

International Civil Aviation Organization

THIRD MEETING OF THE ICAO ASIA/PACIFIC (APAC) VOLCANIC ASH EXERCISES STEERING GROUP (VOLCEX/SG/3)

Bangkok, Thailand, 14 – 16 March 2016

Agenda item 3: Debrief and review of volcanic ash exercise VOLPHIN 16/01

REPORT ON VOLPHIN 16/01

(Presented by Indonesia)

SUMMARY

This paper presents information on the outcomes of the volcanic ash exercise held in Bali, Indonesia on 16 - 17 February 2016.

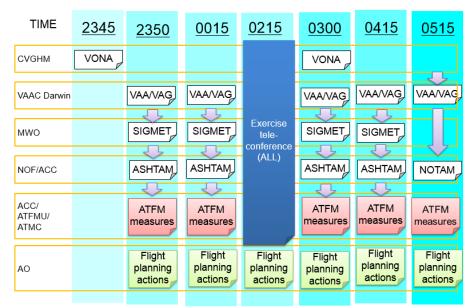
1. INTRODUCTION

- 1.1 The second meeting of the Asia/Pacific Volcanic Ash Exercise Steering Group (VOLCEX/SG/2) was held in Bangkok, Thailand 15 -16 September 2015, decided that the second volcanic ash exercise should be conducted in Indonesia which affected Jakarta FIR and Ujung Pandang FIR by simulated of Merapi Volcano eruption
- 1.2 The exercise aim to demonstrate the practice of applicable global and regional procedures related to volcanic activity and volcanic ash including:
 - a. Distribution of alert (e.g., VONA);
 - b. Distribution of ATS Message (e.g., VAA/VAG, SIGMET, ASHTAM/NOTAM and AIREP);
 - c. Responses by Jakarta ACC, Ujung Pandang ACC, Air Traffic Flow Management Unit and Aircraft Operator (e.g., safety risk assessment and tactical re-route);
 - d. Enhance situational awareness and CDM (e.g., tele-conference, web-conference, website or other media).
- 1.3 Volcanic Ash Exercise activity first in 2016 was named VOLPHIN 16/01 in Denpasar Bali, Indonesia on 16-17 February 2016.

2. IMPLEMENTATION

- 2.1 Exercise of VOLPHIN 16/01 by involving participant from:
 - a. DGCA, Indonesia;
 - b. Airport Authority Region IV Bali;

- c. Meteorological Climatological and Geophysical Agency (MCGA/better known BMKG); Jakarta WMO and Ujung Pandang WMO;
- d. Centre of Volcanology and Geological Hazard Mitigation (CVGHM);
- e. VAAC Darwin;
- f. Airnav Indonesia: Jakarta ACC, Ujung Pandang ACC and Jakarta NOF;
- g. Aircraft Operator: Garuda Indonesia, Lion Air, Air Asia Indonesia, Batik Air, PT. Wings Air dan PT Sriwijaya Air, Singapore Airlines, Malaysia Air System, Silk air, Qantas, Jetstar, Virgin and Royal Brunei;
- h. ANSP from Malaysia, Filipina and Australia
- 2.2 Exercise was led by
 - a. Exercise Leader: Mr. KAKIHARA, Koichiro, Senior Coordinator for International Aeronautical Meteorology, JMA.
 - b. Exercise (in-State) Co-Leader: Moh. Hasan BASHORY, Deputy Director of Air Navigation, DGCA Indonesia.
- 2.3 The exercise scenario involved the simulated eruption of Merapi Volcano with volcanic ash cloud of up to FL 350 and above moving Northeast at 20 Knots to impact ATS Route and airspace within Jakarta FIR and Ujung Pandang FIR. Scenario is structured as follows.



VOLPHIN16/01 SCENARIO

- 2.4 Communications media used in activities VOLPHIN 16/01 using WhatsApp and Skype.
- 2.5 For notification to aviation community regarding the exercise, NOF issued the NOTAM with number A0384/16

2.6 The exercise was conducted on 16 February 2016 over a period of approximately 7 (seven) hours. Exercise begun with announcement of commencement of activities by the co-leader via email at 23.00 UTC. The first VONA issued at 23.45 and message announcing the cessation of the exercise on 17 February at 05.17 UTC by co-leader and NOF issued NOTAM Cancel for volcanic exercise VOLPHIN 16/01 at 05.42.

3. DISCUSSION

ATM Preparation

3.1 VOLPHIN 16/01 exercise is composed team from Jakarta ACC and Ujung Pandang ACC. Each team was responsible for the airspace within its area of responsibility and made close coordination with adjacent ATS unit to prepare Volcanic Ash Contingency Plan and managing flow of the air traffic situation. Each member of the team was assigned with specific task. It was very clear to the team that the exercise should not affect to the actual operation.

Simulated ATFM Measures

- 3.2 VAA and VAG provided by VAAC Darwin which gave information on the affected airspace and its forecast. MWO received the VAA/VAG to create a SIGMET, which was then sent to the NOF. Based on SIGMET and VAA/VAG, NOF issued the ASHTAM; not a NOTAM like the VOLPHIN 15/01 in Philippines.
- 3.3 Information was contained in the ASHTAM as guidance for ACC to monitor the affected area and to decide which portion of the airspace was available and could be used for re-routing of flight. The Ujung Pandang SOP in the Volcanic Ash event requires NOF to publish only ASHTAM (not NOTAM). Ujung Pandang ACC procedures include not closing area or ATS route. The aircraft operators have risk management system regarding such activity.
- 3.4 For area or ATS route which is affected by volcanic ash, in the pre-exercise VOLPHIN 16/01, meeting agreed to simulate what do on daily basis by issuing ASHTAM.

Shortcoming in the Exercise

- 3.5 During the exercise, CVGHM had a problem concerning VONA dissemination by email. The system managed to send the email but no recipient received the email directly. It may have occurred because of too many recipients in the email system and/or the system identified the email as SPAM; it is supposed that this was an error in the system.
- 3.6 Area of volcanic ash affected the Ujung FIR, however coordination with TMA weren't a part of new directives, only with Jakarta ACC.
- 3.7 BMKG noticed that the communication method to disseminate information was not clearly determined in the directive, in particular communication between ACC and MWO for Special AIREP distribution.

- 3.8 NOF issued ASTHAM based on SIGMET and VAA/VAG, all information in VAA should be clearly understood. NOF found "unknown" terminology in second VAA: it becomes a confusing matter for NOF to arrange information in ASHTAM.
- 3.9 Volcanic Ash Graphic (VAG) issued by the VAAC on the website did not display a watermark "exercise", which would have stated that the VAG is intended for the exercise and addressed the question of the users.

3.10 Log of events during VOLPHIN 16/01 exercise

Log of events is provided as an attachment to this paper.

3.11 Lesson learned and Recommendation

i Lesson 1: Notification for Volcanic Ash Activity

In VOLPHIN 16/01, notification to the volcanic ash activity through ASHTAM published by the Jakarta International NOTAM Office (NOF) as the provisions in Annex 15 - Aeronautical Information Service (AIS) and ICAO Document 8126 - Manual AIS and which has been adopted in the Civil Aviation Safety Regulations (CASR) Part 175 of the Aeronautical Information Services, not through NOTAM as on the implementation of the Volcanic Ash Exercise which held in the Philippines (VOLPHIN 15/01).

<u>Recommendation</u>: Necessary to evaluate the rules concerning the notification of volcanic activity listed in Annex 15 and Document ICAO 8126 at a meeting of the International and Regional such as at a meeting of ICAO Asia / Pacific Volcanic Ash Exercise Steering Group (VOLCEX / SG) and ICAO Asia / Pacific AIS to AIM Task Force (AAITF), whether it is more effective through ASHTAM or NOTAM and also need more discuss regarding header message and content of ASHTAM and also ASHTAM Graphic automatically by system to describe the affected airspace and/or ATS Route.

ii Lesson 2: Mutual Agreement

Coordination and information sharing regarding volcanic activity between the operations units on such exercise running well, but needs to be improved and standardized in a mutual agreement.

