*International Civil Aviation Organization*

**ICAO/WMO ASIA/PACIFIC METEOROLOGY/AIR TRAFFIC MANAGEMENT (MET/ATM) SEMINAR**

Fukuoka, Japan, 24 – 26 January 2011

**Discussion Topic 2: Meteorological impacts on ATM and MET information required for Air Traffic Flow Management**

**1) En-route – Large-scale weather deviations, volcanic ash, etc.**

# VOLCANO OBSERVATORY RESPONSE TO AN ERUPTION IN THE FAR EAST

(Presented by Russian Federation)

**SUMMARY**

This working paper describes the actions taken by the Russian Federation at the official designation of the State Volcano Observatory to monitor the active volcanoes located in the Far East, in accordance with the principles established by ICAO.

## 1. INTRODUCTION

1.1 The Kamchatka Volcanic Eruption Response Team (KVERT) was established in 1993 by the Institute of Volcanic Geology and Geochemistry of FED RAS (IVGG FED RAS) in close cooperation with the Alaska Volcanic Observatory (AVO), the US Geological Survey, the Geophysical Institute of Fairbanks in Alaska and the Alaska Department of Geological and Geophysical Services.

1.2 In April 2003, the work team KVERT was organized to inform on the actual situation with the active volcanoes located on the South Kurile Islands.

1.3 The Kurile Volcanoes and the Sakhalin Volcanic Eruption Response Team (SVERT) is a project of the Institute of Marine Geology and Geophysics in Yuzhno-Sakhalinsk, Russia (started in September 2004).

1.4 The Kamchatka region primarily receives aviation meteorological data from the center in Elizovo Airport (Meteorological Center) and sends this information to the Area Control Center (ACC) to prepare an volcanic ash NOTAM, and as well as to the Kamchatka hydro meteorological center for all interested stations.

1.5 The Meteorological Center is responsible for notifying VAAC Tokyo, which in turn produces reports (advisories) on the status of the risks of volcanic ash for aviation. The severity of volcanic activities is color-coded by AVO in volcanoes of Alaska.

1.6 KVERT and SVERT are jointly funded by the IVGG FED RAS.

## 2. DISCUSSION

2.1 Pursuant to paragraph 3.6 of ICAO Annex 3 – *Meteorological Service for International Air Navigation*, the Russian Federation has initiated activities for enhancement of the volcano activity observation to establish an entity responsible for monitoring of the active volcanoes in the Far East, including Sakhalin and Kuril Islands.

2.2 Federal Air Transport Agency (Rosaviatsiya) contacted the Russian Academy of Sciences (RAS) on the appointment of a public entity responsible for the monitoring of volcanic activity in the Far East and rapid transmission of information on critical situations for civil aviation security.

2.3 The RAS President proposed to appoint the Institute of IVGG FED RAS.

2.4 Rosaviatsiya appreciates the work which has been done by IVGG FED RAS to monitor the volcanic activity of the Far East for a number of years and fully supported the RAS's proposal.

2.5 In May 2010, a meeting was organized with participation of the representatives of the IVGG FED RAS, Rosaviatsiya and Roshydromet, to designate a Volcano Observatory responsible for monitoring of active volcanoes in the Far East.

2.6 The meeting approved the RAS proposal to designate the IVGG FED RAS a responsible organization in the field of observation of volcanic activity in the Far East to provide timely information on the critical situations for the general safety and international air navigation.

2.7 At the end of the meeting, the Volcano Observatory organizational matters were agreed.

2.8 Pursuant to section 5.5.3.2 of the *Manual on Volcanic ash, Radioactive Material, and Toxic Chemical Clouds* (ICAO Doc 9691-AN/954), an agreement between Rosaviatsiya, Roshydromet and RAS has signed to stipulate coordinating and operational procedures for volcanoes eruptions and related clouds of volcanic ash, which may affect flights on the Far East.

2.9 Russian Federation implementation of the 24/7 monitoring of the volcanoes activities and clouds of volcanic ash for the relevant ACC, MWO and VAAC.

## 3. ACTION BY THE MET/ATM TASK FORCE MEETING

3.1 The MET/ATM is invited to note the contents of this paper.

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