International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)
First Meeting of the Communications, Navigation and Surveillance / Air Traffic Management Subgroup (CNS/ATM/SG/1)
(Lima, Peru, 15-19 March 2010)

Agenda Item 4: **Review of pending matters of the ATM/CNS/SG, ATM/COMM, CNS/COMM and the respective Task Forces, for their consideration in the work programme of the CNS/ATM Subgroup**

FOLLOW UP OF ACTIONS IN THE CAR/SAM REGIONS IN SUPPORT OF THE ICAO POSITION AT THE 2012 WORLD RADIOCOMMUNICATION CONFERENCE (WRC-2012)

(Presented by the Secretariat)

SUMMARY

This working paper contains the follow up on the activities carried out in the CAR/SAM Region in support of the ICAO position for the upcoming ITU World Radiocommunication Conference (WRC) scheduled for 2012, including the latest actions and results of updating the radio frequency assignment lists, and the results of the 2007 World Radiocommunication Conference (WRC-2007).

References:

- Report of the GREPECAS/15 meeting (Rio de Janeiro, Brazil, 13-17 October 2008).
- Council – Session 184 – C-WP/13183.
- Meeting of ACP Working Group F (Montreal, 18-22 May 2008).
- State Letter NE 24-4 – EMX0295, 1 April 2009.
- ICAO CAR/SAM Air Navigation Plan (Doc 8733), Volume I, Basic ANP and FASID Vol. II.
- Handbook on Radio Frequency Spectrum Requirements for Civil Aviation, Doc 9718

Strategic Objectives	*This working paper is related to Strategic Objectives A and D.*

1. Introduction

1.1 The availability of the required radio frequency spectrum is a safety pre-requisite for civil aviation and for the effective implementation of communications, navigation and surveillance/air traffic management (CNS/ATM) systems. However, taking into account that spectrum demand by non-aviation users is constantly growing, aviation faces growing competition for the limited available spectrum, particularly from commercial telecommunication services. Modern state-of-the-art avionics for communications, radio navigation, automatic position reporting, and data link would not be able to operate without access to the radio electric spectrum. **Appendix A** to this paper illustrates these requirements.

1.2 One of the initiatives of Doc 9750 - *Global Air Navigation Plan* is GPI-23 *Aeronautical Radio Spectrum*, which contemplates the timely and continuous global availability of the appropriate radio spectrum for the provision of viable air navigation services (communication, navigation and surveillance). To this end, States are urged to address all regulatory aspects of the aeronautical issues contained in the agenda of ITU world radiocommunication conferences (WRCs) and to pay special attention to the need to maintain the spectrum assignments currently used for aeronautical services. To this end, Doc 8733 - *CAR/SAM Air Navigation Plan*, Volume I, describes the coordination and management arrangements required for keeping COM 1, COM 2 and COM 3 frequency assignment lists updated by ICAO and the States.

2. Discussion

2.1 For the appropriate radio spectrum to be available worldwide on a timely and continuous manner, aviation requirements regarding the radio frequency spectrum must be broadly supported by all ICAO Contracting States at all international fora where the issue of spectrum allotment is discussed, so as to ensure that all requirements concerning vital aviation safety services are duly presented and understood.

Results of the World Radiocommunication Conference (WRC-2007)

2.2 At the last World Radiocommunication Conference (WRC 2007) held from 22 October to 16 November 2007 in Geneva, Switzerland, three aviation coordination meetings were organised by the ICAO delegation, with the participation of approximately 60 aviation experts. The meetings addressed all issues concerning aviation, particularly those with specific proposals emerging from the conference. At these meetings, the support to ICAO position was bilaterally coordinated with aeronautical administration officials, based on the evolution of the conference. **Appendix B** to this working paper shows a summary of the main results of WRC-2007 that are of interest to international civil aviation.

2.3 The positive results of the WRC-2007 were due to the activities carried out by ICAO in preparation for this conference and the participation of Contracting States in the development of the ICAO position:

a) early development and disclosure of the preliminary position of ICAO by the Secretariat and the Air Navigation Commission, with the assistance of the ACP and the NSP;

b) active participation of ICAO experts in the preparatory work for the ITU;

c) increased participation by ICAO experts at the meetings of regional telecommunication organisations (APT, CEPT, CITEL, ATU). The participation of ICAO Regional Offices--and Headquarters, when so required--was important to support the development by regional telecommunication organisations of proposals aligned with the ICAO position;

d) meetings of the ACP working groups, and the radio frequency seminars organised by ICAO in the Regions;

e) the implementation of Assembly Resolution A32-13; and

f) the active participation of the ICAO delegation at the conference itself.

ICAO position for the World Radiocommunication Conference-2012

2.4 Similarly, for the next WRC meeting to be held in January-February 2012 (WRC-2012), ICAO has prepared its position at the ITU, the final version of which was approved by the Air Navigation Commission on 30 June 2009 (see State Letter E 3/5-09/61). The definitive position of ICAO for WRC 2012 is posted on the ICAO panel website:
http://www.icao.int/anb/panels/acp/repository/ICAO_Pos_WRC11_State_Letter.pdf .

