International Civil Aviation Organization



THIRTEENTH MEETING OF THE ASIA/PACIFIC REGIONAL OPMET BULLETIN EXCHANGE WORKING GROUP (ROBEX WG/13) and FIFTH MEETING OF METEOROLOGICAL HAZARDS TASK FORCE (MET/H TF/5)

Seoul, Republic of Korea, 18 March 2015

Agenda Item (conjoint session) 2: SIGMET and advisory information

MWO/ACC LOCATIONS/AFTN ADDRESSES FOR VAA INFORMATION

(Presented by the Secretariat)

SUMMARY

This paper presents lists of the meteorological watch office and area control centre locations and AFTN addresses required for the addressing of volcanic ash advisory information from VAAC Tokyo and VAAC Darwin.

1. INTRODUCTION

1.1 In accordance with the provisions in Annex 3, a VAAC is required to issue volcanic advisory information to meteorological watch offices, area control centres and flight information centres serving flight information regions in its area of responsibility which may be affected [by volcanic ash cloud].

1.2 In order to assist VAACs in the dissemination of volcanic ash advisory information to the required recipients, this paper presents lists of the MWO and ACC locations and AFTN addresses identified during VAAC back-up exercises as the required recipients for advisory information from VAAC Tokyo and VAAC Darwin.

2. **DISCUSSION**

2.1 The meeting will recall that Japan had previously discussed the issue of maintaining a distribution list and the associated 8-letter AFTN addresses for MWO and ACC to which VAA information is required to be distributed by VAAC Tokyo (CNS/MET SG/16 – IP/52 refers). After developing the list in coordination with the ICAO Regional Office in Bangkok, further discussion on the topic in the MET/H TF/4 meeting in March 2014 led to the agreed action (4/13) which requested ICAO to assist further with lists of MWO and ACC locations for distribution of VAA information for distribution of VAA information in the Asia/Pacific, including the AFTN addresses.

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2.2 The meeting is advised that the action referred above was partially accomplished through the necessary coordination done between the Regional Office and States concerned during the preparation for the 2014 VAAC back-up tests for Tokyo and Darwin.

2.3 Based on a list of all MWOs/ACCs located within the relevant VAAC area of responsibility, a list of AFTN addresses for exchange of VAAC back-up test VAA messages was produced for the VAAC Darwin area of responsibility and the VAAC Tokyo area of responsibility.

2.4 The lists of MWOs/ACCs and AFTN addresses were adopted as part of the guidance material disseminated to participating States in the State letter Ref: AP147/14 (MET), which also requested that States provide updates as necessary to the Regional Office for current valid eight-letter AFTN addresses for all participating operational units.

2.5 For ease of reference, the updated information pertaining to the State letter is provided in the **Attachment** to this paper. The meeting will note that not all the location and AFTN information was updated by States during this exercise, which may be an important factor for consideration with respect to the ongoing maintenance and future development of lists of AFTN information.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Note the information in this paper;
- b) Discuss issues concerning the maintenance of such lists and usefulness to VAAC operations; and
- c) Recommend what further progress is required on this issue.

ATTACHMENT 1

TOKYO – DARWIN VAAC BACK-UP TEST PROCEDURES

1. Introduction

- 1.1 The Handbook on the International Airways Volcano Watch (IAVW) Operational Procedures and Contact List (Doc 9766) recommends that Volcanic Ash Advisory Centres (VAACs) should conduct back-up tests at least annually.
- 1.2 The Tokyo and Darwin VAACs have developed a mutual back-up arrangement that includes procedures for undertaking a back-up test as described in Doc 9766.

2. Purpose and Scope of VAAC Back-up tests

- 2.1 The purpose of the VAAC back-up test is to ensure that internal procedures for the handover of responsibility and the issue of products for the other VAAC's area of responsibility are robust and functional.
- 2.2 The scope of the test also includes checking the dissemination pathways of the volcanic ash advisory (VAA) messages. However it is not designed to check the issuance of volcanic ash SIGMET and so there is **no requirement** to issue test SIGMETs.

