

**Seventeenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group
(CPWG/17)**

(Samara, Russia, 3-6 June 2014)

Agenda Item 2: Administrative Matters

**DRAFT VOLCANIC ASH CONTINGENCY PLAN
FOR TRANS-EAST, NOPAC AND PACOTS**

(Presented by State ATM Corporation)

SUMMARY

This working paper presents the Draft Volcanic Ash Contingency Plan for Trans-East, NOPAC, and PACOTS for discussion.

1. Introduction

1.1. The second volcanic ash exercise in Kamchatka under the umbrella of the International Civil Aviation Organization (ICAO) that involved the Russian Federation, Japan and the United States, was conducted on 4-5 March 2014.

1.2. To summarize the conclusions of VOLKAM/14, a debrief meeting was held in ICAO EUR/NAT regional office on 13-14 March 2014. Lessons learned and corresponding recommendations were submitted to the meeting and discussed. The agreed recommendations were listed as tasks in an action plan to be dealt with by participants. A draft Volcanic Ash Contingency Plan has also been developed for Trans-East, NOPAC, and PACOTS.

2. Action by the Meeting

2.1 The meeting is invited to:

- a. review and discuss the information contained in this Working Paper.

Draft VOLCANIC ASH CONTINGENCY PLAN

for trans-east, NOPAC and PACOTS

1. INTRODUCTION

This document is a draft volcanic ash contingency plan that involves States, service providers and operators in responding safely and efficiently to volcanic ash events that impact trans-east routes, Northern Pacific (NOPAC) routes and Pacific Organized Track System (PACOTS).

Contact email and phone numbers for the various stakeholders are provided in section 2.

Sequence of events during a volcanic ash event are provided in section 3.

Example Volcano Observation Notification for Aviation (VONA), Volcanic Ash Advisories (VAA) and corresponding graphic (VAG), SIGMET, NOTAM, and special air-report on volcanic ash are provided in section 4.

Re-route procedures are provided in section 5.

Volcanic ash telconference and/or web-based conference instructions are provided in section 6.

2. CONTACT INFORMATION for OPERATIONS

Discipline		Name	Email	Phone
Volcano Observatory	KVERT	Olga Girina	girina@kscnet.ru	+ 74152302549
	AVO (noting AVO coordinates with KVERT)	Christina Neal	cneal@usgs.gov	
VAAC	Tokyo	Tetsuyuki Ueyama	tetsu.ueyama@met.kishou.go.jp	
		Operational	vaac@eqvol2.kishou.go.jp	
	Anchorage	Donald Moore	donald.moore@noaa.gov	
		Operational	a-vaac@noaa.gov	
	Washington	Grace Swanson	grace.swanson@noaa.gov	
		Operational	w-vaac@noaa.gov	

ATMC	MATMC of Russia	Alexey Buevich	alexey@matfmc.ru	
	Fukuoka ATMC	Akimitsu Sakurai	sakurai-a07xr@cab.mlit.go.jp	
	US ATCSCC	Joe Varrati Franklin McIntosh	Joseph.Varrati@faa.gov Franklin.McIntosh@faa.gov	
ACC	Anchorage ARTCC	Gail Ferguson	gail.ferguson@faa.gov	
	Fukuoka ATMC Oceanic	Akimitsu Sakurai	sakurai-a07xr@cab.mlit.go.jp	
	Khabarovsk	Seiji Fukami	fukami-s07fm@cab.mlit.go.jp	
	Magadan	Roman Tkachenko	trg@dv.gkovd.ru	
		Mikhail Solntsev	solncev@sv.gkovd.ru	
	Oakland Center (TMO)	Michael Robbins	Michael.Robbins@faa.gov	
	Petropavlovsk-Kamchatsky	Andrey Vovk	avovk@kamaero.ru	
Regulatory	Sapporo	Fumio Satoh	satoh-f05tv@cab.mlit.go.jp	
	FATA	Elena Glukhovskaya	Gluhovskaya_ep@scaa.ru	
	Roshydromet	Naryshkina Yuliya	juliaavia@mail.ru	
	JCAB	Natsuki Ibe	ibe-n24hy@mlit.go.jp	
NOF	FAA (MET Authority)	Steven Albersheim	Steven.Albersheim@faa.gov	
	Moscow	Galina Kotova	kotova@caica.ru	
	NOF serving RJJJ	Yoshiyuki Mikuni	mikuni-y2bd@cab.mlit.go.jp	

