MET/IE WG/14 – WP/21 Agenda Item 6 08/03/16

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### International Civil Aviation Organization

### FOURTEENTH MEETING OF THE ASIA/PACIFIC METEOROLOGICAL INFORMATION EXCHANGE WORKING GROUP (MET/IE WG/14)

Bangkok, Thailand, 7-9 March 2016

# Agenda Item 6: Guidance material related to meteorological information exchange

## ASIA/PAC ANP UPDATES

(Presented by the Secretariat)

## SUMMARY

This paper presents progress on the new Asia/Pacific regional air navigation plan (ANP), which is based on the new ANP template approved by Council.

## 1 INTRODUCTION

1.1 The ICAO regional air navigation plans (ANPs) represents the bridge from (on one side) the global provisions contained in ICAO standards and recommended practices (SARPs) and the global air navigation plan (GANP) to (on the other side) the Member States' national plans and actual implementation of air navigation services for international civil aviation.

1.2 In order to align all the ICAO regional ANPs with the fourth edition of the GANP (Doc 9750) the ICAO Council approved a common ANP template in June 2014 for use by Regions to update their regional ANPs.

1.3 This paper presents progress on the update of the Asia/Pacific ANP, based on the new, common ANP template.

# 2 DISCUSSION

2.1 The Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), at its 26<sup>th</sup> meeting (APANPIRG/26) in September 2015, endorsed a draft new version of the Asia/Pacific regional ANP, which was developed and reviewed with assistance from the Subgroups of APANPIRG and is based on the common ANP template approved by Council. *Note: MET parts of the draft new Asia/Pacific ANP were reviewed by previous meetings of the ROBEX WG and the MET SG*. 2.2 Subsequent to the APANPIRG endorsement of the draft new Asia/Pacific ANP, the ICAO circulated proposals for amendment of the Asia/Pacific ANP, Volumes I and II, to States for comment (i.e., objection/acceptance) in December 2015 and January 2016, respectively [ICAO letters Ref.: T 11/2.1-AP0170/15 (AGA), dated 10 December 2015 and Ref.: T 11/2.1-AP010/16 (AGA), dated 18 January 2016, refer].

2.3 With no objections from States, it is expected that the formal acceptance of the new Asia/Pacific ANP will be announced imminently.

2.4 During the period of development of the draft new ICAO regional ANPs, in order to facilitate the smooth transition from existing ANPs to the new format ANPs, it was decided that the existing requirements would be transferred to the new tables in Volumes I and II of the new ANPs and that the Regions would not delete, add or change the existing requirements during the transition period (apart from minor necessary changes). So, aside from the development of the draft new ANPs, in effect there was a moratorium on amendments to the existing ANPs from 1 August 2015 until the end of the year 2015.

2.5 Due to the moratorium discussed above, the proposal for amendment of the requirements in the existing ANP, specifically in the FASID Tables MET, which was last reviewed and updated at MET SG/19, was unable to be processed at that time. A copy of that draft proposal for amendment (last reviewed and updated at MET SG/19) is provided at **the Attachment** to this paper.

2.6 The draft proposal for amendment mentioned above includes changes to the data in the existing, or 'old' Asia/Pacific ANP, at FASID Table MET 1A, FASID Table MET 1B, FASID Table MET 3A and FASID Table MET 3B.

2.7 The relatively minor changes proposed in FASID Table MET 1A and FASID Table MET 1B (related to the responsible MET office for the provision of OPMET information for Honiara, Solomon Islands, and the removal of MWO requirements at Cairns, Australia) were incorporated during the development of the draft new Asia/Pacific ANP, in Table MET II-2 and Table MET II-1, respectively, and therefore in effect have been circulated to States in the proposal for amendment of the Asia/Pacific ANP, Volume II, in January 2016.

2.8 The other changes proposed in the draft to FASID Table MET 3A and FASID Table MET 3B (related to tropical cyclone advisory centres and volcanic ash advisory centres) cannot be processed at this time as it is still to be determined as to where the requirements from those legacy tables (FASID Table MET 3A and FASID Table MET 3B) will be maintained within the framework of the new Asia/Pacific ANP; potentially in the new ANP at Volume III, which is yet to be finalized based on further advice to come through via the APANPIRG channels.

