

Nineteenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group (CPWG/19)

(Tokyo, Japan 11-15 May 2015)

Agenda Item 5: Provide Status on CPWG/18 Actions

UPDATE ON VOLKAM/15 EXERCISE

(Action Item CP16-05, CP18-01)

(Presented by State ATM Corporation of Russia)

SUMMARY

This paper presents information on the results of the recent VOLKAM/15 volcanic ash exercise.

1 Introduction

1.1. Pursuant to the Exercise Directive approved by ICAO VOLCEXSG EAST/9 the international volcanic ash exercise in the far east part of the ICAO EUR region VOLKAM/15 took place between 2200Z on April 15 and 0400Z on April 16, 2015.

2 Discussion

2.1. The Exercise headquarters were deployed in the premises of the Main ATM Center of Russia (State ATM Corporation of Russia). Alexey Buevich, Head of Strategic Planning, Main ATM Center of Russia acted as VOLKAM/15 Exercise Leader assisted by State ATM Corporation's staff (Messrs Vladimir Synnikov, Konstantin Varfolomeyev and Viktor Tsimbal). The work of Exercise HQ was further facilitated by Ms. Elena Glukhovskaya of Federal Air Transport Agency of Russia, Ms. Galina Kotova of the Russian AIS, Ms. Yuliya Naryshkina of Aviamettelekom (Roshydromet) and Mr. Christopher Kheoan of ICAO EUR/NAT office. The VOLKAM/15 exercise also involved State ATM Corporation's regional branches: Far East Air Navigation (Khabarovsk ACC/ZCC), North-East Air Navigation (Magadan ACC) and Kamchatka Air Navigation (PK ACC), Yelozovo MWO and KVERT. The international stakeholders included: US: ATCSCC, Anchorage ARTCC, Oakland ARTCC, Alaskan VO, VAAC Anchorage, American, United, Delta Airlines, Canada – Vancouver ACC, Japan – Fukuoka ATM Center, VAAC Tokyo, Japan and All Nippon Airlines and China – Cathay Pacific Airways (Hong Kong).

2.2. The exercise has met the following aims and objectives:

- demonstrate coordination procedures between all participating parties (ANSPs, ATM Centres, AIS, VO, VAACs, MWO, users);
- demonstrate tactical re-routes in both Russian Federation and Japan;
- demonstrate VAAC Tokyo and VAAC Anchorage handover;

- demonstrate transmission of air-reports on volcanic ash in accordance to Annex 3 (aircraft->ACC->MWO->VAAC); and
- demonstrate information sharing via teleconferences and website (website to be confirmed)

2.3 The full report is contained in the Attachment A to this information paper.

3 Recommendation

3.1. The Meeting is invited to note the information provided in this paper.

3.2. Many users expressed their concerns about the actual filing and approval of re-route requests during the real-time situation. Further consideration to this subject shall be given under auspices of the existing working groups such as CPWG for example.

3.3. PK ACC, Fukuoka ATM Center and Anchorage ARTCC shall go ahead and implement detour routes on the permanent basis. PK ACC and Fukuoka shall also conclude the permanent LOA.

