deviations:</p> <ul style="list-style-type: none"> <li>- An Ad hoc group comprised by Chile, Colombia, Cuba, CARSAMMA, and the GTE Rapporteur, supported by NAARMO and IATA is approved. The ICAO NACC and SAM Regional Offices will serve as the Secretariat, to present a project to include the safety assessment for lateral and longitudinal deviations, with methodology of analysis, the Collision Risk Model to be used, the establishment of a Target Level of Safety and the guidance material to be used by the Points of Contacts (POC) by 31 January 2019.</li> </ul>				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
Conclusion GTE/18-2	<b>REDUCTION OF CODE E LHD EVENTS</b>	That considering that in the classification of LHD events, the trend in code E events represents 95.03 % of the total events; and that this behavior has been maintained during the last three years, identifying several points in the CAR/SAM Regions where the reduction in the number of events has been low. Include in the GTE work programme the following actions:				<b>VALID</b>
		a) the States of the CAR/SAM Regions develop the necessary strategies for the reduction of Code E events based on the information provided by CARSAMMA and NAARMO, including the necessary training for air traffic controllers, the improvement of the Communications, Navigation and Surveillance (CNS) infrastructure, including the exchange of radar data and the improvement of ATS communications among the involved FIRs among other activities;				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>b) ICAO promotes bilateral and multilateral meetings to address specific issues between involved FIRs, especially at the border of the CAR and SAM Regions; and</p> <p>c) CAR/SAM States notify in the GTE meetings the results of these actions for the reduction of Code E events.</p>				
Conclusion GTE/18-3	<b>AIR TRAFFIC SERVICES REGIONAL PERFORMANCE MEASUREMENT</b>	<p>That considering that the collection of safety information, developed for the functioning of CARSAMMA can contribute to improving the regional safety performance measurement in the provision of ATS in the CAR/SAM Regions:</p> <p>a) the GTE Rapporteur and the Secretariat carry out an analysis on the extension of the GTE TORs, to consider the evaluation of regional safety performance for the provision of ATS in the upper airspace in the CAR/SAM Regions, focusing on events related to the nature of the GTE work;</p>				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>the results of this analysis shall be presented in the GTE/19 for the consideration of the GTE; and</p> <p>b) States/Territories/International Organizations responsible for the provision of ATS services in the CAR/SAM Regions, connect to SIMS of ICAO, for the continuous monitoring of their safety performance and share with ICAO the data provided to CARSAMMA.</p>				
Conclusion GTE/18-4	<p><b>IMPLEMENTATION OF A STRATEGY TO REVIEW RISK ASSOCIATED WITH MID-AIR-COLLISION BETWEEN THE GTE AND RASG- PA</b></p>	<p>That, considering the benefits on the synergy between the GTE and the PA-RAST groups on safety hotspots in the identification of risk to ensure duplication of efforts does not exist, and that recommendations for improvements are aligned are of utmost importance:</p> <p>a) the GTE promote the exchange of the LHD events, especially TCAS events data with the PA-RAST MAC Group, including lateral and longitudinal deviations (navigation errors) errors in RVSM airspace and outside of</p>				<p><b>VALID</b></p>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>the RVSM airspace for the CAR and SAM Regions to improve the identification of contributing factors to Mid-air collision;</p> <p>b) the GTE establish an analysis mechanism between the GTE and PA-RAST to provide CAR/SAM States with safety data for the decision-making process to help reduce LHDs events and improve the safety performance in the RVSM airspace of the CAR/SAM Regions. This analysis should include the possibility of performing a strategic review of safety hotspots in the upper airspace for mid-air collision risk with the PA-RAST MAC team; and</p> <p>c) the Secretariat will report in the GTE meetings, the results obtained from this cooperation mechanism.</p>				
GTE/19/1	<b>REVIEW OF THE GUIDE FOR POINTS OF CONTACT (POC) ACCREDITED TO CARSAMMA</b>	Taking into account that the GTE and LHD points of contact are one of the main elements of the mechanism for the monitoring, analysis and improvement of				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>CAR/SAM RVSM airspace performance, and that the Guide for points of contact (PoC) accredited to CARSAMMA must be updated in order to clarify and reinforce the responsibilities of the GTE, points of contact and the rapporteur:</p> <p>a) The amendment to the Guide for points of contact (PoC) accredited to CARSAMMA, as presented in the Appendix to GTE/19-WP/03 and NI/03 forms F2/F3, is approved.</p> <p>a) The amended Guide is to be submitted by the rapporteur to the approval of the GREPECAS/19 meeting.</p> <p>b) The Secretariat will take the necessary measures to ensure that the Guide and all relevant GTE documentation are available to all GTE members.</p> <p>c) The States and international organisations will fulfil the responsibilities defined in the</p>				

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
GTE/19-02	<b>AIRWORTHINESS/RVSM/PBCS APPROVAL REGISTRY</b>	<p>Taking into account that States are responsible for ensuring that all aircraft under their registry, and for which a PBCS approval request has been submitted, meet all the required criteria; and also considering that it is essential to establish an aircraft PBCS registry in the CAR/SAM Regions for the global monitoring system of these capabilities, the following has been agreed upon:</p> <p>a) CARSAMMA establish the appropriate mechanisms for the creation of the PBCS data base; and</p> <p>b) The ICAO Regional Offices inform CAR/SAM States of the PBCS reporting mechanism for aircraft registered in their respective States.</p>				<b>VALID</b>
GTE/20/1	<b>EXPANSION OF THE APPROVAL STATUS AUDIT FOR THE CAR/SAM REGIONS</b>	<p>That, recognizing the benefits to the process of ensuring the acceptable level of safety in RVSM airspace that the periodic audit carried out by CARSAMMA on the approval status of aircraft that make use of RVSM airspace and that this analysis is currently only takes into consideration the flight</p>				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>plan data from the Brazilian airspace.</p> <p>a) States, Territories and International Organizations providing air traffic services in the</p> <p>b) RVSM airspace of the CAR/SAM Region submit to CARSAMMA flight plan information of aircraft using RVSM airspace under their jurisdiction; and CARSAMMA will provide information to States, Territories and International Organizations regarding the data and flight plan fields required to carry out the approval status audits for the CAR/SAM Region; and</p> <p>c) CARSAMMA use the data submitted by States, Territories and International Organizations to expand the scope of their approval status audit.</p>				
GTE/20/2	<b>DATA EXCHANGE BETWEEN PA-RAST AND GTE FOR AIRSPACE SAFETY IMPROVEMENT</b>	Considering that GREPECAS and RASG-PA are groups that report to the ICAO Council, and the GTE and PA-RAST are technical groups of the GREPECAS				<b>VALID</b>

Conclusion	Title	Text	Responsible of action	Completion date	Deliverable	Status (valid, completed or superseded)
		<p>and RASG-PA with the data analysis as one of their main tasks, and recognizing that the cooperation between the GTE and PA-RAST can improve safety and efficiency in the CAR/SAM Regions and that data exchange can help to improve the process and outcomes of both groups,:</p> <p>a) the GTE and PA-RAST will work jointly to develop a framework that includes mechanism and process or the data exchange and analysis between the two groups by the GTE/21 Meeting; and</p> <p>b) the GTE will identify how the exchanged data can be used to better benefit the CAR/SAM RVSM airspace safety analysis.</p>				