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**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 3: Review of the results of Large Height Deviation (LHD) analysis
3.6 Report on the progress made by States on LHD management**

PROGRESS AND ACHIEVEMENTS OF SENEAM IN MATTER OF LHD IN THE MEXICO FIR

(Presented by México)

EXECUTIVE SUMMARY	
This Paper presents the progress and achievements that SENEAM-MEXICO has had in the exercise of monitoring and mitigation of Large Height Deviations (LHD), as well as the annual analyzes that are carried out and the mitigations that are applied, to increase Safety.	
Action:	Suggested actions are included in Section 6
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety
<i>References:</i>	<ul style="list-style-type: none">• SENEAM Safety Management Manual (SMS).• Reports of Large Height Deviations (LHD) 2017-2021.

1. Introduction

1.1 The objective of this paper is to offer a general summary of the safety evaluation for the RVSM airspace in the Mexico FIR and the actions that are being taken to increase safety.

1.2 An important improvement has been the rapid identification of trends through the analyses carried out, as well as the critical points of coordination.

2. Context

2.1 The LHD reports considered for this analysis are from 2017 to 2021 (and part of 2022).

2.2 Since 2013, the Air Traffic Services Headquarters of the Southeast Regional Management of SENEAM received the task of reviewing the analysis of LHD events with CARSAMMA, for this purpose, in 2014, a course was organized in Rio de Janeiro, Brazil, to obtain the necessary knowledge to be able to participate as a Point of Contact (POC), representing Mexico.

2.3 The immediate actions after this training were to provide feedback to the personnel of the Mérida Control Centre with past events, and to teach the knowledge acquired in CARSAMMA to carry out the reporting process from the controller to the supervisor and, consequently, the process by the head of the unit to the Headquarters of the ATS (POC), for delivery to the Authority and the Monitoring Agency.

2.4 In 2017, the participation of NAARMO, an agency to which Mexico belongs, joined the other Control Centres in the country to generate the corresponding monthly reports; since previously only the Mérida Control Centre was the only one that reported to CARSAMMA due to its proximity to Cuba and CENAMER.

3. Progress on mitigation issues with staff

3.1 The initial steps have always been the training of controllers through the review of reported events, for greater understanding.

3.2 Supervisors have been trained in the same way, to identify events and have sufficient criteria to determine whether the report proceeds or not. With this, revisions of the reports by the Headquarters have been avoided, occupying unnecessary time for it.

3.3 The events that are reportable and the importance of identifying them have been specified with the MMID ACC staff, since through these reports adequate feedback is achieved, identification of incidents, and the pertinent actions for the respective mitigations.

4. Technical advances in mitigation

4.1 In April 2015, as an initial technological measure, the Belize radar signal was integrated into the Topsky V2 radar system of the Mérida Control Centre, which, although we already had it independently as evidence, had not been integrated into multitasking.

4.2 In March 2021, the agreement was signed with the Cuban Civil Aeronautics Institute (IACC) for the establishment of ATS surveillance data exchange between the ATC facilities of both entities. Exchanging the San Julián radar with the Cancun radar.

4.3 Currently, due to a tuning problem in the new Topsky V3 of the MMID ACC, the San Julián signal has not been integrated into the operation, although it is already available on the platform. In this regard, Cuba already has the one in Cancun and it operates adequately.

4.4 In August 2022, the Executive Directorate (CEO) of COCESNA sent an official letter to the Director General of SENEAM in follow-up to the collaboration talks between both agencies, which seeks to increase the exchange of surveillance data to improve coverage and redundancy within of the air traffic control areas, which both institutions are responsible for.

4.5 Regarding the above, an integral exchange of the San José radar/ADS-B signals and the VSA radar is sought for their strategic positions that seek to cover areas without surveillance coverage in each Region.

4.6 Since the installation of the Topsy V3 at the Mérida Control Centre in July 2021, the SENEAM Engineering Department has been requested to contract with the ARINC supplier for the installation of the DATALINK (CPDLC), with the aim of mitigate the lack of coverage in both surveillance and communications, in the Pacific area.

5. Conclusions

5.1 The above actions are aimed at reducing the risk in the Region, as well as reducing or eliminating LHDs, particularly those with code “E”, which continue to represent the majority of reports today.

5.2 Similarly, permanent training on this subject for controller personnel is extremely important, since it allows operational risks to be clearly identified and addressed accordingly immediately.

5.3 The responsibility as POC of Mexico before the respective monitoring agencies, as of 2023, will be in charge of another person; already closing a cycle of 9 years with this extraordinary experience of great learning in aviation security, and with the substantive collaboration as a great work team.

6. Suggested actions

6.1 The Meeting is invited to:

- a) Continue analysing the behaviour of events and continue implementing the necessary measures to reduce/eliminate LHDs, particularly those of code E, to increase safety.
- b) Recommend any additional action deemed necessary.