



International Civil Aviation Organization

**Thirteenth Meeting of the APANPIRG ATS/AIS/SAR Sub-Group  
(ATS/AIS/SAR/SG/13)**

Bangkok, Thailand, 23 – 27 June 2003

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**Agenda Item 3: Review and progress the tasks assigned to the ATS/AIS/SAR/SG by APANPIRG**

**INCLUSION OF SIGMET IN VOLMET BROADCASTS**

(Presented by the Secretariat)

**SUMMARY**

This paper summarizes action undertaken to date concerning ANP amendment proposal APAC 99/9-ATS to add a requirement for inclusion of SIGMET in VOLMET broadcasts in the Asia Region. The meeting is requested to support the proposal.

**1. INTRODUCTION**

**Inclusion of SIGMET in VOLMET broadcasts**

1.1 The inclusion of SIGMET in VOLMET broadcasts was first raised at APANPIRG/5 (October 1994) under Conclusion 5/26 when, based on the results of a survey to be undertaken by IATA and IFALPA, ATS/AIS/SAR/SG would consider the requirement.

1.2 At APANPIRG/10 (September 1999) the meeting noted that Annex 3, Section 11 recommends that SIGMET messages should be included in scheduled VOLMET broadcast if determined by regional air navigation agreement. Following consideration of the results of a survey carried out by IATA and IFALPA, APANPIRG/10 formulated Conclusion 10/3, which stated:

*That, the ASIA/PAC Air Navigation Plan (Doc 9673) be amended to add a requirement for inclusion of SIGMET in VOLMET broadcasts for the Asia Region.*

1.3 At APANPIRG/11 (October 2000), the meeting noted that following APANPIRG/10, ICAO drafted an amendment proposal to the Asia/Pacific ANP (APAC 99/9-ATS), which was forwarded in March 2000 to the States whose facility and services would be significantly affected for comments before it would be formally circulated. The proposed amendment is appended to this paper.

**2. DISCUSSION**

2.1 Progress on the proposal was reviewed at ATS/AIS/SAR/SG/12 (June 2002) and it was noted that Australia, China and Japan had expressed concerns regarding the limited time for broadcast though they were all in favour of the proposal in principle. In addition, New Zealand raised an objection to the proposal. They advised that States with very large FIRs would have difficulty in

transmitting SIGMET in addition to other required meteorological information in the limited timeframe of 5 minutes.

2.2           ATS/AIS/SAR/SG/12 recalled that there were several options addressed at previous meetings:

- a)       SIGMET information or its availability be included in VOLMET broadcasts as the final section, when time permits, e.g. Auckland broadcast includes TAF, METAR and TTL for designated aerodromes in accordance with the present ANP. The existence and validity of SIGMET is also included;
- b)       procedures being applied for VOLMET broadcast including SIGMET in the North Atlantic (NAT) Region whereby SIGMET information included in the Gander broadcasts include SIGMET or notification of SIGMET affecting flights operating above FL100 in the Gander Oceanic and Gander, Moncton, Montreal and Toronto FIRs (NAT ANP, Table ATS 2 refers). It was felt that these procedures would be difficult to apply in the ASIA/PAC Region.
- c)       some brief and simple guidance should be developed as to what SIGMET information is critical to the VOLMET and what information in the whole VOLMET broadcast could be condensed and abbreviated. Some examples:
  - i)       information on position and movement of a tropical storm or depression;
  - ii)      volcanic activity; or
  - iii)     actual pilot reports of severe clear air turbulence (CAT) (*note: this is not referring to forecast CAT, which is subjective and rarely encountered*).
- d)       to identify additional frequencies for VOLMET broadcast from ITU Radio Regulation Appendix S27. It was however, not considered practical to pursue this option, as it would take a considerable period of time to secure suitable frequencies. This option was not found suitable to satisfy the immediate requirement;
- e)       as a near term solution, consideration may be given for the use of currently available D-VOLMET through ACARS data link pending availability of ICAO standard telecommunication system. Where feasible, the use of voice channel of existing NDB may also be considered;
- f)       to condense and abbreviate SIGMET, it was noted that, similar to para. c) above, this would contradict the provision of Annex 3 which particularly specifies that content and format of reports, forecasts and SIGMET information included in VOLMET broadcasts should be consistent with the provisions of Chapters 4, 6, and 7 of the Annex as applicable to bulletins disseminated beyond the aerodrome of origin; and
- g)       to include in VOLMET broadcast only those SIGMETs valuable to the operating crew. The CNS/MET/SG/5 felt that, since issuance of SIGMET was considered as a safety issue, selection of SIGMETs to be included in VOLMET broadcast is not acceptable.

2.3 The ATS/AIS/SAR/SG/12 meeting was not able to reach any consensus on this issue. IATA presented a suggested procedure and agreed to further study the issue with its member airlines so that a consolidated view would be presented to the Sub-Group.

