### International Civil Aviation Organization North American, Central American and Caribbean Office

### **WORKING PAPER**

NACC/WG/4 — WP/06 18/03/14

# Fourth North American, Central American and Caribbean Working Group Meeting (NACC/WG/4)

Ottawa, Canada, 24 to 28 March 2014

**Agenda Item 2:** General matters

2.3 Review of the status of the air navigation deficiencies reported in the GREPECAS Air Navigation Deficiencies Database (GANDD)

# ACTIONS IN THE RESOLUTION OF THE AIR NAVIGATION DEFICIENCIES REPORTED IN THE GREPECAS AIR NAVIGATION DEFICIENCIES DATABASE (GANDD)

(Presented by the Secretariat)

### **EXECUTIVE SUMMARY**

This working paper presents updated information on the actions carried out by the States and ICAO regarding the priority "A", "B" and "U" air navigation deficiencies of the Caribbean States/Territories/International Organizations, so the Meeting take note and agree on actions to resolve the aforementioned deficiencies.

| Action:                  | Suggested in Section 3   |
|--------------------------|--|
| Strategic<br>Objectives: | <ul> <li>Safety</li> <li>Air Navigation Capacity and Efficiency</li> <li>Economic Development of Air Transport</li> <li>Environmental Protection</li> </ul>  |
| References:              | <ul> <li>Sixteenth Meeting of the CAR/SAM regional planning and Implementation Group (GREPECAS/16) (Punta Cana, Dominican Republic, 28 March – 1 April 2011).</li> <li>GREPECAS Air Navigation Deficiencies Data Base (GANDD)</li> <li>Summary of discussion of the Workshop on Air Navigation Deficiencies Management, Mexico City, Mexico, 17 May 2013.</li> </ul> |

#### 1. Introduction

1.1 Based on the uniform methodology for the identification, assessment and reporting of air navigation deficiencies formulated by the ICAO Council, GREPECAS and its contributory bodies periodically review the status of implementation of the CAR/SAM Regional Air Navigation Plan, with a view to determining and evaluating the deficiencies in the air navigation fields within the CAR/SAM Regions classified as "A" (necessary for air navigation safety) and "B" (necessary for the regularity and efficiency of air navigation) "U" priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.

### 2. Discussion

- 2.1 GREPECAS, by its Conclusion 16/43 approved a new methodology application, based on ICAO dispositions on Safety management system (SMS), for identification, evaluation and notification of air navigation deficiencies. This methodology considers deficiencies as safety hazard and applies a Hazard Identification and Risk Assessment (HIRA) process.
- 2.2 In order to assist States in the implementation of this new methodology, the ICAO NACC Regional Office carried out a Workshop on Air Navigation Deficiencies Management in 17 May 2013. Among these Workshop results for the methodology application, the following recommendations were provided:
  - The methodology will be revised to meet SMS requirements established in Annex 19
  - ICAO NACC Regional Office will continue providing assistance to States for State Safety Programme (SSP) and SMS implementation
  - States should provide data analysis in order to establish a right criteria in the risk assessment
- 2.3 In accordance with the approved methodology by GREPECAS for deficiencies management, the lack of response of a State to perform the HIRA process in the evaluation of a deficiency could be considered as an evidence of lack of compliance of a service provider in the SMS implementation.
- Appendix A to this working paper presents a summary of the current status of deficiencies "A", "B" and "U". since 2013, there's been a positive response in the resolution of "U" deficiencies, which dropped by 40% (were reported in 2012, compared to the current 27). Most "U" deficiencies (30%) occur in the air traffic management area, followed by aerodromes (AGA) and communications, navigation, and surveillance (CNS) with 26% in each area. This positive response is illustrated in the 2012 2013 comparative graph, showing that the reduction in "U" deficiencies occurred mainly in AGA and CNS. Likewise:
  - AGA deficiencies dropped to 5 by 2012, and 2 new deficiencies were added in June 2012 following an ICAO mission.
  - ATM deficiencies of 2011were reduced in 2013, and one new deficiency was added following an ICAO mission.

