

WORKING PAPER

NACC/WG/7 — WP/27 26/08/22 Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)

ICAO NACC Regional Office, Mexico City, 29 August - 1 September 2022

Agenda Item 3: Follow-up of the Activities of the NACC/WG Task Forces 3.1 Progress of the NACC/WG on Aeronautical Information Management (AIM), Air Traffic Management (ATM) and Communications, Navigation and Surveillance (CNS)

FOLLOW UP ON THE ACTIVITIES FOR BETTER FREQUENCY MANAGEMENT IN THE REGION

(Presented by Frequency Management Rapporteur)

EXECUTIVE SUMMARY							
This Working Paper is to provide information about the activities that took place in the							
NACC Region this year to provide awareness of the Improvements to the ATS Voice Link							
(MEVA) Member States regarding the aeronautical frequencies spectrum management							
and protection.							
Action:	Suggested actions are presented in Section 4.						
Strategic	• Safety						
Objectives:	Air Navigation Capacity and Efficiency						
References:	MEVA TMG/36						
	• NAM/CAR/SAM Workshop on the ICAO Position for ITU WRC23						
	https://www.icao.int/NACC/Pages/meetings-2021-cmr23.aspx						
	 ICAO Panel FSMP and WRC-23 Workshop 						
	https://www.icao.int/NACC/Pages/meetings-2022-wrc23.aspx						

1. Introduction

1.1 Since the Thirty Sixth MEVA Technical Management Group Meeting (MEVA/TMG/36) last year, where the MEVA Frequency Management Ad hoc group listed a set of actions that the States needed to follow up on to ensure that the radio spectrum used for current and future air navigation services is available, many activities took place to emphasize the fact that current and future Communication, Navigation, and Surveillance/Air Traffic Management (CNS/ATM) systems are highly dependent upon the availability of sufficient, suitably protected radio spectrum that can support the high integrity and availability requirements associated with aeronautical safety systems.

2. Discussion

2.1 There has been ongoing work with the Points of Contact (PoCs) of the MEVA member States to update the region's frequency COM Lists 1, 2, and 3. Significant work was done by the majority of the MEVA Member States to provide ICAO with their updated COM Lists. It is of common interest that this work be extended to the whole Region for more efficiency. The table below gives a summary of what was done so far:

STATE	Organisation	POC	email	COM list 1	COM List 2	COM List 3
Aruba	ANSA	Joselito Correia de Andrade	Joselito.correiadeandrade@ansa.aw	N/A	Updated	Updated
Cayman	Cayman Islands Airport Authority	Cleavy A. Scott	Cleavy.Scott@caymanairports.com	Updated	Updated	Updated
COCESNA	COCESNA	Manuel Flores	manuel.flores@cocesna.org	Work ongoing		
Cuba	IACC	Carlos M. Jiménez Guerra	carlosm.jimenez@iacc.avianet.cu	Updated	Updated	Updated
Curacao	DC-ANSP	Jean Baptiste Getrouw	J.Getrouw@dc-ansp.org	No Changes	No Changes	Updated
Dom Rep	IDAC	Elvis A. Collado	ecollado@idac.gov.do	No changes	No changes	Updated
Freeport	BANSD	Earl A. Rahming	rahmingearl@gmail.com	Updated	Updated	Updated
Haiti	OFNAC	Nadia Leopold	nleopold@hotmail.com	N/A	Updated	Updated
Jamaica	JCAA	Derrick Grant	derrick.grant@jcaa.gov.jm	Updated	Updated	Updated
Mexico	SCT	Daniel Castañeda Cruz	dcastane@sct.gob.mx	Updated	Updated	Updated
Nassau	BANSD	Earl A. Rahming	rahmingearl@gmail.com	Updated	Updated	Updated
Panama						
Puerto Rico	FAA	Mervin Medina; Communications Manager/ Luis Diaz; Coordinator	mervin.medina@faa.gov luis.diaz@faa.gov			
St Maarten	SXM	Richard Hazel	rhazel@sxmairport.com	Work ongoing		

The lists can be found on the link below with the last updates by November 2021: <u>https://www.icao.int/NACC/Pages/frequency.aspx</u>.

