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# ICAO NAM/CAR Region Aeronautical Frequencies Management

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ICAO NACC Regional Office, Mexico 6-7 February 2018



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# Agenda

- ✈️ NAM/CAR ICAO NACC Regional office.
- ✈️ Frequency Assignment CAR region
- ✈️ MEVA Network
- ✈️ NAM/CAR State Strategy to Support ICAO Position
- ✈️ Future Challenges



AGENDA

 **E/CAR - Eastern Caribbean**  
Caribe Oriental

-  **Anguilla (UK)**  
Anguilla
-  **Antigua and Barbuda**  
Antigua y Barbuda
-  **Barbados**  
Barbados
-  **British Virgin Islands (UK)**  
Islas Vírgenes Británicas
-  **French Antilles**  
Guadeloupe, Martinique,  
Saint Barthélemy (France)  
Antillas Francesas  
Guadalupe, Martinica,  
San Bartolomé
-  **Grenada**  
Grenada
-  **Montserrat (UK)**  
Montserrat
-  **Saba (Netherlands)**  
Saba
-  **Saint Kitts and Nevis**  
San Kitts y Nevis
-  **Saint Lucia**  
Santa Lucia
-  **Saint Vincent and the Grenadines**  
San Vicente y Las Granadinas
-  **Sint Eustatius (Netherlands)**  
Sint Eustatius
-  **Sint Maarten (Netherlands)**  
Sint Maarten
-  **Trinidad and Tobago**  
Trinidad y Tabago
-  **United States**  
Puerto Rico, Virgin Islands  
Estados Unidos  
Islas Vírgenes, Puerto Rico

 **C/CAR - Central Caribbean**  
Caribe Central

-  **Aruba (Netherlands)**  
Aruba
-  **Bahamas**  
Bahamas
-  **Bonaire (Netherlands)**  
Bonaire
-  **Cayman Islands (UK)**  
Islas Caimanes
-  **Cuba**  
Cuba
-  **Curaçao (Netherlands)**  
Curacao
-  **Dominican Republic**  
República Dominicana
-  **Haiti**  
Haítí
-  **Jamaica**  
Jamaica
-  **Mexico**  
México
-  **Turks and Caicos Islands (UK)**  
Islas Turcas y Caicos
-  **United States**  
Estados Unidos

 **CA - Central America**  
Centroamérica

-  **Belize**  
Belice
-  **Costa Rica**  
Costa Rica
-  **El Salvador**  
El Salvador
-  **Guatemala**  
Guatemala
-  **Honduras**  
Honduras
-  **Nicaragua**  
Nicaragua

 **NAM - North America**  
Norteamérica

-  **Canada**  
Canadá
-  **Saint Pierre et Miquelon (France)**  
San Pedro y Miquelón
-  **United States**  
Estados Unidos
-  **CAR - Caribbean**  
Caribe
-  **Bermuda (UK)**  
Bermuda
-  **Mexico**  
México



# NAM/CAR Regions

- ✈ 21 States
- ✈ 19 Territories
- ✈ 26 Civil Aviation Authorities (CAAs)
- ✈ 44 Flight Information Regions (FIRs)
  - ✈ 29 FIRs in NAM
  - ✈ 15 FIRs in CAR



# Radio Frequency Assignment Lists - CAR Region

List 1	List of Facilities Operating on Frequencies in the LF/MF Band (190-1750 kHz) -
List 2	Record of VHF Frequency Assignments to Caribbean VOR and ILS Radio Navigation Aids -
List 3	List of Frequency Assignments in the Band 117.975 - 137.000 MHz -

[www.icao.int/NACC/Pages/frequency.aspx](http://www.icao.int/NACC/Pages/frequency.aspx)



## COM List Explanatory Information

COM List 1

COM List 2

COM List 3

✈ [https://www.icao.int/NACC/Documents/frequencies/Int\\_List1A.pdf](https://www.icao.int/NACC/Documents/frequencies/Int_List1A.pdf)



## CAR/SAM Air Navigation Plan References

Planning Principles for the Aeronautical Radio Navigation Aids

AM(R)S Planning Principles

VHF Band Geographical Separation Criteria

AM(R) VHF Sub-Bands Allotment Table

Regional Assignment of Interrogator Identifier (II) Codes





## MEVA NETWORK TECHNICAL GROUP

### TMG



#### Introduction

Since 1994, the Caribbean States and territories agreed to implement new technology to help increase the safety and regularity of operations through the implementation of a common telecommunication network called the MEVA Network; Mejoras al Enlace de Voz del ATS (MEVA—Spanish equivalent of Improvements to ATS Voice Link). These improvements were put in place to improve the Regional reliability of the Aeronautical Fixed Services (AFS) telecommunications service. This regional network was upgraded in November 2006 becoming the MEVA II Network. The analyzing and evaluation of the MEVA Network performance is carried out by the MEVA Network Technical Group, composed by experts from each of the MEVA Members and assisted by ICAO.

