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– Pan America (RASG-PA) Executive Steering Committee
RASG-PA ESC/17



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Agenda Item 2 Review of the RASG-PA ESC/17 Working Papers

AIRBUS SAFETY SUPPORT TO THE ICAO PBN REGIONAL ROADMAP DEPLOYMENT

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SUMMARY

ICAO Recommendation on Performance Based Navigation is one of the global worldwide safety initiatives that Airbus is actively supporting in the frame of its strategy for Runway/CFIT Safety enhancement.

Airbus, and its subsidiary Airbus ProSky, have launched a cooperative program with AviancaTaca to implement RNP procedures on a selected number of airports. To contribute in making the ICAO PBN Regional Roadmap Deployment effective and successful Airbus would like to enlarge the scope of this support to other RASG-PA Members States and is willing to launch cooperative initiatives with the main stakeholders of the Latin American Region.

Strategic Objectives

*This working paper is related to Strategic Objective:
A – Safety*

1. Introduction

1.1 In the frame of its Runway/CFIT Safety Enhancement strategy Airbus is willing to support the **ICAO PBN Regional Roadmap Deployment** and provide Central and South American States with PBN implementation support.

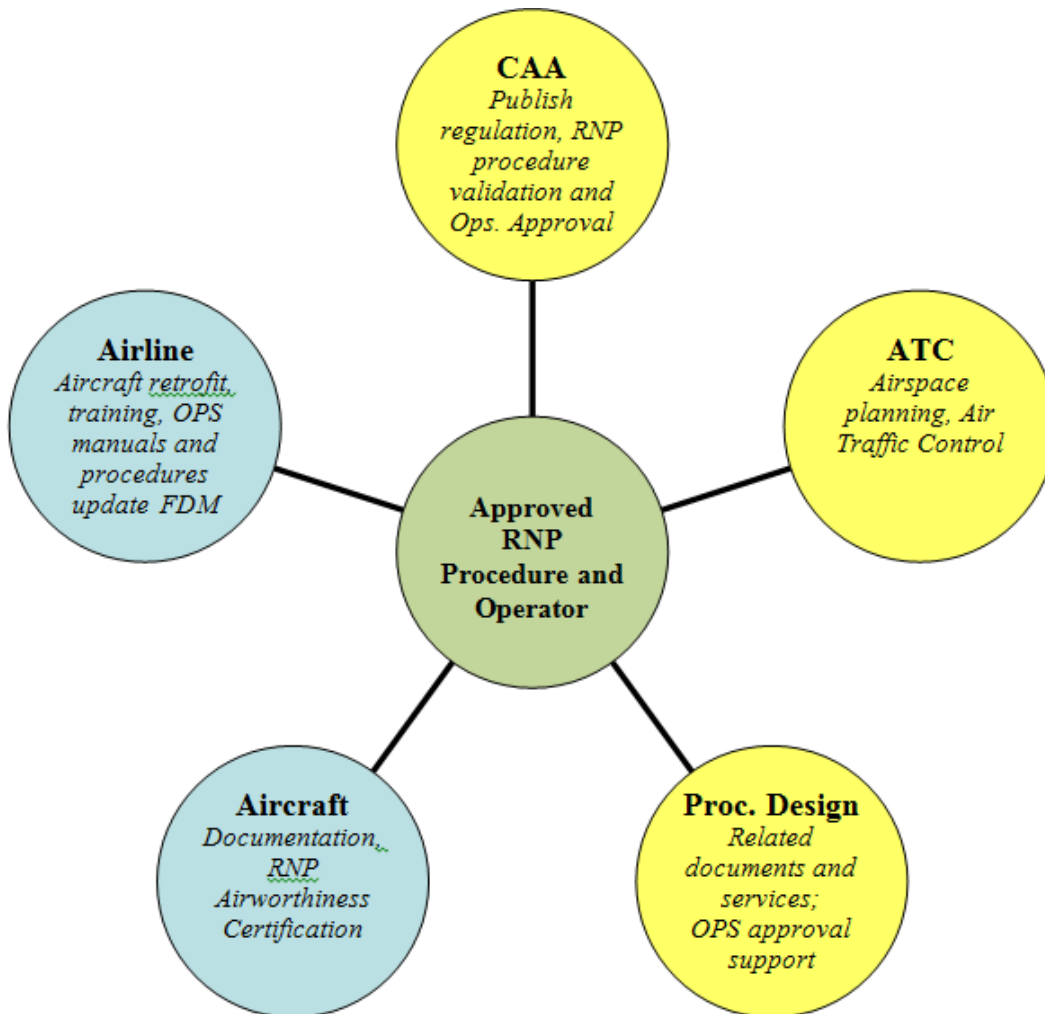
1.2 Objectives and structure of a PBN Tutoring program

1.2.1 Along with the provision of RNP approaches procedures, a PBN Tutoring program also aims at ensuring that the **regulatory baseline** and **relevant regulatory expertise** are in place to secure a safe and successful implementation of the PBN project.