3. Back-up test of VAAC Darwin by VAAC Tokyo

- 3.1 At 0100UTC on 22 October 2014 VAAC Darwin will request back-up services from VAAC Tokyo according to internal procedures and using the operational VAAC contact details contained within the IAVW Handbook (Doc 9766) Table 4-2. VAAC Tokyo will issue a VAA for commencement of back-up test to participating operational units as per the VAA example in Attachment 1A (i) and the AFTN addresses in Attachment 2A.
- 3.2 VAAC Tokyo will issue a VAA for VAAC back-up test to participating operational units as per the VAA example in Attachment 1A (ii) and the AFTN addresses in Attachment 2A. All recipients (ACCs/FICs, MWOs, WAFCs and RODBs) of this VAA are requested to **respond to VAAC Darwin** using the email address <u>vaac.darwin@bom.gov.au</u> and the subject 'VAA TEST' with an affirmative or negative response regarding the receipt of the test VAA.
- 3.3 At 0130UTC on 22 October 2014 VAAC Darwin will notify of intent to resume normal operations to VAAC Tokyo, and at 0145UTC VAAC Darwin will issue a VAA for cessation of back-up test to participating operational units as per the VAA example in Attachment 1A (iii) and the AFTN addresses in Attachment 2A.
- 3.4 MWOs should <u>NOT</u> issue a test SIGMET at any stage of the test.

4. Back-up test of VAAC Tokyo by VAAC Darwin

4.1 At 0200UTC on 22 October 2014 the VAAC Tokyo will request back-up services from VAAC Darwin according to internal procedures and using the operational VAAC contact details contained within the IAVW Handbook (Doc 9766) Table 4-2. VAAC Darwin will issue a VAA for commencement of back-up test to participating operational units as per the VAA example in Attachment 1B (i) and the AFTN addresses in Attachment 2B.

- 4.2 VAAC Darwin will issue a VAA for VAAC back-up test to participating operational units as per the VAA example in Attachment 1B (ii) and the AFTN addresses in Attachment 2B. All recipients (ACCs/FICs, MWOs, WAFCs and RODBs) of this VAA are requested to **respond to VAAC Tokyo** using the email address <u>vaac@eqvol2.kishou.go.jp</u> and the subject 'VAA TEST' with an affirmative or negative response regarding the receipt of the test VAA.
- 4.3 At 0230UTC on 22 October 2014 VAAC Tokyo will notify of intent to resume normal operations to VAAC Darwin, and at 0245UTC VAAC Tokyo will issue a VAA for cessation of back-up test to participating operational units as per the VAA example in Attachment 1B (iii) and the AFTN addresses in Attachment 2B.
- 4.5 MWOs should <u>NOT</u> issue a test SIGMET at any stage of the test.

5. Back-up test termination and reporting

- 5.1 At 0300UTC on 22 October 2014 the test will be terminated.
- 5.2 In case of significant eruption, the test should be ceased.
- 5.3 During the test each VAAC will maintain a logbook of events and will provide the other VAAC with a copy.
- 5.4 Email responses to the VAA for VAAC back-up test will be analyzed by the VAACs. Both VAACs will analyze the responses to the test VAAs and will present the results to the conjoint meeting of the ROBEX Working Group and Meteorological Hazards Task Force to be held in March 2015.

ATTACHMENT 1A - SAMPLE VAA MESSAGES

(i) VAA for commencement of back-up test; AFTN message from VAAC Tokyo to operational units in VAAC Darwin area of responsibility:

GG ****** DDHHMM RJTDYMYX FVAU01 ADRM DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: DARWIN VOLCANO: NOTICE 999999 PSN: S8959 E9959 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: VAAC DARWIN AND VAAC TOKYO ARE CONDUCTING A BACK UP TEST NOW. THIS IS A TEST NOTICE ISSUED BY VAAC TOKYO FOR THE VAAC DARWIN AREA OF RESPONSIBILITY ANNOUNCING THE START OF BACK UP TEST FOR VAAC DARWIN BY VAAC TOKYO. NXT ADVISORY: NO FURTHER ADVISORIES.

(ii) VAA for VAAC back-up test; AFTN message from VAAC Tokyo to operational units in VAAC Darwin area of responsibility:

GG ****** DDHHMM RJTDYMYX FVAU01 ADRM DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: DARWIN VOLCANO: TEST 999999 PSN: S8959 E9959 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: THIS IS A TEST ADVISORY ISSUED BY TOKYO VAAC FOR THE VAAC DARWIN AREA OF RESPONSIBILITY. PLEASE ACKNOWLEDGE RECEIPT OF THIS ADVISORY BY SENDING AN EMAIL TO DARWIN.VAAC AT BOM.GOV.AU NXT ADVISORY: NO FURTHER ADVISORIES.