#### Membership



Aruba



Bahamas



Cayman Islands (UK)



Cuba



Curaçao



Dominican Republic



Haiti



Jamaica



Mexico



Panama



Puerto Rico (United States)



Sint Maarten



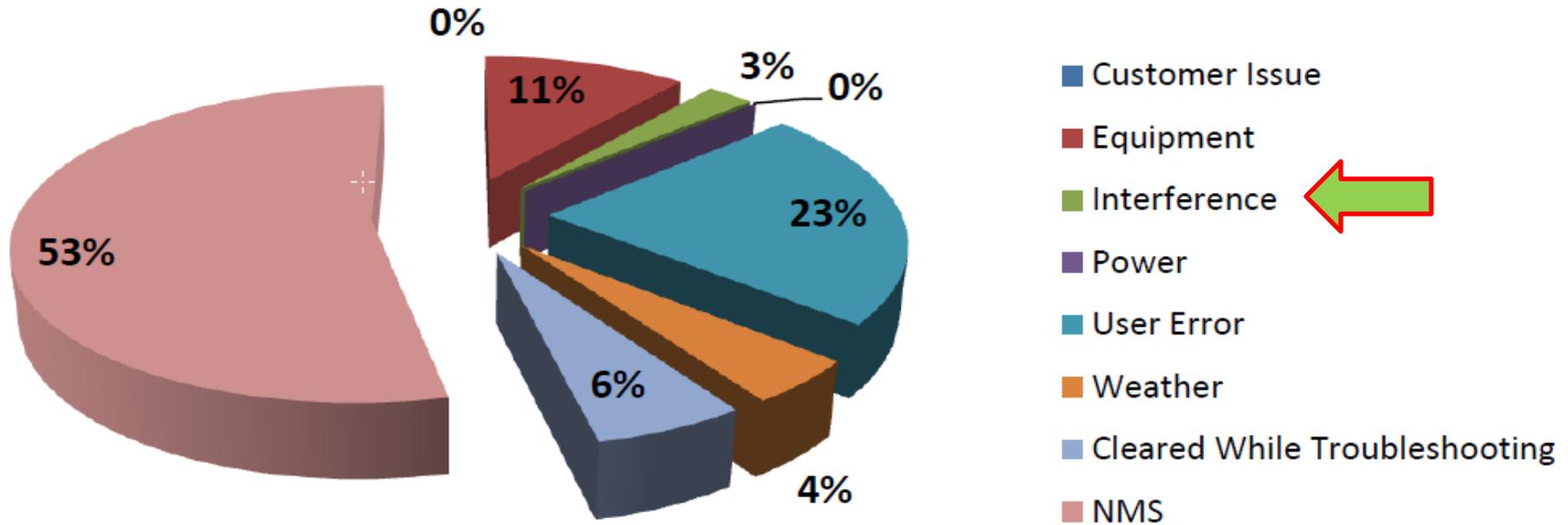
United States



COCESNA



# RFO Breakdown





## ICAO Position for the International Telecommunication Union World Radiocommunication Conference 2019 (ITU WRC-19)

5.2 It is important that States and International Organizations providing air traffic control services analyse the ITU WRC-19 agenda to ensure:

1. that the radio frequency spectrum that is required to meet current and future demand for communications, navigation and surveillance services will be available.
2. opposition to the reassignment of frequencies currently used for aeronautical services.
3. that ITU has carried out the necessary studies to support the proposed changes and that States ensure that these changes do not affect communications for air traffic services. In this regard, States should support ICAO's position on this agenda.
4. that search and rescue services are not affected.
5. that frequency bands are identified for the future development of International Mobile Telecommunications (IMT) that could impact aviation systems.
6. that the proposed changes do not affect the servicing of aviation systems in the frequencies of 5150-5250 MHz, 5350-5470 MHz, 5850-5925 MHz.
7. that the assignment of the international, national, air-ground, air-to-air, frequency bands of navigation systems and bands already assigned for future aeronautical development are not affected.