- CNS deficiencies in 2011 were reduced in 2 by 2013, and one new deficiency was added following an ICAO mission.
- 2.5 Review of air navigation deficiencies is the responsibility of civil aviation authorities. Nevertheless, it is necessary to promote new measures aimed at supporting States to resolve their deficiencies and establish dates of implementation for their resolution.
- 2.6 From the review of ICAO of the corrective action plan for each outstanding deficiency, only three states have updated their target dates and actions, observing the following:
  - a) Some States do not understand the description of the deficiency
  - b) The corrective Action Plan (CAP) proposed by the State is out of date or not complete to address all the elements for the resolution of the deficiency
  - c) Some State Point of Contacts (PoC) do not update the GANDD
- 2.7 Also from this review, there are common deficiencies in many States, like:
  - a) Need to implement or improve a procedure/ documental process for example: Frequency interference procedure, Implement a Performance based plan, etc.
  - b) Inefficient use of resources for sample: single frequency for two services
  - c) Lack of equipment/infrastructure implementation based on CAR/SAM ANP
  - d) Lack of implementation of State registers like 24-bits aircraft addresses
  - e) Lack of coordination for regional implementation: Frequency assignments
  - f) Inaccurate AIP information vs. current operational status, for e.g. A NAVAID or frequency
- 2.8 ICAO recalled the permanent available assistance of the ROs for reviewing the description and understanding of the deficiencies as well as the development of an appropriate CAP. Several deficiencies may be validated as completed without necessary an onsite mission, with the submission of the official approved procedure (file or link to website), photos showing the solution, etc. These evidences may be sent by email to ICAO. ICAO can conduct an individual follow-up with each State (PoC) for the review of the description and understanding of the deficiencies.
- 2.9 Based on this review, ICAO has been implementing events to assist States in revolving their deficiencies such as aerodrome certification events, SMS workshops, Frequency related events, ADS-B workshops, etc. Similar guidance material and samples are available for States to ease the solution implementation such as the AIC for 24 bits aircraft addresses register. Also the deficiencies shall be reviewed for those related with the lack of equipment/procedure/service implementation in accordance to the CAR/SAM ANP when the electronic Regional Plan is implemented in 2014.
- 2.9 **Appendix B** shows the review of the deficiencies and actions by ICAO for assisting the States in resolving these deficiencies.

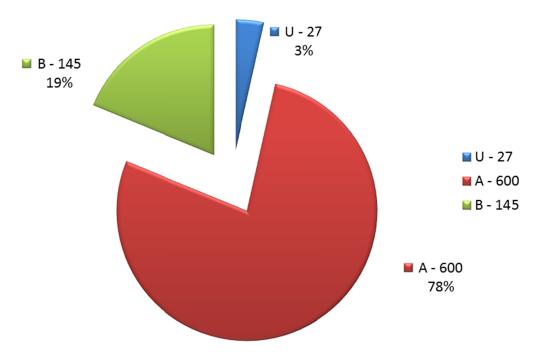
### 3. Suggested action

- 3.1 The Meeting is invited to:
  - a) take note of the information contained in this working paper;
  - b) coordinate with your State PoC to review its outstanding deficiencies, with the assistance of ICAO for any update or clarification by December 2014; submitting the applicable evidence to ICAO NACC Office;
  - c) include in their Work Programme any supporting activity for resolving the deficiencies as identified by ICAO by Dec 2015; and
  - d) Recommend additional actions as deemed appropriate.

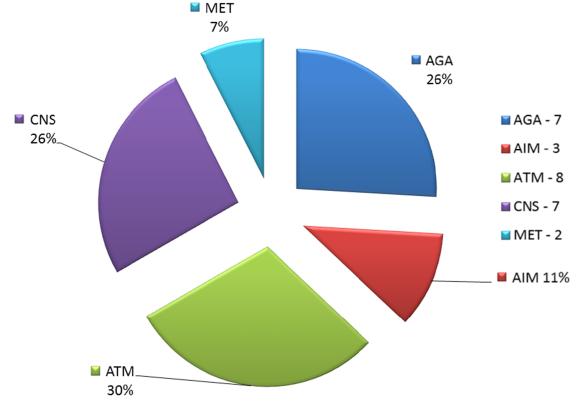
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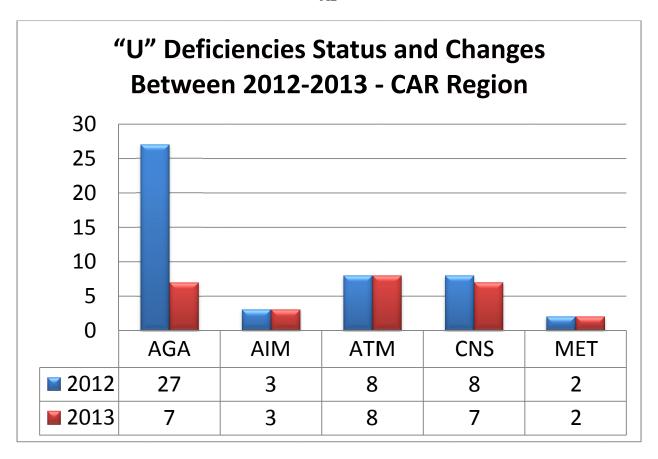
APPENDIX/APÉNDICE A