2.4 The APANPIRG/13 meeting reviewed the ATS/AIS/SAR/SG/12 report on this subject but no progress was made on the difficulties reported. In considering the report of the CNS/MET/SG/6 meeting, APANPIRG/13 noted that CNS/MET/SG/6 emphasized that the introduction of D-VOLMET through VHF data link would be the most appropriate way to overcome the capacity problem of the voice VOLMET. APANPIRG/13 adopted Conclusion 13/29:

*Conclusion 13/29 - Inclusion of SIGMET in VOLMET*

*That, States be encouraged to fully implement D-VOLMET to permit suitably equipped aircraft to receive timely SIGMET information amongst other requisite meteorological information.*

2.5 In considering the foregoing review of developments, a regional agreement has not been reached to include SIGMET in VOLMET, and amendment proposal APAC-S 99/9-ATS to the Asia/Pacific ANP is on hold pending resolution of outstanding issues. It should be noted that the FASID lists Honolulu as including SIGMET in its VOLMET broadcast. The North Atlantic Region also provides this facility as noted in 2.2 b) above.

2.6 In light of the overwhelming agreement in principle by States, apart from one State having raised an objection to include SIGMET in VOLMET broadcasts due to technical problems, as noted at APANPIRG/13, and that in the near to mid-term VOLMET will continue to provide a primary means of disseminating SIGMET, this issue should be resolved and regional agreement reached.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note progress to date to amend the Asia/Pacific ANP to include SIGMET in VOLMET broadcasts;
- b) consider ways to overcome the capacity limitation of VOLMET broadcasts as noted in paragraph 2.1 above; and
- c) support the circulation of APAC 99/9-ATS to States and international organizations.

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**Proposal for Amendment of Air Navigation Plan  
(Serial No. APAC 99/9-ATS)**

- a) **Plan:** ASIA/PAC, Doc 9673
- b) **Proposed Amendment:** *Add* the requirement for inclusion of SIGMET in VOLMET broadcasts for Asia Region as shown in the Attachment hereto: (cf. Table ATS 2)
- c) **Originated by:** Regional Asia/Pacific Air Navigation Planning and Implementation Group (APANPIRG)
- d) **Originator's reasons for amendment:** To enhance safety and efficiency of long haul flights by providing pilots of aircraft and aircraft operators with earlier opportunity to anticipate meteorological conditions at their destination/alternate airports as has been done in NAT and PAC Regions.
- e) **Intended date of Implementation:** Six months after approval by the Council
- f) **Proposal circulated to the following States and Organizations :**
- |  |                     |
|--|---------------------|
| Afghanistan                              | Maldives            |
| Argentina                                | Marshall Islands    |
| Australia                                | Mexico              |
| Bahrain                                  | Micronesia,         |
| Bangladesh                               | Federated States of |
| Belgium                                  | Mongolia            |
| Bhutan                                   | Myanmar             |
| Brazil                                   | Nauru/Nepal         |
| Brunei Darussalam                        | Netherlands,        |
| Cambodia                                 | Kingdom of the      |
| Canada                                   | New Zealand         |
| Chile                                    | Norway              |
| China                                    | Oman                |
| (cc: Hong Kong, China)                   | Pakistan            |
| (cc: Macau, China)                       | Palau               |
| Cook Islands                             | Papua New Guinea    |
| Cyprus                                   | Peru                |
| Democratic People's<br>Republic of Korea | Philippines         |
| Denmark                                  | Portugal            |
| Ecuador                                  | Qatar               |
| Egypt                                    | Republic of Korea   |
| Fiji                                     | Russian Federation  |
| Finland                                  | Samoa               |
|  | Saudi Arabia        |

France	Singapore
Germany	Solomon Islands
India	Sri Lanka
Indonesia	Sudan
Iran, Islamic	Sweden
Republic of	Switzerland
Iraq	Syrian Arab Republic
Israel	Tajikistan
Japan	Thailand
Jordan	Tonga
Kazakhstan	Turkmenistan
Kiribati	United Arab Emirates
Kuwait	United Kingdom
Kyrgyzstan	United States
Lao People's	Uzbekistan
Democratic Republic	Vanuatu
Lebanon	Viet Nam
Libyan Arab	Yemen
Jamahiriya	IATA
Luxembourg	IFALPA
Malaysia	

**g) Secretariat comments:**

- i) The subject amendment was proposed at the Fifth Meeting of APANPIRG (APANPIRG/5) held in Bangkok, 24-28 October 1994, subject to results of a survey to be undertaken by IATA and IFALPA.
- ii) At the Tenth Meeting of APANPIRG (APANPIRG/10) held in Bangkok, 30 August-3 September 1999, IATA confirmed that a majority of airlines concerned supported the inclusion of SIGMET in VOLMET broadcasts, and IFALPA also supported this. Based on results of the survey undertaken by IATA and IFALPA, APANPIRG/10 developed Conclusion 10/3 to amend the Asia and Pacific Air Navigation Plan (ASIA/PAC ANP, Doc 9673) to add a requirement for inclusion of SIGMET in VOLMET broadcasts for the Asia Region.
- iii) Annex 3 *Meteorological Service for International Air Navigation*, Chapter 11 recommends that SIGMET messages should be included in scheduled VOLMET broadcasts if determined by regional air navigation agreement. Where this is done, the SIGMET message or an indication of "NIL SIGMET" should be transmitted at the beginning of the broadcast or of a five-minute time block.

? END ?