(iii) VAA for cessation of back-up test; AFTN message from VAAC Darwin to operational units in VAAC Darwin area of responsibility:

GG ****** DDHHMM YMMCYMYX FVAU01 ADRM DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: DARWIN VOLCANO: NOTICE 999999 PSN: S8959 E9959 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: VAAC DARWIN AND VAAC TOKYO ARE CONDUCTING A BACK UP TEST NOW. THIS IS A TEST NOTICE ISSUED BY VAAC DARWIN FOR THE VAAC DARWIN AREA OF RESPONSIBILITY ANNOUNCING THE END OF BACK UP TEST FOR VAAC DARWIN BY VAAC TOKYO. NXT ADVISORY: NO FURTHER ADVISORIES.

(******* Indicates appropriate AFTN addresses as per Attachment 2A)

ATTACHMENT 1B - SAMPLE VAA MESSAGES

(i) VAA for commencement of back-up test; AFTN message from VAAC Darwin to operational units in VAAC Tokyo area of responsibility:

GG ****** DDHHMM YMMCYMYX FVFE01 RJTD DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: TOKYO VOLCANO: NOTICE 999999 PSN: S8959 E9959 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: VAAC DARWIN AND VAAC TOKYO ARE CONDUCTING A BACK UP TEST NOW. THIS IS A TEST NOTICE ISSUED BY VAAC DARWIN FOR THE VAAC TOKYO AREA OF RESPONSIBILITY ANNOUNCING THE START OF BACK UP TEST FOR VAAC TOKYO BY VAAC DARWIN. NXT ADVISORY: NO FURTHER ADVISORIES.

(ii) VAA for VAAC back-up test; AFTN message from VAAC Darwin to operational units in VAAC Tokyo area of responsibility:

GG ****** DDHHMM YMMCYMYX FVFE01 RJTD DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: TOKYO VOLCANO: TEST 999999 PSN: S89.59 E99.59 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: THIS IS A TEST ADVISORY ISSUED BY DARWIN VAAC FOR THE VAAC TOKYO AREA OF RESPONSIBILITY. PLEASE ACKNOWLEDGE RECEIPT OF THIS ADVISORY BY SENDING AN EMAIL TO VAAC AT EQVOL2.KISHOU.GO.JP NXT ADVISORY: NO FURTHER ADVISORIES.

(iii) VAA for cessation of back-up test; AFTN message from VAAC Tokyo to operational units in VAAC Tokyo area of responsibility:

GG ****** DDHHMM RJTDYMYX FVFE01 RJTD DDHHMM VA ADVISORY DTG: YYYYMMDD/HHMMZ VAAC: TOKYO VOLCANO: NOTICE 999999 PSN: S89.59 E99.59 AREA: UNKNOWN SUMMIT ELEV: 9999M ADVISORY NR: YYYY/N INFO SOURCE: NIL AVIATION COLOUR CODE: NIL ERUPTION DETAILS: NIL OBS VA DTG: NIL OBS VA CLD: NIL FCST VA CLD +6HR: NO VA EXP FCST VA CLD +12HR: NO VA EXP FCST VA CLD +18HR: NO VA EXP RMK: VAAC DARWIN AND VAAC TOKYO ARE CONDUCTING A BACK UP TEST NOW. THIS IS A TEST NOTICE ISSUED BY VAAC TOKYO FOR THE VAAC TOKYO AREA OF RESPONSIBILITY ANNOUNCING THE END OF TEST FOR VAAC TOKYO BY VAAC DARWIN. NXT ADVISORY: NO FURTHER ADVISORIES.

(******* Indicates appropriate AFTN addresses as per Attachment 2B)

ATTACHMENT 2A

AFTN addresses for exchange of VAAC back-up test VAA messages in the VAAC Darwin area of responsibility

