



International Civil Aviation Organization

**FIRST MEETING OF THE ASIA/PACIFIC METEOROLOGICAL
ADVISORIES AND WARNINGS IMPLEMENTATION TASK FORCE
(METWARN/1 TF/1)**

Bangkok, Thailand, 23 – 25 March 2011

Agenda Item 4: Aerodrome Warnings

**UPDATE ON THE METWSG/3 DISCUSSIONS ON WIND SHEAR,
TURBULENCE AND TSUNAMI WARNINGS**

(Presented by co-chairs)

SUMMARY

Provide a summary of the outcomes of METWSG/3 relating to the reporting and issuance of wind shear, turbulence and tsunami warnings.

1. INTRODUCTION/BACKGROUND

1.1 The Meteorological Warnings Study Group (METWSG) was established in 2007. The main task of the group is to review the provision of Annex 3 of the Chicago Convention – Meteorological service for international air navigation, in particular the provisions related to low level wind shear, turbulence and tsunami alerts. The third meeting was held in Montreal in November 2010.

2. WIND SHEAR WARNINGS

2.1 The *Manual on Low-Level Wind Shear* (Doc 9817) has been updated by the ICAO Secretariat to reflect the changes stemming from Amendment 75 to Annex 3 — *Meteorological Service for International Air Navigation*.

2.2. An ad hoc group reported back to METWSG/3 on their work on the use of terms “expected” and “reported” in wind shear alerts. There were divergent views on the benefits and risks associated with using semi-automated system rather than fully automatic systems as described in Annex 3. Further work identifying user needs will be undertaken and reported back at the next METWSG meeting, which will be held in May 2012. The Asia-pacific region is represented on the ad hoc group by Mr Pak-wai Chan (Hong Kong, China).

3. REPORTING OF TURBULENCE AND ICING

3.1 METWSG/3 was informed of problems encountered with the receipt of air reports of turbulence reporting “moderate to severe” in addition to the permissible reports of “moderate” and “severe”. Over a two-year period, reports of “moderate to severe” accounted for 5.3 per cent of all turbulence reports by en-route aircraft in the Hong Kong flight information region (FIR). These reports were expected to cause problems with the inclusion of the mandatory reporting of moderate turbulence, as well as severe turbulence, in special air reports as a part of Amendment 75 to Annex 3.

3.2 METWSG/3 agreed that, in the short term, these non-compliant reports should be treated as “severe” by meteorologists responsible for SIGMET/AIRMET, but that the long-term solution would be to provide appropriate guidance to pilots to ensure that the air reporting provisions were implemented correctly. There is ongoing by the International Federation of Air Line Pilots’ Associations (IFALPA) to address this problem, and the Secretariat will report back to METWSG/4 on any guidance to pilots currently available from ICAO on the reporting of turbulence and icing.

4. TSUNAMI WARNINGS

4.1 METWSG/3 noted the conclusion 20/69 b) of the 20th meeting of the ASIA/PAC Air Navigation Planning and Implementation regional Group (APANPIRG/20) in September 2009 to request ICAO consider developing Annex 3 provisions and guidance materials related to the issuance of aerodrome warnings on tsunamis.

Conclusion 20/69 — Implementation of SIGMET on Radioactive Clouds and Aerodrome Warnings on Tsunami

That, in view of clarifying existing Annex 3 provisions,

- a) the IAVWOPSG consider developing Annex 3 provisions and guidance material, as necessary, related to the issuance of SIGMET on radioactive clouds; and
- b) ICAO consider developing Annex 3 provisions and guidance material as necessary related to the issuance of aerodrome warnings on Tsunami.

4.2 The group agreed that, the intent of the inclusion of tsunami in the list of phenomena in aerodrome warnings was simply to relay any notification of an impending impact from a State emergency response structure to those concerned at an aerodrome, so that emergency measures could take place. It was noted that tsunami was not a meteorological phenomenon, but also recognized that the aerodrome warning was a convenient pre-existing means to get such information to the authorities concerned.

4.3 An ad hoc group was formed to consider the form of any appropriate guidance that could be provided to assist States. The Asia/pacific region is represented by Jun Ryuzaki (Japan) and Shona Rosengren (Australia), who is the co-rapporteur. The ad hoc group will:

- a) examine existing capabilities of relevant countries to issue public tsunami warnings and the processes for States to forward them to meteorological service providers;
- b) determine the capabilities of meteorological service providers to extract tsunami information specifically relating to aerodromes (including land inundation) from public tsunami warnings;
- c) recommend how information on tsunami warnings can be included in aerodrome warning;
- d) establish guidance material to support meteorological service providers on the issuance of aerodrome warning for tsunami; and
- e) produce a report by 15 January 2012 for consideration by the METWSG/4 Meeting.

5. ACTION BY THE MEETING

- 5.1 The meeting is invited to note the information in this paper.