	NOF serving (FAA U.S. NOTAM Office – USNOF) PZAN,PAZA, and KZOA	Steven Hyde Ernie Bilotto	Steven.Hyde@faa.gov Ernie.Bilotto@faa.gov	
MWO	Yelizovo Airodrome MET Center Office of Aviation Weather Forecast JMA for Fukuoka FIR Anchorage MWO Anchorage Centre Weather Service Unit	Irina Veretennikova Yuichi Yamakoshi Donald Moore Kristine Nelson	arrow.ir@mail.ru y-yamakoshi@met.kishou.go.jp donald.moore@noaa.gov Kristine.a.nelson@noaa.gov	
Airlines	IATA United Airlines JAL ANA Cathay Pacific UPS Delta	Dmitry Kosolapov Gene Cameron Greg Dale Mike Stills (PoC) Tomohiko Mori Takeshi Saito Keiichi Otaki Maki Mori Allan Tang Julian Fung Ken Foster Gary Edwards	kosolapovd@iata.org gene.cameron@united.com greg.dale@united.com mike.stills@united.com tomohiko.mori@jal.com tak.saito@ana.co.jp ke.otaki@ana.co.jp maki.mori@ana.co.jp allan_tang@cathaypacific.com julian_fung@cathaypacific.com kffoster@ups.com	

	American Airlines	Ray Howland Steve Smith Brian Schultz	ATL019.SASINT@delta.com ray.howland@aa.com Stephen.smith@aa.com Brian.schultz@aa.com	
Expert Advisor	Eurocontrol	Zarko Sivcev	Zarko.sivcev@eurocontrol.int	
International and Inter-regional coordinator	ICAO	Christopher Keohan	ckeohan@paris.icao.int	

3. SEQUENCE OF EVENTS

<i>Time</i>	<i>Player</i>	<i>Event/Action</i>
1.Time of eruption		EXPLOSIVE ERUPTION STARTS (example provided for an eruption of a volcano in Kamchatka or N Kurile Islands)
2.sequentially	Volcano Observatory (KVERT, Institute of Volcanology & Seismology, Far East Branch, Russian Academy of Sciences)	VO send VONA (indicating change in aviation colour code and giving first known data about eruption) via email to MATMC, Petropavlovsk-Kamchatsky ACC, Yelizovo MWO, VAAC Tokyo, AVO and others, and post to KVERT web-site: http://www.kscnet.ru/ivs/kvert/van/index.php?type=1 after this a phone call Yelizovo MWO will be made.
3.sequentially	Yelizovo MWO	Issues first, short SIGMET to VAAC Tokyo, MATMC, PK ACC and other players concerned
4.sequentially	VAAC Tokyo	Issues first VAA without observed/forecasted VA dispersion warning about only eruption; provides VAA to MATMC and other key players concerned.
5.sequentially	MATMC and Petropavlovsk-Kamchatsky ACC	MATMC requests Moscow NOF to issue NOTAM
6.sequentially	Moscow NOF	Issues advisory NOTAM
7.sequentially	AVO	Conduct telephone notification to US and Canadian agencies and complete internal notification procedures. Commence ash cloud tracking as appropriate.
8.~1 hour after eruption	VAAC Tokyo	Issues second VAA/VAG; provides VAA/VAG to MATMC and other key players concerned.
9.sequentially	MWOs affected	Issue SIGMETs for respective areas
10.sequentially	MATMC	Issues an invitation to teleconference (eruption time + 2 hours) via email (note this may change to web-based teleconference)
11.sequentially	National ATM Centers and ACCs	Publish advisory NOTAMs via NOFs
12.sequentially	ANSPs affected (ACCs)	Request national ATM Centers to apply ATFM measures (ATFM messages could be communicated via the web portal of ATM Centres)
13.sequentially	National ATM Centers	Apply ATFM measures on request of ACCs
14.sequentially	AO	Take appropriate flight planning actions: e.g. reroute or cancel flights (note all revised FPLs must be sent via email to MATMC) Procedure to submit re-route requests should be added for Fukuoka, Anchorage and Oakland FIRs