YPDMYMYX (VAAC Darwin)							
AGGHYMYX,	ANYNYOYX,	AYPMYMYX,	AYPMYSYX,	AYPMZGZX,	AYPYANGM,	AYPYANGO,	
<mark>egkkvirw</mark> ,	<mark>egllsitv</mark> ,	<mark>egzzmasi</mark> ,	<mark>egzzmpac</mark> ,	<mark>egzzvanw</mark> ,	<mark>ehamklmd</mark> ,	<mark>ehamklmk</mark> ,	
EHAMKLMW,	<mark>ellxclxb</mark> ,	<mark>kdenxldw</mark> ,	<mark>kjfkgtiw</mark> ,	KWBCYMYX,	lozzmmss,	<mark>lszhswrw</mark> ,	
<mark>nffnypyx</mark> ,	<mark>NZAAANZO</mark> ,	<mark>nzklymyx</mark> ,	<mark>rjaaanao</mark> ,	<mark>rjaajalo</mark> ,	<mark>rjaancao</mark> ,	<mark>rjaaymyx</mark> ,	
<mark>rksiypyx</mark> ,	<mark>rphizrzx</mark> ,	<mark>rpllymyx</mark> ,	<mark>vcbiymyx</mark> ,	<mark>vcbizqzx</mark> ,	<mark>vhhhcpao</mark> ,	<mark>vhhhymyx</mark> ,	
vomfzqzx,	vommymyx,	<mark>vtbbypyx</mark> ,	<mark>vtbdymyx</mark> ,	<mark>vtbsymyx</mark> ,	<mark>VVGLYMYX</mark> ,	<mark>vvnbzrzx</mark> ,	
<mark>vvtsymyx</mark> ,	<mark>vvtszrzx</mark> ,	<mark>vyyyymyx</mark> ,	<mark>vyyyzqzx</mark> ,	<mark>waaaymyx</mark> ,	<mark>waaazqzx</mark> ,	WABBYMYX,	
WADDYMYF,	<mark>waddymyx</mark> ,	<mark>waddyoyx</mark> ,	<mark>wbfczqzx</mark> ,	<mark>wbkkymyx</mark> ,	<mark>wbsbymyx</mark> ,	<mark>WIHHYMYX</mark> ,	
WIIIYMYX,	wiiizqzx,	<mark>wmfczqzx</mark> ,	<mark>wmkbymyx</mark> ,	<mark>wmkbywyx</mark> ,	<mark>wmkkmasd</mark> ,	<mark>wmkkymyx</mark> ,	
wpdlztzx,	<mark>WRRRYNYX</mark> ,	<mark>wsatymyx</mark> ,	<mark>wsjczrzx</mark> ,	wssssiao,	<mark>wsssymyw</mark> ,	<mark>wsssymyx</mark> ,	
wsssyzyx,	<mark>wszzymyr</mark> ,	YAMBZAZX,	<mark>YAMBZGZA</mark> ,	YAMBZTZX,	YBBBNCYM,	YBBBVOZM,	
YBBBZRZA,	<mark>ybbbzrzb</mark> ,	<mark>YBBBZRZG</mark> ,	<mark>ybbbzrzz</mark> ,	<mark>ymmljstx</mark> ,	<mark>ymmzrza</mark> ,	YMMMZRZB,	
YMMMZRZG,	<mark>ymmzrzx</mark> ,	<mark>ypdnzazx</mark> ,	<mark>ypdnzgza</mark> ,	<mark>ypdnztzx</mark> ,	<mark>yptnzazx</mark> ,	<mark>YPTNZGZA</mark> ,	
<mark>yptnztzx</mark> ,	<mark>YSSYQFAM</mark>						

Note: the above list of AFTN addresses is subject to validation and updates by States/units concerned (yellow highlighted information has been validated by States as of 15 October 2014)

ATTACHMENT 2B

AFTN addresses for exchange of VAAC back-up test VAA messages in the VAAC Tokyo area of responsibility

RJTDYMYX (VAAC Tokyo)			
EGZZMASI,	KWBCYMYX,	NFFNYPYX,	RCTPYMYX,	RCTPZQZX,	<mark>rjaaymyx</mark> ,
RJCGZQZX,	RJDGZQZX ,	RJTDYMYX,	RJTGZQZX ,	RKRRZQZX,	RKSIYMYX,
RORGZQZX,	<mark>rphizrzx</mark> ,	<mark>rpllymyx</mark> ,	UELLYMYX,	UELLZRZX,	UHHHYMYX,
UHHHZRZX,	UHMMYMYX,	UHMMYMYX,	UHMMZRZX,	UHPPZRZX,	UIIIYMYX,
UIIIZRZX,	VDPPYMYX,	VDPPZRZX,	<mark>vhhhymyx</mark> ,	VHHKZQZX,	VLVTYMYX,
VLVTZQZX,	<mark>vtbbypyx</mark> ,	VTBBYZYX,	<mark>vtbsymyx</mark> ,	<mark>VVGLYMYX</mark> ,	<mark>vvnbzrzx</mark> ,
<mark>vvtszrzx</mark> ,	<mark>wsssyzyx</mark> ,	<mark>ybbbypyx</mark> ,	ZBAAYMYX,	ZBHHZQZX,	ZBLAZQZX,
ZBPEZQZX,	ZBYNZQZX,	ZGCSZQZX,	ZGGGYMYX,	ZGKLZQZX ,	ZGNNZQZX,
ZGZUZQZX,	ZHHHYMYX,	ZHWHZQZX,	ZJHKYMYX,	ZJSAZQZX,	ZKPYYMYX,
ZKPYYMYX,	ZLANZQZX,	ZLHWZQZX,	ZLSNZQZX,	ZLXYYMYX,	ZMUBYMYX,
zmubzqzx ,	ZPKMZQZX ,	ZSAMZQZX,	zscnzqzx,	zshazqzx,	ZSNJZQZX,
zsofzqzx,	zsqdzqzx,	ZSSSYMYX,	ZSTNZQZX,	ZUCKZQZX,	ZUDSZQZX,
ZUUUYMYX,	ZWUQZQZX,	ZWWWYMYX,	ZWWWZQZX,	ZYHBZQZX,	ZYSHZQZX,
ZYTLZQZX ,	ZYTXYMYX,				-

