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

WORKING PAPER

FPL/AD/MON — WP/11 20/02/15

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

Mexico City, Mexico, 24-26 February 2015

Agenda Item 3 Review of the measures adopted during December – January 2014 period for mitigation of errors (recommended actions)

FPL PROBLEM MITIGATION / RESOLUTION IN SANTO DOMINGO FIR

(Presented by Dominican Republic)

| EXECUTIVE SUMMARY | | |
|--|---|--|
| This working paper presents the actions taken by the personnel in Santo Domingo FIR to mitigate errors in the processing of flight plans, according to the recommended actions of the FPLP Monitoring Group. | | |
| Action: | The meeting is invited to take note and comment on the information presented in this working paper. | |
| Strategic Objectives: | SafetyAir Navigation Capacity and Efficiency | |

1. Introduction

1.1 The FPL Monitoring Group, and Ad Hoc group of the AIDC Task Force, developed a list of recommended actions, based on the analysis of data collected during July and August of 2014. This list was to be acted upon during the December 2014 – January 2015 period.

2. Discussion

2.1 In the Santo Domingo FIR, the recommended actions can be summarized as follows:

| Recommended Action | Action Taken |
|---|---|
| 1.1. ANSPs agree to avoid the use of RPLs. | Agreed. An experiment was done with RPLs, which reflected some of the problems that arise from the use of RPLs discussed during the development of these recommended actions. |
| 1.2. ANSPs to report any update to FPL2012 converters removal and full FPL2012 processing capability. | No converters were used in Santo Domingo FIR. |

| Recommended Action | Action Taken |
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| 1.3. Consider the implementation of electronic applications for the pre-departure clearance (PDC) as necessary; | Will consider for the future. |
| 1.4. All ANSPs to verify the level of validation of their systems, based on the data analysed, and define the necessary procedures to ensure that those fields that are not validated automatically by your systems are properly checked. (due January 31 st , 2015). | The AMHS gateway does adequate validation for outgoing flight plans, but only simple validation for flight plans received. Its purpose is mainly routing. The Spatia software is currently not being used for flight plan processing, and although it has defined waypoints, navaids, and aircraft types, these are not used extensively for validation of flight plans in the software. The FDP has a high level of validation, including aircraft performance consistency, validation of routes, and such. In the next version of the AMHS software, a much thorough validation is expected, mainly through the new Spatia software. |
| 1.5. All States should, to the extent possible, assign personnel to consistently check the information on flight plan issues (missing/duplicate/erroneous), and in the case of missing flight plans, to investigate the cause with originator, correct action and record the agreed solution. | In Santo Domingo FIR there is a shortage of ARO personnel, so it was difficult to assign personnel to this end. Since AROs have different shifts, this task cannot be assign to a particular person, but maybe to a defined person in each shift (e. g. a supervisor). This was proposed but was not decided at the time. Most of the mitigation activity was done by the ATM manager and the FIS manager |
| Missing FPLs | Š |
| 1.6. ANSPs to verify the correctness of the address(es) that is/are published in their AIP for FPL filing (ENR. 1.11) processing. Due by January 31 st , 2015 . Also ensure the publication in the AIP the corresponding procedures in accordance with ICAO SARPs for the coordination, validity and update of changes in flight plans. | The addresses to be used by neighbouring FIRs were reviewed and a NOTAM issued informing of the changes (see Appendix). The AIP will be amended accordingly. |
| 1.7. Update domestic provisions on flight plan message transmission in accordance with ICAO Doc 4444 and the NAM Interface Control Document (ICD) for data communications between ATS units (All ANSPs due January 31 st , 2015) | AIDC implementation in progress. |
| 1.8. Airlines/dispatchers to provide a contact method to be used in case there is a need to report a missing flight plan. FAA will provide a document with the airlines' contacts to be revised/considered (February 24, 2015) | |
| 1.9. All ANSPs to consult Graph 1: Error types by FIR to identify the percentage of missing flight plans, identify the originator and apply the procedure described in 3.5 | Most cases of missing flight plans were not reported during the first round of data collection. During the mitigation period there was a considerable amount of missing flight plans detected on a daily basis in the control centre, being reported to the FIS manager and followed up on. |