1.2.2 The objectives are the following:

- Support the development and implementation of a common regulatory baseline, or as a minimum of regulations with a limited and clearly identified gaps and agreed processes to facilitate Airline operational approval in the country/countries,
- Agree on aircraft modification approval based on EASA and/or FAA,
- Agree on procedure approval process,
- Train NAA/ANSP on data survey of obstacles as required,
- Train ATC controllers of the targeted airport.

1.2.3 The typical structure of a PBN Tutoring program can be illustrated as it follows:



Note: The role and mission of each stakeholder in the PBN Tutoring program are summarised in the here above drawing.

1.2.4 In order to reach the project objectives, the support we propose to provide entails:

- PBN Tutoring programs for the Civil Aviation Authority (CAA) of the targeted country, including:
 - PBN Workshops and follow-up visits to support regulation definition,
 - Electronic Terrain and Obstacle Data (ETOD) training and tutoring for the relevant representatives of the Civil Aviation Authority,
 - PBN training for CAA Flight inspectors,
 - PBN Training for Air Traffic Controllers (ATCOs) at the project airport(s),
 - On-site data survey of obstacles at the project airport(s) and Digital Elevation Model (DEM) for this/these airport(s) as required.

1.2.5 This structure adopts the “**train the trainer approach**” and aims at sharing “know-how” capabilities in terms of RNP procedures design.

2.1 Areas of cooperation with regional aviation actors

2.1.1 At regional level, Airbus and Airbus ProSky are seeking for cooperation areas with the local main stakeholders such as the local procedure designer (if any), the Air Traffic Control of the targeted airports, and the local CAAs which represent one of the key elements in the success of the implementation of RNP approaches procedures.

2.1.2 The benefits of such cooperation program are mainly to strengthen the relationships between the main aviation stakeholders of the region and the manufacturer. It also supports States in their compliance with the ICAO PBN Regional Deployment Roadmap. It helps aviation actors to work together, mutualise the efforts and thus avoid duplication of safety enhancement initiatives.

2.1.3 Programs structured in this way have already shown very effective results in neighbouring regions and allowed RNP approaches procedures to be designed, validated, approved and flown by operators.

2.2 Areas of cooperation with RASG-PA

2.2.1 By submitting this information paper to the 17th ESC of the RASG-PA, Airbus intends to open areas of cooperation with Members of the Committee in the field of PBN implementation.

2.2.2 The “yellow circles”^{*} highlighted in the foregoing drawing represent potential domains where RASG-PA and Airbus could develop cooperative initiatives that would further enhance the deployment of PBN in the Latin American Region.

**: regulatory baseline, procedure design and approval and ATC Training.*

2.2.3 RASG-PA could stand as the privileged platform for, but not limited to, defining the common regulatory baseline.

3.1 An example: the AviancaTaca - Airbus ProSky PBN Project

3.1.1 As a first step of this regional safety initiative, Airbus ProSky, an Airbus subsidiary, has recently signed an agreement with the AviancaTaca Group in order to provide the following airports with RNP approaches procedures:

3.1.2 In Central America:

- Guatemala: Guatemala City
- El Salvador: San Salvador
- Honduras: Review of the Tegucigalpa existing RNP AR approach procedure
- Costa Rica: San Jose. As part of the agreement, Airbus ProSky will perform the review of the design and the validation of the existing RNP AR approach procedure and the RNAV 1 departure, designed by IDS, as well as the data survey of obstacles.
- Ecuador: As part of the agreement, the EOSID and the RNP approach procedure of the new airport of Quito (jointly designed by LAN and the local CAA) will be evaluated to confirm adequacy with Airbus aircraft performance parameters.
- Peru: As part of the agreement, both Cuzco and Lima existing procedures will be validated.
- Colombia: Two airports have still to be selected and the related procedures will be jointly designed through a tutoring program.

3.1.3 As far as some Central American countries are concerned, Airbus and Airbus ProSky has presented the project to the institution COCESNA during its latest Executive Board, held the 13th of June in Honduras.

3.1.4 COCESNA is interested into playing an important role in this project and sharing information on its own PBN roadmap.

3.1.5 COCESNA naturally highlighted the role of their entity to drive the national DGACs with the rulemaking and really welcomed the PBN support initiative of Airbus/Airbus ProSky. For that purpose, COCESNA is willing to host the first workshop gathering all the stakeholders and aiming at establishing the RNP regulatory baseline.

3.1.6 The steps forward will be closely followed up by all the stakeholders during the forthcoming weeks and months. Airbus would be delighted to update RASG-PA Members States on the progress of the project.