<u>Recommendation</u>: To facilitate the coordination and delivery of information related to the volcanic activity can be created a Letter of Coordination Agreement (LOCA) between operation units and then poured in a Standard Operating Procedure (SOP) for each operating units.

iii Lesson 3: Effect of Volcanic Ash Exercise

The scenario used in such exercise only resulted in a delay, cancellation or diversion of flights not affect the aerodrome closure or diversion route flight.

<u>Recommendation</u>: Need to do Volcanic Ash Exercise scenarios impact the closure of an Aerodrome or diversion route to see the level of complexity of coordination among Stake Holder in shared common decision making (CDM). When and where these have an impact on route, there is a need to be prepared for contingency route.

iv Lesson 4: Exercise Directive should be finalized early

Exercise Directive which is used as a guide in carrying out the exercise VOLPHIN 16/01 finalized completed one (1) day prior to the exercise so that the player and the observer must re-learn the scenario.

<u>Recommendation</u>: Exercise Directive in order to be used in the next exercise has been discussed at the meeting of Volcanic Ash Exercise Steering Group (VOLCEX / SG) so that the player and the observer can learn and prepare for their duties and functions in the exercise early.

v Lesson 5: Watermark on VAG

Volcanic Ash Graphic (VAG) issued by the VAAC on the website did not display a watermark "exercise" which would have stated that the VAG is intended for the exercise would have addressed the question of the users.

<u>Recommendation</u>: For the next exercise, the VAAC can display VAG with watermark "exercise" so as not to cause question for the user.

vi The VOLPHIN Sheet

The VOLPHIN 16/01 sheet was sent when the exercise has already started. Although it was a simple spreadsheet, the participant still took some time to figure out how it will be applied.

<u>Recommendation</u>: The VOLPHIN sheet should be distributed in advance, preferably with the Directives

4. ACTION BY THE MEETING

- 4.1 The meeting is invited to:
 - a. Note the information contained in this paper, and;
 - b. Discuss any relevant matters as appropriate.

VOLCEX/SG/3-WP/3 14-16/03/2016

ATTACHMENT

Date Time (UTC)	Players	Event/Action	Remarks
17/01/2016	Exercise leader, ICAO Secretariat	Publish final version of exercise directive	
10/02/2016	Exercise Co- leader NOF Jakarta	Exercise Co-leader request NOF to issue preparatory NOTAMs to inform the aviation community of the exercise (A0384/16 NOTAMN 0)WRXX/OWXX/IV/NB0/W/000/999/0733511027E999 A)WAAF WIIF B)1602162300 C)1602170515EST E)VA EXERCISE VOLPHIN16/01. VOLCANIC ASH EXERCISE TAKES PLACE FROM 16 FEBRUARY 2300 TO 17 FEBRUARY 0515. EXERCISE NAME: VOLPHIN16/01. EXERCISE VOLCANO: MERAPI 60325 S0733 E11027 INDONESIA. FREE TEXT OF PROMULGATED EXERCISE MESSAGES CONTAINS: VA EXERCISE VOLPHIN16/01 OR VA EXERCISE F)SFC G)UNL)	
15/02/2016, 2300	Exercise Co- leader	GO/NO decision — inform participants • Volcano Asia Pacific Volphin 16/01 Form: Hean Beshory: Carbington (2) Date: Tue, Feb 15, 2016 at 9:13 AM Stubject: Re list enail To: Koichiro Kakihara (chakhara@mat.kiebou.go.jp>, Emile Jansons < Lamsons@bom.gov.au>, 'Mcalpine, Ashey' cality and the submitted on the submitt	
16/02/2016, 2300	Exercise Co- leader	Send email message to all players to announce commencement of the exercise • Hasan Bashory <bashory@aviasi.org> To aditya wibisono, k-kakihara@met.kishou.go.jp, kakihara516@gmail.com, dinni_n, Dear exercise leader, all player and observer. As planned in the Appendix D, VA Exercise Directive of VOLPHIN 16/01, I announce the commencement of the exercise is starting today 2016/02/17 at 2300UTC. Regards > Show original message Note: pls ignore the previous email (accidently sent) Reply, Reply All or Forward More</bashory@aviasi.org>	16/02/2016, 2300
16/02/2016, 2335	—	Simulated Merapi volcano eruption	
15/02/2016, 2345	VO (CVGHM)	Issue 1st exercise VONA (initial eruption details)	
16/02/2016, 23.50	AO (Indonesia Air Asia)	Issue AIREP SPECIAL (Wagon Air 7556 overhead KOTES 23.50z FL039 in vicinity plum eruption approximate FL 300 Volcanic Ash Cloud VA Exercise VOLPHIN 16/01 VA Exercise VA Exercise	

15/02/2016,	AO (Lion Air)	Issue AIREP SPECIAL (LNI 748 B737-900ER) Position	
23.58		LASEM at 23.50 FL340 Volcanic Ash Cloud VA Exercise	
		VOLPHIN 16/01 VA Exercise VA Exercise VA Exercise	
16/02/2016,	AO (Lion Air)	Issue AIREP SPECIAL (LNI 030 B737-900ER) Position ANY	
00.00		VOR at 23.50 FL350 Volcanic Ash Cloud VA Exercise	
		VOLPHIN 16/01 VA Exercise VA Exercise VA Exercise	
17/02/2016,	AO (Malaysia	Received VONA at 00.01	
00.01	Airline)		
17/02/2016,	BMKG, MWO	Received VONA	
00.04	Ujung Pandang		
	dan Jakarta		
17/02/2016,	NOF	Received VONA	
00.06			
17/02/2016,	AO (MI)	Received VONA	
00.10			
17/02/2016,	VAAC Darwin	Received VONA	VONA
00.11			received late
			due to SPAM
17/02/2016,	ACC Jakarta	Received Special AIREP Air Wagon 7566	
00.11			
17/02/2016,	AO (Indonesia	Received VONA	
00.12	Air Asia)	ot	
17/02/2016,	VAAC Darwin	Issue 1 st exercise VAA and VAG based on VONA	
00.13			
17/02/2016,	CASA	Received VAA	
00.14			
17/02/2016,	AO	Received VAA and VAG by webpage and directed email to	
00.15	(JETSTAR)	CASA by VAAC	
17/02/2016,	NOF	Received VAA	
00.16		D ' 1374 4	
17/02/2016,	BMKG, MWO	Received VAA	
00.18	Ujung Pandang		
17/02/2016	dan Jakarta	Less AIDED ODECIAL (INI 740 D727 000ED) Decident	
17/02/2016,	AO (Lion Air)	Issue AIREP SPECIAL (LNI 748 B737-900ER) Position LASEM at 23.50 FL340 Volcanic Ash Cloud VA Exercise	
00.20		VOLPHIN 16/01 VA Exercise VA Exercise VA Exercise	
		VOLPHIN 10/01 VA Exercise VA Exercise VA Exercise	
		Issue AIREP SPECIAL (LNI 030 B737-900ER) Position ANY	
		VOR at 23.50 FL350 Volcanic Ash Cloud VA Exercise	
		VOLPHIN 16/01 VA Exercise VA Exercise VA Exercise	
17/02/2016,	ACC Jakarta	Received LNI 030 Special AIREP	
00.20	INCE JANAITA		
17/02/2016,	ACC Jakarta	Sent Special AIREP AWQ7566 and LNI 030 to Jakarta MWO	
00.25	I SUC Jakarta		
17/02/2016,	ICAO	Disregard AIREP Lion, it is not ICAO Formatted AIREP	
00.27	Secretary		
17/02/2016,	MWO Ujung	WVID21 WAAA 162355,	
00.28	Pandang	WVID21 WAAA 102555, WAAZ SIGMET A09 VALID	
00.20	1 undung		
		162355/170555 WAAA-WAAZ Ujung Pandang FIR VA	
1	1	Exercise VOLPHIN 16/01 VA Eruption MT Merapi PSN S07	