2.9 In accordance with the terms of reference of the MET SG (and its working groups), and the objectives of APANPIRG, the new Asia/Pacific ANP – and in particular the MET Parts – will be subject to regular review and proposals for amendment (prepared by the MET SG), as has been the practice prior to development of the new ANP.

# 3. ACTION REQUIRED BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the information contained in this paper; and
  - b) consider in the work programme of the group, any requirement to support the MET SG with its regular review and preparation of amendment proposals, as necessary, to the new Asia/Pacific ANP.

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### <u>Proposal for Amendment of Asia and Pacific Regions</u> <u>Air Navigation Plan</u> Volume II, Facilities and Services Implementation Document

(Serial No.: APAC 15/xx – MET)

#### a) **Plan**:

b) Proposed amendment:

### ASIA/PAC ANP Volume II, FASID Doc 9673

### Part VI METEOROLOGY (MET), FASID Table MET 1A:

As indicated in **Appendix 1** to this document:

**<u>REPLACE</u>** PORT MORESBY INTL, AYPY with HONIARA (HENDERSON), AGGH as the responsible MET office for service to be provided at HONIARA (HENDERSON), AGGH

#### Part VI METEOROLOGY (MET), FASID Table MET 1B:

As indicated in **Appendix 2** to this document:

Under Australia, <u>DELETE</u> requirement for MWO at Cairns YBCS; and

Under Solomon Islands, <u>**DELETE</u>** the remark in column 5 next to MWO Honiara indicating non- implementation of the MWO and that SIGMET is issued by Port Moresby</u>

### Part VI METEOROLOGY (MET), FASID Table MET 3A:

As indicated in Appendix 3 to this document:

Under TCAC Darwin (Australia) and TCAC Nadi (Fiji), **DELETE** requirement for MWO at Cairns YBCS in columns 5 and 6; and

Under TCAC Darwin (Australia) and TCAC Nadi (Fiji), **DELETE** the superscript "<sup>4</sup>" next to MWO Honiara referencing the footnote indicating non- implementation of the MWO and that SIGMET is issued by Port Moresby

### Part VI METEOROLOGY (MET), FASID Table MET 3B:

As indicated in **Appendix 4** to this document:

Under VAAC Darwin (Australia), **DELETE** requirement for information to be sent to MWO at Cairns YBCS and **<u>REALIGN</u>** reference to ACC/FIC Townsville (in columns 6 and 7) with MWO Brisbane YBRF;

Under VAAC Darwin (Australia) and VAAC Wellington (New Zealand), <u>**DELETE**</u> the superscript "<sup>1</sup>)" next to MWO Honiara referencing the footnote indicating non-implementation of the MWO and that SIGMET is issued

by Port Moresby; and

Under VAAC Anchorage (United States), VAAC Tokyo (Japan), VAAC Toulouse and VAAC Washington (United States), <u>AMEND</u> the VAAC Area of Responsibility in column 3

c) **Originated by:** Australia: with respect to changes related to Cairns YBCS and Townsville YBTL (raised at ROBEX WG/12 and ROBEX WG/13)

Solomon Islands: with respect to changes related to Honiara

IAVWOPSG/8: with respect to changes to VAAC Area of Responsibility (Conclusion 8/2 refers)

 d) Originator's reasons for amendment:
To reflect the current requirements with respect to the provisions for Meteorological Offices in Australia and the Solomon Islands.

Date of approval

To ensure the areas of responsibility for volcanic ash advisory centres (VAACs), as depicted in column 3 of the ASIA/PAC FASID Table MET 3B, reflect the current requirements for VAAC areas of responsibility and are fully aligned with other (ICAO) regional air navigation plans.

- e) Intended date of implementation :
- f) Proposal circulated to the following Sates and International Organizations:

Afghanistan Australia Bangladesh Bhutan Brunei Darussalam Cambodia China cc: Hong Kong, China Macao, China **Cook Islands** Democratic People's Republic of Korea Fiji India Indonesia Japan Kiribati Lao PDR Malaysia Maldives Marshall Islands Micronesia Mongolia

Myanmar Nauru Nepal New Zealand Pakistan Palau Papua New Guinea Philippines Republic of Korea Samoa Singapore Solomon Islands Sri Lanka Thailand Timor-Leste Tonga Vanuatu Viet Nam **International Organizations** IATA

g) Secretariat comments: i) The

The Secretariat is in favour of the amendment as proposed

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above in order to more accurately reflect the current requirements with respect to requirements for Meteorological Offices in Australia and the Solomon Islands and VAAC Area of Responsibility.

ii) Editorial note: Amendments are arranged to show "deleted word/text" using strikeout (text to be deleted), and "added word/text" with yellow highlight (text to be inserted or to replace the existing text).

