INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
NINETEENTH MEETING (APIRG/19)
Dakar, Senegal (28 – 31 October 2013)

Agenda Item 4: Regional Air Navigation Deficiencies

MISSING FLIGHT PLANS

(Presented by South Africa)

SUMMARY
This paper discusses the challenges around missing flight plans and how rejected incorrect fight plans contribute towards the increasing trend of missing flight plans. Rejected flight plans, which are not corrected by the originating Air Traffic Service Units, results in flights arriving at Flight Information Region (FIR) boundaries and the Air Traffic Controllers not having the necessary flight plan data available to them (missing flight plan). This results in an undesired and avoidable safety state that increases the risk of a safety event occurring.
REFERENCE(S): APIRG 18 - CONCLUSION 18/17: Addressing Missing Flight Plans Amendment 1 to ICAO Doc 4444

Strategic Objectives	This working paper relates to the Strategic Objectives A, B and E.

1. INTRODUCTION

1.1 An accurate, timely flight plan to the appropriate Air Traffic Service Unit (ATSU) is a critical success factor to ensure that safe and efficient Air Traffic Management (ATM) takes place.

1.2 With the implementation of RVSM as well as Amendment 1 to ICAO Doc 4444 many ATM and Aeronautical Information Management (AIM) Systems have been upgraded to meet these requirements.

1.3 It is now, more than ever, essential that flight plans that are filed are accurate in terms of syntax as well as data.

1.4 Flight plan information as well as flight data from ATM systems is used for RVSM compliance monitoring.

1.5 Inaccurate flight plans submitted to South Africa are rejected which contributes to the prevalence of missing flight plans.

1.6 Rejected or missing flight plans increases the risk of safety events occurring.

2. DISCUSSION

2.1 Incomplete, incorrect and erroneous flight plans are received by the South African Aeronautical Information Management Unit on a daily basis. These flight plans are rejected, and a service message is sent back to the flight plan originator using Aeronautical Fixed Telecommunication Network. The service message advises the originator that the submitted flight plan has been rejected and provides the reason for the rejection.

2.2 The most common reasons for flight plan rejections are:

2.2.1 Incorrect equipage in item 10a and 10b. Not conforming to Amendment 1 of Doc 4444.

2.2.2 Incorrect syntax error. Not including the waypoint entry/exit point on/off a route, incorrectly formatted co-ordinates, using Oscar instead of zero and vice versa.

2.2.3 Route errors. Using withdrawn or non-existent navigational aids and waypoints as well as incorrect route names.

2.2.4 Mismatch with requested flight level and intended route. That is requested flight level is too high (or too low) to be on the requested route.

2.2.5 Non-provision of critical data in item 18. Missing estimated elapse times (EET) to Flight Information Region (FIR) boundaries. Missing or incorrect Performance Based Navigation (PBN) capability data; Missing Communication (COM), Navigation (NAV) and/or Data (DAT) information when this is required as indicated in item 10a and 10b.

2.2.6 Missing or incorrect nomination of search and rescue requirements.

2.3 The rejection of the flight plan signifies that the flight plan has not been accepted by the addressee for a valid reason and thus the intended flight cannot take place without correction to the flight plan.

2.4 This is however not how these flight plans and rejection messages are handled.

2.5 In most cases the flight is allowed to depart the originating aerodrome inbound for South Africa and is none the wiser that their flight plan has been rejected.

2.6 This results in the aircraft arriving at the FIR boundary without a valid flight plan available to the Air Traffic Controller. This adds to the regional “missing flight plan” statistics unnecessarily.

2.7 The Air Traffic Controller has no way of being able to validate that the aircraft being handed over to him is RVSM capable or equipped, and relies on the minimal data provided in

the co-ordination between the two area control centres (ACC). This is a safety and security risk that can be easily avoided.

2.8 In order for these undesired states to be avoided, it is required that personal processing flight plans are adequately trained and have access to required aeronautical information to check and validate flight plans on submission from airspace users to pro-actively avoid the incorrect filing of flight plans.

2.9 Further to this appropriate processes and procedures should be implemented within Air Traffic Service Units filing flight plans for the monitoring and processing of return rejection or query service messages regarding filed flight plans.

2.10 It should be agreed that where flight plans are rejected, the flight is not released without a new, correct flight plan having been submitted to all applicable Air Traffic Service Units.

2.11 The average number of missing flight plans for flights into South African Airspace per month:

- 2011 = 26
- 2012 = 109[1]
- 2013 = 151[2]

It should be noted that the 2011 statistic is a very conservative number as the processes and procedures for the monitoring and gathering of statistics were being developed and refined.

2.12 If the number of missing flight plans is compared to the total number of flight plans filed for South Africa the average, expressed as a percentage, seems quite small, however the trend is that missing flight plans are becoming more prevalent, which is of great concern.

- 2011 = 0.097%
- 2012 = 0.308%
- 2013 = 0.388%

2.13 This increase in missing flight plans can be linked to the problem of rejected flight plans not being corrected and retransmitted.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the contents of this paper.

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[1] Statistics for 2011 and 2012 are an annual average
[2] Statistics for 2013 are an average for the first 6 month of the year