



International Civil Aviation Organization

NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE

Fourth Central Caribbean Working Group Meeting (C/CAR WG/4)

Santo Domingo, Dominican Republic, 9 to 13 February 2004

C/CAR WG/4-WP/07

20/01/04

Agenda Item 3: Specific Air Navigation Activities and Developments
3.3 Aeronautical Information Services (AIS)

WGS-84 IMPLEMENTATION

(Presented by the Secretariat)

SUMMARY

In view that five years have elapsed since the promulgation of the application date of the WGS-84 System, and that in order to finalize its implementation it is necessary that the geographical coordinates of the boundaries of the FIRs be determined in this system, civil aviation authorities are hereby urged to take effective measures to achieve the total implementation of WGS-84 in the CAR Region.

1. Introduction

1.1 The Council of ICAO adopted the WGS/84 geodetic system as the standardized global geodetic reference system for international civil aviation, and established 1 January 1998 as the application date in which geographical coordinates on which the air navigation systems are based were to be published by the States.

1.2 Consequently, some States, in an individual manner, and the international community together have made many efforts to implement the system in their respective countries and regions. Nevertheless, in the CAR Region the implementation of WGS-84 is still pending in view that several States do not yet comply with this international standard.

1.3 Likewise, in view of the importance of the issue of the implementation of the system, it has been discussed in different regional and subregional meetings such as the CAR/SAM/3 RAN, GREPECAS Group and Directors of Civil Aviation Meetings of the CAR Region. In these fora, aviation authorities have always agreed that WGS-84 is a high-priority matter.

1.4 Moreover, within the subject, the need of States with adjacent FIRs for coordination of the determination and publication of geographical coordinates in those neighbouring common points, as agreed upon at the C/CAR/WG/1, has been specifically discussed.

2. Discussion

2.1 Since the first meeting of this Working Group, different conclusions have been adopted pointing towards the need of totally implementing the WGS-84 geodetic system, and the impact of this implementation on air navigation safety has also been emphasized. Notwithstanding this fact, and the efforts carried out by some States, the total implementation of the system is still pending after five years of its application date. This situation is a concern for the aeronautical community in view that there is no notice about a plan nor an estimated date for its total implementation in the CAR States that have not yet finalized the transformation of coordinates into WGS-84.

2.2 The implementation of this geodetic system is all the more important in these moments when RNAV and RNP systems are being developed, requiring accuracy and integrity in data and, therefore, availability of WGS-84 coordinates. Now that States have recognized the importance of progressing in the CNS/ATM system, in order to establish their Air Traffic Management Services with these systems, it is more urgent to transform the relevant geographical coordinates for air navigation into WGS-84 coordinates.

2.3 The authorities have also recognized that the lack of implementation of this system entails the use of a diversity of coordinates data that has been determined based on other geodetic systems that may have a serious impact on air safety with regrettable consequences if no necessary measures are taken to carry out an effective implementation of the system.

2.4 Within this context, and in view that not all the States have implemented the system, there is also a situation preventing States that already have consolidated coordinates supporting air navigation in their corresponding territories to advance, as they cannot determine the common coordinates at the limits of the adjacent FIRs. This requires an agreement between States and a team work to facilitate the transformation of these border coordinates.

3. Conclusion

3.1 Bearing in mind that Conclusion 1/7 of the C/CAR/WG/1 - *Total Implementation of WGS-84 in the Central Caribbean States*, urged the States/Territories to establish agreements in order to complete the implementation of the system and to coordinate the determination of the common points coordinates in the adjacent FIRs, the Meeting should consider the need for reactivating this initiative so that the States may make more efforts, follow-up and establish the real purpose of the definite implementation of WGS-84 System in the CAR Region.

4. Suggested action

4.2 Based on the above, the Meeting is invited to:

- a) note the contents of this paper; and
- b) consider and analyze the following draft conclusion:

DRAFT**CONCLUSION 4/X FOLLOW-UP TO THE TOTAL IMPLEMENTATION OF WGS-84**

That, considering that the RNAV and RNP systems, including RVSM, are in an advanced implementation phase, and that for their efficient application the strict accuracy and integrity of data on which they are based is required, the States/Territories of the C/CAR agree to:

- a) carry out a greater and more effective follow-up to the total implementation of the WGS-84 System;
- b) establish 30 November 2004 as the deadline for the total implementation of WGS-84 in the C/CAR area;
- c) develop technical assistance agreements of which the experience obtained by the States that have already implemented the system in their territories may be taken advantage; and
- d) carry out coordination meetings between States as shown in the programme of **Appendix** to this working paper, in order to establish agreements to jointly determine and implement the geographical coordinates of those common points of the adjacent FIRs depicted in the **Attachment** to the Appendix, and copy and inform the ICAO NACC Regional Office on the coordination and the agreements attained in these meetings.

APPENDIX

PROGRAMME OF COORDINATION MEETINGS AMONG C/CAR STATES TO DETERMINE THE COORDINATES OF THE FIRS UNDER THE WGS-84 SYSTEM	
STATES	DATE
Netherlands Antilles/United States	24/03/04
Netherlands Antilles/Dominican Republic	21/04/04
Netherlands Antilles/Haiti	26/05/04
Netherlands Antilles/Jamaica	23/06/04
Netherlands Antilles/Colombia	28/07/04
Bahamas/United States	21/04/04
Bahamas/Cuba	24/03/04
Cuba/Haiti	25/08/04
Cuba/United States	26/05/04
Cuba/Mexico	23/06/04
Cuba/COCESNA	21/04/04
Cuba/Jamaica	28/07/04
Haiti/Dominican Republic	24/03/04
Haiti/United States	28/07/04
Haiti/Jamaica	21/04/04
Jamaica/COCESNA	26/05/04
Jamaica/Panama	25/08/04
Jamaica/Colombia	22/09/04
Dominican Republic/United States	23/06/04

Note: Civil aviation authorities should copy and inform the ICAO NACC Regional Office on the coordination and the agreements attained in these meetings.
