



*International Civil Aviation Organization*

**Seventh Meeting of CNS/MET Sub-Group of APANPIRG and  
Tenth Meeting of CNS/ATM IC Sub-Group of APANPIRG**

Bangkok, Thailand, 15 – 21 July 2003

**Agenda Item 10: Implementation of ICAO Warning Systems –  
International Airways Volcano Watch IAVW**

**RECENT ACTIVITIES OF JAPAN FOR IAVW**

(Presented by Japan)

**SUMMARY**

This paper provides information about the recent activities of Japan for IAVW.

**1. Introduction**

1.1 The Japan Meteorological Agency (JMA) is a unique governmental organization that is responsible for geological hazard monitoring as well as meteorological services. JMA has been providing aviation authorities and companies with information on volcanic activities since late 1970s.

1.2 In response to the recommendation of ICAO, Tokyo VAAC started its operations on volcanic ash advisories in March 1997 at Tokyo Aviation Weather Service Center of JMA. Since then, JMA has been improving Tokyo VAAC operations including the expansion of the area of responsibility from 100E to 90E in April 2001.

**2. A new product of Tokyo VAAC (1)  
- Re-transmission of VA advisory from adjacent VAAC**

2.1 Tokyo VAAC started forwarding VA advisories issued by adjacent VAACs expected to affect operations for aviation within Tokyo VAAC's area of responsibility to MWOs in the area with the header of 'FVFE01' in July 2003. (see attached figure)

**3. A new product of Tokyo VAAC (2)  
- Issuance of VA advisory for all FL**

3.1 Tokyo VAAC has issued VAAs when a volcanic plume rises over 5,000m (15,000ft) above sea level taking account that international flights normally use higher levels. The low-level VAAs have been issued for the domestic flights only.

3.2           However, the Annex-3 does not provide any criterion of VA plume height for the issuance of VAAs. To comply with the Annex-3 provisions, Tokyo VAAC is going to abolish height threshold of VAA for international flights this autumn. Consequently, Tokyo VAAC will issue VAA regardless of the height of volcanic ash plume for all the volcanic eruptions within its area of responsibility. All the VAAs will include present state and forecast.

3.3           It must be noted that in low altitude the reliability of wind forecast that carries volcanic ash cloud becomes low because of the effect of topography, etc. It means that the forecasted location of volcanic ash cloud may have large error in the low altitude. Users should understand that this condition is general, that is, not only for Tokyo region but also for all regions in the world.

#### **4.           Action by the meeting**

4.1           The meeting is invited to note the information in this document.

FVFE01 RJTD 020152  
THIS IS A RETRANSMISSION OF A VAA MESSAGE ISSUED BY AN ADJACENT VAAC.  
IT DESCRIBES CONDITIONS OF VOLCANIC ASH CLOUD OVER OR NEAR THE TOKYO VAAC  
AREA OF RESPONSIBILITY.

FVXX22 KWBC 020151

VOLCANIC ASH ADVISORY  
ISSUED: 2003JUL02/0200Z    VAAC: WASHINGTON

VOLCANO: ANATAHAN 0804-20  
LOCATION: N1621E14540    AREA: MARIANA ISLANDS

SUMMIT ELEVATION: 2585 FT (788 M)

ADVISORY NUMBER: 2003/216

INFORMATION SOURCE: GOES 9 IMAGERY. UPPER AIR SOUNDING. GUAM  
SIGMET.

ERUPTION DETAILS: ASH AND GAS EMISSIONS SINCE MAY 10.

OBS ASH DATE/TIME: 02/0125Z

OBS ASH CLOUD: SFC/FL080 5 NM WIDE LINE OF ASH EXTENDING BETWEEN  
N1621E14540 N1609E14438. ASH IS MOVING W 15-20 KNOTS.

FCST ASH CLOUD +6H: SEE SIGMETS.

REMARKS: A NARROW AND POORLY DEFINED PLUME OF ASH CAN BE SEEN IN  
VISIBLE AND MULTISPECTRAL SATELLITE IMAGERY SINCE AROUND 2300Z.  
THE ASH CLOUD APPEARS TO EXTEND APPROXIMATELY 65 NM TO THE WEST  
OF THE SUMMIT. BALDWIN.

NEXT ADVISORY: WILL BE ISSUED BY 2003JUL02/0800Z.

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Figure 1 Sample message of forwarded VAA from Tokyo VAAC  
4 lines (in Arial font) are added by Tokyo VAAC followed by  
original VAA from Washington VAAC (in Century font).