

A night view of a city, likely Fukuoka, Japan, with a large fireworks display over a body of water. The fireworks are in various colors, including red, orange, yellow, green, and blue. The city lights are visible in the background, and the water reflects the lights and fireworks. The fireworks are exploding in the sky, creating a large, colorful display. The city lights are visible in the background, and the water reflects the lights and fireworks. The fireworks are exploding in the sky, creating a large, colorful display. The city lights are visible in the background, and the water reflects the lights and fireworks.

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

Fukuoka ATMC, JCAB
Samara, Russia, 3 - 6 June 2014



Lesson learned
of VOLKAM14

1.Introduction

In order to confirm the procedures for sharing information on volcanic eruption and estimate influence on air traffic by spreading volcanic ashes, we carried out VOLKAM14 that was on the assumption that a volcano erupts in the Kamchatka Peninsula in Mar 2014.

Airlines, meteorological facilities, State ATM Corporation, FAA and JCAB participated in the exercise.

Although some issues remained unsolved at VOLKAM13, we solved most of them and greatly advanced at VOLKAM14 of this year. We would like to give a presentation on the intervals of VAA issue and the effectiveness of information sharing sheet. In addition, we would like to have a small discussion on CHG message from in-flight aircraft .

1.VAA/VAG issue interval

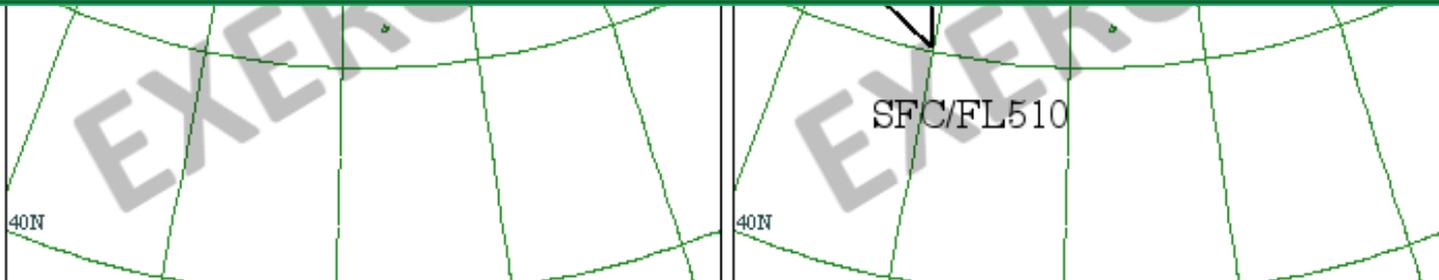
At VOLKAM14 exercise, domestic airlines had an opinion that they would like to receive the VAA at intervals of every 6 hours to shorter.

We had a discussion on the VAA with Tokyo VAAC , so we would like to share the details.

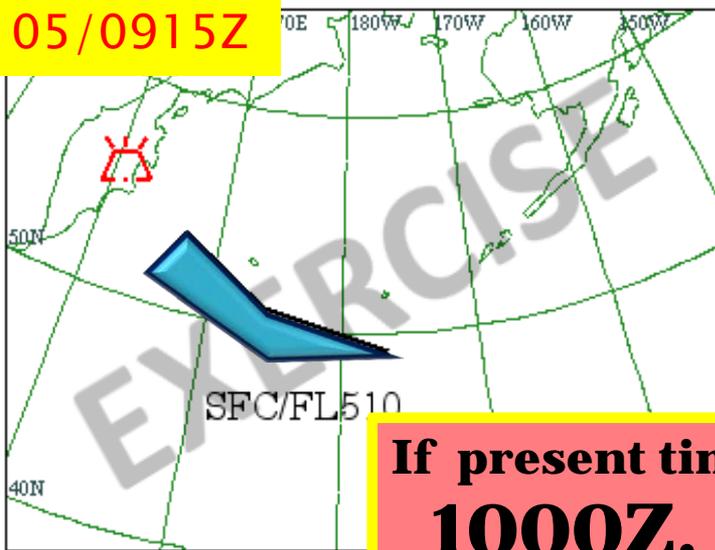
VAAC issues VAA/VAG every 6 hours. Even if the expected airspace in 6 hours is out of volcanic ashes distribution, airlines shall consider the area as “the airspace where no aircraft is allowed to fly”.



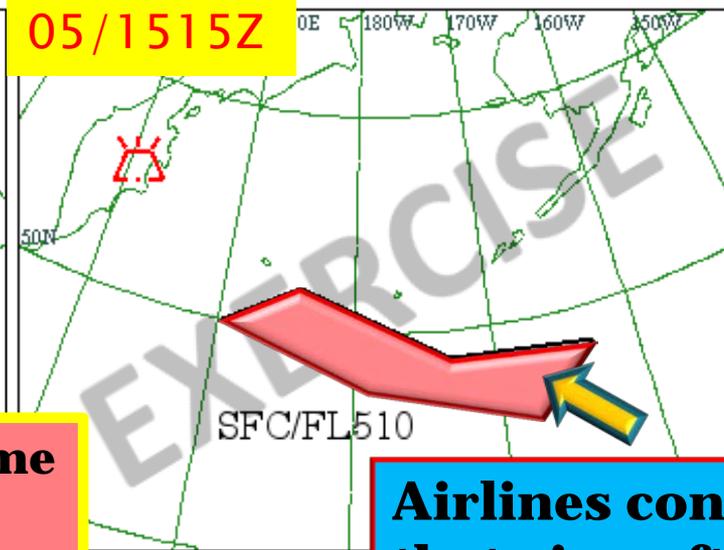
“the airspace where aircraft are not allowed to fly”



05/0915Z



05/1515Z



If present time
1000Z,

Airlines consider
that aircraft are not
allowed to fly in the
airspace.