| Recommended Action | Action Taken |
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| Duplicated FPL | |
| 1.10. ANSPs to update letters of agreement (LOAs) between adjacent ATS units for flights that operate from one FIR to an adjacent FIR, where deemed necessary (January 31st, 2015). | Pending |
| 1.11. FAA, ICAO and IATA will draft some considerations on a practical guide to best practices for the region, such that there is a uniform method of work for flight plan presentation. This draft is to be discussed later on. (due Dec. 8 2014) | Pending discussion in meeting. |
| 1.12. All ANSPs to consult Graph 1: Error types by FIR to identify the percentage of duplicate flight plans, identify the originator, agree on the corrective action and record the solution. | Data collection was focused on outgoing flight plans. Thus, when analysing duplicate flight plans only local originators are found. For local errors operators had reinforcement training, which reduced the number of errors to almost zero occurrences, according to the FIS manager. |
| Rejected/Incorrect FPLs | |
| 1.13. All ANSPs to consult Graph 2: Error messages by FIR to identify the most frequent errors for your FIR to take corrective action. For example: | As mentioned, errors reported were on flight plans originated by ourselves. The mitigation action was reinforcement training. |
| Dominican Republic has very frequent ATS Route, SID or STAR designator errors, so the corrective action should be on the lines of reviewing the designators used in the erroneous flight plans, and correcting these designators where they may be registered (databases, templates, etc.). | See above. Also, see the notes for item 1.14 |
| Several States (Anguilla, Martinique, St. Lucia, among others) have a high percentage of ICAO Doc. 4444 issues. Suggested action is to identify the particular issue of compliance, review and correct where this data may be registered (e. g. flight plan templates), and also program training of staff where deemed necessary. | |
| Other States (Curaçao, Haiti) have frequent Inconsistent Item 18 errors. Suggested action is to identify the originator, if external contact and follow up on corrective action, and if internal, review personnel training requirements. | |
| In all cases, States should use the identified flight plans to analyse the possible root causes of the error, take corrective action, register the solution and communicate any changes of procedure or published information that may result. All corrective measures will be viewed and discussed at the FPL Monitoring Group meeting in February. | |

| Recommended Action | Action Taken |
|--|---|
| 1.14. Ensure harmonization of the information between FDPs and ARO FPL system databases (designators, aircraft types, performance data). Each ANSP to review their situation and inform of results (due January 31 st , 2015) | AS mentioned, although there is ample data in the Spatia application, since it is not currently being used there are no conflicts between its database and the FDPs'. We are awaiting the new version. |
| 1.15. Ensure that the originator of a rejected message gets the feedback so the error can be corrected (see item 3.5 regarding dedicated personnel for correction and feedback of flight plan issues). | For missing flight plans the originators have been contacted via their representatives in the Las Americas airport. Also, many cases of missing or flight plans that do not apply to our FIR have been corrected by the NOTAM issued. |
| 2. State/FIR relevant actions taken for mitigating/resolving FPL problems | |
| 2.1. In the PIARCO FIR, a Centralized Flight Planning System is being implemented by the end of first quarter of 2015 as part of the solution for the FPL duplication and errors. | |
| 2.2. Haiti has implemented a feedback process with the users to reduce the missing FPLs. | |
| 2.3. United States had a well-established coordination communication mechanism with airlines to discuss and agree on actions to resolve FPLs errors. | |

2.2 For the next phase of data collection, the errors detected at the control centre will be included.

3. Action by the meeting

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) suggest any improvements and changes to the recommended actions; and
 - c) discuss any relevant matters as appropriate.

APPENDIX SANTO DOMINGO FIR – NOTAM FOR FLIGHT PLAN ADDRESSING

GG MDSDYNYX

310158 MDSDYNYX

(A0024/15 NOTAMN

Q)MDCS/QPLXX/IV/NBO/AE/000/999/1802N06928W999

A)MDCS

B)1502030001

C)PERM

E)FLIGHT MOVEMENT MESSAGES RELATING TO TRAFFIC INTO OR VIA THE SANTO DOMINGO FIR SHALL BE ADDRESSED AS STATED BELOW IN ORDER TO WARRANT CORRECT RELAY AND DELIVERY.

IFR FLIGHTS INTO OR VIA SANTO DOMINGO FIR SHALL BE ADDRESSED TO MDCSZQZX AND, IN ADDITION, FOR FLIGHTS INTO OR VIA PUNTA CANA TMA SHALL BE ADDRESSED TO MDPCZAZX.

VFR FLIGHTS SHALL BE ADDRESSED TO MDCSZFZX ALL FLIGHT TO A CONTROLLED AERODROME, SPECIFY ICAO 4 LETTER LOCATION INDICATOR PLUS ZTZX AND ICAO LOCATION INDICATOR PLUS ZPZX FLIGHT MOVEMENT MESSAGES IN THIS CONTEXT COMPRISE FLIGHT PLAN MESSAGES, AMENDMENT MESSAGES RELATING THERETO AND FLIGHT PLAN CANCELLATION MESSAGES (PLEASE REFER TO PANS-ATM DOC. 4444).

E.G.

- 1. A FLIGHT LANDING AT MDSD SHALL BE ADDRESSED TO MDCSZQZX, MDSDZTZX AND MDSDZPZX.
- 2. A FLIGHT LANDING AT MDPC SHALL BE ADDRESSED TO MDCSZQZX, MDPCZAZX, MDPCZTZX AND MDPCZPZX

THIS PROCEDURE SUPERSEDES THE AERONAUTICAL INFORMATION PUBLICATION (AIP) PART ENR 1.11-1)