15.any time	AO, ACC, MWO, VAAC	If special air-report on volcanic ash is received by ACC via voice communications the dissemination of information is as follows: aircraft → ACC → MWO → VAAC Tokyo
16.When there is a change in aviation colour code	KVERT	Issues VONA indicating aviation colour code change
17.~eruption time + 2 hours	All	<p>Operational teleconference to discuss the latest situation; (details of teleconference to be provided) VOLKAM sheet with information to be discussed at teleconference may be distributed one-half hour earlier to the master email list (to be developed) to improve situational airwareness)</p> <p>State where volcano is erupting should be coordinator of teleconferences. Teleconferences to be held approximately one hour after a new set of VAA/VAG is issued.</p>
18.When appropriate, but no later than 6 hours after the second VAA/VAG issued	VAAC Tokyo	<p>Issues third VAA/VAG; provides VAA/VAG to MATMC and other key players concerned</p> <p>Note, a handover may occur from VAAC Tokyo to VAAC Anchorage and/or VAAC Washington in accordance to VAAC agreements</p>
19. sequentially		Follow steps 9-18 until volcanic ash no longer impacting trans-east, NOPAC and PACOTS

4. EXAMPLES

VONA

First VONA

(1) VOLCANO OBSERVATORY NOTICE FOR AVIATION (VONA)

- | | |
|--|--|
| (2) Issued: | 20140304/2100Z |
| (3) Volcano: | Bezymianny (CAVW #1000-25-) |
| (4) Current Aviation Color Code: | RED |
| (5) Previous Aviation Color Code: | orange |
| (6) Source: | KVERT |
| (7) Notice Number: | 2014-0000 |
| (8) Volcano Location: | N 55 deg 58 min E 160 deg 36 min |
| (9) Area: | Kamchatka, Russia |
| (10) Summit Elevation: | 9453 ft (2882 m) |
| (11) Volcanic Activity Summary: | New explosive eruption of Bezymianny volcano began at 20:45 UTC on March 04, 2014. According to video and satellite data, ash plumes raise up to 51,000 ft (15.5 km) a.s.l. to the south-east of the volcano at present time. Eruption of the volcano continues. |
| (12) Volcanic cloud height: | 51,000 ft (15.5 km) a.s.l. |
| (13) Other volcanic cloud information: | ash plumes extending south-east of the volcano |
| (14) Remarks: | This explosive eruption is extremely hazardous for aircraft downwind. |

Bezymianny volcano is one the most active volcano of the world. In 1955, for the first time in history, Bezymianny started to erupt and after six months it produced a catastrophic eruption with the total volume of eruptive products over 3 km³. The lava dome began to grow in the explosive caldera immediately after the catastrophe and continues to this day. From 1965 to 2012, 43 Vulcanian explosive eruptions occurred. Twenty of these sent ash to 33,000 to 49,000 ft (10-15

km) a.s.l.

The last eruption occurred on: 2012/09/01

(15) Contacts:

Dr. Olga A. Girina, Head of KVERT, IVS FEB
RAS; girina@kscnet.ru +74152302549
Duty scientist: +79622825253

(16) Next Notice:

A new VONA will be issued if conditions change significantly or the Aviation Color Code is changes. VONAs are posted at http://www.kscnet.ru/ivs/kvert/index_eng.php

In Russia, KVERT, on behalf of the Institute of Volcanology and Seismology (IVS) FED RAS, is responsible for providing information on volcanic activity to international air navigation services for the airspace users.