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

SOURCE: EXERCISE VOLCANO
AVIATION COLOUR CODE: N
ERUPTION DETAILS: EXERCISE
EXTD SE REPORTED
RMK: EXERCISE VOLKAM14
NXT ADVISORY: 20140305/0100Z

If VAAC shortens the VAA/VAG issue intervals, airlines could define the restricted areas in a short period.

As a result of that, they can have more choices to detour their aircraft in order to avoid volcanic ashes.

We had a discussion on the proposal with Tokyo VAAC.



Tokyo VAAC answered as follows.

➤ In ICAO standards, it is prescribed that VAA/VAG normally shall be issued every 6 hours.

➤ Tokyo VAAC burdened themselves with issuing all VAA every 3 hours.

➤ It is possible for Tokyo VAAC to grant the request because they issued the VAA every 3 hours when Sarychev Peak erupted in 2009.

➤ Tokyo VAAC has been investigating at Meteorological International Committee if they could issue VAA instantly in case a volcano catastrophically erupts and airlines or related facilities request VAA/VAG issue every 3 hours.



2. The utility of VOLKAM SHEET

The information sharing sheet which is used for teleconference at volcanic ashes exercise is called VOLKAM sheet.

Although Fukuoka ATMC prepared the VOLKAM sheet at VOLKAM 14 exercise in advance, it was not utilized by the participants because registration on the WEB had not completed.

If the participants verbally report important matters at a teleconference, we might miss hearing about beneficial information. If we record them in writing, however, it is valuable as an information sharing tool.



VOLKAM SHEET

Facility name _____

Item Time	Present condition (aircraft operation, phase of eruption, position of volcanic ash etc.)	Estimated correspondence (flow control, reset PACOTS, timing of next forecast etc.)	Remarks

VOLKAM SHEET

Facility name Fukuoka ATMC

Time \ Item	Present condition (aircraft operation, phase of eruption, position of volcanic ash etc.)	Estimated correspondence (flow control, reset PACOTS, timing of next forecast etc.)	Remarks
1st Telecon 2300z	<ul style="list-style-type: none"> •No influence in traffic flow. •<u>Eruption has weakened.</u> <i>(note: this is an example that meteorological organization issue.)</i> 	<ul style="list-style-type: none"> •Resetting PACOTS is under examination in the south of 38 degrees north. •<u>Next VAA will be issued @ 0000z</u> <i>(note: this is an example that meteorological organization issue.)</i> 	<ul style="list-style-type: none"> •Some aircraft requested VA info in the air.
0045z	<ul style="list-style-type: none"> •PACOTS reset in the south of 40 degrees north. 	<ul style="list-style-type: none"> •Domestic flow control 	
2nd Telecon 0100z			

Fill in your facility name

Draw a line between each information

Short sentence

Sample

sequentially

VOLKAM sheets are utilized in order to share information on each participant by fill in the sheet in advance so that they can concentrate on discussing the problems at the teleconference.

In addition, each participant fills in, updates and shares the VOLKAM sheet in case of any matter of importance, which makes it possible for other participants to take effective measures on the basis of the information.

The advantages of VOLKAM sheet is

© **We can look again at the utterances because it's re-readable.**

© **We can instantly share the same contents with many related personnel without discrepancies by publishing VOLKAM sheets.**

By utilizing VOLKAM SHEET...

It helps to bring the present problems into focus and cope with them.

By publishing VOLKAM sheets, AOC (Aeronautical Operational Control) also can refer to and utilize the other airlines' information.

The advantage above is on the assumption that a real volcano erupts. One piece of information combines with other information by sharing VOLKAM sheets with related personnel, and it can be worthwhile information in order to save lives on the aircraft.

3. CHG message for in-flight status aircraft

There was an inquiry from an airline concerning why ATC facilities does not accept route change intentions by receiving CHG message when in-flight aircraft changes its route within Fukuoka FIR.

The specifications of JCAB system do not apply to CHG message from in-flight aircraft.



Operators send CHG message to ATC facilities when their in-flight aircraft need to change its route. Although the specifications of Russia and FAA system are designed to accept CHG message from in-flight aircraft, the one of JCAB is not.

We have some questions as follows.

1. Does the Flight Data deal with CHG message or is it automatically updated in flight plan?

2. Do dispatch and the pilot agree with each other when CHG message is sent to ATC facilities?

3. In Russia and FAA, do they issue re-route clearance when they receive CHG message from in-flight aircraft?
If so, how do they issue clearance when the aircraft change its route outside of the controlled airspace?

4. Is there any disadvantage when an ATC directly receive a route change request from in-flight aircraft?



JCAB has been summarizing the opinions from ATC facilities and airlines, and investigating the procedures for the receipt of CHG message from in-flight aircraft.



Спасибо за внимание.

спасибэ зэ бримэ'эниэ