



ICAO

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

WORKING PAPER

FPL/AD/MON — WP/14
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FPL Ad hoc Group Missing/duplicated/erroneous Filed flight plan /Flight plan (FPL) evaluation meeting (FPL/AD/MON)

Mexico City, Mexico, 24-26 February 2015

Agenda Item 6 Review of data collection process and form: improvements

Review of data collection process and form: improvements

(Presented by Costa Rica)

EXECUTIVE SUMMARY	
The following paper present an overview of the data collected in the first phase of data collection and how the initial data collection form was improved during the process.	
Action:	The Meeting is invited to review and improve the form, with a view to the next phase of data collection.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency• Environmental Protection
<i>References:</i>	<ul style="list-style-type: none">• First phase of FPL Data collection

1. Introduction

1.1. Following the effort to resolve/mitigate the FPL problems, a data collection process and form was created by the FPL Ad Hoc Group.

1.2. The objective of this process and form is to identify, summarize and present a specific report about the errors and problems that are occurring in the region with the Flight Plans.

2. Discussion

2.1. To summarize the issues encountered, it was determined that the main issues related to the management of flight plans are:

a) **Missing Flight Plans**
(The FPL was not received at all).

b) **Duplicated Flight Plans**
(It was received more than one FPL, and the FPL were exactly equal).

- c) **Similar Flight Plans**
(It was received more than one FPL, but they had differences as: Flight Level, Type of Aircraft, Different Routes, etc).
- d) **Incorrect Flight Plans**
(If neither of the previous, select an error of the next list, or write a new one)

2.2. As a result of the analysis, the error messages were normalized in:

- ATS FDP System Problem
- ICAO Doc 4444 Format Incorrect
- Inconsistent ATS Route, SID or STAR Designator
- Inconsistent Item 10 G/ and 18 NAV/
- Inconsistent Item 10 R/ and 18 PBN/
- Inconsistent Item 10 Z/ and 18 COM/ NAV/ DAT/ SUR/
- Inconsistent Type of Aircraft and Speed or Level
- Invalid Aircraft Model
- Invalid Date of Flight
- Invalid EET Data
- Invalid Item 18 Data
- No RVSM Status
- Other

2.3. The proposed initial form was as follows:

State:		Originator		Destination	Flight Plan Issues				Corrective Action	
Date	Call Sign	ATS Unit	Airline	Addresses	Missing	Duplicated	Similar	Incorrect Flight Plan	Doc 4444 Ref	Proposal

2.4. In the process of analysis, the form was modified to get a better result:

- a) Columns were added for analysis purposes:
 - Sequence to differentiate each row unique, so the dynamic table can count them correctly.
 - Company. This columns has the first letters of the call sign, to identify the company the aircraft belongs to.
- b) The Incorrect Flight Plan column was duplicated. The first one has the normalized error message, and the second one the original message. That is for reference.

2.5. Results:

In a period of 30 days approximately, between July and August of 2014, a total of 44.160 flight plans issues were analysed, through the form. As a result of this, the biggest problems founded were:

56%	of duplicated FPL	Qty	24.873
1%	of Similar FPL	Qty	609
1%	of Missing FPL	Qty	345
42%	of FPL with Errors	Qty	<u>18.333</u>
		Total	44.160

The principal issues regarding the Errors, were:

58%	FPL Already Exists	Qty	25.482
28%	Inconsistent ATS Route, SID or STAR	Qty	12.487
14%	Other	Qty	<u>6.191</u>
		Total	44.160

3. Suggested action

3.1 The Meeting is invited to review and improve the form, with a view to the next phase of data collection.