		33 E110 27, VA CLD OBS at 23.50 WI:	
		S0714 E11049 – S0727 E11058 – S0744 E11030 – S0735	
		E11019 – S0728 E11019 – S0719 E11026 – S0714 E11049	
		SFC/FL350 MOV NE 20 knots	
17/02/2016, 00.31	ACC Ujung Pandang	Received SIGMET	
17/02/2016, 00.10	MWO Jakarta	WVID20 WIII 170010	
		WIIZ SIGMET 04 VALID 170010/0610 WIII –WIIZ JAKARTA FIR EXERCISE VOLPHIN 16/01 VA ERUPTION MT MERAPI PSN S0733 E11017 VA CLD OBS AT 0010 z WI :	
		S0714 E11049 – S0727 E11058 – S0744 E11052 – S0744 E11030 – S0735 E11019 – S0728 E11019 – S0719 E11026 MOV NE 20 knots	
17/02/2016,	VAAC Darwin	Received SIGMET from MWO Jakarta and Ujung Pandang	
00.31 17/02/2016, 00.22	ACC Jakarta	Received SIGMET	
00.32	Airport	Received Message	
00.34	Authority Surabaya	Received Message	
17/02/2016, 00.35	NOF	Received SIGMET from MWO Jakarta and Ujung Pandang	
17/02/2016, 00.36	NOF	Issued ASHTAM : VAWR1637 WAAF 02170010	
		ASHTAM 1637	
		A)WAAF	
		B)02162345	
		C)MERAPI 60325	
		D)S0733 E11027	
		E)RED ALERT	
		F)VA EXERCISE VOLPHIN16/01. SFC/FL350 S0714 E11049 - S0727 E11058 -	
		S0744 E11052 - S0744 E11030 - S0735 E11019 - S0728 E11019 - S0719 E11026	
		G)MOV NE 20KT	
		H)W17N	
		I)NIL	
		J)VA EXERCISE VONA	
		K)VA EXERCISE ERUPTION AT 20160216/2345Z TO	

		FL350 MOV NE 20KT.	
		FCST VA CLD +6 HR: 17/0610Z NOT AVBL	
		FCST VA CLD +12 HR: 17/1210Z NOT AVBL	
		FCST VA CLD +18 HR: 17/1810Z NOT AVBL	
		RMK: VA EXERCISE VOLPHIN16/01 VONA RECEIVED INDICATING	
		ERUPTION TO FL350. A MORE DETAILED ADVISORY WILL BE ISSUED	
		SHORTLY. VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA	
		EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA	
		EXERCISE VA EXERCISE.	
		WARS Allowed Vall Wes/g 4g Wes/g 4g Subaction Wes/g 4g Subaction Wes/g 4g Subaction Wes/g 4g Subaction Subaction Mars Mars Mars Subaction Mars Mars Subaction Mars Subaction Mars Subaction Mars Subaction Subaction Subaction Mars Subaction Subaction Mars Subaction Suba	
17/02/2016, 00.36	Airport Authority Surabaya	Airport authority Surabaya forward SIGMET message to stake holder at Juanda community. (Stake holder airport Juanda Surabaya)	
17/02/2016, 00.36	ACC Ujung Pandang	Received ASHTAM & monitor affected area	
17/02/2016, 00.36	VAAC Darwin	Issue second VAA	Exercise 2nd
17/02/2016, 00.37	MWO Ujung Pandang	Second SIGMET based on 2nd VAA has been sent : WVID21 WAAA 170030	
		WAAZ SIGMET A01 VALID 170015/170615 WAAA-	
		WAAZ UJUNG PANDANG FIR VA EXERCISE VOLPHIN16/01 VA ERUPTION MT MERAPI PSN S0733 E11027 VA CLD OBS AT 17/0015Z WI S0706 E11055 - S0729 E11002 - S0744 E11052 - S0735 E11019 - S0744 E11030 - S0735 E11019 - S0728 E11019 S0706 E11030 - S0706 E11055 SFC/FL350 MOV NE 20KT=	
17/02/2016,	ACC Ujung	Start coordinate with Surabaya TMA regarding VA event,	
00.38	Pandang Airport	preparing any actions Airport authority Surabaya will monitor all effected flight	
00.39	Authority	schedule departure from and to Surabaya	
	Surabaya		

17/02/2016	ACC Intrasta	Dessived ASUTAM and plotting in Dodon someon as Denger	[
17/02/2016, 00.40	ACC Jakarta	Received ASHTAM and plotting in Radar screen as Danger Area	
17/02/2016,	AO (Lion Air)	Lion Air	
00.42	AO (LIOII AII)	AIREP SPECIAL [LNI 030 B 737-900ER]position [ANY	
00.42		VOR]at [23:50]maintain [FL 350] MT Merapi eruption	
		approximately FL 300. VA exercise, VA exercise.	
		approximately FL 500. VA exercise, VA exercise.	
		AIREP SPECIAL [LNI 030 B 737-900ER]position [ANY	
		VOR]at [23:50]maintain [FL 350] MT Merapi eruption	
		approximately FL 300. VA exercise, VA exercise.	
17/02/2016,	ACC Ujung	Copied pilot report LNI030 position ANY	
00.43	Pandang		
17/02/2016,	AO (Jetstar)	For users of Flight Explorer Merapi advice is plotting. Glenn	
00.45		JETSTAR	
		II CONTENT AND INTERNAL PROPERTY OF A CONTENT AND A CONTEN	
		All and the second seco	
		HE DEL CONTRACTOR DEL CONTRACTOR DE LA C	
		11 11 free hand have been	
17/02/2016,	ACC Ujung	Send special AIREP from LNI030 to MWO Ujung Pandang	
00.45	Pandang		
17/02/2016,	ACC Ujung	Start coordinate with Jakarta	
00.47	Pandang		
17/02/2016,	ACC Jakarta	Advise to aircraft at surrounding area in danger area to get off	
00.49		frequency	
17/02/2016,	AO (Virgin	NOF From Virgin Australia, could you please confirm that the	
00.49	Air)	ASHTAM was only sent via EMAIL and not released via	
		AFTN to the wider international audience.	
17/02/2016,	AO (Malaysia	To NOF: ASHTAM not received via AFTN	
00.50	Airlines)		
17/02/2016,	AO (Garuda	Send AIREP Garuda 438 to ACC Jakarta :	
00.52	Indonesia)		
17/02/2016,	AO (Malaysia	Received ASHTAM.	
00.55	Airline)		
17/02/2016,	AO (Silk Air)	MI175 will be departing DPS to SIN in 1 hour, the FLT route	
00.57		seems to be affected, any closure for affected airways?	
		(NOTAM?)	
17/02/2016,	ACC JAkarta	Received AIREP GIA438 position piala F350 VA moving to	
00.59		north east	
17/02/2016,	NOF	Issued second ASHTAM :	
00.59		VAWR1638 WAAF 02170015	
		ASHTAM 1638	
		A)WAAF	
		B)02170015	
		,	