Note: the above list of AFTN addresses is subject to validation and updates by States/units concerned (yellow highlighted information has been validated by States as of 15 October 2014)

ATTACHMENT 3

List of States, participating units and tasks required* for VAAC back-up test

STATE UNIT		LOCATION NAME	LOC.	TASK/S	AFTN
	TYPE		ID.	REQUIRED*	ADDRESS
AUSTRALIA	ACC/FIC	BRISBANE/BRISBANE INTL	YBBN	D	<mark>YBBBZRZA</mark>
					<mark>YBBBZRZB</mark>
					YBBBZRZG
					YBBBZRZX
AUSTRALIA ¹	ACC/FIC	CAIRNS/CAIRNS INTL	YBCS	Ð	YBCS ZQZX
AUSTRALIA ¹	ACC/FIC	TOWNSVILLE/TOWNSVILLE INTL	YBTL	Ð	YBTLZQZX
AUSTRALIA ¹	ACC/FIC	HOBART	YMHB	Ð	YMHBZQZX
AUSTRALIA	ACC/FIC	MELBOURNE ACC/FIC	YMMM	D	YMMMZRZA
					YMMMZRZB
					YMMMZRZG
					YMMMZRZX
AUSTRALIA ¹	ACC/FIC	ADELAIDE / ADELAIDE INTL	YPAD	Ð	YPADZQZX
AUSTRALIA ¹	ACC/FIC	DARWIN/DARWIN INTL	YPDN	Ð	YPDNZQZX
AUSTRALIA ¹	ACC/FIC	PERTH/PERTH INTL	YPPH	Ð	YPPHZQZX
AUSTRALIA ¹	ACC/FIC	SYDNEY/SYDNEY (KINGSFORD SMITH) INTL	YSSY	Ð	YSSYZQZX
AUSTRALIA ²	MWO	BRISBANE (REGIONAL FORECAST CENTRE)	YBRF	Ð	YBRFYMYX
AUSTRALIA ²	MWO	HOBART (REGIONAL FORECASTING CENTRE)	YMHF	Ð	YMHF YMYX
AUSTRALIA ²	MWO	MELBOURNE (WORLD MET CENTRE, BUREAU OF	YMMC	Ð	YMMCYMYX
		METEOROLOGY)			
AUSTRALIA ²	MWO	MELBOURNE (REGIONAL FORECAST CENTRE)	YMRF	Ð	YMRF YMYX
AUSTRALIA ²	MWO	DARWIN (REGIONAL FORECASTING CENTRE)	YPDM	Ð	YPDMYMYX
AUSTRALIA ²	MWO	PERTH (REGIONAL FORECASTING CENTRE)	YPRF	Ð	YPRFYMYX
AUSTRALIA ²	MWO	ADELAIDE	YPRM	Ð	YPRMYMYX
AUSTRALIA ²	MWO	SYDNEY (REGIONAL FORECASTING CENTRE)	YSRF	Ð	YSRFYMYX
AUSTRALIA	RODB	BRISBANE (FIR/FIC/ACC/COM/MET/NOF)	YBBB	DJ	YBBBYPYX
AUSTRALIA	VAAC	DARWIN (REGIONAL FORECASTING CENTRE)	YPDM	AEFHIM	YPDMYMYX
CAMBODIA	ACC/FIC	PHNOM PENH	VDPP	J	VDPPZRZX
CAMBODIA	MWO	PHNOM PENH	VDPP	J	VDPPYMYX
CHINA	ACC/FIC	TAIBEI CITY/TAIBEI INTL AP	RCTP	J	RCTPZQZX

