



INTERNATIONAL VOLCANIC ASH TASK FORCE (IVATF)

THIRD MEETING

Montréal, 15 to 17 February 2012

Agenda Item 4: Progress report of the air traffic management sub-group (ATM SG)

4.4: Clearances through Danger Areas as contained in the EUR/NAT volcanic ash contingency plan

ATTACHMENT-ATM04 TO IVATF/3 PPT/04

(Presented by the Project Manager of the IVATF ATM Sub-Group)

SUMMARY

This attachment is associated with deliverable of IVATF task TF-ATM04, proposing an amendment to PANS-ATM (Doc 4444) procedures for an ATC unit when volcanic ash cloud is report or forecast.

The IVATF is invited to note the content of this attachment and, as necessary, develop a recommendation or further tasking for the consideration of the task force.

The following contains a proposed amendment to the Fifteenth Edition, