



International Civil Aviation Organization

**FOURTEENTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE
AND METEOROLOGY SUB-GROUP OF APANPIRG
(CNS/MET SG/14)**



Jakarta, Indonesia, 19 – 22 July 2010

- Agenda Item 15: Other MET issues**
1) **Amendment 75 implementation issues**

SPECIAL AIRCRAFT OBSERVATION AND SPECIAL AIR REPORT

(Presented by Hong Kong, China)

SUMMARY

This paper discusses on issues in relation to the inclusion of “moderate” category in the aircraft observation and reporting of turbulence and icing in Amendment 75 to ICAO Annex 3.

This paper relates to:

Strategic Objectives:

- A. Safety – Enhance global civil aviation safety
- D. Efficiency – Enhance the efficiency of aviation operations

Global Plan Initiatives:

- GPI-18 Aeronautical Information
- GPI-19 Meteorological Systems

1. Introduction

1.1 Amendment 75 to Annex 3 will become effective on 18 November 2010. Among the amendments, the inclusion of "moderate" category in special aircraft observation of turbulence and icing and their reporting in special air report will become mandatory (see Amendment 75 to Annex 3 - para. 5.5 on special aircraft observation; Table A4-2 of Appendix 4 & Table A6-1 of Appendix 6 on special air report).

2 Discussions

2.1 The templates for special aircraft observation and special air report in Amendment 75 to Annex 3 contain only "moderate" and "severe" categories for icing and turbulence. While these categories for turbulence are defined for automatic systems in terms of the Eddy Dissipation Rate (EDR), the manual observation of turbulence remains subjective (Appendix 1 of PANS-ATM refers). Some pilots have indicated that there might be occasions where it was difficult to easily differentiate between “moderate” and “severe” turbulence. When this occurs, some pilots might choose to report “moderate to severe” turbulence. Under such situation, Meteorological Watch Office (MWO) would face difficulty in interpreting such special aircraft observation. There is a question as to whether such

“moderate to severe” report should be categorized as a “moderate” or a “severe” report according to Amendment 75 to Annex 3.

2.2 During previous discussions at ICAO METLINKSG (now reorganized as METWSG) when the provisions for the reporting of turbulence were developed, there was considerable discussion regarding the number of categories that should be used. The consensus at that time was to minimize the categories to avoid over-complication, which led to the inclusion of LIGHT, MODERATE and SEVERE categories. These categories are also in accordance with PANS-ATM (Doc 4444). In the light of the above, it may not be a good idea to introduce yet a new category as “moderate to severe”. It is suggested that ICAO be invited to provide some guidance to assist pilots and MWOs in resolving the problem identified in para. 2.1 above.

3 Action required by the meeting

3.1 The meeting is invited to note the discussion made in this paper and to exchange views on the issues highlighted in Section 2 above. Following discussions on these issues, the meeting may wish to formulate the following draft Conclusion:

Draft Conclusion 14/xx – Guidance on manual observation and reporting of turbulence and icing as required in Amendment 75 to Annex 3

That, ICAO be invited to provide guidance, in consultation with IFALPA as appropriate, to assist pilots in manual observation and reporting of turbulence and icing to cater for the inclusion of “moderate” category in Amendment 75 to Annex 3.
