



Agenda

Item 3:

**Analysis of the availability and flight plans errors in the NAM/CAR/SAM
Regions**

**FOLLOW-UP OF ACTIONS ON ERROR MITIGATION AND THE
DUPLICITY/MULTIPLICITY IN FLIGHT PLANS IN THE NAM/CAR REGION**

(Presented by the Secretariat)

SUMMARY

This working paper presents information on actions carried out in the NAM/CAR Region in order to follow-up agreed activities between the States of the Region aimed at obtaining agreement on error mitigation and duplicity in flight plans.

REFERENCES

- Report of the Fifth Meeting of the North America, Central America and Caribbean Working Group
- NACC/WG/5, (Port of Spain, Trinidad and Tobago from 22 to 26 May 2017). Report of the First Meeting of the Aeronautical Information Management (AIM), Flight Plan (FPL) Error Management and Air Traffic Services Inter-Facility Data Communications (AIDC) Meeting (AIM/FPL/AIDC/1), (Tegucigalpa, Honduras 30 October to 3 November 2017)
- Summary of the AIDC Implementation follow-up telecommunications (November 2017 to February 2018)
- Statistical Analysis carried out by the NAM/CAR Region AIDC Working Group

**ICAO Strategic
Objectives:**

A – Safety

C – Air Navigation Capacity and Efficiency

1. Introduction

1.1 The NAM/CAR Region through the AIDC implementation follow-up information and lessons learned of implementation carried-out by States in this Region, identified that the flight plans present many inconsistencies and errors which in States with AIDC implemented is a safety problem in view that flight plans are the primary source for the automation process.

2. Analysis

2.1 It has been identified that error problems in flight plans automation and management are not only associated to errors inherent to the implementation of flight plans, but to other factors as the non-compliance with ICAO standards in regard to flight plan (Document 4444), inconsistencies in database information (including procedures names, fixed, airways, aircraft information) among others.

2.2 In the ATC control centres databases, weakness in the correct flight plan management has been found, because systems databases are not updated so the information base for the information management differs from the information that is received from an adjacent control centre and from an airline.

Se ha identificado inconsistencia de la información en las diferentes casillas del formato de plan de vuelo, listando como los más importantes, identificándose fallas o falta de información en las casillas 10 y 18 como principal deficiencia.

2.3 Inconsistencies in the information of different boxes of the flight plan have been identified, listing as the most important, identifying failures or lack of information in boxes 10 and 18 as the principal deficiency.

Campo 10a	campo 18					
R	A1	B6	L1	S2	T1	T2
RD	B3	C3	D3	O3		
RG	B2	C2	D2	O2	S1	
RI	B5					
RDI	C4	D4	O4			
RDO	B4					
RDS	B4					
RGDI	C1	D1	O1			
RGDIO	B1					
RGDIS	B1					

Example: many flight plan management centres have weaknesses in PBN management capacity, linked to boxes 10 and 18 of the flight plan.

2.4 Hard work has been performed through the AIDC/Adhoc Working Group for flight plans with errors in the region and duplication of flight plans with errors has been minimized. This work has been carried out together with IATA and some airlines.

2.5 Currently when the flight plan information is the raw material so that the automated messages are managed correctly, an error in the flight plan will become one of the causes that diminish security. Appendix A to this working paper presents the fields of the flight plans taken by the automated messages to manage the information and interchange messages between control centres.

2.6 In addition to the above mentioned problems, training of personnel plays an important role and is an important tool to achieve security mechanisms of the information required.

2.7 The AIDC NAM/CAR Working Group has carried out a series of statistical samplings to categorize flight plan errors, by type of error, by address of origin, achieving through this information regional decisions making that allow reducing the percentage of error occurrence.

2.8 IATA and airlines have joined to the effort made in the NAM/CAR Region in order to contribute to the decision making that allow flight plan management to be more efficient and above all, safer.

2.9 This working paper gives rise to the information of erroneous flight plans that the AIDC/Ad-hoc Task Force will share, according to the tasks carried-out in the region, implementation of procedures and decisions making at regional level that will allow to significantly minimize flight plan errors.

3. Suggested Action

3.1 The Meeting is invited to:

- a) take note of the information presented in this working paper;
- b) be part of the discussion and decision making regarding this issue; and
- c) integrate the NAM/CAR/SAM regional action plan that minimize the occurrence of flight plans errors.

APPENDIX A

ASIA/PAC Core Messages

CORE	OPT	MESSAGE	MESSAGE ACRONYM	ICAO FIELDS											NON-ICAO FIELD	
				3	7	8	9	10	13	14	15	16	18	22		
X		Advance Boundary Information	ABI	X	X				X	X		X		X		
														X		
														8, 9, 10, 15, 18, Text		
X		Current Flight Plan	CPL	X	X	X	X	X	X	X	X	X	X			
X		Coordination Estimate	EST	X	X				X	X		X				
X		Coordination Cancellation	MAC	X	X				X			X		X		
														X		
	X	PreActivation	PAC	X	X				X	X		X		X		
														X		
														8,9,10,15,18		
X		Coordination	CDN	X	X				X			X		X		
														X		
														10,14,15,18, Text		
X		Acceptance	ACP	X	X				X			X				
X		Rejection	REJ	X	X				X			X				
	X	Track Update	TRU	X	X				X			X				X
X		Transfer of Control	TOC	X	X				X			X				
X		Assumption of Control	AOC	X	X				X			X				

-A2-

CORE	OPT	MESSAGE	MESSAGE ACRONYM	ICAO FIELDS											NON-ICAO FIELD
				3	7	8	9	10	13	14	15	16	18	22	
X		Emergency	EMG	X	X								X		
X		Miscellaneous	MIS	X	X								X		
	X	Track Definition Message	TDM	X											X
X		Logical Acknowledgment Message	LAM	X											
X		Logical Rejection Message	LRM	X									X		
	X	Application Status Monitor	ASM	X											
	X	FANS Application Message	FAN	X	X				X			X			X
	X	FANS Completion Notification	FCN	X	X				X			X			X
	X	Surveillance ADS-C	ADS	X	X				X			X			X

- END -