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### FASID TABLE MET 1A

### METEOROLOGICAL SERVICE REQUIRED AT AERODROMES

EXPLANATION OF THE TABLE

Column

1 Name of the aerodrome or location where meteorological service is required

Note: The name is extracted from the *ICAO Location Indicators (Doc 7910)* updated quarterly. If a state wishes to change the name appearing in Doc 7910 and this table, ICAO should be notified officially.

- 2 ICAO location indicator of the aerodrome
- 3 Designation of aerodrome:

RG - international general aviation, regular use RS - international scheduled air transport, regular use RNS - international non-scheduled air transport, regular use AS - international scheduled air transport, alternate use ANS - international non-scheduled air transport, alternate use

- 4 Name of the meteorological office responsible for the provision of trend and aerodrome forecasts in TAF code at the aerodrome indicated in column 1
  - Note: A secondary meteorological office may be included if the primary meteorological office is closed part of the 24-hour period or a specific day of the week. Offices responsible under exceptional (e.g. back-up) conditions should not be listed.
- 5 ICAO location indicator of the responsible meteorological office
- 6 Requirement for trend forecasts
  - Y Required
- 7 Requirement for aerodrome forecasts in TAF code
  - C Requirement for 9-hour validity aerodrome forecasts in TAF code (9H)
  - T Requirement for 18/24-hour validity aerodrome forecasts in TAF code (18/24H)
  - X Requirement for 30-hour validity aerodrome forecasts in TAF code (30H)
- 8 Availability of OPMET information (METAR/SPECI and TAF)
- F Full : OPMET data as listed issued for the aerodrome all through the 24-hour period
- P Partial : OPMET data as listed not issued for the aerodrome for the entire 24-hour period
- N None : No OPMET data issued for the time being



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# MET 1A - ASIAPAC

Aerodrome where service is to be provided			Responsible MET Office		ists to vided	Ava	
Name	ICAO Location Indicator	Use	Name	ICAO Locatio Indicator	TR	TAF	vailability of OPMET
1	2	3	4	5	6	7	8
Solomon Islands HONIARA (HENDERSON) 	AGGH	RS	PORT MORESBY INTL HONIARA (HENDERSON)	AYPY AGGH	Y	т	F

**APPENDIX 2** 

VI-MET 1B-1

# **FASID Table MET 1B**

# METEOROLOGICAL WATCH OFFICES

# EXPLANATION OF THE TABLE

### Column

- 1. Location of the meteorological watch office (MWO). Locations, other than aerodromes, where an MWO is to be established are shown in parentheses.
- 2. ICAO location indicator, assigned to the MWO.
- 3. Name of the FIR, UIR and/or search and rescue region (SRR) served by the MWO.
- 4. ICAO location indicator assigned to the ATS unit serving the FIR, UIR and/or SRR.
- 5. Remarks.

Note (1). — Unless otherwise stated in column 5, the MWO listed in column 1 is the designated collecting centre for the air-reports received within the corresponding FIR/UIR listed in column 3.

*Note* (2). — *Non-implementation of a required MWO is a serious deficiency.* 

	Area served			
MWO Location	ICAO loc. ind.	Name	ICAO loc. ind.	Remarks
1	2	3	4	5
AUSTRALIA				
ADELAIDE (REGIONAL FORECASTING CENTRE)	YPRM	Melbourne FIR <sup>1)</sup>	YMMM	MWOs have areas of responsibility (AOR) defined by specific forecast area
BRISBANE (REGIONAL FORECASTING CENTRE)	YBRF	Brisbane FIR <sup>2)</sup>	YBBB	boundaries. These boundaries are not aligned with FIR boundaries
CAIRNS	<b>YBCS</b>	Brisbane FIR <sup>13)</sup>	YBBB	MWO Darwin is designated to issue VA SIGMET for the whole Brisbane and
DARWIN (REGIONAL FORECASTING CENTRE)	VDDM	Brisbane FIR 4)	YBBB	Melbourne FIR
	YPDM	Melbourne FIR 5)	YMMM	
SOLOMON ISLANDS				
HONIARA (HENDERSON)	AGGH	Honiara FIR and SRR	AGGG	MWO not implemented, however, arrangement made for issuance of SIGMET by Port Moresby MWO
				•

 limited by the coordinates: 27S/128E;27S/135E;26S/138E; 2806S/14012E;29S/142E; 3414S/14205E;3345S/14045E; 40S/14045E;45S/14045E; 45S/129E;33S/129E;30S/129E; 2715S/12830E.