	C)MERAPI 60325	
	D)S0733 E11027	
	E)RED ALERT	
	F)VA EXERCISE VOLPHIN16/01. SFC/FL350 S0706 E11055 - S0729 E11102 -	
	S0744 E11052 - S0744 E11030 - S0735 E11019 - S0728 E11019 - S0706 E11030	
	G)MOV NE 20KT	
	H)W17N	
	I)NIL	
	J)VA EXERCISE HIMAWARI-8	
	K)VA EXERCISE SCENARIO, VA OBS FL350 EXTENDING 40NM TO NE.	
	FCST VA CLD +6 HR: 17/0615Z SFC/FL350 S0804 E11043 - S0650	
	E11305 - S0549 E11252 - S0527 E11206 - S0634 E11015 - S0726	
	E11007	
	FCST VA CLD +12 HR: 17/1215Z SFC/FL350 S0805 E11050 - S0546	
	E11509 - S0439 E11455 - S0356 E11250 - S0625 E11000 - S0725 E10954 - S0800 E11020	
	FCST VA CLD +18 HR: 17/1815Z SFC/FL350 S0724 E11231 - S0642	
	E11647 - S0335 E11624 - S0249 E11428 - S0622 E10958 - S0725	
	E10951 - S0818 E11036	
	RMK: VA EXERCISE VOLPHIN16/01 VA OBS ON IR SAT IMAGERY AND	
	CONFIRMED BY GROUND REPORTS. HEIGHT BASED ON IR TEMP AND	
	ACCESS-R MODEL SOUNDING. FORECAST CONFIDENCE IS LOW. VA	
	EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE	

		BY BELANDARY THE STATE	
		High water	
		Sthart / Same	
		According backet inside VA area: Solo (V(AHO)	
		Distance Aerodrome to VA area; Adagta	
		- Ahmad Yan/Semarang : 10 NM Watkawa Akuko / - Bendara Surabaya : 105 NM Adod Radman Samera	
		9 300 B ATS Route affected by VA : WITN	
17/02/2016,	ACC Jakarta	Jakarta ACC also sent to Jakarta MWO special AIREP GIA438	
01.00			
17/02/2016,	AO (Qantas	As an exercise only - QF81 En-route to WSSS has been risk	
01.02	Airlines)	assessed and will be rerouted in flight to avoid ash.	
17/02/2016, 01.02	ICAO	Noted ASHTAM distribution queries. FYI the ASHTAM is	
17/02/2016,	Secretary	available through SADIS. ASHTAM 1638 received via AFTN at 0057z	
01.04	AO (Malaysia Airlines)	ASHTAW 1058 received via AFTIN at 00572	
17/02/2016,	AO (Qantas	Received ASHTAM via AFTN	
01.04	Airlines)		
17/02/2016,	NOF	Message to Silk Air : NOF not issued separate NOTAM for	
01.05		closure airspace and route for 2nd ASHTAM exercise	
17/02/2016,	ACC Jakarta	Received ASTHAM	
01.05			
17/02/2016,	AO (Lion Air)	Copied ASHTAM LNI 028 will avoid volcanic ash area,	
01.06	· · · · ·	standby submit flight plan	
17/02/2016,	AO (Silk Air)	To NOF, so in this situation, airline will decide the alternate	
01.07		routing and file in new ATC flt plan (no published airway	
		closure)	
17/02/2016,	ACC Jakarta	Jakarta ACC and Ujung Pandang ACC are coordinating about	
01.07		contingency plan VA	
17/02/2016,	ACC Ujung	ASHTAM 1638 received and monitoring area	
01.08	Pandang		
17/02/2016,	Co-Leader	ACC Ujung will you respond query from Silk Air?	
01.09			
17/02/2016,	ACC Ujung	ACC Ujung SOP on VA event never asking NOF for separate	
01.11	Pandang	NOTAM, only ASHTAM. We don't close the area &	
		airway(s). Each airline has risk management system regarding	
17/02/2016,	AO (Garuda	the event GA OCC acknowledged and noted. We are also performing	
01.14	AU (Garuda Airlines)	risk assessment and plotting VA.	
17/02/2016,	ACC Ujung	We follow & assess aircraft route of FPL & only giving	
01.14	Pandang	amendment route or suggestions based on affected area	
17/02/2016,	ACC Jakarta	Jakarta ACC still coordinating about ATFM measurement	
01.16			
17/02/2016,	AO (Virgin	Virgin Australia, completed risk assessment at 0105, currently	
01.16	Australia)	we have four arrivals to DPS between 0340 and 0615, all 4 are	
		continuing on flight planned tracks and we will continue to	
		monitor.	
17/02/2016,	ACC Ujung	Ujung ACC start coordinate with Jakarta ACC to confirm	
01.21	Pandang	Jakarta ACC fully understood about ASHTAM 1638. At this	
		point affected route still W17N. W45 east bound hasn't affect	
		yet	
17/02/2016,	AO (Garuda	GA OCC Plotting VA Merapi Exercise	
01.21	Airlines)		

17/02/2016,	ACC Jakarta	Jakarta ACC standby ATFM measurement Ujung ACC we are	
01.22	ACC JAKalla	still coordinating	
17/02/2016,	AO (Garuda	GIA615 sent AIREP to ACC Ujung Pandang	
01.22	Airlines)	GIAOIS sent AINER to ACC Opting I and ang	
17/02/2016,	ACC Ujung	Received AIREP GIA615 position SIPUT 0120Z VA Mount	
01.24	Pandang	Merapi move to NE VOLPHIN 16/01	
17/02/2016,	ACC Jakarta	Jakarta ACC and Ujung Pandang ACC still coordinating	
01.26	ACC Jakarta	Jakarta ACC and Ojung I and ang ACC sun coordinating	
17/02/2016,	ACC Ujung	Special AIREP GIA615 were sent to MWO	
01.32	Pandang	Special filled of to 15 were sent to 11 w o	
17/02/2016,	AO (Qantas	To Jakarta ACC - QF aircraft rerouted to avoid ash area - have	
01.33	Airlines)	you issued a Danger Area NOTAM?	
17/02/2016,	AO (Garuda	GA OCC send to briefing office:	
01.34	Airlines)	1. GA 232/233 CGK-SRG-CGK cancelled.	
01.01	1 1111105)		
		2. GA 290/291 CGK-MLG-CGK cancelled.	
		3. GA 222/223 CGK-SOC-CGK cancelled.	
		5. GA 222/225 COK-50C-COK cancened.	
		4. GA 404 CGK-DPS reroute airways avoid danger area	
		forecast VA at 06.15.	
17/02/2016,	ACC Jakarta	To Qantas Airlines : Jakarta ACC not issuing danger area	
01.35		NOTAM, it is conclude on ASHTAM	
17/02/2016,	AO (Indonesia	QZ OCC:	
01.39	Air Asia)	QZ658 JOG-SIN Reroute avoiding VA	
17/02/2016,	AO (Indonesia	QZ OCC:	
01.42	Air Asia)	QZ8454 DPS-SOC Retime	
17/02/2016,	AO (Silk Air)	MI175 DPS-SIN will be rerouted to avoid VA, MI104 SIN-	
01.43		SRG is retimed to 0830 UTC	
17/02/2016, 01.42	AO (Indonesia Air Asia)		
17/02/2016, 01.53	AO (Malaysia Airlines)	MH - Exercise - MH 141 KUL/SYD re-routing MH 129 KUL/MEL - on ground re filing to avoid VA ASH	
		MH715 KUL/DPS re timing	
17/02/2016,	ACC Jakarta	Jakarta ACC received a new flight plan from airlines and	
01.53		cancelled flight plan	
17/02/2016,	AO (Malaysia	Risk assessment completed. Allowable parameters defined	
01.58	Airlines)		
17/02/2016,	AO (Garuda	GA OCC - According to VA forecast at 06.15, some of GA	
02.00	Airlines)	flights airways will be affected especially flight from CGK to SRG, SOC, SUB, MLG vice versa.	
17/02/2016, 02.02	AO (Lion Airlines)	Lion Air 1.JT 565 JOG CGK STD 00.30Z Cancelled	