Second VONA

(1) VOLCANO OBSERVATORY NOTICE FOR AVIATION (VONA)

- | | |
|--|---|
| (2) Issued: | 20140304/2230Z |
| (3) Volcano: | Bezymianny (CAVW #1000-25-) |
| (4) Current Aviation Color Code: | ORANGE |
| (5) Previous Aviation Color Code: | red |
| (6) Source: | KVERT |
| (7) Notice Number: | 2014-0001 |
| (8) Volcano Location: | N 55 deg 58 min E 160 deg 36 min |
| (9) Area: | Kamchatka, Russia |
| (10) Summit Elevation: | 9453 ft (2882 m) |
| (11) Volcanic Activity Summary: | The explosive eruption of Bezymianny volcano has finished. Seismic activity of the volcano decreased at 21:30 UTC on March 04, 2014. According to video data, the volcano is quiet, no ash plumes are erupting from the volcano at this time. |
| (12) Volcanic cloud height: | No ash cloud produced |
| (13) Other volcanic cloud information: | According to data from VAACs, at 1800 UTC on March 05, ash cloud was located about 1240-1860 mi (2000-3000 km) to the southeast of the volcano. |

- (14) Remarks: Strong and moderate fumarole activity of the volcano continues. Ongoing activity could affect low-flying aircraft.
- (15) Contacts: Dr. Olga A. Girina, Head of KVERT, IVS FEB RAS; girina@kscnet.ru +74152302549
Duty scientist: +79622825253
- (16) Next Notice: A new VONA will be issued if conditions change significantly or the Aviation Color Code is changes. VONAs are posted at http://www.kscnet.ru/ivs/kvert/index_eng.php

In Russia, KVERT, on behalf of the Institute of Volcanology and Seismology (IVS) FED RAS, is responsible for providing information on volcanic activity to international air navigation services for the airspace users.

VAA

(First VAA)

FVFE01 RJTD 0421mm

VA ADVISORY

DTG: 20140304/21mmZ

VAAC: TOKYO

VOLCANO: BEZYMANNY 1000-25

PSN: N5559E16035

AREA: RUSSIA

SUMMIT ELEV: 2882M

ADVISORY NR: 9999/1

INFO SOURCE: MTSAT-2 KVERT

AVIATION COLOUR CODE: NIL

ERUPTION DETAILS: ERUPTION AT 20140304/2045Z FL510 EXT

SE REPORTED

OBS VA DTG: 04/2100Z

OBS VA CLD: VA NOT IDENTIFIABLE FM SATELLITE DATA WIND FL510 310/40KT

FCST VA CLD +6 HR: NO VA EXP (to be replaced with NOT AVLB)

FCST VA CLD +12 HR: NO VA EXP

FCST VA CLD +18 HR: NO VA EXP

RMK: WE WILL ISSUE FURTHER ADVISORY IF VA IS

DETECTED IN SATELLITE IMAGERY (when applicable, provide colour code referencing KVERT)

NXT ADVISORY: NO FURTHER ADVISORIES=

(Second VAA)

FVFE01 RJTD 0422mm

VA ADVISORY

DTG: 20140304/22mmZ

VAAC: TOKYO

VOLCANO: BEZYMANNY 1000-25

PSN: N5559E16035

AREA: RUSSIA

SUMMIT ELEV: 2882M

ADVISORY NR: 9999/2

INFO SOURCE: MTSAT-2 KVERT

AVIATION COLOUR CODE: NIL

ERUPTION DETAILS: ERUPTION AT 20140304/2045Z FL510 EXTD SE

REPORTED

OBS VA DTG: 04/2115Z

OBS VA CLD: SFC/FL510 N5545 E16045 - N5455 E16100 - N5525 E16135 MOV

SE 40KT

FCST VA CLD +6 HR: 05/0315Z SFC/FL510 N5315 E16450 - N5205 E16915 - N

5015 E16945 - N5230 E16240

FCST VA CLD +12 HR: 05/0915Z SFC/FL510 N5125 E16505 - N5335 E16715 -

N5055 E17405 - N4910 W17635 - N4850 E17500

FCST VA CLD +18 HR: 05/1515Z SFC/FL510 N5000 E17015 - N5155 E17545 -

N4845 W17305 - N4825 W16300 - N4535 W16740 - N4735 W17905

RMK: NIL (when applicable, provide colour code referencing KVERT)

NXT ADVISORY: 20140305/0100Z=

(Third VAA)

FVFE01 RJTD 0501mm

VA ADVISORY

DTG: 20140305/01mmZ

VAAC: TOKYO

VOLCANO: BEZYMANNY 1000-25

PSN: N5559E16035

AREA: RUSSIA

SUMMIT ELEV: 2882M

ADVISORY NR: 9999/3

INFO SOURCE: MTSAT-2

AVIATION COLOUR CODE: NIL

ERUPTION DETAILS: VA CONTINUOUSLY OBS ON SATELLITE IMAGERY.