2.5 With a view to the development of, and support to the ICAO position at the ITU World Radiocommunication Conference - 2012 (WRC-2012), GREPECAS/15 formulated Conclusion 15/46 (*CAR/SAM regional action in preparation for, and support to, the ICAO position at the WRC 11),* urging CAR/SAM States and International Organisations to implement the regional actions described in the aforementioned conclusion.

2.6 In this regard, CAR/SAM States and International Organisations have expressed their willingness to support and follow up the preparation and update of the ICAO position, as stated at the third meeting of Directors of North America, Central America and the Caribbean (NACC/DCA/3), through Conclusion NACC/DCA/3/6 – *Support by NAM/CAR States to the position of ICAO at the ITU WRC-11*.

2.7 Based on the express support by States, the ICAO Regional Offices have requested the States, Territories and International Organisations to designate their focal points for this support. This focal point will be in contact with ICAO and the national authority responsible for managing the radio frequency spectrum, for purposes of coordinating issues related to WRC-12. Likewise, focal points should continue participating actively at CITEL meetings of the Organization of American States (OAS) on the preparatory work for WRC-12, and participate actively at the meetings and seminars convened by ICAO to explain and analyse the position of this organisation at the WRC-12, and participate actively at the WRC-12 in support of the ICAO position. **Appendix C** to this paper contains the list of focal points designated by CAR/SAM States/Territories.

2.8 It should be noted that, as a result of the presentation of the ICAO position for WRC 2012, CAR/SAM States and Territories felt the need to conduct a workshop so that the States/Territories/International Organisations could understand and support the ICAO position. Consequently, in coordination with the ICAO Air Navigation Panel (ACP), two events have been organised: a workshop on the management of the radio electric spectrum for aviation and the preparatory work for the WRC-2012 ("ICAO NAM/CAR/SAM regional preparatory meeting (NCSRPM) for the ITU WRC-2012"), followed by the 22nd meeting of Working Group F of the Aeronautical Communications Panel (ACP-WG/F). Both events will take place at the ICAO NACC Office in Mexico City, Mexico: the NCSRPM meeting on 21-22 April 2010, and the ACP-WG/F meeting on 23-30 April 2010.

Review of the radio frequency assignment lists

2.9 Also in 2009, and in order to update radio frequency assignments, ICAO took the necessary action with the States/Territories for the overall updating of CAR/SAM radio frequency assignment lists. As a result of such action, revised lists of radio frequency assignments for the CAR and SAM Regions have been obtained, and are available on the websites of the NACC Office (http://www.mexico.icao.int/Freq_en.html) under the section Regional Databases / *Radio frequency assignment lists — CAR Region*, and of the SAM Region (http://www.lima.icao.int/ICAOSAMNET/AirNav-eDocumentsMenu.asp) under the CNS section, respectively.

3. **Suggested action**

3.1 The Meeting is invited to:

a) take note of the information contained in this working paper and its appendices;

b) urge States that have not yet done so, to designate and update the information on their point of contact, according to paragraph 2.7 and Appendix C;

c) participate at the ICAO NAM/CAR/SAM regional preparatory meetings (NCSRPM) for the ITU WRC-2012 and at the 22nd meeting of Working Group F of the Aeronautical Communications Panel (ACP-WG/F) as described in paragraph 2.8;

d) review the frequency assignments that correspond to their State/Territory, as indicated in paragraph 2.9, and send their updated information to ICAO; and

e) propose any other action it may deem advisable.