		2.JT 560 JOG DPS STD 00.25Z Cancelled	
		3.JT 670 JOG BPN STD 00.45Z Cancelled	
		4.JT 536 CGK SOC STD 00.50Z Cancelled	
		5.JT 537 SOC CGK STD 02.45Z Cancelled	
		6.JT 505 SRG CGK STD 02.45Z Cancelled	
		7.JT 506 CGK SRG STD 04.20Z Cancelled	
17/02/2016, 02.04	ACC Jakarta	Jakarta received cancelled FPL from LION air	
17/02/2016, 02.07	ACC Ujung Pandang	Exercise only - Ujung ACC received some modified route of overflying aircraft as well as cancelled FPL.	
17/02/2016, 02.13	AO (JETSTAR)	Exercise only - JETSTAR AUS/NZ risk assessment - JQ7 MEL-SIN and JQ27 SYD-HKT re-routed upwind and remaining well clear. DPS operations continuing with close monitoring. JQ116 DPS-SIN to be routed with southerly track from DPS with significant increase in flight time.	
17/02/2016, 02.18	ACC Ujung Pandang	Exercise only - Ujung ACC confirming Surabaya TMA regarding VA event, and as the result reported some cancelled DEP & diverted aircrafts	
17/02/2016, 02.24	Exercise Co Leader	Dear Exercise Leader, ICAO Secretary. I already sent email, for teleconference	
17/02/2016, 0130	Exercise Co- leader	Send email message inviting directing staff to join exercise teleconference at 0215. Exercise Teleconference (4) People	
		 Moh. Hasan Bashory -bashory@aviasi.org> To aditya wibisono, 編原 弘一郎, Kolchiro Kakhara, dinni_n, Gede Suantika, and 46 more Dear exercise leader, Directing Staff As scheduled in the list of action, linviting all of Directing Staff to join in exercise teleconference AT 0215 UTC, using WhatsApp application as the primary means. For those who are not listed yet in the WA Group please inform your WA number. Regards Regards To Moh. Hasan BASHORY Directorate of Air Navigation 	
		DGCA of Indonesia Reply, Reply All or Forward More	
17/02/2016, 02.29	ICAO Secretary	In lines with exercise directive [4.1] please provide brief update on significant issues not already covered in earlier discussions. Please start with VO.	
17/02/2016,	Exercise Co	I notice there is an internet connection issue when CVGHM try	
02.31	Leader	to issued first VONA	
17/02/2016, 02.32	AO (Silk Air)	Is radar vector by SUB ATC via south available for flights from west to SUB?	
17/02/2016, 02.36	ACC Ujung Pandang	Silk Air: according to the last plotting image from ASHTAM 1638 radar vector available only from west (e.g point RUPKA) for destination Surabaya	
17/02/2016,	CVGHM	During the exercise, we have a problem concerning VONA	

17/02/2016,	ACC Ujung	but no recipient received the email directly. Lately, maybe some of you are still receiving VONA delayed emails until now. I supposed that this system error (as we send this email automatically by the system) may be occurred because we have too much recipients so that Google thinks that we may SPAM everybody. Exercise only - Ujung ACC: For East bound flight from point	
02.40	Pandang	ANY radar vector still also available with cautious. All in- flight near the VA area strongly suggested avoid VA.	
17/02/2016, 02.43	AO (Garuda Airlines)	AIREP to MATSC from GA435. : AIREP SPECIAL GA435 PSN OVER SBR 02.40z VA MT Merapi MOV to NE VA CLD VOLPHIN 16/01 VA Exercise VA Exercise VA Exercise	
17/02/2016, 02.43	BMKG	I notice that the communication method to disseminate information was not clearly determined in the directive, in particular communication between ACC and MWO for Special AIREP distribution	
17/02/2016, 02.43	ICAO Secretary	Based on operational experience with VA events, exercise co- leader has requested change of plan so that next (and final) exercise VONA will be issued approx. 0300 UTC (instead of 0515 UTC) to indicate scenario where eruption has ceased but VA still exists. This will impact information contained in subsequent VA exercise messages	
17/02/2016, 02.49	VAAC Darwin	Nil significant issues to report. Next VAA will not include the small ash area near Merapi as per revised VONA	
17/02/2016, 02.50	NOF	We issued ASTHAM based on VAA, all information in VAA should clearly understood. we found "unknown" terminology on second VAA. it becomes confusing matter for NOF to arrange information in ASHTAM	
17/02/2016, 02.53	ICAO Secretary	Thank you VO, VAAC and NOF for updates. Please all use exercise sheet as necessary to record important details/observations made during course of the exercise. Any brief updates may now be sent from ACC Jakarta, ACC Ujung Pandang, please	
17/02/2016, 02.54	CVMBG	Exercise VOLPHIN 16/01 (Merapi Volcano Observer Report 2)	
		Merapi activity is decreased significantly on 17 February 2016 at 02:55 UTC, ash cloud has dissipated. State of activity is Level II (Advisory).	
		VONA with issued number 20160217/0300Z has been sent. Please kindly check your email and let me know if you already received it.	

		(1) VOLCANO OBSERVATORY NOTICE FOR AVLATION - VONA (2) Issued :2016012705002. (3) Volamo ::Mempi (26320) (4) Carrent Aviation Colour :empi (26320) (5) Colour :empi (26320) (6) Source :meni (26320) (7) Notice Volami :2016041202 (8) Volamo Location :S07 dg 32 min 31 are: E110 dg 26 min 31 are: (9) Area :Dameh Istimewa Yogokara, Indonesia (10) Volami Activity Sammy :Engrino has ceased. Volami activity has decreased significantly. (12) Volami Colal Hagit :Abd-roku on twishe. (13) Information :Abd-roku on twishe. (14) Remeks :- (15) Contacts :Tasificat - Car2-72-72-206 (16) Remeks :- (17) Colac SumMa, M. Si : :: Abd-roku on twishe. : :: Abd-roku on twishe. : :: Carter for Volamology and Goolgical Hazard Mfigation (CVGHM) : :: Testify the down own and molenioning Storb-section (CVGHM) : :: Testify the down own and molenioning Storb-section (Samtem & Java) Do Di Hender (Torawan) : : :: Based (Volacem Volacem Montoring Sub-section	
17/02/2016, 02.55	MWO Ujung Pandang	Communication between ACC Ujung and MWO for Special AIREP distribution was not clearly determined, we haven't received special AIREP from ACC Ujung to be forwarded to VAAC	
17/02/2016,	ICAO Secondaria	MWO - noted issues regarding special air-report relay. Will	
02.55	Secretary ACC Ujung	follow up after exercise. Area of VA affected on Ujung FIR, however coordination with	
03.00	Pandang	TMA weren't a part of new directives, still only with Jakarta ACC. About separate NOTAM we have agreed to simulate what we do on daily basis	
17/02/2016, 03.03	NOF	Received VONA	
17/02/2016, 03.03	AO (Silk Air)	Received VONA	
17/02/2016, 03.04	MWO Ujung Pandang	Received VONA	
17/02/2016, 03.04	ACC Ujung Pandang	Received VONA	
17/02/2016, 03.06	Mr. Nawaz, Singapore	Great effort everyone thanks. A suggestion to help airlines react faster, if FIR authority were to issue NOTAM about airways closure due ash contamination. Then airlines can quickly look at the routes and prioritize action. This will cut down on time each airline takes to plot the ash cloud and then check what is affected.	
17/02/2016, 03.06	ACC Jakarta	Received VONA	
17/02/2016, 03.13	ICAO Secretary	Reference NOTAM closing airspace and/or ATS routes. This was discussed at length at last VOLCEX/SG meeting. Globally and regionally agreed position is that airspace should not be closed. AOs retain responsibility for their own risk assessment processes. Further discussion available at next VOLCEX/SG meeting in March.	
17/02/2016, 03.13	ICAO Secretary	Understood. Unfortunately using this medium we can only give very brief responses. What will happen is that recommendations will be made arising from the analysis of the exercise outcomes. Discussion of NOTAM information will be	

