



International Civil Aviation Organization
Western and Central African Office

Twelfth Meeting of the Air Traffic Management/Aeronautical Information Management/Search and Rescue Sub-Group(ATM/AIM/SAR SG/12)

(Dakar, Senegal, 25 - 29 July 2011)

Agenda Item 4: PBN Implementation in AFI Region and AFI ATS routes network

Follow up of the AORRA airspace implementation
(Presented by Secretariat)

Summary
This paper reports on the implementation of the AORRA airspace as considered by the SP AFI RAN meeting and the APIRG/17 meeting, and follow-up measures.
References: <ul style="list-style-type: none"> • SAT Group meetings Reports • Report of the AORRA Implementation Coordination Meeting held in ACCRA, Ghana. • SP AFI RAN 08 report • APIRG 17 report

1. Introduction

1.1 As a result of repetitive demands expressed by airlines, and in order to realize increased benefits from the tracks designed to maximize wind effect and related fuel savings in flight operations, South Atlantic States, decided and initiated the implementation of a Random Routing Area for aircraft operating between Africa and South America, called the Atlantic Ocean Random Routing Area (AORRA).

1.2 Aircraft flying random routes within AORRA will use the conventional Airway structure outside of the AORRA area and commence random routing only at the boundary. As the conventional ATS route structure does not always position the aircraft efficiently for a random route, benefits to airlines will increase with the additional entry/exit waypoints and transition route portions to the boundary of AORRA airspace . This would make Random Routing and its associated benefits accessible to airlines operating, inter alia, from the Arabian Gulf (Middle East) to South America, and from North America to South Africa, in both directions. This will allow airlines to achieve fuel efficiencies and the subsequent reduction in green house gas emissions.

2. Discussion

2.1 The random routing area was planned to be implemented in four phases as shown at **Appendix A** to this paper. AORRA phase I was implemented on AIRAC date 21st of December 2006 by States concerned.

2.2 Following phases were scheduled to be implemented as follows:

- Phase 2 : 18 December 2008,
- Phases 3 and 4: 17 in December 2009.

2.3 In November 2008, noting that the target date of AORRA phase 2 implementation will not be met, the SP AFI RAN meeting recommended (Recommendation 6/12) that ICAO facilitates and coordinates implementation of all phases of AORRA and assists in determining a suitable date for AORRA Phase 2 implementation. This was done by the ICAO WACAF office and AORRA Phase 2 was successfully implemented on 12 April 2009.

2.4 Subsequently the SAT Group decided to postpone the implementation of AORRA phases 3 and 4 to the end of April 2010.

2.5 However, some States requested again for more time to adequately prepare for their implementation, particularly with regards to ATC training and communication means. In this respect, the Airac date of 26 August 2010 was set as deadline for full implementation of AORRA by all States concerned.

2.6 Along with the implementation of the random routing area, the following issues were acknowledged as key requirements:

- All routes within AORRA should be suspended in order to allow full random routing operations and remove any misunderstanding of the application. These routes may be reactivated in case of an emergency situation.
- direct route transitions are required from waypoints on the existing airway structure to discrete Latitude/Longitude waypoints on the AORRA boundaries, in order to optimize random routing benefits.

2.7 The issue was considered by APIRG/17 which approved a proposal made by IATA for additional Entry/Exit waypoints on the AORRA boundary along with suitable transitions from the existing domestic airway structure and adopted the following conclusion:

CONCLUSION 17/60: DIRECT TRANSITIONS TO/FROM AORRA AIRSPACE

That, the ICAO Regional Offices facilitate coordination, publication and implementation by Angola, Ghana, Sao Tome and Principe, ASECNA and Roberts FIR, with regard to the AORRA airspace to/from transition points in Appendix 3.4I (as amended) to this report.

2.8 To this effect, an AORRA Implementation Coordination meeting was held in Accra, Ghana, to the kind invitation of Ghana Civil Aviation Authority (GCAA), which agreed to the creation of new entry/exit waypoints on the AORRA boundary and transition route segments as required by APIRG17.

2.10 AORRA implementation was finally completed on Airac date 26 August 2010 by all States concerned in application of Conclusions of the Accra meeting.

2.11 A continuous coordination process between ANSPs and users has been put in place through SAT Group meetings in order to deal with any new requirement related to the management of the AORRA airspace, as well as to monitor the level of safety for the operations in AORRA.

3. Action by the meeting

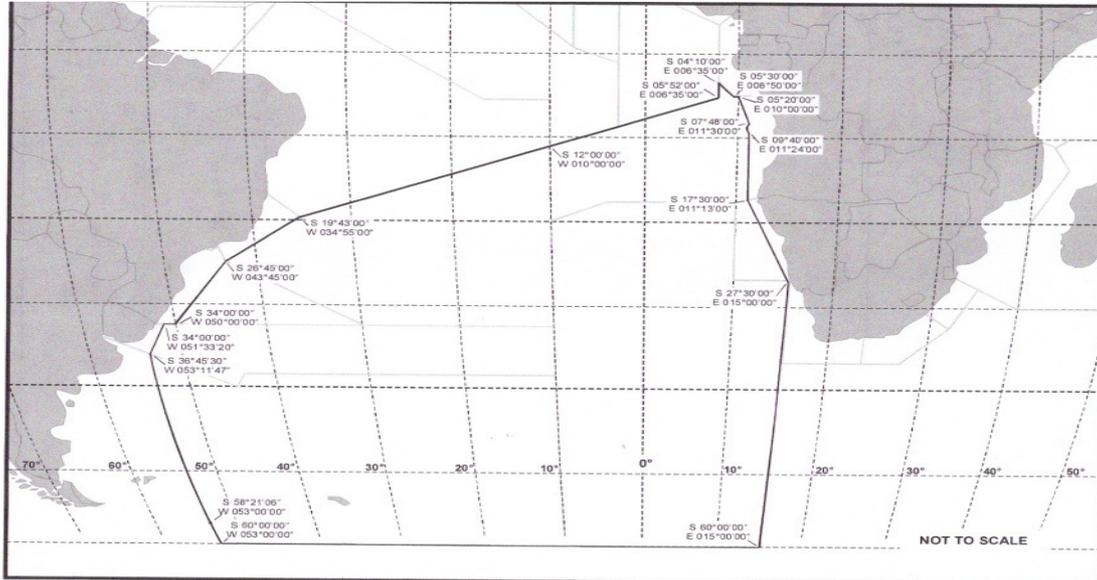
3.1. The meeting is invited to:

- 1) Note the information contained in this paper.
- 2) Note that the implementation of AORRA Phases 3 and 4 has been completed on the airac date 26 August 2010.
- 3) Note the suspension of all fixed routes within the AORRA and the creation of transition routes to/from AORRA, by all States and ANSPs concerned.
- 4) Agree on any other follow-up action required

-END-

AORRA PHASES

Phase I



Phase II

