



International Civil Aviation Organization

The First Meeting of the Asia/Pacific ICAO Flight Plan and ATS Messages Implementation Task Force (FPL&AM/TF/1)

Bangkok, Thailand, 17 – 20 March 2009

Agenda Item 5: Aspects of implementation in Asia/Pacific region

THE IMPACT OF CHANGING THE A388 WAKE TURBULENCE INDICATOR TO “J” IN FIELD 9 OF THE ICAO FPL ON AIDC COMMUNICATION

(Presented by New Zealand)

SUMMARY

This paper reviews the impact on AIDC communication of the recommendations contained in ICAO State Letter T3/4.4 - AP 080/08 (DRD 7) that strongly encouraged states to implement the use of the letter “J” for A388 aircraft in the space allocated to wake turbulence under Item 9 of the ICAO Flight Plan. The paper notes the similarity between this change and the introduction of the new ICAO FPL when considering maintaining viable AIDC communication during the transition.

1. INTRODUCTION

1.1 In October 2006 ICAO published a letter to states (Ref: T3/4.4-AP099/06 (ATM)) providing guidance on wake turbulence aspects of the Airbus A380-800 aircraft. This guidance included the statement that for A380-800 aircraft the letter “J” should be entered into the space allocated to wake turbulence under Item 9 of the ICAO flight plan. The initial guidance was superseded by ICAO State Letter T3/4.4 - AP 080/08 (DRD 7) which strongly encouraged states to implement the use of the letter “J” for A388 aircraft in the space allocated to wake turbulence under Item 9 of the ICAO Flight Plan.

1.2 The implementation of this change in the South Pacific provides a timely example of some of the issues involving AIDC communication that will need to be addressed during the introduction of the new ICAO FPL.

2. DISCUSSION

2.1 In March 2007 at ISPACG/21 Airways New Zealand raised the issue of the new “J” designator and advised that Airways intention was to modify its Oceanic Control System (OCS) and Domestic system (Skyline) to enable them to accept any Flight Plans filed with the letter “J” for a wake turbulence designator in the ICAO flight plan. This work was to be completed in time to be available for the software release scheduled in conjunction with the 7 June 2007 AIRAC date. The meeting recommended that this work not proceed because of its impact on neighbouring states that would be unable to automatically process the “J” designator in field 9 of AIDC ABI Notification and CPL coordination messages.

2.3 The current status is that no ANSP in our region have ground systems capable of automatically processing the “J” wake turbulence designator. All FPL are queued and manually modified to “H” to enable automatic processing. One airline operating the A388 aircraft in NZZO is filing H in field 9 of the FPL enabling automatic processing; the other airline is filing “J” in field 9 which is rejected and then manually modified to “H” to enable further processing.

2.4 The issue is not so much with modifying our ground systems to accept the use of “H” or “J” in any filed A388 FPL, the issue is avoiding the failure of AIDC messaging because adjacent ANSP are unable to accept the new designator. For example, if New Zealand implemented “J” in field 9 today with no consultation then ABI messaging would fail with Brisbane, Nadi, Tahiti and Oakland and CPL messaging would fail with Oakland. This is operationally unacceptable.

2.5 Airways New Zealand will be initiating further discussion on this subject at ISPACG/23 to be held in Santiago at the end of this month. The approach we will be taking is as follows: First, our Oceanic ground system will be modified to accept either “J” or “H” as an appropriate designator for A388 aircraft; Second, the ground system will also be modified so that we can define in adaptation what each adjacent FIR will accept in Field 9 of AIDC messages i.e either “J” or “H”. AIDC communication with that FIR will then use the correct designator and the communication will not be compromised by message failure caused by an incorrect designator. As adjacent systems are upgraded then we can modify our adaptation to send “J” instead of “H” for the A388.

2.6 The introduction of the “J” designator illustrates in a small way some of the problems that will need to be overcome when the new ICAO FPL is introduced. AIDC communication forms an integral part of the ATM operation for many ANSP and we do not want to lose this capability during the transition period to the new FPL.

2.7 Airways New Zealand has determined that it will be possible for us to modify our oceanic ground system to accept FPL in either the new or old formats and then by internal mapping of the fields maintain AIDC communication with adjacent FIR by sending either the new or old format fields as required.

2.8 If a global or regional transition could be scheduled such that all ANSP and aircraft operating agencies converted to the new FPL at exactly the same time then the solution described in para 2.7 above would not be required to maintain AIDC communication. We suggest that this may not be possible and are currently scoping the work that needs to be done to modify our system. This is not a small task.

3 ACTION BY THE MEETING

3.1 The meeting is urged to note the impact that the introduction of the new Field 9 “J” designator has had on automated ground systems and the possible detrimental flow on effects with AIDC communication.

3.2 The meeting determine a strategy to prevent the failure of AIDC communication during the transition to the new FPL, and note the solution being developed by Airways New Zealand.

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