2.2 Many activities were carried out by ICAO through the NACC Regional Office from October last year and all year round to emphasize the attention of the Member States on the importance of supporting the ICAO position for the next ITU WRC-23, through the respective coordination and participation with their National Frequency Spectrum Authorities to ensure that the results of WRC-23 reflect civil aviation's continued need for radio frequency spectrum in support of current and future safety-of-flight applications.

2.3 ICAO also shared their concerns on the potential interference to Radio Altimeters operating in the 4 200-4 400 MHz frequency band, due to the deployment of 5G mobile service systems planned to operate in frequency bands adjacent/nearby to the 4 200-4 400 MHz frequency band. ICAO is requesting States to take the pertinent actions to mitigate operational risks. Radio altimeter interference is a major problem for aviation because it decreases operational safety, especially in descent and climb procedures in different airports.

2.4 Related information can be found at the different events that this Office has held to address these issues:

 NAM/CAR/SAM Workshop on the ICAO Position for the International Telecommunication Union (ITU) World Radiocommunication Conference (2023) (WRC-23), October 2021. <u>https://www.icao.int/NACC/Pages/meetings-2021-cmr23.aspx</u> ICAO Frequency Spectrum Management Panel (FSMP) and 2023 World Radiocommunication Conference (WRC-23) Workshop, February 2022, <u>https://www.icao.int/NACC/Pages/meetings-2022-wrc23.aspx</u>

2.5 It was also presented at the ICAO FSMP WRC-23 virtual workshop the updates on the Frequency Finder, a tool to assist ICAO Regional Offices and States to manage and coordinate aeronautical frequency assignments. It was a tutorial on the SSR module and the new NAV module.

2.6 On March 2nd this year, the MEVA service provider operated a new frequency change because of interference on the IS-14 satellite due to bad cross-pol isolation. The transition was done successfully. States were encouraged to register this new satellite frequency with their local spectrum regulator

2.7 On 8 July 2022, the Radiocommunication Bureau (BR) of ITU issued, to its Member States, a Circular Letter (CR/488), *Prevention of harmful interference to Radio Navigation Satellite Service Receivers in the 1559 – 1610 MHz frequency band*. It informed of a significant number of cases of harmful interference to the radionavigation-satellite service (RNSS) in the 1 559 – 1 610 MHz frequency band affecting receivers onboard aircrafts and causing degradation or total loss of the service for passenger, cargo and humanitarian flights. In some cases, this has also led to misleading information provided by RNSS receivers to pilots. A number of 10 843 radio-frequency interference events were detected globally in 2021. The majority of these events occurred in the Middle East region, but several events were also detected in the European, North American and Asian regions. The Circular summarizes the Radio Regulations Board (RRB) decisions on the issue, formulates recommendations concerning mitigation of harmful interference to the radionavigation-satellite service and provides the list of the relevant ITU-R reference documents.

3. Recommendations

3.1 The management of aeronautical frequencies under the MEVA Task Force does not have the expected results, because this work requires a greater number of working hours and specialists with experience in this area who can make the corresponding analysis and recommendations to States to ensure the correct management of the necessary frequencies to support the protection of frequencies for aeronautical use.

3.2 The management of this item could be carried out by specialists in the area of Communications, Navigation and Surveillance (CNS) and with experience in the management of frequencies at the regional level.

3.3 This Group would be responsible for the management, analysis of the ITU agenda for the WRCs, analysis of the impact of the allocation of frequencies to another area other than aeronautics, and providing recommendations on a regional basis to ensure that the frequencies necessary for the use aviation are protected and available to the need of aviation.

4. Suggested actions

- 4.1 The Meeting is respectfully invited to:
 - a) review the information presented in this Working Paper;
 - b) support the ICAO Position for WRC-23 on a local and regional level;
 - c) reinforce navigation systems' resilience to interference;
 - d) work jointly with their national agencies that manage the allocation of aeronautical frequencies;
 - e) work together with the local telecommunications companies responsible for the implementation of 5G technology and in the same way with the airline operators; and
 - f) take decisions regarding the management of aeronautical frequencies for regional benefit.

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