STATE	UNIT	LOCATION NAME	LOC.	TASK/S	AFTN
	TYPE		ID.	REQUIRED*	ADDRESS
CHINA	ACC/FIC	HONG KONG FIR	VHHK	J	VHHKZQZX
CHINA	ACC/FIC	HUHHOT/BAITA	ZBHH	J	ZBHHZQZX
CHINA	ACC/FIC	HULUNBEIER/HAILAR	ZBLA	J	ZBLAZQZX
CHINA	ACC/FIC	BEIJING FIR	ZBPE	J	ZBPEZQZX
CHINA	ACC/FIC	TAIYUAN/WUSU	ZBYN	J	ZBYNZQZX
CHINA	ACC/FIC	CHANGSHA CITY	ZGCS	J	ZGCSZQZX
CHINA	ACC/FIC	GUILIN/LIANGJIANG	ZGKL	J	ZGKLZQZX
CHINA	ACC/FIC	NANNING/WUXU	ZGNN	J	ZGNNZQZX
CHINA	ACC/FIC	GUANGZHOU FIR	ZGZU	J	ZGZUZQZX
CHINA	ACC/FIC	WUHAN FIR	ZHWH	J	ZHWHZQZX
CHINA	ACC/FIC	SANYA FIR/ACC	ZJSA	J	ZJSAZQZX
CHINA	ACC/FIC	LANZHOU CITY	ZLAN	J	ZLANZQZX
CHINA	ACC/FIC	LANZHOU FIR	ZLHW	J	ZLHWZQZX
CHINA	ACC/FIC	XI'AN CITY	ZLSN	J	ZLSNZQZX
CHINA	ACC/FIC	KUNMING FIR	ZPKM	J	ZPKMZQZX
CHINA	ACC/FIC	XIAMEN/GAOQI	ZSAM	J	ZSAMZQZX
CHINA	ACC/FIC	NANCHANG/CHANGBEI	ZSCN	J	ZSCNZQZX
CHINA	ACC/FIC	SHANGHAI FIR	ZSHA	J	ZSHAZQZX
CHINA	ACC/FIC	NANJING/LUKOU	ZSNJ	J	ZSNJZQZX
CHINA	ACC/FIC	HEFEI/XINQIAO	ZSOF	J	ZSOFZQZX
CHINA	ACC/FIC	QINGDAO/LIUTING	ZSQD	J	ZSQDZQZX
CHINA	ACC/FIC	JINAN CITY	ZSTN	J	ZSTNZQZX
CHINA	ACC/FIC	CHONGQING/JIANGBEI	ZUCK	J	ZUCKZQZX
CHINA	ACC/FIC	CHENGDU CITY	ZUDS	J	ZUDSZQZX
CHINA	ACC/FIC	URUMQI FIR	ZWUQ	J	ZWUQZQZX
CHINA	ACC/FIC	URUMQI/DIWOPU	ZWWW	J	ZWWWZQZX
CHINA	ACC/FIC	HARBIN/TAIPING	ZYHB	J	ZYHBZQZX
CHINA	ACC/FIC	SHENYANG FIR	ZYSH	J	ZYSHZQZX
CHINA	ACC/FIC	DALIAN/ZHOUSHUIZI	ZYTL	J	ZYTLZQZX
CHINA	MWO	TAIBEI CITY/TAIBEI INTL AP	RCTP	J	RCTPYMYX
CHINA	MWO	HONG KONG/INTERNATIONAL	VHHH	J	VHHHYMYX
CHINA	MWO	BEIJING/CAPITAL	ZBAA	J	ZBAAYMYX
CHINA	MWO	GUANGZHOU/BAIYUN	ZGGG	J	ZGGGYMYX
CHINA	MWO	WUHAN/TIANHE	ZHHH	J	ZHHHYMYX