- 2) outside the AOR of YBTL MWO and limited by the coordinates: 0937S/14102E;0916S/14203E; 0913S/14206E;0911S/14214E; 0914S/14217E;0922S/14230E; 0922S/14230E;0923S/14236E; 0919S/14248E;0908S/14352E; 0924S/14414E;0957S/14405E; 1130S/14402E;1144S/14404E; 12S/144E;12S/155E;14S/155E; 14S/16115E;1740S/163E; 2830S/163E;2830S/155E; 2850S/15316E;29S/150E; 29S/14330E;26S/138E; 14S/138E;0937S/14102E.
- 3) limited by the coordinates: 26S/138E;29S/143E;29S/142E; 2806S/14012E;26S/138E.
- 4) limited by the coordinates: 1055S/12447E;0920S/12650E; 07S/135E;0950S/13940E; 0950S/141E;14S/138E; 18S/138E;2215S/138E; 26S/138E;2218S/13638E; 2128S/13609E;2111S/13134E; 2151S/13058E;2313S/12828E; 2322S/12629E;2327S/12415E; 2250S/12330E;2030S/12330E; 20S/129E;16S/12915E; 1528S/12806E;1450S/12825E; 14S/12730E;1345S/12609E; 14S/124E;1055S/12447E.
- 5) limited by the coordinates: 2250S/12330E;2327S/12415E; 2322S/12629E;2313S/12828E; 2151S/13058E;2111S/13134E; 2128S/13609E;2218S/13638E; 26S/138E;27S/135E; 2715S/12830E;25S/12815E; 25S/12330E;2250S/12330E.
- 6) limited by the coordinates: 40S/14045E;40S/143E; 3953S/14353E;4006S/14759E; 40S/150E;45S/150E; 45S/14045E;40S/14045E.
- 7) limited by the coordinates: 3730S/15033E;3730S/163E; 45S/163E;45S/150E; 4434S/150E;4351S/15040E; 43S/151E;3811S/15019E; 3730S/15033E.
- limited by the coordinates: 3345S/14045E;3414S/14205E; 3510S/14728E;3730S/150E; 3730S/15033E;3811S/15019E; 43S/151E;4351S/15040E; 4434S/150E;40S/150E; 4006S/14759E;3953S/14353E; 40S/143E;40S/14045E; 3811S/14045E;3345S/14045E.
- 9) limited by the coordinates: 2311S/12831E; 2313S/12827E; 2321S/12631E; 2326S/12414E; 2133S/12226E; 2015S/12113E; 1858S/1203E; 1752S/11821E; 148S/1158E; 12S/11430E; 12S/12319E; 12S/12320E; 1055S/12446E; 140S/1240E; 1345S/1268E; 140S/12730E; 1449S/12825E; 1528S/1286E; 16S/12915E; 20S/1290E;
- 10) limited by the coordinates:. 12S/11430E; 148S/1158E; 1752S/11821E; 1858S/1203E; 2015S/12113E; 2133S/12226E; 2326S/12414E; 2321S/12631E; 2313S/12827E; 2311S/12831E; 25S/12815E; 2715S/12830E; 30S/1290E; 50S/1290E; 50S/75E; 60S/75E; 20S/78E; 20S/92E; 12S/107E;
- 11) limited by the coordinates: 29S/14632E;29S/150E; 2850S/15328E;2830S/155E; 2830S/163E;3730S/163E; 3730S/15033E 3657S/15045E; then east of the minor arc of a circle of 120NM radius centred on 3457S/15032E; 3519S/15256E;3421S/15140E; 3359S/15201E;3351S/15154E; 3328S/15148E;3315S/15126E; 3312S/15114E;3320S/15042E; 3327S/15033E;3206S/14850E; 29S/14632E.
- 12) limited by the coordinates: 29S/142E;29S/14330E; 29S/14632E;3206S/14850E; 3327S/15033E;3320S/15042E; 3312S/15114E;3315S/15126E; 3328S/15148E;3351S/15154E; 3359S/15201E;3421S/15140E; 3519S/15256E; then east of the minor arc of a circle of 120NM radius centred on 3457S 15032E; 3657S/15045E;3730S/15033E; 3730S/150;3510S/14728E; 3414S/14205E;29S/142E.
- limited by the coordinates: 14S/138E;10S/141E;09S/142E; 09S/144E;13S/145E;15S/147E; 1817S/148E;2309S/15252E; 2334S/14811E;1818S/14332E; 18S/138E;14S/138E.

