



ICAO

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INFORMATION PAPER

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Fifth NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/5)
Mexico City, Mexico, 27 to 31 May, 2019

- Agenda Item 2: Review and Follow-up to Valid Conclusions/Decisions of the ANI/WG/04, NACC/WG/05 and GREPECAS/18 Meetings**
- 2.1 Follow-up and performance and monitoring assessment of the NAM/CAR Regional Performance-Based Air Navigation Implementation Plan (RPBANIP)**

**NECESSITY OF THE STATES AND SERVICE PROVIDERS TO ACCESS
UPDATED AIRCRAFT TYPE DATABASES**

(Presented by Cuba)

EXECUTIVE SUMMARY	
This working paper presents the necessity of the States and service providers to access the technical parameters of the most recent aircraft models.	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Security & Facilitation
<i>References:</i>	<ul style="list-style-type: none">• Doc 8643 - Aircraft Type Designators

1. Introduction

1.1 The growing demand of air traffic in the FIR drive the need to improve capacity, efficiency and safety between the ATS units (ATS), and consequently the importance in the region to have a place where to updating aircraft type and designators databases for the harmonization of the systems and the procedures to warrantee interoperability across borders.

2. Analysis

2.1 All who counts with air traffic control automated systems, with high or low automatization levels, have had the difficulty of not being able to process a Filed flight plan (FPL) or carry out a manual or automated coordination due to a lack of an updated aircraft and designators database, technical parameters of new aircrafts, or which have suffered a modification and, therefore, change its designator.

2.2 Hereunder an example of the abovementioned:

- In 30 days we have counted 900 rejections (ERR_FIELD_INVALID_MODEL) of different aircraft type names, and this determines that REJ FPL, and LRM have been carried out in the automated coordination.
- The following conclusion resulted from a deep analysis of these data:
 - i. Operators' errors when writing the name of an aircraft type incorrectly.
 - ii. When this data is not kept in the aircraft type and designators databases.
 - iii. Not including in field 18 of the FPL the TYP descriptor, followed by model and ZZZZ in field 9 of the FPL.

2.3 Currently, the number of technical parameters used by different systems ranges from the most common (standard) to the more complex:

- Aircraft designator
- Wake category
- Maximum cruising speed
- Minimum cruising speed
- Maximum flight level
- Climbing rate
- Descent rate
- Minimum approximation speed

2.4 The most advanced air traffic control systems use these parameters and add other more complex variables that allow them to perform more accurate calculations and predictions in conditions of winds and temperatures and flight levels giving the most accurate variables for prediction.

2.5 In the electronic publications of ICAO Doc 8643, this is the data that can be obtained:

- Manufacturer
- Model
- Designator
- Description
- Engine type and amount of them
- WTC

2.6 Data that can be considered standard is not published:

- Maximum and minimum cruising speed
- Maximum flight level
- Climb and descent standard rate
- Maximum approximation speed