STATE	UNIT	LOCATION NAME	LOC.	TASK/S	AFTN
	TYPE		ID.	REQUIRED*	ADDRESS
CHINA	MWO	HAIKOU/MEILAN	ZJHK	J	ZJHKYMYX
CHINA	MWO	XI'AN/XIANYANG	ZLXY	J	ZLXYYMYX
CHINA	MWO	SHANGHAI/HONGQIAO	ZSSS	J	ZSSSYMYX
CHINA	MWO	CHENGDU/SHUANGLIU	ZUUU	J	ZUUUYMYX
CHINA	MWO	URUMQI/DIWOPU	ZWWW	J	ZWWWYMYX
CHINA	MWO	SHENYANG/TAOXIAN	ZYTX	J	ZYTXYMYX
DPR KOREA	ACC/FIC	PYONGYANG (FIR)	ZKKP	J	ZKPYYMYX
DPR KOREA	MWO	SUNAN	ZKPY	J	ZKPYYMYX
FIJI	RODB	NADI/INTL	NFFN	DJ	NFFNYPYX
INDIA	ACC/FIC	CHENNAI (FIC)	VOMF	D	VOMFZQZX
INDIA	MWO	CHENNAI	VOMM	D	VOMMYMYX
INDONESIA	ACC/FIC	UJUNG PANDANG (FIC)	WAAF	Ð	WAAF ZQZX
INDONESIA	ACC/FIC	MAKASSAR/SULTAN HASANUDDIN	WAAA	D	WAAAZQZX
INDONESIA	ACC/FIC	JAKARTA FIC	WIIF	Ð	WIIFZQZX
INDONESIA	ACC/FIC	JAKARTA INTL/SOEKARNO-HATTA	WIII	D	WIIIZQZX
INDONESIA	MWO	MAKASSAR/SULTAN HASANUDDIN	WAAA	D	WAAAYMYX
INDONESIA	MWO	JAKARTA INTL/SOEKARNO-HATTA	WIII	D	WIIIYMYX
JAPAN	ACC/FIC	SAPPORO ACC	RJCG	J	RJCGZQZX
JAPAN	ACC/FIC	FUKUOKA ACC	RJDG	J	RJDGZQZX
JAPAN	ACC/FIC	TOKYO ACC	RJTG	J	RJTGZQZX
JAPAN	ACC/FIC	NAHA ACC	RORG	J	RORGZQZX
JAPAN	MWO	TOKYO (CITY)	RJTD	J	RJTDYMYX
JAPAN	RODB	TOKYO (CITY)	RJTD	DJ	<mark>RJAAYMYX</mark>
JAPAN	VAAC	TOKYO (CITY)	RJTD	BCGKLM	RJTDYMYX
LAO PDR	ACC/FIC	VIENTIANE (WATTAY)	VLVT	J	VLVTZQZX
LAO PDR	MWO	VIENTIANE (WATTAY)	VLVT	J	VLVTYMYX
MALAYSIA	ACC/FIC	KOTA KINABALU ACC/FIC	WBFC	D	WBFCZQZX
MALAYSIA	ACC/FIC	KUALA LUMPUR ACC/FIC	WMFC	D	WMFCZQZX
MALAYSIA	MWO	SEPANG/KL INTERNATIONAL AIRPORT	WMKK	D	WMKKYMYX
MONGOLIA	ACC/FIC	ULAANBAATAR/CHINGGIS KHAAN	ZMUB	J	ZMUBZQZX
MONGOLIA	MWO	ULAANBAATAR/CHINGGIS KHAAN	ZMUB	J	ZMUBYMYX
MYANMAR	ACC/FIC	YANGON INTERNATIONAL	VYYY	D	VYYYZQZX
MYANMAR	MWO	YANGON INTERNATIONAL	VYYY	D	VYYYYMYX
PAPUA NEW GUINEA	ACC/FIC	PORT MORESBY ACC/FIC/COM	AYPM	D	AYPMZGZX