OBS VA DTG: 05/0000Z

OBS VA CLD: SFC/FL510 N5410 E16100 - N5500 E16130 - N5320 E16540 - N51

40 E16430 MOV SE 40KT

FCST VA CLD +6 HR: 05/0600Z SFC/FL510 N5255 E16435 - N5040 E17130 - N

4940 E17805 - N4830 E17310 - N5100 E16420

FCST VA CLD +12 HR: 05/1200Z SFC/FL510 N5050 E16545 - N5250 E16900 -

N5010 E17815 - N4850 W17100 - N4720 W17735 - N4850 E17130

FCST VA CLD +18 HR: 05/1800Z SFC/FL520 N5130 E17355 - N4925 W16915 -

N4810 W15425 - N4615 W16310 - N4755 W17525 - N4900 E17105

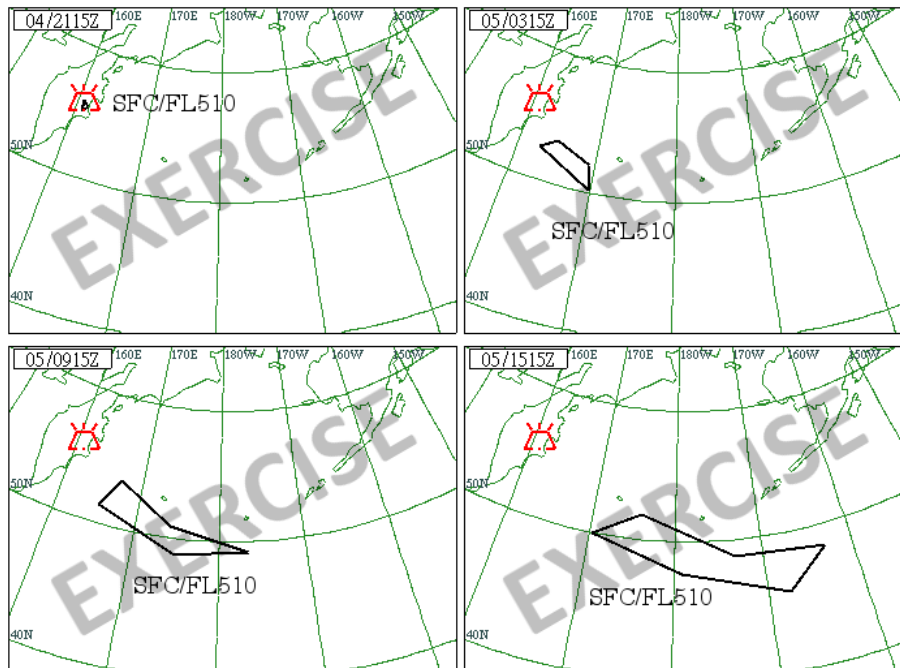
RMK: NIL (when applicable, provide colour code referencing KVERT)

NXT ADVISORY: 20140305/0400Z=

(Fourth VAA)

FVFE01 RJTD 0502mm
VA ADVISORY
DTG: 20140305/02mmZ
VAAC: TOKYO
VOLCANO: BEZMYIANNY 1000-25
PSN: N5559E16035
AREA: RUSSIA
SUMMIT ELEV: 2882M
ADVISORY NR: 9999/4
INFO SOURCE: MTSAT-2
AVIATION COLOUR CODE: NIL
ERUPTION DETAILS: VA CONTINUOUSLY OBS ON SATELLITE IMAGERY.
OBS VA DTG: 05/0115Z
OBS VA CLD: NO VA EXP
FCST VA CLD +6 HR: NO VA EXP
FCST VA CLD +12 HR: NO VA EXP
FCST VA CLD +18 HR: NO VA EXP
RMK: VA MOVED OUT OF OUR AREA OF RESPONSIBILITY.
PLEASE SEE VAA FROM ANCHORAGE VAAC FROM NOW ON.
NXT ADVISORY: NO FURTHER ADVISORIES=