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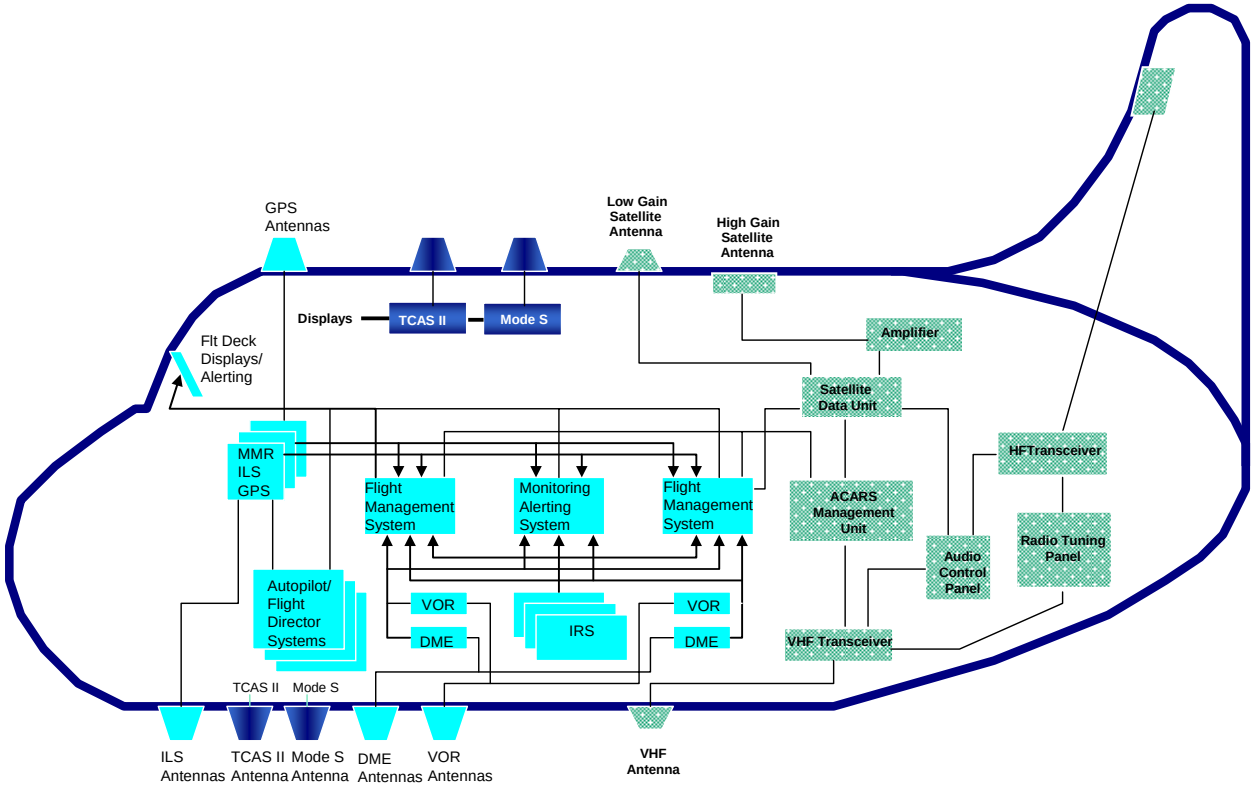
APPENDIX A / APÉNDICE A



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APPENDIX B

SUMMARY OF THE MOST IMPORTANT RESULTS FOR INTERNATIONAL CIVIL AVIATION OF WRC-07

1. Protection of global navigation satellite system (GNSS) signals in the 1 559-1 610 MHz band (global positioning system [GPS], global navigation satellite system [GLONASS]) was enhanced by giving secondary status to the fixed service (FS) operating in this band in thirty-four countries. As a result, FS operation in those countries must protect the GNSS. Up until late 2009, this band will be assigned mainly in nine African and Middle Eastern countries. Although use of this band by FS must necessarily conclude no later than 2015, the GNSS service operating in this band will be protected globally until 2009. Furthermore, the elimination of aeronautical radio navigation service assignments in Sweden (used for radar systems) further enhanced GNSS protection in Europe.

2. The conference agreed to give primary status to the radiolocation service (RLS), giving the same primary assignment status to the earth exploration satellite service (EESS) (active) and the space research service (SRS) (active) in the 9 GHz bands. After an intense discussion, the conference agreed to give the aeronautical radio navigation service operating in these bands (ground-based radars and aircraft weather radars) the necessary regulatory protection, in keeping with the ICAO position.

3. It was agreed that assignments for the aeronautical mobile (route) service (AM(R)S) would be made in the 112-117.975 MHz, 960-1 164 MHz, and 5 091-5 150 MHz bands. This complies with the ICAO position, which was based on the bandwidth requirements identified in the Future Communications Study conducted by the Aeronautical Communications Panel, with the exception of the 5 GHz band, which might need more bandwidth. The new AM(R)S assignments are in bands that have also been assigned to the aeronautical radio navigation service (ARNS) and are used (or are planned to be used) by the VOR, DME, SSR, UAT, and MLS. Assignments are subject to not causing harmful interference and not being entitled to protection by stations operating in the ARNS. Assignments are limited to airport surface operations and are shared with assignments for aeronautical mobile telemetry (AMT) and with aeronautical safety (AS) transmissions. AS is an application that provides a broad aircraft-to-ground bandwidth link, like for instance a video transmission, in case of unlawful intervention.

4. In order to meet aeronautical mobile telemetry (AMT) requirements for flight tests, the conference agreed to have a global assignment in the 5 091-5 150 MHz band (MLS extension band). A number of band frequencies in the 4 and 6 GHz range that are not being currently used for aeronautical safety purposes, as well as the 5 091-5 150 band, were also assigned to AMT on a regional or subregional basis.

5. The conference agreed to eliminate the provision that gave MLS precedence over any other use in the 5 091-5 150 MHz band (MLS extension band). The deadline for new fixed satellite service (FSS) assignments in the MLS extension band was extended from 2012 to 2016.

6 It is acknowledged that VSAT networks operating in the fixed satellite service can be used for aeronautical safety applications. WRC 07 formulated a recommendation to this effect.

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APPENDIX C / APENDICE C

POINT-OF-CONTACT (PoCs) TO COORDINATE MATTERS CONCERNING WRC-2012/ PUNTO DE CONTACTO (PoCs) PARA COORDINAR ASUNTOS CONCERNINENTES A LA CMR-2012

POINT-OF-CONTACT (PoCs) TO COORDINATE MATTERS CONCERNING WRC-2012/ PUNTO DE CONTACTO (PoCs) PARA COORDINAR ASUNTOS CONCERNINENTES A LA CMR-2012				
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