Attachment A

VOLKAM/15 Exercise Leader Report

Pursuant to the Exercise Directive approved by ICAO VOLCEXSG EAST/9 the international volcanic ash exercise in the far east part of the ICAO EUR region VOLKAM/15 took place between 2200Z on April 15 and 0400Z on April 16, 2015. The Exercise headquarters were deployed in the premises of the Main ATM Center of Russia (State ATM Corporation of Russia). Alexey Buevich, Head of Strategic Planning, Main ATM Center of Russia acted as VOLKAM/15 Exercise Leader assisted by State ATM Corporation's staff (Messrs Vladimir Synnikov, Konstantin Varfolomeyev and Viktor Tsimbal). The work of Exercise HQ was further facilitated by Ms. Elena Glukhovskaya of Federal Air Transport Agency of Russia, Ms. Galina Kotova of the Russian AIS, Ms. Yuliya Naryshkina of Aviamettelekom (Roshydromet) and Mr. Christopher Kheoan of ICAO EUR/NAT office. The VOLKAM/15 exercise also involved State ATM Corporation's regional branches: Far East Air Navigation (Khabarovsk ACC/ZCC), North-East Air Navigation (Magadan ACC) and Kamchatka Air Navigation (PK ACC), Yelozovo MWO and KVERT. The international stakeholders included: US: ATCSCC, Anchorage ARTCC, Oakland ARTCC, Alaskan VO, VAAC Anchorage, American, United, Delta Airlines, Canada – Vancouver ACC, Japan – Fukuoka ATM Center, VAAC Tokyo, Japan and All Nippon Airlines and China – Cathay Pacific Airways (Hong Kong).

In preparation for the exercise, the following activities took place. PK ACC, Anchorage ARTCC and Fukuoka ATM Center coordinated and pre-approved temporary cross-border detour routes and made a provisional Letter of Agreement (LOA). Main ATM Center of Russia, US ATCSCC and Fukuoka ATM Center issued respective NOTAMs on VOLKAM/15 exercise. A preparatory meeting at the Exercise HQ was held on April 15, 2015 to further elaborate the exercise directive. An agreement was reached with Eurocontrol to utilize their web/telecom facility. The telecom moderator and participants were issued respective pin codes and a couple of test telecons were run shortly before the exercise.

Exercise Timeline (all times in UTC)

2200 – The explosive eruption of Ksudach Volcano in Kamchatka takes place.
2202. – KVERT sends a VONA message.
2204 – Yelizovo MWO sends a SIGMET via AFTN and email
2205 – MATMC sends a NOTAM request to the Russian AIS
2210 – VAAC Tokyo publishes VAA at its website and also sends it by email.
2218 – Russian AIS issues the NOTAM
2300 –VAAC Tokyo publishes a new VA at their website and sends a copy by email.
2305 – Yelizovo MWO sends a SIGMET via AFTN and email
2309 – MATMC sends a NOTAM request to the Russian AIS
2314 –All Nippon Airways and JAL send a re-route request for 6 flights. The request is reviewed, approved and ACK message is sent back by email.

2315 – American Airlines sends an AIREP report from AAL132. No volcanic ash observed in the vicinity of Ksudach Volcano. The time of observation is 2310.

2317 – Russian AIS issues the NOTAM

2323 – A re-route request for three AAL flights. Reviewed, approved and ACK message sent back.

2330 – The Exercise Leader sends an invitation to join the first telecom at 0000Z.

2332 – a new VONA from KVERT. The color code is changed from RED to ORANGE.

2340 – A re-route request for two DAL flights. Reviewed, approved and ACK message sent back.

2341 – A re-route request for one AAL flight. Reviewed, approved and ACK message sent back.

2342 – A re-route request for one AAL and one DAL flights. Reviewed, approved and ACK message sent back.

2344 – MATMC sends a NOTAM request to the Russian AIS

2345 – Fukuoka ATM Center sends a VOLKAM sheet describing the current situation in Fukuoka FIR

2351 – MATMC sends a VOLKAM sheet, describing the current situation in the Russian airspace.

2351 – VAAC Tokyo sends a VOLKAM sheet

2353 – Russian AIS issues the NOTAM

2355 – A re-route request for one UAL flight. Reviewed, approved and ACK message sent back.

0000 –JAL sends a VOLKAM sheet.

0000 – the first telecom begins. Reports are presented from VAAC Tokyo, VAAC Anchorage, MWOs, national ATM centers, ACCs and users. The reports note that due to the explosive eruption of Ksudach volcano in the southern part of Kamchatka a volcanic ash cloud is moving to south east with the velocity of 110 km/hour within the flight level band up to FL510 affecting Russian Transeast ATS Routes and North Pacific NOPAC tracks. The airlines are taking respective measures to re-route the affected flights. PK ACC, Anchorage ARTCC and Fukuoka ATM Center are implementing the pre-coordinated detour routes between Russian Transeast ATS Routes and NOPAC tracks. ACCs and users are carrying out operational coordination procedures. Oakland ARTCC is realigning PACOTS tracks to accommodate rerouted traffic. The telecon proceeded smoothly. Next telecon is 0300Z..