# FASID Table MET 3A

# TROPICAL CYCLONE ADVISORY CENTRES

# EXPLANATION OF THE TABLE

### Column

- 1. Location of the tropical cyclon advisory centre (TCAC).
- 2. ICAO location indicator of TCAC (for use in the WMO heading of advisory bulletin).
- 3. Area of responsibility for the preparation of advisory information on tropical cyclones by the TCAC in column 1.
- 4. Period of operation of the TCAC.
- 5. MWOs to which the advisory information on tropical cyclones should be sent.
- 6. ICAO location indicator of the MWOs in Column 5.

Note. - MWOs in italics are situated outside the Asia/Pacific Region.

TROPICAL CYCLONE ADVISORY CENTRE			PERIOD OF	MWO TO WHICH ADVISORY INFORMATION IS TO BE SENT		
	LOC. IND.	AREA OF RESPONSIBILITY	OPERATION <sup>2)</sup>	Name	ICAO LOC. IND.	
1	2	3	4	5	6	
Darwin (Australia)	YPDM	South-East Indian Ocean N: 0°S S: 36°S W: 90°E E: 141°E South-West Pacific Ocean N: 0°S S: 40°S W: 141°E E: 160°E	November – April	Adelaide <sup>3)</sup> Brisbane Colombo Darwin Hobart <sup>3)</sup> Honiara <sup>4)</sup> Jakarta Melbourne <sup>3)</sup> Perth Port Moresby Sydney <sup>3)</sup> Cairns <sup>a)</sup> Ujung Pandang Melbourne (World Met Centre, BoM) <sup>3)</sup>	YPRM YBRF VOMM YDRM YMHF AGGH WIII YMRF YPRF AYPY YSRF <del>YBCS</del> WAAA YMMC	
 Nadi (Fiji)	NFFN	Southern Pacific: N: 0°S S: 40°S W: 160°E E: 120°W	November – April	Brisbane Cairns <sup>3)</sup> Hobart <sup>3)</sup> Honiara <sup>4)</sup> Honolulu Melbourne <sup>3)</sup> Melbourne (World Met Centre, BoM) <sup>3)</sup> Nadi Nauru <sup>4)</sup> Sydney <sup>3)</sup> Tahiti Wellington (Aviation Weather Centre)	YBRF YBCS YMHF AGGH PHFO YMRF YMMC NFFN ANYN YSRF NTAA NZKL	

NOTES:

Co-ordinates of the area of responsibility of the Nadi Tropical Cyclone Advisory Centre to be confirmed. 1)

2) Indicates approximately the main seasons for tropical cyclones.

Tropical cyclone SIGMET for the Australian FIRs is issued by MWOs: Brisbane, Darwin and Perth.
MWO not implemented, however, arrangement made for issuance of SIGMET by Port Moresby MWO

5) MWO not implemented, however, arrangement made for issuance of SIGMET by Chengdu MWO

VI-MET 3B-1

# FASID Table MET 3B

# VOLCANIC ASH ADVISORY CENTRES

# EXPLANATION OF THE TABLE

### Column

- 1. Name of the volcanic ash advisory centre (VAAC).
- 2. ICAO location indicator of VAAC (for use in the WMO header of advisory bulletin).
- 3. Area of responsibility for the preparation of advisory information on volcanic ash by the VAAC in column 1.
- 4. State where the MWOs and ACCs/FICs are located.
- 5. ICAO region where the MWOs and ACCs/FICs are located.
- 6. MWOs to which the advisory information on volcanic ash should be sent.
- 7. ICAO location indicator of the MWOs in column 6.
- 8. ACCs/FICs to which the advisory information on volcanic ash should be sent.
- 9. ICAO location indicator of the ACCs/FICs in column 8.