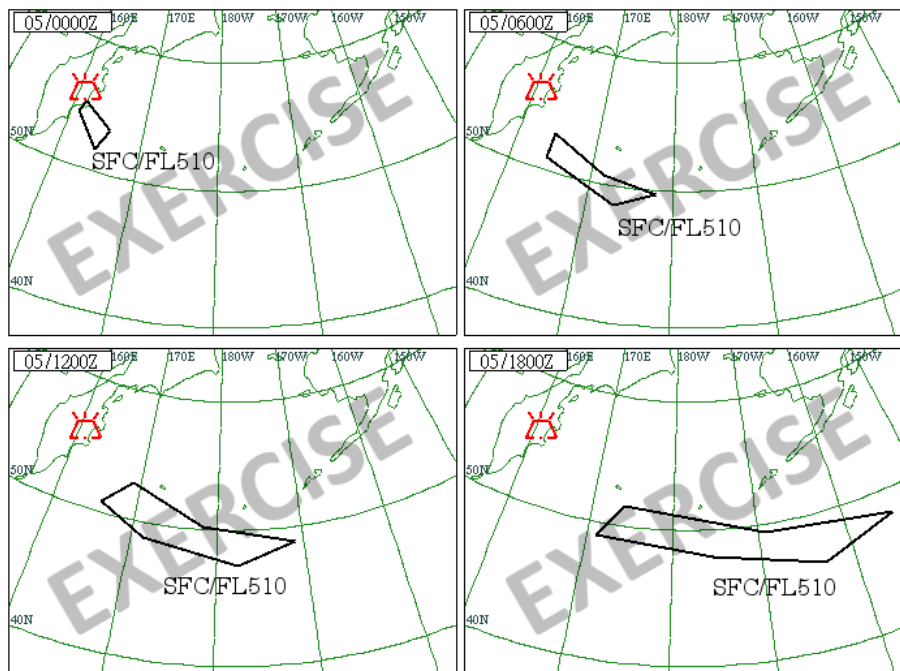
Note: This kind of VAA is issued to advise that VAAC Tokyo has handed over the responsibility for a volcanic ash event to an adjacent VAAC.

VAG**VOLCANIC ASH ADVISORY INFORMATION IN GRAPHICAL FORMAT MODEL VAG**

VA ADVISORY
 DTG: 20140304/2200Z
 VAAC: TOKYO
 VOLCANO: BEZMIANNY 1000-25
 AREA: RUSSIA
 SUMMIT ELEV: 2882M
 ADVISORY NR: 9999/2

INFO SOURCE: EXERCISE VOLKAM14 MTSAT-2 KVERT
 AVIATION COLOUR CODE: NIL
 ERUPTION DETAILS: EXERCISE ERUPTION AT 20140304/2045Z FL510
 EXTD SE REPORTED
 RMK: EXERCISE VOLKAM14 NIL EXERCISE EXERCISE EXERCISE
 NXT ADVISORY: 20140305/0100Z

VOLCANIC ASH ADVISORY INFORMATION IN GRAPHICAL FORMAT MODEL VAG



VA ADVISORY
 DTG: 20140305/0100Z
 VAAC: TOKYO
 VOLCANO: BEZYMANNY 1000-25
 AREA: RUSSIA
 SUMMIT ELEV: 2882M
 ADVISORY NR: 9999/3

INFO SOURCE: EXERCISE VOLKAM14 MTSAT-2
 AVIATION COLOUR CODE: NIL
 ERUPTION DETAILS: EXERCISE VA CONTINUOUSLY OBS ON SATELLITE
 IMAGERY
 RMK: EXERCISE VOLKAM14 NIL EXERCISE EXERCISE EXERCISE
 NXT ADVISORY: 20140305/0400Z