**CONCLUSION**  
**MEVA TMG/32/11**

**ACTIONS BEFORE THE ITU WORLD RADIOCOMMUNICATION  
CONFERENCE 2019 (WRC-19)**

That, ICAO and the MEVA TMG carry out an action plan to ensure that States develop the protection of frequencies necessary in their territories to maintain current and future aeronautical services before the ITU World Radiocommunication Conference 2019, to be presented at and followed-up by the MEVA/TMG/33.





# Strategy to Support ICAO Position NAM/CAR Region

The plan should contain at least the following activities:

1. Each State shall communicate to the national entity information on the necessary frequencies used for civil aviation, ensuring its protection at the national level before December 2017 and report the action to ICAO.
2. Encourage the participation at the national level of a representative at the ITU 2019 assembly, to ensure the protection of aeronautical frequencies.



# Strategy to Support ICAO Position NAM/CAR Region

3. Support the proposal made by ICAO to ensure that frequencies are available for air navigation services.
4. Each State follow up the protection of the aeronautical frequencies in their own countries and report ICAO in the next MEVA meeting of the actions that they did to support the protection of aeronautical frequencies.





# Frequencies challenges in NAM/CAR region



**Comm Satellite**

- ✈ Update the database information of all frequencies in operation in the different States.
- ✈ Work closing with the Civil Aviation Authority to ensure the protection of the frequencies need for the current and future aeronautical services.
- ✈ Development the future phase of the MEVA network to ensure the available of the future communication to support new services for the NAM/CAR region, Integrate national, regional and global requirements.
- ✈ To ensure the implementation of the ICAO NACC Strategy “No Country Left Behind” in our planning.

Air Traffic  
Control

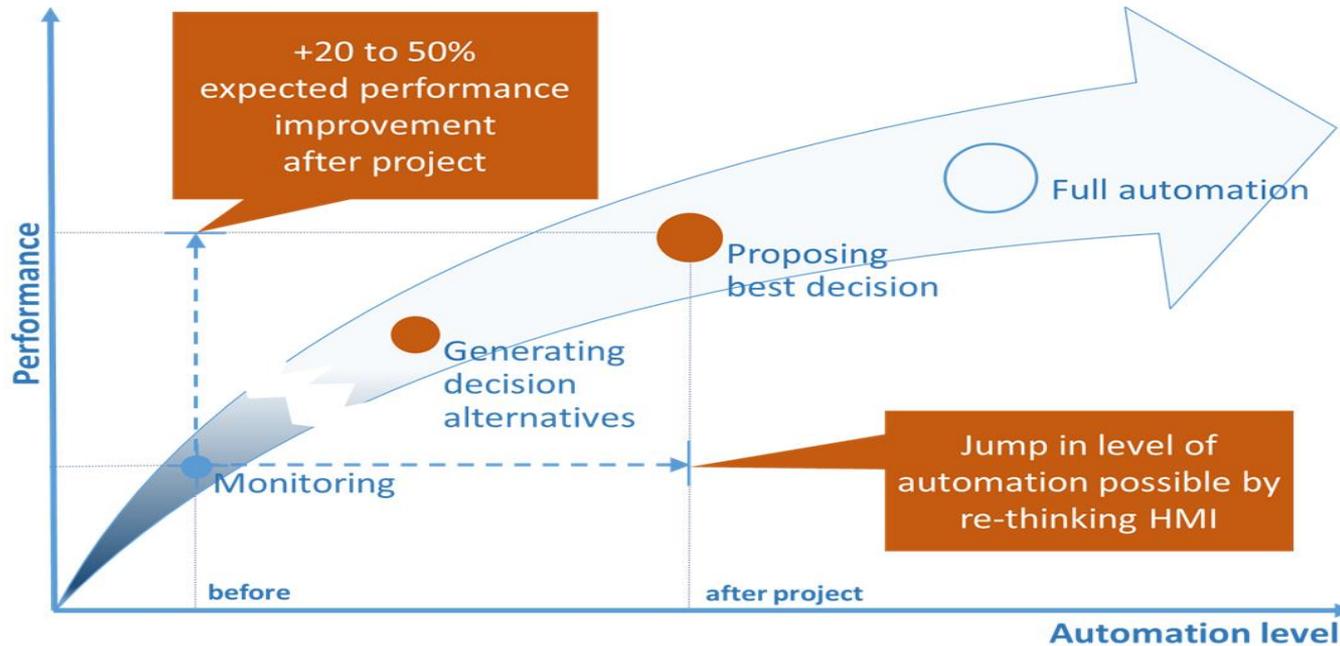


Ground Station





# Automated decision support tools





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# New generation of communication systems



## Data Communications

Data Comm is a program aimed at transitioning from an analog voice system of communication between controllers and pilots, to digital communication system.



