



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

AIDC/NAM/ICD — WP/06
14/03/19

NAM/CAR Air Traffic Services Inter-facility Data Communication (AIDC) and North American Interface Control Document (NAM/ICD) Implementation Follow-up Meeting (AIDC/NAM/ICD)
Mexico City, Mexico, from 8 to 11 April 2019

Agenda Item 4: NAM/CAR/SAM Availability and plan flight errors analysis

ANALYSIS OF THE MOST COMMON FLIGHT PLANS ERRORS RECEIVED IN HAVANA FIR

(Presented by Cuba)

EXECUTIVE SUMMARY	
This working paper presents the most common flight plans errors received in Habana FRI.	
Action:	Suggested actions are presented in Section 5.
<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 4444- Air traffic management• Daily analysis of received FPL errors in the ACC Havana

1. Introduction

1.1 The purpose of this working paper is to reflect the persistence of errors in flight plans that are daily received in the Havana (ACC Havana) air traffic command centre, endangering the provision of the flow management service and increasing the workload of the Air traffic controllers (ATCOs).

1.2 The reception of flight plans with errors results in an increase in coordination, due that in most of the occasions is necessary to orally receive flight plans data and load it to the system for processing. The time that an assistant controller takes in this action deviates him/her of his/her fundamental function, which is assisting the radar controller in a service that has grown because of the increase of operations in the Havana FIR.

2. Analysis

2.1 24 hours analysis of errors in flight plans:

Total Filed Flight Plans (FPL) received in ACC Havana	1314	
	EVENTS #	% DEL TOTAL
Type of error		
Rejected FPL	304	23.1
SIMILAR ¹	143	10.9
EET DATA ²	60	4.6
DUPLICATED ³	62	4.7
NO ALTERNATE AERODROME ⁴	9	0.7
Day of flight (DOF)	8	0.6
INCONSISTENT PBN VALUE WITH ITEM 10	8	0.6
INCONSISTENCIAS 10/18	7	0.5
MISSING OR EXCEEDING FIELD	2	0.2
PBN	1	0.1
AIRCRAFT MODEL	1	0.1
INVALID OTHER INFORMATION ELEMENT	1	0.1
INVALID EQUIPMENT DESIGNATOR	1	0.1
Total FPL with errors	606	46.1
46% of the FPL have errors		

2.2 The next chart shows the analysis where FPL are originated by region.

FPL ORIGIN	LETTER	REJECTED FPL
CANADA	C	17 FPL
USA	K	94 FPL
NORTH OF EUROPE	E	20 FPL
ANTILLES	T	4 FPL
CARIBBEAN	M	81 FPL
SAM	S	86 FPL
OTHER REGIONS		2 FPL

2.3 Of all these FPL errors only 29 belong to general aviation and the rest are related to companies that flight regularly and charters.

¹ The FPL that at least has one different element loaded in the FPL servers and standardized messages have not being used for their modification.

² Estimated entry time (EET) to the FIR. Automated systems use this time/parameter to stablish the different flight plan stages.

³ Those FPL that are the same as the stored in the flight plan servers.

⁴ Due that the Cuban air law states the following: Every aircraft that requests landing in the national territory must present an alternate airdrome.

2.4 Errors in field 15 of FPL are not shown in this analysis, where placement of the points is abused consecutively, without including the route section between them.

2.5 It has to be cleared that not all the systems are capable to interpret routes in the same way considering it as an error; in Doc 4444 is clearly specified how flight routes have to be translated.

2.6 The flight plan is an official document that can't be amended or modified without knowledge of the aircraft Captain, and there has been cases that after the correspondent investigations has been determined that they were consequence of PFL modifications done by third parties, in which are included fundamentally Air traffic service (ATS) dependencies.

2.7 It rests highlighting the reiterate usage of direct trajectories and the elimination of departure or arrival procedures in force and that are published for the different aircraft categories.

3. Discussion

3.1 Medium-term solution

3.1.1 It is proposed that aviation authorities of the States include in their inspection protocols the operators and air navigation services providers (ANSP):

- a) Training status of the personnel that is in charge of this duties;
- b) If the related procedures are in line with Doc 4444; and
- c) Other issues related to the management of flight plans and associated messages.

3.1.2 In the same way, when reviewing safety, operators and ANSP may assess the impact of these flight plan errors in the security of their operations and also evaluate mitigation actions of the procedures that are applied when receiving rejection messages.

3.1.3 Operators and ANSP should apply procedures to assess the results of the analysis of the rejection messages to the flight plans, mitigation actions and their results.

3.2 Long-term solutions.

3.2.1 A long-term solution asks for a radical change that corrects, particularly, the limitations of the operators and the ANSP, as well as the performance measurements in this issue. Future provisions may encourage a wider usage of data and information through indicators that can verify the usage of new capacities or the implementation of flight plans management systems and their effectiveness, when flight plans do not comply with the requirements of Doc 4444.

3.2.2 It is recommended to the States to publish the results of the mitigation actions in each of the presented issues and, if necessary, consider the assistance of the NACC Regional Office.

4. Conclusion

4.1 It is considered that the current procedure, used to evaluate and achieve satisfactory results, is not as effective as it is intended.

4.2 Medium and long-term proposals, or others suggested by the Meeting, should be analysed to make mitigation actions more effective in the face of the repetition of errors in flight plans.

5. Suggested action

5.1 The Meeting is invited to:

- a) Note the provided information in this working paper; and
- b) Evaluate sections 3 and 4 of this working paper and make decisions accordingly that allow resolve the flight plan errors issue.