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		included in the analyst/recommendations. FYI it was decided	
		that the exercise should be confined to current, implemented	
		operational procedures, rather than trying to implement new	
		procedures at late notice	
17/02/2016,	ICAO	Any further issues from AOs or ACCs? Also, any significant	
03.14	Secretary	observations from regulator (DGCA or CASA)?	
17/02/2016,	VAAC	VONA received	
03.15	DARWIN		
17/02/2016,	VAAC	Issued VAA and VAG	
03.15	DARWIN	DTG: 20160217/0315Z VAAC: DARWIN VOLCANO: MERAPI 263250 PSN: S0733 E11027 AREA: INDONESIA SUMMIT ELEV: 2968M ADVISORY NR: 2016/3	
		INFO SOURCE: VA EXERCISE VONA AVIATION COLOUR CODE: YELLOW ERUPTION DETAILS: VONA INDICATES LOCAL ERUPTION CEASED. ASH STILL VISIBLE ON SA	
		OBS VA DTG: 17/0315Z OBS VA CLD: SFC/F1350 S0728 E11106 - S0715 E11221 - S0701 E11239 - S0608 E11249 - S0549 E11224 - S0601 E11100 - S0629 E11042 - S0714 E11043 MOV NE 20KT	
		FCST VA CLD +6 HR: 17/0915Z SFC/FL350 S0705 E1145 - S0717 E11229 - S0656 E11322 - S0527 E11431 - S0434 E11417 - S0432 E11314 - S0530 E11131 - S0625 E11103 FCST VA CLD +12 HR: 17/1515Z SFC/FL350 S0653 E11355 - S0556	
		El1603 - S0414 El1542 - S0359 El1358 - S0519 El1211 - S0613 El1152 - S0653 El1213 FCST VA CLD +18 HR: 17/21152 SFC/FL350 S0658 El1355 - S0601	
		E11704 - S0350 E11703 - S0337 E11608 - S0417 E11340 - S0520 E11232 - S0606 E11222 - S0656 E11255	
		RMK: VA EXERCISE VOLPHIN16/01 SATELLITE IMAGERY INDICATES THE MAIN ERUFTION CLOUD HAS NOW DETACHED FROM THE VOLCANO.	
		VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA	
		EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE	
		NXT ADVISORY: NO LATER THAN 20160217/0615Z	
17/02/2016,	CASA (AU)	To ICAO Secretary : Nothing significant to add from down-	
03.16	CASA (AU)	under	
17/02/2016,	AQ (Qantas		
03.17	AO (Qantas	Agree with ICAO Secretary - airspace should not be closed by	
05.17	Airways)	NOTAM or AWYs closed - AO responsible to avoid ash using	
17/02/2016	ICAO	evidence based RA - thanks	
17/02/2016,	ICAO	Thank you all participants. Exercise leader and co-leader -	
03.17	Secretary	please make some final teleconference remarks	
17/02/2016,	Exercise	Exercise leader: Thanks co-leader, ICAO Secretariat and all	
03.19	Leader	participants of VOLPHIN16/01.	
		I'm very happy we are able to conduct the VOLPHIN16/01	
		today.	
		This exercise is the first volcanic ash exercise in Indonesia and	
		also the first attempt in the APAC Region to conduct volcanic	
		ash exercise which is assumed to impact on two FIRs.	
		I hope we will be able to conclude the exercise successfully	
		and to get a lot of lessons learnt through this exercise	
17/02/2016,	AO (Garuda	Garuda 608 sent it AIREP	
03.20	Indonesia)		
17/02/2016,	Exercise Co	DGCA will bring the exercise result as a part of flexible use of	
03.23	Leader	airspace discussion with the Military.	
17/02/2016,	Exercise Co	Look forward to, Mr. Hasan, south routing will be a very good	
03.26	Leader	alternative	
17/02/2016,	Exercise Co	There is a suggestion from our stake holder (other group), to	
03.26	Leader	put a big letter of "VA-Exercise" on VA Graph (chart)	
33.20			

17/00/2016	ICAO		
17/02/2016, 03.27	ICAO Secretary	Thank you, again, all teleconference contributors. Let's end this teleconference now - but please stay online to share info as	
00.27	Secretary	necessary up until exercise co-leader announces end of exercise	
17/02/2016,	MWO Ujung	Issue SIGMET :	
03.27	Pandang	MWO Ujung : WVID21 WAAA 170317	
		WAAZ SIGMET A03 VALID 170315/170915 WAAA-	
		WAAZ UJUNG PANDANG FIR VA EXERCISE VOLPHIN16/01 VA ERUPTION MT MERAPI PSN S0733 E11027 VA CLD OBS AT 17/0315Z WI S0728 E11106 - S0715 E11221 - S0701 E11239 - S0608 E11249 - S0549 E11224 - S0601 E11100 - S0629 E11042 - S0714 E11043- S0728 E11106 SFC/FL350 MOV NE 20KT=	
17/02/2016,	NOF	Received SIGMET	
03.28	NOI		
17/02/2016, 03.28	AO (Qantas Airlines)	AIREP to MATS XT324	
17/02/2016,	AO (Garuda	GA OCC keep monitoring VA activities and any updates from	
03.34	Indonesia) NOF	VAAC and BMKG AWR1640 WAAF 02170315	
03.35	NOF	AWK1040 WAAF 02170515 ASHTAM 1640	
		A)WAAF	
		B)02170315	
		C)MERAPI 60325	
		D)S0733 E11027	
		E)RED ALERT	
		F)VA EXERCISE VOLPHIN16/01. SFC/FL350 S0728 E11106 - S0715 E11221 -	
		S0701 E11239 - S0608 E11249 - S0549 E11224 - S0601 E11100 -	
		S0629 E11042 - S0714 E11043	
		G)MOV NE 20KT	
		H)W13 W16 W17N W45 W52 G461 M766	
		I)NIL	
		J)VA EXERCISE VONA	
		K)VONA INDICATES LOCAL ERUPTION CEASED. ASH STILL VISIBLE ON SA	
		FCST VA CLD +6 HR: 17/0915Z SFC/FL350 S0705 E11145 -	

		S0717	
		E11229 - S0656 E11322 - S0527 E11431 - S0434 E11417 - S0432	
		E11314 - S0530 E11131 - S0625 E11103	
		FCST VA CLD +12 HR: 17/1515Z SFC/FL350 S0653 E11355 - S0556	
		E11603 - S0414 E11542 - S0359 E11358 - S0519 E11211 - S0613	
		E11152 - S0653 E11213	
		FCST VA CLD +18 HR: 17/2115Z SFC/FL350 S0658 E11355 - S0601	
		E11704 - S0350 E11703 - S0337 E11608 - S0417 E11340 - S0520	
		E11232 - S0606 E11222 - S0656 E11255	
		RMK: VA EXERCISE VOLPHIN16/01 SATELLITE IMAGERY INDICATES	
		THE MAIN ERUPTION CLOUD HAS NOW DETACHED FROM THE VOLCANO.	
		VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE	
		VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE	
		NXT ADVISORY: NO LATER THAN 20160217/0615Z	
17/02/2016, 03.35	NOF	Amountain Amountain Amountain	
17/02/2016, 03.37	UJUNG ACC	AIREP IDX324 RECEIVED AND SENT TO MWO	
17/02/2016,	AO (Lion Air)	Acknowledge, monitor flight plan	
03.37	ACC Ujung	Exercise - ASHTAM VAWR 1640 received and being assess	