Template for **SIGMET** messages

WVRA31 RUPK **042100**

UHPP SIGMET **1** VALID 042100/042215 UHPP-
UHPP PETROPAVLOVSK-KAMCHATSKY FIR
VA ERUPTION MT BEZMYIANNY PSN **N5558 E16036** VA CLD OBS AT 2100Z
SFC/FL510 MOV SE 70KMH=

WVRA31 RUPK **042215**

UHPP SIGMET **2** VALID 042215/050315 UHPP-
UHPP PETROPAVLOVSK-KAMCHATSKY FIR
VA ERUPTION MT BEZMYIANNY PSN **N5558 E16036** VA CLD OBS AT 2115Z WI
N5545 E16045 - N5455 E16100 - N5525 E16135 – N5545 E16045 SFC/FL510 MOV SE
70KMH FCST 0315Z VA CLD APRX N5315 E16450 –N5258 E16557 - N5212 E16354 -
N5230 E16240 – N5315 E16450=

WVRA31 RUPK **050115**

UHPP SIGMET **1** VALID 050115/050315 UHPP-
UHPP PETROPAVLOVSK-KAMCHATSKY FIR CNL SIGMET 2 042215/050315 =

WVRA31 RUPK **050115**

UHPP SIGMET **2** VALID 050115/050600 UHPP-
UHPP PETROPAVLOVSK-KAMCHATSKY FIR
VA ERUPTION MT BEZMYIANNY PSN **N5558 E16036** VA CLD OBS AT 0000Z WI
N5410 E16100 – N5500 E16130 – N5320 E16540 – N5242 E16513 – N5211 E16350N -
N5410 E16100 SFC/FL510 MOV SE 70KMH FCST 0600Z VA CLD APRX N5255 E16435 –
N5227 E16431 – N5243 E16516 – N5255 E16435=

WVRA31 RUPK **050230**

UHPP SIGMET **3** VALID 050230/050600 UHPP-
UHPP PETROPAVLOVSK-KAMCHATSKY FIR CNL SIGMET 2 050115/050600 VA MOV
TO PAZA PAZN KZOA FIR=

NOTAM (provide other examples of NOTAM – with VA points and/or NOTAM pointing to SIGMET)

(Pxxxx/14 NOTAMN

Q) UHPP/QWWXX/IV/NBO/W/000/999/5558N16036E999

A) UHPP B) 1403042100 C) 1403050400

D)

E) EXERCISE VOLKAM14

VOLCANIC ASH EXERCISE TAKES PLACE 04 MARCH FROM 21:00 TO 05 MARCH APPROX. 04:00UTC.

EXERCISE NAME: VOLKAM14 EXERCISE VOLCANO: BEZYMIANNY 1000-25 N55 58 E160 36 RUSSIAN FEDERATION-KAMCHATKA

FREE TEXT OF PROMULGATED EXERCISE MESSAGES STARTS WITH:

EXERCISE VOLKAM14. FREE TEXT OF EXERCISE MESSAGES ENDS WITH:

EXERCISE EXERCISE EXERCISE

F) SFC

G) UNL

(Axxxx/14 NOTAMN

Q) PAZA/QWWXX/IV/NBO/W /000/999/5558N16036E999

A) PAZA PAZN B) 1403042100 C) 1403050400

D)

E) EXERCISE VOLKAM14

VOLCANIC ASH EXERCISE TAKES PLACE 04 MARCH FROM 21:00 TO 05 MARCH APPROX. 04:00UTC.

EXERCISE NAME: VOLKAM14

EXERCISE VOLCANO: BEZYMIANNY1000-25 N55 58 E160 36 RUSSIAN FEDERATION-KAMCHATKA

FREE TEXT OF PROMULGATED EXERCISE MESSAGES STARTS WITH:

EXERCISE VOLKAM14.