Note: MWOs and ACCs/FICs in italics are situated outside the ASIA/PAC Region

VAAC			STATE		MWO TO WHICH IN TO BE S		ACC/FIC TO WHICH INFORMATION IS TO BE SENT	
NAME	ICAO LOC. IND.	AREA OF RESPONSIBILITY	Y STATE ICAO REGION	Name	ICAO LOC. IND.	Name	ICAO LOC. IND.	
1	2	3	4	5	6	7	8	9
Anchorage	PAWU	Anchorage Oceanic,	China	APAC	Haikou/Meilan	ZJHK	Sanya	ZJSA
(United States)		Anchorage Continental <mark>,</mark> Oakland Oceanic north of N4300 E16500,	Russian Federation	EUR	Anadyr	UHMA	Anadyr Shmidta Cape	UHMA UHMI
		N4812 W15000, N4812			Magadan	UHMM	Magadan	UHMM
		W12800 Anchorage Arctic,			Tiksi	UEST	Tiksi	UEST
		and West to E15000, North of			Zyryanka	UESU	Zyryanka	UESU
		N6000	USA	NAM	Anchorage	PAWU	Anchorage	PAZA
					Kansas City	KKCI	Kansas City	KKCI
Darwin	YPDM	Southward from N2000	Australia	APAC	Adelaide <sup>3)</sup>	YPRM	Adelaide	YPAD
(Australia)		and from E08200 to E10000, and Southward from	Thailand	APAC	Bangkok	VTBS	Bangkok	VTBB
		N1000 and from E10000 to E16000, and the Colombo, Melbourne	Australia	APAC	Brisbane <sup>3)</sup>	YBRF	Brisbane Cairns <mark>Townsville</mark>	YBBN YBCS <mark>YBTL</mark>
		and Brisbane FIRs	Australia	APAC	Cairns <sup>3)</sup>	YBCS	Townsville	YBTL
			India	APAC	Chennai	VOMM	Chennai	VOMF
			Sri Lanka	APAC	Colombo	VCBI	Colombo	VCBI
			Australia	APAC	Darwin	YDRM	Darwin	YPDN
			Viet Nam	APAC	Gia Lam	VVGL	Hanoi Ho-Chi-Minh	VVNB VVTS
			Australia	APAC	Hobart <sup>3)</sup>	YMHF	Hobart	YMHB
			Solomon I.	APAC	Honiara <sup>4)</sup>	AGGH	Honiara	AGGH
			Indonesia	APAC	Jakarta	WIII	Jakarta	WIIF
			Malaysia	APAC	Kuala Lumpur	WMKK	Kota Kinabalu Kuala Lumpur	WBFC WMFC
			Philippines	APAC	Manila	RPLL	Manila	RPHI
			Australia	APAC	Melbourne (World Met Centre, BoM)	YMMC	Melbourne	YMMM
			Australia	APAC	Melbourne <sup>3)</sup>	YMRF	Melbourne	YMMM
			Australia	APAC	Perth <sup>3)</sup>	YPRF	Perth	YPPH

