



International Civil Aviation Organization

**Trans-Regional Airspace and Supporting ATM Systems Steering Group
Third Meeting (TRASAS/3)**

Paris, France, 19 – 20 October 2010

Agenda Item 6: Update on Volcanic Ash Activities

**VOLCANIC ASH HAZARDS AND MITIGATION IN THE NORTH PACIFIC AND RUSSIAN TRANS
EAST AIRSPACE**

(Presented by IATA)

SUMMARY

This working paper presents information for the Group's consideration with regard to volcanic ash information tracking, coordination and dissemination.

1. Introduction

1.1. The Kamchatka Volcanic Eruption Response Team (KVERT) monitors and reports on volcanic hazards to aviation for Kamchatka and the north Kuril's.

1.2. The Sakhalin Volcanic Eruption Response Team (SVERT) monitors and reports on volcanic hazards based on Sakhalin Island.

1.3. Both Russian organizations coordinate warning messages with appropriate meteorological and aviation authorities in Japan, Russia, and the U.S.

1.4. There are more than 65 potentially active volcanoes on the Kamchatka Peninsula and Kuril Island chain that pose a substantial threat to aircraft on the Russian Trans East (RFE), North Pacific (NOPAC), and Pacific Organized Track System (PACOTS) air routes.

1.5. In addition to the volcanoes mentioned above, there are a significant number of active volcanoes in the Alaska Aleutian region that can have significant affect on aviation in the region.

2. Discussion

2.1. A very large eruption of Mt. Sarychev—a volcano in the Kuril Islands of Russia, with no ground-based monitoring instruments—began on 12 June 2009 and produced large umbrella clouds through 15 June 2009. Over this time period hundreds of international flights between North America and Asia were re-routed, diverted, and dozens of flights were cancelled. One flight was reported to have turned back to its origin point because of lack of fuel to divert. One carrier estimated its total costs in re-routes at approximately \$700,000.

(2 pages)

2.2. Although the overall affect did not compare to the eruption of Eyjafjallajökull volcano in April and May 2010, the significance of the event affecting the Pacific operations needs to be noted.

2.3. In January 2010, a notification was received that funding for KVERT was planned to be eliminated by February 1, 2010. Fortunately the funding was restored after various organizations, including IATA and ICAO, urged the Russian Federation to continue supporting KVERT.

2.4. Limitations in the ability of authorities to verify ash production, determine ash cloud height, and rapidly notify air carriers of ash events put operations at risk.

2.5. Despite the current limitations, and progress in the past, aviation warning message coordination across facilities among the relevant centers in Russia, Japan, and the United States must be improved to ensure consistent warning message content and timeliness.

2.6. Verification and/or validation of 24/7 coverage by the volcano monitoring agencies is needed so that operators can assess the risk to operations.

2.7. This paper urges an assessment of coordination between KVERT, SVERT, the Tokyo VAAC, and the Anchorage and Washington VAAC's, to ensure timely information concerning volcanic activity, including ash cloud evaluation, is disseminated for air traffic management through coordination with the Main Air Traffic Flow Management Center in Moscow.

3. Action by the Steering Group

3.1. The TRASAS is invited:

- a) review the information contained in this Information Paper;
- b) consider action necessary to improve volcanic information for the North Pacific and Russian Trans East region.

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