

**International Civil Aviation Organization
UNDP/ICAO Regional Project RLA/98/003
Transition to the CNS/ATM Systems in the CAR and SAM Regions**

Third Meeting/Workshop of Air Traffic Management (ATM) Authorities and Planners

(Lima, Peru, 20-24 May 2002)

Agenda Item 3: Analysis of the Action Plan for the Implementation of RNP 10 pre-operational Trials and Demonstrations Programme in UT (UL) 780 and its parallel route.

IMPLEMENTATION OF PARALLEL RNAV RNP 10 ROUTES IN THE SAO PAULO-RIO DE JANEIRO/MIAMI TRAFFIC FLOW

(Presented by the Secretariat)

Summary

This working paper contains a proposal to establish parallel RNAV RNP 10 routes in the Sao Paulo-Rio de Janeiro/Miami traffic flow, in order to make better use of the airspace related to routes UA 315; UL 304 y UT (UL) 795.

References:

- Report of the SAM ATM/CNS NNW/1 meeting;
- Report of the CAR/SAM RAN/3 meeting;
- Reports of GREPECAS 8 and GREPECAS 10;
- Reports of the AP/ATM/1 and AP/ATM/2 meetings;
- Project RLA/98/003 "Transition to the CNS/ATM systems in the CAR/SAM Regions";
- Annex 11 - Air Traffic Services;
- Doc. 9613 - Handbook on the required navigation performance (RNP);
- Doc. 9689 - Manual on airspace planning methodology for the determination of separation minima; and
- Doc. 7030 - Regional Supplementary Procedures.

1 Introduction

1.1 During the AP/ATM/1 meeting (Lima, Peru, 18-21 July, 2000), it was agreed to begin pre-operational trials on route UT (UL) 795 (Sao Paulo/Miami). During the AP/ATM/2 meeting (Lima, Peru,

14-18 May, 2001), after an assessment that gave satisfactory results, its definitive implementation was approved. Currently, the process of amendment for its inclusion in the CAR/SAM ANP is underway.

1.2 Route UL 304 (Rio de Janeiro/Miami) has already been included in the CAR/SAM ANP; however, for various reasons, only the Porto (PCX) VOR/DME - Cabo Codera (CBC) VOR/DME segment has been implemented and the segment to the Great Inagua (ZIN) NDB is pending. This route is parallel to route UT (UL) 795.

1.3 According to the information provided by Venezuela during the SAM ATM/CNS NNW/1 meeting held in Lima, Perú, on 8-12 April, 2002, route UT (UL) 795 is not being used by the traffic departing from or arriving at Maiquetía, because its path is more than 100 NM west of that city, thus increasing the distance. This traffic is using route UA 315 (Sao Paulo-Rio de Janeiro/Miami) which goes through the Maiquetía (MIQ) VOR/DME, but, because its path gets very close to the CBC VOR/DME and there is no VHF communication coverage in that area, there is a potential for conflict with the traffic converging over that radio aid.

2 Analysis

2.1 At that meeting, the proposal submitted by Venezuela to realign route UA 315 in its Manaus (MAN) VOR/DME – KAMUT – Maiquetía (MIQ) VOR/DME segment, replacing it with the Manaus (MAN) VOR/DME – Tuy (TUY) VOR/DME - Maiquetía (MIQ) VOR/DME segment was examined and approved.

2.2 Nevertheless, the meeting considered that the realignment of route UA 315 was a solution restricted to traffic conflicts that might be occurring in and near the Maiquetia TMA, and therefore it would be necessary to find solutions enabling better use of the airspace and involving the Sao Paulo-Rio de Janeiro/Miami traffic flow, as a whole.

2.3 In this respect, the Secretariat submitted an overall analysis of that traffic flow, containing a proposal for an integrated solution consistent with the planning being carried out by GREPECAS in the CAR/SAM Regions. (The Secretariat will make a presentation during the AP/ATM/3 meeting to explain in graphical form the analysis done in the Sao Paulo-Rio de Janeiro/Miami traffic flow airspace.)

2.4 Based on the analysis performed, the need for the following was established:

- a) Implementation of the CBC VOR/DME-ZIN NDB segment of route UL 304;
- b) Cancellation of route UA 315; and
- c) Implementation of a parallel RNAV route between routes UL 304 and UT (UL) 795, with RNP 10 values.

2.5 Considering that this proposal involves CAR/SAM States/Territories and that an airspace safety assessment is required prior to its implementation, the SAM ATM/CNS NNW/1 meeting considered that it should be submitted by the Secretariat to the consideration of the AP/ATM/3 meeting.

3 Suggested action

3.1 The meeting was asked to examine this working paper and adopt the corresponding actions.