VAAC		AREA OF RESPONSIBILITY	STATE			MWO TO WHICH INFORMATION IS TO BE SENT		ACC/FIC TO WHICH INFORMATION IS TO BE SENT	
NAME	ICAO LOC. IND.	AREA OF RESPONSIBILIT	STATE	STATE ICAO REGION	Name	ICAO LOC. IND.	Name	ICAO LOC. IND.	
1	2	3	4	5	6	7	8	9	
			Papua New Guinea	APAC	Port Moresby	AYPY	Port Moresby	AYPM	
			Singapore	APAC	Singapore	WSSS	Singapore	WSJC	
			Australia	APAC	Sydney <sup>3)</sup>	YSRF	Sydney	YSSY	
			Indonesia	APAC	Ujung Pandang	WAAA	Ujung Pandang	WAAF	
			Myanmar	APAC	Yangon	VYYY	Yangon	VYYY	
Tokyo (Japan)	RJTD	N6000 to N1000 and from E09000 to Oakland Oceanic	Russian Federation	EUR	Artiom (Vladivostok)	UHWW	Vladivostok	UHWW	
		and Anchorage Oceanic and	Thailand	APAC	Bangkok	VTBS	Bangkok	VTBB	
		Continental FIR	Russian Federation	EUR	Blagoveshchensk	UHBB	Blagoveshchensk	UHBB	
	bou	boundaries <del>minus the region</del> <del>bounded by N1000, N2000,</del> <del>E09000 and E10000</del>	China	APAC	Beijing	ZBAA	Beijing Huhhot Taiyuan	ZBPE ZBHH ZBYN	
		except the area within N2000	Russian Federation	EUR	Chita	UIAA	Chita	UIAA	
		E09000 to N2000 E10000 to N1000 E10000 to N1000	Russian Federation	EUR	Chulman (Nerungri)	UELL	Chulman	UELL	
		E09000	Viet Nam	APAC	Gia Lam	VVGL	Hanoi Ho-Chi-Minh	VVNB VVTS	
			China	APAC	Guangzhou	ZGGG	Guangzhou Changsha Guilin Nanning	ZGZU ZGCS ZGKL ZGNN	
			China	APAC	HAIKOU/Meilan	ZJHK	Sanya	ZJSA	
			China	APAC	Hong Kong	VHHH	Hong Kong	VHHK	
			Republic of Korea	APAC	Incheon	RKSI	Incheon	RKRR	
			Russian Federation	EUR	Irkutsk	UIII	Irkutsk	UIII	
			Russian Federation	EUR	Khabarovsk	UHHH	Khabarovsk	UHHH	
		China	APAC	Chengdu	ZUUU	Kunming Chengdu Chongqing	ZPKM ZUDS ZUCK		
			China	APAC	Xi'an	ZLXY	Lanzhou Xi'an	ZLAN ZLHW ZLSN	

VAAC		AREA OF RESPONSIBILITY	STATE	ICAO REGION	MWO TO WHICH INFORMATION IS TO BE SENT		ACC/FIC TO WHICH INFORMATION IS TO BE SENT	
NAME	ICAO LOC. IND.	AREA OF RESPONSIBILITY		Name	ICAO LOC. IND.	Name	ICAO LOC. IND.	
1	2	3	4	5	6	7	8	9
			Russian Federation	EUR	Magadan	UHMM	Magadan	UHMM
			Philippines	APAC	Manila	RPLL	Manila	RPHI
			Cambodia	APAC	Phnom Penh <sup>2)</sup>	VDPP	Phnom-Penh	VDPP
			DPR Korea	APAC	Sunan	ZKPY	Pyongyang	ZKKP
			China	APAC	Shanghai	ZSSS	Shanghai Hefei Jinan Nanchang Nanjing Xiamen Qingdao	ZSHA ZSOF ZSTN ZSCN ZSNJ ZSAM ZSQD
			China	APAC	Shenyang	ZYTX	Shenyang Dalian Hailar Harbin	ZYSH ZYTL ZBLA ZYHB
			China	APAC	Taibei	RCTP	Taibei	RCAA
			Japan	APAC	Токуо	RJTD	Sapporo Tokyo Fukuoka Naha	RJCG RJTG RJDG RORG
			Mongolia	APAC	Ulaanbaatar	ZMUB	Ulaanbaatar	ZMUB
			China	APAC	Urumqi	ZWWW	Urumqi	ZWWW ZWUQ
			Lao PDR	APAC	Vientiane	VLVT	Vientiane	VLVT
			China	APAC	Wuhan	ZHHH	Wuhan	ZHWH
			Russian Federation	EUR	Yelizovo (Petropavlovsk- Kamchatsky)	UHPP	Petropavlovsk- Kamchatsky	UHPP
			Russian Federation	EUR	Yuzhno-Sakhalinsk	UHSS	Yuzhno-Sakhalinsk	UHSS
Toulouse	LFPW	PW Santa Maria Oceanic FIR, AFI Region north of S6000 down to the South Pole, EUR Region (except for Finland,	India	APAC	Chennai	VOMM	Chennai FIR and SRR	VOMF
(France)			India	APAC	Delhi/Indira Ghandi Intl	VIDP	Delhi FIR and SRR	VIDF
		Kobenhavn, London, Norway,	Afghanistan	APAC	Kabul AD	OAKM	Kabul FIR and SRR	OAKX