03.37	Pandang	by Ujung ACC	
17/02/2016,	ACC Jakarta	Received ASHTAM	
03.37			
17/02/2016,	MWO Ujung	Received AIREP and forwarded to VAAC	
03.37	Pandang		
17/02/2016,	ACC Ujung	Exercise - Ujung ACC coordinating with TMAs like Surabaya	
03.42	Pandang	& Bali regarding ASHTAM VAWR 1640. Traffic management	
		apply.	
17/02/2016,	Surabaya	Have 2 parking stand for wide body available and 3 narrow	
03.46	Airport		
	Authority		
17/02/2016,	ACC Ujung	Exercise - Ujung ACC commences coordinating with Jakarta	
03.48	Pandang	related ASHTAM 1640 discuss about traffic management and/	
		or any diverse/ RTB flight	
17/02/2016,	AO (Garuda	GA 608 sent AIREP to MATS	
03.48	Indonesia)		
17/02/2016,	AO (Silk Air)	Emile, is it possible to use watermark to indicate VA exercise	
03.48		on VAA plot for this exercise? Heard a few airlines missed out	
1 = 10 2 12 0 1 5		the small remarks at the bottom	
17/02/2016,	AO (Garuda	Special AIREP GIA608 received by Ujung ACC and	
03.52	Indonesia)	forwarded to MWO	
17/02/2016,	MWO Ujung	SPECIAL AIREP received and forwarded to VAAC	
03.54	Pandang		
17/02/2016, 03.56	AO (Lion Air)	LNI 971 SUB~BTH RTB SUB	
17/02/2016,	ACC Ujung	Exercise - Ujung ACC receiving request of LNI971 RTB,	
03.59	Pandang	followed coordination with SUB TMA	
17/02/2016,	VAAC Darwin	To Silk Air : At this stage of the exercise it is not possible to	
04.00	VILLE Durwin	add the watermark. Agree, for future exercises we should	
0.000		consider this.	
17/02/2016,	ICAO	Dear all. Just a reminder to please use the exercise sheet (or	
04.02	Secretariat	similar) to record important information and submit to the	
		Secretariat by end of week if possible (for inclusion in	
		VOLCEX/SG/3 debrief and planning discussions next month).	
		Also, we seem to have been distributing many exercise special	
		air-reports in VOLPHIN16/01 - which is very helpful. To help	
		us account for all of them, please also email copies of exercise	
		special air-reports including UTC time of each report to the	
17/02/2014		Secretariat.	
17/02/2016,	AO (Lion Air)	LNI871 is contacted to sub ATS and monitor available parking	
04.02	Mag Diari	stand	
17/02/2016,	Mrs. Dinni Noerdiani	To ICAO Secretary : suggest by VOLPHIN16-01 exercise observation, that should be evaluated is the standardization of	
04.14	noerdiani		
		issuing VA information By ASHTAM (instead of NOTAM) according to ICAO SARPs by the NOFs	
17/02/2016,	ACC Ujung	Exercise - Ujung ACC coordinating with Jakarta ACC, after	
04.15	Pandang	assessed the hazard for air traffic flow management suggest to	
VT.15	1 undung	change the Transfer Control Point (TCP) from point ANY that	
		usually use for east bound traffic from Jakarta ACC to point	
		RUPKA & for west bound traffic from Ujung ACC usually	
		using point MADIN to point SPIKO. Known in agreement	
		between Ujung Pandang ACC & Jakarta ACC ATS	

		Coordinator agreement "ALTER TWO	
17/02/2016,	ACC Jakarta	Jakarta ACC agree to execute Contingency plan VA agreement	
04.17		Alter Two	
17/02/2016, 04.17	VAAC Darwin	17/02/2016, 04.17	
17/02/2016, 04.17	MWO Ujung Pandang dan Jakarta	Received fourth VAA	
17/02/2016, 04.20	AO (Garuda Indonesia)	GA OCC report: 1. GA 364 SRG-SUB cancelled STD 03.20	
		2. GA 310/311 CGK-SUB-CGK cancelled STD 03.10	
		3. GA 292 CGK-MLG STD 03.45 after airborne and position PIALA observed VA movement to NE and decided RTB to CGK. Prefer to re-timing	
		4. GA 293 MLG-CGK STD 06.10 prefer to re-timing due to aircraft rotation from GA292.	
		5. GA 408 CGK-DPS STD 04.35 re-route airways	
17/02/2016, 04.23	ICAO Secretary	Thank you, Mrs. Dinni N. Agreed that regional position on use of ASHTAM vs. NOTAM for VA be further discussed at VOLCEX/SG/3 (March 2016) and possibly at AAITF (June 2016)	
17/02/2016,	AO (Indonesia	IAA OCC:	
04.23	Air Asia)	QZ302 SUB-DMK reroute avoid VA	
17/02/2016,	MWO Ujung	Issued SIGMET :	
04.24	Pandang	WVID21 WAAA 170420 WAAZ SIGMET A04 VALID 170415/171015 WAAA-	
		WAAZ UJUNG PANDANG FIR VA EXERCISE VOLPHIN16/01 VA ERUPTION MT MERAPI PSN S0733 E11027 VA CLD OBS AT 17/0415Z WI S0703 E11240 - S0624 E11324 - S0551 E11311 - S0550 E11206 - S0624 E11139 - S0702 E11205 - S0703 E11240 SFC/FL350 MOV NE 20KT=	
17/02/2016, 04.25	AO (Indonesia Air Asia)	Received SIGMET	
17/02/2016, 04.27	ACC Ujung Pandang	Exercise Ujung ACC following internal coordination with Jakarta ACC receiving GIA408 from RUPKA & suggestions of amendment new route(s) accepted then followed by GIA40	
17/02/2016,	ACC Jakarta	Exercise VA Jakarta ACC acknowledge GIA292 special report	

04.27		and forwarded to Jakarta MWO	
17/02/2016,	AO (Indonesia	IAA OCC:	
04.30	Air Asia)	QZ302 sent AIREP to MATS	
17/02/2016, 04.31	NOF	Received SIGMET	
17/02/2016, 04.38	ACC Jakarta	Exercise Jakarta ACC receiving REQ GIA 292 RTB, and followed coordination with Jakarta lower	
17/02/2016,	ACC Ujung	Exercise - Ujung ACC received AIREP AWQ302 position	
04.40	Pandang NOF	KOLTA and forwarded to MWO Issued ASHTAM :	
04.42	NOI	VAWR1641 WAAF 02170415	
		ASHTAM 1641	
		A)WAAF	
		B)02170415	
		C)MERAPI 60325	
		D)S0733 E11027	
		E)YELLOW ALERT	
		F)VA EXERCISE VOLPHIN16/01. SFC/FL350 S0703 E11240 - S0624 E11324 -	
		S0551 E11311 - S0550 E11206 - S0624 E11139 - S0702 E11205	
		G)MOV NE 20KT	
		H)W13,W16,W31,W31W,W52,M766,L511,M635	
		I)NIL	
		J)VA EXERCISE PIREP, HIMAWARI-8	
		K)VA EXERCISE SCENARIO VA ERUPTION TO FL350	
		FCST VA CLD +6 HR: 17/1015Z SFC/FL350 S0657 E11259 - S0638	
		E11347 - S0558 E11437 - S0511 E11436 - S0511 E11346 - S0533	
		E11223 - S0610 E11206 - S0655 E11230	
		FCST VA CLD +12 HR: 17/1615Z SFC/FL350 S0635 E11431 - S0547	
		E11533 - S0445 E11536 - S0448 E11414 - S0515 E11303 - S0602	
		E11252 - S0646 E11337	
		FCST VA CLD +18 HR: 17/2215Z NO VA EXP	
		<u>I</u>	