# Outstanding Air Navigation Deficiencies by Priority "U", "A" and "B" in the CAR Region (772)



# Outstanding Priority "U" Deficiencies by Field in the CAR Region (27)





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# APPENDIX/ APÉNDICE B

## **AGA DEFICIENCIES**

# Action by ICAO: Assistance through events

| Common deficiencies                                     | Assistance of ICAO through                        |
|---|---|
| Lack of runway maintenance                              | ALACPA  |
| Lack of runway friction measurement                     | ALACPA  |
| Lack of aerodrome bird/animal control and management    | CARSAMPAF   |
| Deficient visual aids (signs, signage and illumination) | Workshops and Mission Assistance visits to States |
| Lack of obstacles control around aerodromes             | Workshops   |
| Lack of firefighting SEI personnel training             |   |
| lack of partial exercises and SEI totals                |   |
| Lack of RESAS (Runway End Safety Area)                  | ICAO Workshops                                    |
| Insufficient runway strips                              |   |
| Runway strip objects                                    |   |
| No signage of safety lines at the platforms             |   |

### **Deficiencies AIS**

| Category   | TOTAL per Deficiency |
|--|----------------------|
| UpdateWGS84 and EGM96 información                        | 5                    |
| Production of Aeronautical Charts with WGS84             | 7                    |
| Partial Applic ICAO Req for IAP charts                   | 6                    |
| Partial Applic ICAO Req for Aerod/Helip charts           | 6                    |
| Partial Applic ICAO Req for Enroute charts               | 5                    |
| Lack of Hi-priority for AIS publications                 | 5                    |
| Complete Implementation of QMS                           | 23                   |
| Implementation of eTOD                                   | 26                   |
| Lack update IAIP (AIP, AMDt, AIC, SUP, etc)              | 6                    |
| Lack of AIS-AIM TRAIN personnel                          | 2                    |
| Comply ICAO Req for adequate cond and Org in AIM         | 7                    |
| Lack implementation equipment, personnel, software, etc. | 7                    |
| Update VFR charts published in AIP including Aerodrome   | 1                    |
| Implementation of AIXM                                   | 1                    |
| Lack of WAC VFR 1:1000000-1:500000 production            | 6                    |

| Lack of use of English lang in plain TXT                   | 4   |
|--|-----|
| Establish Pre-flight info AIS-ARO Units                    | 6   |
| Implementt pre-flight information boulletin PIB            | 7   |
| Partial application Aerodrome Obst, Chart ICAO Type A      | 2   |
| Timely NOTAM distribution, NOTAM AUTO                      | 6   |
| Lack of AIM implementation                                 | 1   |
| Not enough qualified AIS/AIM personnel                     | 1   |
| No LOAs with NOTAM data originators                        | 1   |
| Not sufficient AIS liaison with other Air Navigation Areas | 1   |
| Lack of AIRAC implementation                               | 1   |
|  |     |
| TOTAL per State  | 143 |

# ICAO Assistance through seminar and workshops

## **CNS** deficiencies

| Common deficiencies                                      | Assistance of ICAO through                      |
|--|---|
| Lack of facility/ service implementation                 | Evaluation of Performance needed- ASBU planning |
|  | ICAO workshop                                   |
| Optimum use of frequency spectrum                        | Coordination with ICAO                          |
| Lack of Navaids monitor                                  |   |
| Deficient navaids flight inspections                     |   |
| Deficient navalus riight inspections                     |   |
| Lack of performance based System planning                | Evaluation of Performance needed- ASBU planning |
|  | ICAO workshop                                   |
| Lack of ANS oversight                                    | ICAO ANS and CMO workshops                      |
| T 1 00412 1 0 11   | II. IGAO : I : IGAO I :                         |
| Lack of 24-bits aircraft address registry implementation | Use ICAO guidance in ICAO website               |
| latest ICAO outstanding amendments not available         |   |
| Application of ASTERIX codes                             | Use ICAO guidance in ICAO website               |
| Application of regional IPv4 addressing scheme           | Use ICAO guidance in ICAO website               |
| Lack of voice recording or UTC synchronization           |   |
| Incorrect Navaid/Com information published in AIP        |   |
| Deficient radar/ Com service                             | ICAO workshop- Meeting of Implementation Groups |