STATE	UNIT	LOCATION NAME	LOC.	TASK/S	AFTN
	TYPE		ID.	REQUIRED*	ADDRESS
PAPUA NEW GUINEA	MWO	PORT MORESBY INTL	AYPY	Ð	AYPYYMYX
PAPUA NEW GUINEA	MWO	PORT MORESBY ACC/FIC/COM	AYPM	D	AYPMYMYX
PHILIPPINES	ACC/FIC	MANILA (ACC/FIC/COM)	RPHI	DJ	RPHIZRZX
PHILIPPINES	MWO	NINOY AQUINO INTERNATIONAL AIRPORT,	RPLL	D J	<mark>RPLLYMYX</mark>
		MANILA			
REPUBLIC OF KOREA	ACC/FIC	INCHEON ACC	RKRR	J	RKRRZQZX
REPUBLIC OF KOREA	MWO	INCHEON INTL	RKSI	J	RKSIYMYX
RUSSIAN FEDERATION	ACC/FIC	CHULMAN	UELL	J	UELLZRZX
RUSSIAN FEDERATION ³	ACC/FIC	BLAGOVESHCHENSK/IGNATYEVO	UHBB	Ŧ	UHBBZRZX
RUSSIAN FEDERATION	ACC/FIC	KHABAROVSK/NOVY	UHHH	J	UHHHZRZX
RUSSIAN FEDERATION	ACC/FIC	MAGADAN/SOKOL	UHMM	J	UHMMZRZX
RUSSIAN FEDERATION	ACC/FIC	PETROPAVLOVSK-KAMCHATSKY/YELIZOVO	UHPP	J	UHPPZRZX
RUSSIAN FEDERATION ³	ACC/FIC	YUZHNO-SAKHALINSK/KHOMUTOVO	UHSS	£	UHSSZRZX
RUSSIAN FEDERATION ³	ACC/FIC	VLADIVOSTOK/KNEVICHI	UHWW	£	UHWWZRZX
RUSSIAN FEDERATION ³	ACC/FIC	CHITA/KADALA	UIAA	£	UIAAZRZX
RUSSIAN FEDERATION	ACC/FIC	IRKUTSK	UIII	J	UIIIZRZX
RUSSIAN FEDERATION	MWO	CHULMAN	UELL	J	UELLYMYX
RUSSIAN FEDERATION ³	MWO	BLACOVESHCHENSK/IGNATYEVO	UHBB	£	UHBBYMYX
RUSSIAN FEDERATION	MWO	KHABAROVSK/NOVY	UHHH	J	UHHHYMYX
RUSSIAN FEDERATION	MWO	MAGADAN/SOKOL	UHMM	J	UHMMYMYX
RUSSIAN FEDERATION	MWO	PETROPAVLOVSK-KAMCHATSKY/YELIZOVO	UHPP	J	UHPPYMYX
RUSSIAN FEDERATION ³	MWO	YUZHNO-SAKHALINSK/KHOMUTOVO	UHSS	£	UHSSYMYX
RUSSIAN FEDERATION ³	MWO	VLADIVOSTOK/KNEVICHI	UHWW	£	UHWWYMYX
RUSSIAN FEDERATION ³	MWO	CHITA/KADALA	UIAA	Ŧ	UIAAYMYX
RUSSIAN FEDERATION	MWO	IRKUTSK	UIII	J	UIIIYMYX
SINGAPORE	ACC/FIC	SINGAPORE ACC/FIC	WSJC	D	WSJCZRZX
SINGAPORE	MWO	SINGAPORE/CHANGI	WSSS	D	WSSSYMYX
SINGAPORE	RODB	SINGAPORE/CHANGI	WSSS	DJ	WSSSYZYX
SOLOMON ISLANDS	ACC/FIC	HONIARA (HENDERSON)	AGGH	D	<mark>AGGHYMYX</mark>
SOLOMON ISLANDS	MWO	HONIARA (HENDERSON)	AGGH	D	<mark>AGGHYMYX</mark>
SRI LANKA	ACC/FIC	KATUNAYAKE/BANDARANAIKE INTERNATIONAL AIRPORT COLOMBO	VCBI	D	VCBIZQZX
SRI LANKA	MWO	KATUNAYAKE/BANDARANAIKE INTERNATIONAL	VCBI	D	VCBIYMYX

STATE	UNIT	LOCATION NAME		TASK/S	AFTN
	TYPE		ID.	REQUIRED*	ADDRESS
		AIRPORT COLOMBO			
THAILAND	ACC/FIC	BANGKOK (ACC/FIC/COM CENTRE)	VTBB	DJ	<mark>VTBBYPYX</mark>
THAILAND	MWO	BANGKOK/SUVARNABHUMI INTL AIRPORT	VTBS	DJ	<mark>VTBSYMYX</mark>
THAILAND	RODB	BANGKOK (ACC/FIC/COM CENTRE)	VTBB	DJ	<mark>VTBBYPYX</mark>
UNITED KINGDOM	WAFC	UK PDAI (GEN)	EGZZ	DJ	<mark>EGZZMASI</mark>
UNITED STATES	WAFC	WASHINGTON (NWS NATIONAL MET CENTER), DC.	KWBC	DJ	<mark>KWBCYMYX</mark>
VIET NAM	ACC/FIC	HA NOI/NOI BAI INTERNATIONAL	VVNB	DJ	<mark>VVNBZRZX</mark>
VIET NAM	ACC/FIC	HO CHI MINH/TAN SON NHAT INTERNATIONAL	VVTS	DJ	<mark>VVTSZRZX</mark>
VIET NAM	MWO	GIA LAM	VVGL	DJ	VVGLYMYX

Note: AFTN addresses in the table above are subject to validation and updates by States/units concerned (yellow highlighted information has been validated by States as of 15 October 2014)

- 1 In accordance with arrangements in Australia, the participating ACC/FICs are: BRISBANE and MELBOURNE
- 2 In accordance with the APAC regional air navigation plan, no Australian MWOs are required to participate because VAAC/MWO Darwin is designated to issue both the VAA and the SIGMET for volcanic ash for all Australian FIRs
- 3 In accordance with the EUR regional air navigation plan, the participating Russian Federation MWOs and ACC/FICs are: CHULMAN, IRKUTSK, KHABAROVSK/NOVY, MAGADAN/SOKOL and PETROPAVLOVSK-KAMCHATSKY/YELIZOVO