		RMK: VA EXERCISE VOLPHIN16/01 VA TO FL350 CLEARLY DISCERNIBLE ON SAT IMAGERY, EXPECTED TO	
		DISSIPATE BY 18/0000Z. ERUPTION TO FL140 CONTINUES AT THE VOLCANO. VA	
		EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA	
		EXERCISE VA EXERCISE VA EXERCISE	
		Aerodrome placed inside VA area: AhmoD YANI/ SEMARANO A Aron Second Come to VA area: AhmoD YANI/ SEMARANO Aron Second Come to VA a	
17/02/2016, 04.50	MWO Ujung Pandang	AIREP received from ACC Ujung and forwarded to VAAC	
17/02/2016, 05.00	AO (Garuda Indonesia)	AIREP SPECIAL GARUDA 610 PSN 05.00z NO VA AND NO VA CLOUD VOLPHIN 16/01 VA EXERCISE VA EXERCISE	
17/02/2016, 05.10	ACC Jakarta	Exercise- Jakarta ACC received special AIREP GIA610 and forwarded to Jakarta MWO	
17/02/2016, 05.15	MWO Jakarta	Special AIREP received and forwarded to VAAC.	
17/02/2016, 05.17	ICAO Secretary	Congratulations all participants and observers in VOLPHIN16/01. We have gathered much valuable information from your exchanges which will be used to support the debrief meeting and planning meeting (VOLCEX/SG/3) next month - which of course is intended to make recommendations on how to improve the air navigation system's response to VA events. Please remember that your contributions are much appreciated and it would be most helpful if your summaries (e.g., VOLPHIN16/01 sheet) are received by the Secretariat by the end of the week.	
17/02/2016, 05.17	Exercise Co- leader	Send email message to all players to announce cessation of the exercise	

		CESSATION of the VA Exercise	
		Moh. Hasan Bashory - bashory @aviasi.org> to adiya. 親原以一般. Kolchiro. dimi_n. Gede, gedesuantika, e.jansons, VAAC. Rekso.har	
		Dear Exercise Leader, ICAO Secretariat, all Exercise Player and Observer. At 0515Z 1 declare the cessation of the exercise.	
		It will then followed by: VAAC; issue final exercise VAA, MWVo: cancellation exercise SIAMET and	
		NOT: careful on excrise ASI/TAM NOT: careful on excrise ASI/TAM Thank you for your active participation and support.	
		Best Regards	
		_	
		Moh. Hasan BASHORY Directorate of Air Navigation DGCA of Indonesia	
17/02/2016,	AO (Lion Air)	AIREP TO MATSC	
05.19		AIREP SPECIAL LNI 029 B737 ER PSN ENTAS maintain FL	
		360 NO.VOLCANIC ASH CLOUD VOLPHIN 16/01 VIA EXERCISE VA EXERCISE VA EXERCICE	
17/02/2016,	ACC Ujung	EXERCISE VA EXERCISE VA EXERCICE Exercise - Ujung ACC receiving AIREP LNI029 and	
05.20	Pandang	forwarded to MWO	
17/02/2016,	AO (Lion Air)	AIREP SUB ATC	
05.20		AIREP SPECIAL LNI 857 B 737ER POSITION KASOL	
		MAINTAIN FL 200	
		NO VOLCANIC ASH CLOUD VOLPHIN 16/01 VA exercise	
15/02/2016		VA exercise VA exercise	
17/02/2016, 05.20	VAAC Darwin	Issued Final VAA :	
03.20		VA ADVISORY DTG: 2016021/05202	
		VAAC: DAWNIN VOLCANO: WERREY 263250 PSN: 50733 Ell027	
		AREA: INDONESIA SIGNAT ELEV: 2966M ADVISORX NR: 2016/S	
		INFO SOURCE: VA EXERCISE AVIJATION COLOUR CODE: VELOW ERUPTION DETAILS: VA EXERCISE SCENARIO ERUPTION HAS NOW CREARED	
		CLASED OBS VA DTG: 17/0520Z OBS VA CLD: VA NOT IDENTIFIABLE FM SATELLITE DATA WIND SFC7/FL350 VH20XT	
		SCOT VA CLD +6 IR: 17/1202 NO VA EXP PCST VA CLD +12 IR: 17/1202 NO VA EXP PCST VA CLD +12 IR: 17/1203 NO VA EXP	
		IUGI VA CLU POLINA 1/2220 KO VA LAF TANK VA EXERCISE VOLPHINIG/OL END OUTHER ADVISORIES VA EXERCISE VA EXERCISE VA EXERCISE VA XEXECISE VA XEXECISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA XEXECISE VA	
		EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VA EXERCISE VXT ADVISORY. NO TUMERE ADVISORIES	
		17(0520Z	
		NO VA EXP	
		nde wei foreison	
		1703307	
		17/07202 NO VA EXP NO VA EXP	
		rea A L	
		Distance due mension Distance 1% Distance Distance	
17/02/2016,	ACC Ujung	Exercise - Ujung ACC receiving airep LNI857 from SUB	
05.24	Pandang	TMA and forwarded to MWO	
17/02/2016,	NOF	VAA received	
05.24			
17/02/2016, 05.29	MWOs	VAA received	
17/02/2016,	MWO Ujung	WVID21 WAAA 170525	
,,,	Juine S Sjuine		

05.29	Pandang	WAAZ SIGMET A05 VALID 170525/171125 WAAA-	
		WAAZ UJUNG PANDANG FIR VA EXERCISE	
		VOLPHIN16/01 CNL SIGMET A04 170420/171020=	
17/02/2016,	MWO Ujung	Issue SIGMET cancel	
05.32	Pandang		
17/02/2016,	AO (Garuda	AIREP SPECIAL WAGONAIR SIX FIVE NINER POSITION	
05.35	Indonesia)	PASING CHARLIE LIMA PAPA ZERO FIVE ONE ZERO	
		NO VOLCANIC ACTIVITY AND NO VOLCANIC ASH	
		CLOUD VOLPHIN 16/01 VA EXERCISE VA EXERCISE	
1 = 10 2 12 0 1 5	NOF	VA EXERCISE	
17/02/2016,	NOF	Issued NOTAM Cancel for Volcex VOLPHIN 16/01 :	
05.42		(A0451/16 NOTAMC A0384/16	
		Q)WRXX/QWWCC/IV/NBO/W/000/999/0733S11027E999	
		A)WAAF WIIF B)1602170539	
		E)VA EXERCISE VOLPHIN16/01 HAS CONCLUDED.	
		ERUPTION HAS CEASED OF MERAPI 60325 S0733	
		E11027 INDONESIA	
		AS REPORTED BY VOLCANO OBSERVATORY AT 0520.	
		VOLCANIC ASH CLOUD HAS DISSIPATED.	
		VOLCANIC ASH CLOUD NO LONGER VISIBLE.VA	
		EXERCISE VA EXERCISE VA EXERCISE	
	Exercise	Exercise leader: Dear all, I am glad that the VOLPHIN16/01	
	Leader	has finished without any significant trouble.	
		I hope all the experiences and lessons learnt through this	
		exercise will improve future VA exercises as well as VA	
		contingency plan in the APAC Region more and more.	
		I really appreciate your work and support for the	
		VOLPHIN16/01. And hope to see you at the VOLCEX/SG/3	
		meeting next month	
	Exercise Co	Thanks a bunch to Mrs Dinni and team, we do hope this	
	Leader	exercise could ease the preparation of the ATM Contingency	
		Plan on VA.	
		Thanks also to Emilie from VAAC for updating the VAA/VAG	
		timely	
		All of Air Operator, MWO, CVGHM, AirNav (NOF, ACCs),	
		Airport authority of Surabaya we appreciate of your active	
		participation.	