VAAC		AREA OF RESPONSIBILITY	STATE	ICAO REGION	MWO TO WHICH INF TO BE SE		ACC/FIC TO WHICH INFORMATION IS TO BE SENT	
NAME	ICAO LOC. IND.	AREA OF RESPONSIBILIT		Name	ICAO LOC. IND.	Name	ICAO LOC. IND.	
1	2	3	4	5	6	7	8	9
		Scottish <mark>, and</mark> Shannon <mark>and</mark> Sweden FIRs) west of	Pakistan	APAC	Karachi/ Jinnah Int'l	ОРКС	Karachi FIR and SRR	OPKR
		E09000 and south of N7100, MID Region, and ASIA	Nepal	APAC	Kathmandu	VNKT	Kathmandu FIR and SRR	VNSM
		Region, west of E09000 north	India	APAC	Kolkata	VECC	Kolkata FIR and SRR	VECF
		of N2000 (plus Mumbai, Chennai (west of E08200) and Male FIRs)	Pakistan	APAC	Lahore/Allama Iqbal Int'l	OPLA	Lahore FIR and SRR	OPLR
			Maldives	APAC	Male/Intl	VRMM	Male FIR and SRR	VRMM
			India	APAC	Mumbai/ Chhatrapati Shivaji Intl.	VABB	Mumbai FIR and SRR	VABF
			China	APAC	Urumqi/Diwopu	ZWWW	Urumqi FIR and SSR	ZMUQ
			Bangladesh	APAC	Hazrat Shahjalal International Airport	VGHS	Dhaka FIR and SRR	VGFR
Washington	KNES	New York Oceanic, Oakland	USA	NAM	Honolulu	PHFO	Oakland Oceanic	KZAK
(United States)		Oceanic FIR south of N4300 E16500.N4812 W15000.			Kansas City	KKCI	Guam	PGZU
		N4812 W12800 and United States continental FIRs north of S1000 W14000 New York Oceanic Oakland Oceanic south of N4300 E16500 to N4820 W15000 to N4820 W12800, United States Continental FIRs, New York Oceanic FIR North of S1000 W14000 East of 0000 W14000 and North of S1000 W14000 to S1000 W03000 Nadi and Nauri FIRs North of Equator	Fiji	APAC	Nadi	NFF	Nadi	NFF
Wellington (New Zealand)	NZKL	Southward from the Equator and from E16000 to W14000,	Australia	APAC	Brisbane <sup>3)</sup>	YBRF	Brisbane	YBBN
2caidiluj		except for the Melbourne and	Australia	APAC	Darwin	YDRM	Darwin	YPDN
		Brisbane FIRs, and	USA	APAC	Honolulu	PHFO	Oakland Oceanic	KZAK

VAAC				ICAO REGION	MWO TO WHICH INFORMATION IS TO BE SENT		ACC/FIC TO WHICH INFORMATION IS TO BE SENT	
NAME	ICAO LOC. IND.	AREA OF RESPONSIBILITY	STATE	ICAO REGION	Name	ICAO LOC. IND.	Name	ICAO LOC. IND.
1	2	3	4	5	6	7	8	9
		Southward from S1000 and from W14000 to W09000	Solomon I.	APAC	Honiara <sup>‡)</sup>	AGGH	Honiara	AGGH
			Australia	APAC	Melbourne <sup>3)</sup>	YMRF	Melbourne	YMMM
			Fiji	APAC	Nadi	NFFN	Nadi	NFFF
			Nauru	APAC	Nauru <sup>1)</sup>	ANYN	Nauru	ANAU
			Australia	APAC	Sydney 3)	YSRF	Sydney	YSSY
			French Polynesia	APAC	Tahiti	NTAA	Tahiti	NTTT
		New Zealand	APAC	Wellington (Aviation Weather Centre)	NZKL	Auckland Christchurch	NZZO NZZC	

Notes: – 1) MWO not implemented, however, arrangement made for issuance of SIGMET by Port Moresby MWO.

2) MWO not implemented, however, arrangement made for issuance of SIGMET by Chengdu MWO.

3) MWO Darwin is designated to issue VA SIGMET for Brisbane and Melbourne FIRs.