



International Civil Aviation Organization

**ICAO New Flight Plan Format Study Group
(INFPL STG)**

**Fifth Meeting
(Cairo, Egypt, 03 -05 September 2012)**

Agenda Item 3: Status of Implementation of INFPL in the MID Region

**MODIFICATION OF DOCUMENT 8643 –
(AIRCRAFT TYPE DESIGNATORS)**

(Presented by Kingdom of Bahrain)

SUMMARY

This paper describes the implications of the generic Aircraft Type ZZZZ, Wake Turbulence Category and their impact on ATM Systems and Safety related to the FPL submitted by the operator and proposes changes to ICAO Document 8643.

Action by the meeting is at paragraph 3.

REFERENCES

- ICAO Document 8643
- Kingdom of Bahrain Guidance Material ATC Assistants and Controllers

1. INTRODUCTION

1.1 A number of Radar Display and Processing (ATC) Systems, link the ICAO Aircraft Type Designator (TYPE) with the Wake Turbulence Category (WTC). This is done so that the System can cross check that the TYPE and WTC in its Database of Aircraft are matching. This is important because Controllers use different Separation Standards based upon the WTC.

1.2 When a Flight Plan is received for an Aircraft that has not yet been issued with an ICAO Aircraft Type Designator, the Operator can insert ZZZZ as the TYPE and add the appropriate WTC to the Flight Plan.

1.3 Some Systems, including the TOPSKY ATC System in use in Bahrain, can only have one of each TYPE listed in their Database of Aircraft Types, and each Aircraft Type can only have one WTC.

1.4 Aircraft Type ZZZZ is listed in the Aircraft Database with a WTC. In the Bahrain case it is a WTC of M. When a Flight Plan is received, with a TYPE of ZZZZ and with a WTC other than M, the Flight Plan will be rejected and sent to an Error Queue. The only way for Controllers or Assistants to activate this Flight Plan is to modify the WTC to M. This will then provide the Controllers with incorrect information as to the WTC of the Aircraft and could lead to a failure to provide appropriate Separation between Aircraft.

1.5 Radar Display and Processing Systems are limited in the number of Aircraft Types that can be stored in their Databases and there are Database updating limitations in these Systems also. This means that not all ATC Systems can contain all Aircraft Types, and consequently, when a Flight Plan is received for an Aircraft with a correct TYPE, this TYPE may not be defined in the ATC System, and as such the TYPE may need to be changed to ZZZZ to allow the System to accept the Flight Plan.

2. DISCUSSION

2.1 The Kingdom of Bahrain suggests that the following additional “generic” Aircraft Types be added to ICAO Document 8643, under the heading of (ANY MANUFACTURER).

ZZZL	–	WTC=L	Light Aircraft Type not yet assigned a designator
ZZZM	–	WTC=M	Medium Aircraft Type not yet assigned a designator
ZZZH	–	WTC=H	Heavy Aircraft Type not yet assigned a designator
ZZZJ	–	WTC=J	Super Aircraft Type not yet assigned a designator

2.2 The above will allow Radar Display and Processing Systems to correctly display the WTC of Aircraft Types that are not yet assigned and will maintain the integrity of the required separation between Aircraft.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the content of this working paper;
- b) provide feedback from States on how this would affect their systems; and
- c) provide further suggestion if any to the proposal in para 2.1.

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