0015 A re-route request for one AAL flight. Reviewed, approved and ACK message sent back.

0021 A re-route request for one UAL flight. Reviewed, approved and ACK message sent back.

0034 A re-route request for two CPA flights. Reviewed, approved and ACK message sent back..

0034 A re-route request for one UAL flight. Reviewed, approved and ACK message sent back.

0043 A re-route request for one UAL flight. Reviewed, approved and ACK message sent back.

0118 VAAC Tokyo issues the last VA

0121 Anchorage ARTCC issues a NOTAM

0123 Yelizovo MWO sends a SIGMET

0129 A re-route request for four ANA flights. Reviewed, approved and ACK message sent back..

0131 a new AIREP from American Airlines

0132 MATMC sends a NOTAM request to the Russian AIS

0140 A re-route request for one AAL flight. Reviewed, approved and ACK message sent back

0144 Russian AIS issues the NOTAM

0213 VAAC Anchorage sends VA/SIGMET
 0225 JAL sends second VOLKAM sheet
 0230 the Exercise Leader sends an invitation to join the second telecon at 0300Z
 0235 Fukuoka ATM Center sends second VOLKAM sheet
 0234 MATMC sends second VOLKAM sheet
 0241 ANA sends second VOLKAM sheet
 0246 A re-route request for one DAL flight. Reviewed, approved and ACK message sent back.
 0254 PK ACC sends second VOLKAM sheet
 0300 – the second telecon begins. Reports reviewed from VAAC Anchorage, MWOs, national ATM centers, ACCs and users. VAAC Anchorage reports the successful completion of handoff procedure with VAAC Tokyo (with confirmation). The national ATM centers and ACCs report on the measures taken to redistribute flows of traffic around the volcano ash. The airlines report on re-routed flights affected by volcanic ash. The second telecon went smoothly as well. In conclusion, the exercise leader thanked everyone for the participation and reminded to cancel all NOTAMs, SIGMETs, VAAs, VAGs and VONAs at 0400Z, which was the official end of the exercise.
 0400 – the exercise leader sends a notification on the completion of VOKAM/15 exercise.

Conclusions

In accordance with the exercise directive, the following aims and objectives were met:

- demonstrate coordination procedures between all participating parties (ANSPs, ATM Centres, AIS, VO, VAACs, MWO, users)
- demonstrate tactical re-routes in both Russian Federation and Japan
- demonstrate VAAC Tokyo and VAAC Anchorage handover
- demonstrate transmission of air-reports on volcanic ash in accordance to Annex 3 (aircraft->ACC->MWO->VAAC)
- demonstrate information sharing via teleconferences and website (website to be confirmed)

Observations:

KVERT was unable to take part in the both telecons due to other commitments, which was very regrettable as they were a major exercise stakeholder.

Eurocontrol assistance in provision of the telecon facility is indeed much appreciated but the stakeholders should consider establishing their own telecon facility for the next exercise

The next VOLKAM exercise should consider reducing the duration until 0230Z to minimize the downtime.

Many users expressed their concerns about the actual filing and approval of re-route requests during the real-time situation. Further consideration to this subject shall be given under auspices of the existing working groups such as CPWG for example.

PK ACC, Fukuoka ATM Center and Anchorage ARTCC shall go ahead and implement detour routes on the permanent basis. PK ACC and Fukuoka shall also conclude the permanent LOA.

Although at the time of exercise, another volcano Shiveluch was erupting and a few actual flights were re-routed, it was decided not to cancel the exercise as the impact was not very significant.