

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 2: Implementation of routes UL 670 (Bogotá/Kington/New York), UL 793 (Buenos Aires/New York), UL 674 (Caracas/Houston), UL 337 (Porto of Spain/Miami), UL 423 (Bogotá/San José/México) y UL 471 (San Salvador/Miami).

Factors affecting the implementation of RNAV routes in the CAR/SAM Regions

(Presented by the Secretariat)

Summary

This working paper presents the factors that are affecting the implementation of RNAV routes in the CAR/SAM Regions.

References:

- Reports of the AP/ATM/1 and AP/ATM/2 meetings
- Doc. 9426, Air Traffic Services Planning Manual

1 Introduction

1.1 The Third CAR/SAM RAN Meeting held in Buenos Aires, Argentina in October 1999, considering the operational advantages and economic benefits involved and based on the planning that was already being carried out, asked the CAR/SAM Regional Planning and Implementation Group (GREPECAS) to establish an RNAV route network and design a strategy for its implementation.

1.2 During the AP/ATM/1 and AP/ATM/2 meetings held in Lima, Peru on 18-21 July, 2000 and 14-18 May, 2001, respectively, the decision was made to implement RNAV trial and demonstration routes in the CAR/SAM Regions.

1.3 The GREPECAS 10 meeting, held in Las Palmas, Canary Islands, Spain, in October 2001, examined the trajectories submitted by the RNAV/RNP Task Force at the ATM/CNS/SG/1 meeting and identified 13 RNAV routes for inclusion in the CAR/SAM ANP – Basic Vol. and subsequent implementation in the Caribbean and South American Regions.

2 Analysis

2.1 The experience obtained over the past two years in the implementation of RNAV routes in the CAR/SAM Regions has dictated the need for a thorough analysis of interconnected factors that might affect said process, as well as extensive and intensive coordination with the parties involved (States/Territories, international organizations, IATA and users).

2.2 Despite the successful implementation of RNAV routes, this process revealed that the following factors, among others, were affecting the prompt implementation of the RNAV routes proposed for the CAR/SAM Regions:

- a) The tendency to assign a single starting/ending point for all the proposed RNAV routes originating from the same sector, at points already in existence and/or in FIR boundaries, thus preventing the implementation of parallel routes to alleviate traffic congestion or to allow aircraft to fly at their optimum flight levels;
- b) The restricted and prohibited airspaces that affect some of the trajectories of the proposed RNAV routes and significantly increase flight distances, resulting in the need for closer civil/military coordination; and
- c) The preference to incorporate the new RNAV routes into existing arrival and departure trajectories, which suggests that the Administrations are not making a comprehensive analysis of existing conventional ATS routes that coincide with or are in the proximity of the proposed RNAV routes.

2.3 As already mentioned, implementation is a complex and painstaking process that requires the active participation of all parties involved.

2.4 In view of the new process for the implementation of RNAV routes, the Administrations should take the necessary steps and prepare an RNAV implementation programme that identifies the real implementation needs, examines the impact of implementation on the airspace and on ATS provision, and establishes the relevant coordinations to enable an integrated, harmonious and timely implementation of more direct RNAV routes.

3 Suggested action

3.1 The meeting is invited to take note of the information provided in this working paper and, if deemed advisable, to approve the following conclusion:

Draft Conclusion AP/ATM3X/X National programme for the implementation of RNAV routes

That CAR/SAM States/Territories and International Organizations draw up a national programme for the implementation of RNAV routes that is compatible with the CAR/SAM RNAV implementation programme, specifying the real implementation needs, examining the impact of the implementation on the airspace and on ATS provision and establishing the relevant coordinations to enable an integrated, harmonious and timely implementation of more direct RNAV routes.