FREE TEXT OF EXERCISE MESSAGES ENDS WITH:

EXERCISE EXERCISE EXERCISE

F) SFC

G) UNL

Example for **Special air-report on volcanic ash** (reference Table A4-1 of Appendix 4 to ICAO Annex 3) (*downlink*)

Annex 3, Appendix 4, 1.3 Special air-reports by voice communications

When voice communications are used, the elements contained in special air-reports shall be:

Message type designator

Section 1 (Position information)

Aircraft identification

Position or latitude and longitude

Time

Level or range of levels

Section 3 (Meteorological information)

Condition prompting the issuance of a special air-report, to be selected from the list presented in Table A4-1.

(pilot to ACC)

ARS UA322 N5503 E17020 OBS AT 0105Z FL300/FL390 VA CLD=

Routing

- Pilot of UA322 communicates by voice special air-report on volcanic ash to Petropavlovsk-Kamchatsky ACC
- PK ACC sends to VAAC Tokyo (fax: +81 (3) 3212 6446; email vaac@eqvol2.kishou.go.jp - email preferred)
- PK ACC then sends special air-report to Yelizovo MWO
- Yelizovo MWO then sends special air-report to VAAC Tokyo (fax: +81 (3) 3212 6446; email vaac@eqvol2.kishou.go.jp; AFTN: RJTDYMYX)
- Yelizovo MWO should also route the special air-report using the World Meteorological Organization Abbreviated Header Line (WMO AHL) of **UARA71 RUPK** to
 - SADIS (AFTN: EGZZWPXX)
 - WIFS (AFTN: KWBCYMYX)

In accordance with Table A6-1 of Annex 3, the Special Air-Report format for *uplink* is as follows (applicable format for dissemination from Yelizovo MWO):

ARS UA322 VA CLD FL300/390 OBS AT 0105Z N5503 E17020=

Other NOTES

Note that confidence in PACOTS and west bound tracks decreases considerably after 18 hours due to the absence of volcanic ash products beyond 18 hours (VAA/VAG only valid to 18 hours in accordance to Annex 3).

Note that VAAC Tokyo uses the maximum height of volcanic ash reported if differences in volcanic ash height are reported from various sources (satellite, aircraft report, VAA).

Useful websites:

VAAC Tokyo <http://ds.data.jma.go.jp/svd/vaac/VOLKAM14/index.html>

VAAC Anchorage <http://vaac.arh.noaa.gov/>

VAAC Washington <http://www.ssd.noaa.gov/VAAC/washington.html>

KVERT <http://www.kscnet.fu/ivs/kvert/van/index.php?type=1>

Alaska Volcano Observatory (AVO) <https://www.avo.alaska.edu/>

5. RE-ROUTE PROCEDURS

(to obtain from AA in coordination with UA/Japan Airlines and IATA)

6. VOLCANIC ASH TELECONFERENCE INSTRUCTIONS

(update with web-based instructions when obtained)

Lead: The lead of teleconference calls should be the ATMC of the State where the volcano is erupting (e.g. a volcano eruption in Kamchatka – MATMC Moscow; volcano eruption in Japan – Fukuoka ATMC; volcano eruption in Alaska – US ATCSCC)

Expected Participants and general information expected from each:

VO – brief update on eruption status, latest height information, source of height information; duration of event, expected activity

VAA – brief update on VAA/VAG (are observations such as aircraft reports being used to update products)

MWO – brief update on SIGMET (if different from VAA/VAG, briefly explain why)

NOF – brief update on NOTAM and published reroutes

ACC – brief update on reroutes and coordination with ACCs and ATMCs

ATMC – brief update on overall strategy (coordination with other ATMCs and ACCs)

Airlines – brief update on tactical reroutes, flight plan changes and satisfaction with reroutes

ATMC – response, if necessary, to airlines

ACC – response, if necessary, to ATMCs and airlines

Information sharing:

The following web portal is available to obtain volcanic ash related products and information: State ATM Operational website (**to obtain**). Options include (1) using tools to increase situational awareness and (2) one same picture is shared by all.

Proposed VOLKAM Sheet will be emailed to the appropriate participants for shared awareness.

Language:

Each State should arrange to have participants speak in English during the teleconferences.

Microphones:

Each Participant should mute microphones to reduce back ground noise. The Leader of the teleconference will instruct the participant when to speak. When other features are available, leader would mute and controls when participants speak (e.g. dial 01 if you wish to speak).
