



International Civil Aviation Organization

Third North Atlantic/Caribbean (NAT/CAR) ATS Routes Working Group Meeting

(NAT/CAR WG/3)

Miami, Florida, USA, 13 to 15 November 2007

NAT/CAR WG/3 - IP/07

25/10/07

Agenda Item 2: WATRS Plus Project Implementation Issues
2.5 Status of Operator/Aircraft on RNP 10 or 4 Authorizations and Guidance

ICAO STATE LETTER: GUIDANCE MATERIAL FOR THE ISSUANCE OF PERFORMANCE BASED NAVIGATION (PBN) OPERATIONAL APPROVALS.
(DOC 9613 MANUAL ON PERFORMANCE BASED NAVIGATION /PBN)

(Presented by the Secretariat)

SUMMARY
This Information Paper presents to the Meeting the State Letter issued by the Secretary General in April 2007 containing standardized Navigation Specifications for implementation of PBN routes and procedures. The new PBN Manual is a source document for implementation of 50 NM lateral separation as needed for the WATRS Plus route structure redesign.
References:
ICAO State Letter AN 11/45-07/22 dated 27 April 2007, <i>Guidance material for the issuance of performance based navigation (PBN) operational approvals</i>
This Information Paper relates to
ICAO Strategic Objectives: <i>A: Safety – Enhance global civil aviation safety</i> <i>D: Efficiency – Enhance the efficiency of aviation operations</i> <i>E: Continuity – Maintain the continuity of aviation operations</i> Global Performance Indicators: <i>GPI-1 Flexible use of Airspace</i> <i>GPI-5 Performance Based Navigation</i> <i>GPI-8 Collaborative airspace design and management</i>

1. Introduction

1.1 In December 2003, ICAO established the Required Navigation Performance (RNP) Special Operations and Requirements Study Group (RNPSORSG) to address the confusion in terms and proliferation of requirements for RNP-based operations.

2. Analysis

2.1. The ICAO RNP Study Group spent almost 3 years re-writing ICAO Doc 9613, formerly titled the *Manual on RNP*. The two volumes of the new Document 9613, posted on the ICAO NET webpage, are titled the *Manual of Performance Based Navigation (PBN)*. This new title reflects the overarching concept, known as PBN that comprises both Area Navigation (RNAV) and RNP operations. Information pertaining to RNP 10 and RNP 4 is contained in the document.

2.2 After the Study Group completed its work on the PBN Manual, the ICAO Secretariat determined that it should remain as a draft until completion of a series of jointly-presented ICAO-FAA/EUROCONTROL 3-day seminars on the new Manual scheduled in each ICAO Region from September 2007 through June 2008. The Secretariat expects that feedback from seminar attendees on the concepts and implementation processes presented in the new Manual may result in refinement of the contents of Volume I.

2.3 Volume II of the new ICAO PBN Manual contains detailed technical "Navigation Specifications" with standardized, harmonized airworthiness and operator requirements for several RNAV and RNP operations. These standardized Navigation Specifications also contain detailed recommendations for pilot and controller training.

2.4 It is expected that the RNP Study Group will resume work in 2008 to develop Navigation Specifications for RNP 2 and Advanced RNP 1. These specifications will be included in a future edition of the PBN Manual.

2.5 Recognizing that substantive changes to Volume II technical navigation specifications are not expected as a result of the PBN Manual seminars, on 27 April 2007 the ICAO Secretary General issued State Letter AN 11/45-07/22, stating *"Noting the great demand expressed by States to commence implementation of ATS routes and instrument flight procedures based on PBN, and in order to avoid proliferation of operational approval requirements, the relevant guidance material taken from the manual is being distributed at an earlier date so that States may make advance use of this critical information prior to publication of the new edition of the manual."*

2.6 The State Letter invites readers to note and take appropriate action in accordance with paragraph 5 which reads *"All States wishing to implement PBN operations are urged to establish an appropriate approval process in accordance with the attached guidance material."*

3 Suggested Action

3.1 The meeting is invited to take note that the new ICAO Doc 9613, PBN Manual is available on the ICAO web page for implementation of PBN routes and procedures, as reflected in the ICAO State Letter AN 11/45-07/22 (27 April 2007); and note that these standardized navigation specifications contain the necessary information for harmonized implementation of the WATRS Plus Project.