ICAO/IATA/CANSO PBN/2 — IP/02 29/04/18

Third ICAO/IATA/CANSO Performance-Based Navigation (PBN) Harmonization, Modernization and Implementation Meeting for the North American, Caribbean and South American (NAM/CAR/SAM) Regions

Mexico City, Mexico, 2 – 6 July 2018

Agenda Item 2

Implementation of Performance-Based Navigation (PBN) Routes
2.3 New Performance-Based Navigation (PBN) Routes Proposal and Interregional Initiatives

UPDATE ON THE IMPLEMENTATION OF PBN IN PARAMARIBO AIRSPACE

(Presented by Suriname)

| EXECUTIVE SUMMARY | | | | | | | | | | |
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| This Information Paper presents the update on the PBN implementation and the progress on the implementation of the PBN airspace concept within the Paramaribo FIR/TMA. | | | | | | | | | | |
| Strategic | Safety | | | | | | | | | |
| Objectives: | Air Navigation Capacity and Efficiency | | | | | | | | | |
| | Security & Facilitation | | | | | | | | | |
| | Economic Development of Air Transport | | | | | | | | | |
| | Environmental Protection | | | | | | | | | |

1. Introduction

1.1 This information paper serves the purpose of providing an update on the known progress made by Suriname within Paramaribo's airspace with regards to the implementation of Performance Based Navigation within the NAM/CAR/SAM Region.

2. Discussion

2.1 According to the NAM/CAR/SAM PBN Roadmap, air traffic growth within the Region is expected to occur at an average of four percent (4%) from 2015. It is the view of the NAM/CAR/SAM Regions that the increase in air traffic could affect ATM efficiency within limited airspaces. Suriname's main goal is to create/ accept more routes to accommodate air traffic and attract more flight movement within the Paramaribo airspace, because in comparison with other states our airspace has enough free space left to help reduce that pressure on neighbouring States.

- 2.2 One means of achieving the above stated goal while addressing the concerns of the NAM/CAR/SAM Regions and Aircraft Operators would be through the implementation of Performance Based Navigation (PBN). By exploiting aircraft capabilities, PBN can increase airspace capacity and traffic movements while providing the realization of economic benefits to both ANSPs and aircraft operators, ensuring safety of flight operations and providing more environmentally friendly aircraft operations.
- 2.3 Suriname has adopted regulations for operation approvals for the implementation of the RNAV routes within the Paramaribo FIR (En-route).
- 2.4 Suriname has begun restructuring the TMA within Paramaribo FIR to implement PBN arrivals and approaches (SID and STAR) that provide operational rewards for airspace users and ANSPs with the help of an authorized airspace designer. He has given a two (2) day teach-in to ANSPs about the concept STARs for SMJP Aerodrome in March 2017.
- 2.5 In Suriname we have already started the pre-implementation of PBN, initially using 40NM longitudinal separation within our airspace that focuses on the harmonization of the navigation specifications in the different airspace strata. LOA's have already been signed with Brazil and Guyana and implemented.
- 2.6 In order to meet the requirements of PBN implementation Suriname has begun ensuring that personnel of the ANSP receive the requisite introduction training. This began officially with the attendance of ATS personnel at a two (2) day Basic ICAO Procedures for ANS Operations (PANS-OPS) lecture during the last quarter of 2016. There is an intension for some personnel to attend an advanced PANS-OPS Course and train their colleagues in return for the continued implementation of PBN.
- 2.7 Suriname has already agreed on new and aligned routes with Brazil, Guyana and Trinidad and Tobago with the focus on the harmonization of the navigation specifications in the different airspaces in the Region.

PBN Implementation in en route/terminal areas and approach procedures

2.8 Appendix to this working paper shows the known PBN applications that have been implemented within the Paramaribo airspace. The RNAV routes UL576, UL462, UL452, and the realigned UL776 will be introduced into the Paramaribo airspace with effect from 27 August 2017.

Requirements of Suriname

2.9 It is also Suriname's view that greater harmonization and Collaborative Decision Making is required from all the States within the NAM/CAR/SAM Regions if the continued implementation of PBN applications is to become a reality. Suriname is willing to work along with other States to achieve the objectives.

3. Conclusion

3.1 In order for NAM/CAR/SAM Region to effectively implement a PBN airspace concept, in accordance with ICAO's PBN Airspace Concept for this Region there is a need for greater harmonization and Collaborative Decision Making between the concerned States.

STATUS OF IMPLEMENTATION OF PBN SIDS, STARS, AND APPROACH PROCEDURES

| DATA COLLECTION DATE: 01 May 2017 | | | | | | | | | | | |
|--|------------------------------------|-------------------|-------------------|---------|-------------|---------------|---------|-------------|------------|-------------|---------------|
| STATE | CAR/SAM ANP INTERNATIONAL AIRPORTS | IFR thresholds | VFR thresholds | APV IAP | LNAV IAP | RNPA R IAP | PBN SID | PBN STAR | CCO SIC | CDO STAR | OBS |
| SURINAME | SURINAME (1 AERODROME) | l. | | | | | | | | | |
| | JOHAN ADOLF PENGEL INT'L SMJP | (2) | (2) | (1) | (4) | (0) | (0) | (0) | (0) | (0) | All published |
| | | 11/29 | 11/29 | YES* | 11/29** | NO | NO | NO | NO | NO | |
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| (1) RNAV ROUTE within Paramaribo Airspace: UM791 | | | | | | | | | | | |

Note: The cited AIRAC dates are tentative, based on the capability of publishing instrument procedures.

^{*} SMJP ILS RWY 11 Temporarily U/S

^{**} VOR RWY 11/29, VOR/DME RWY 11/29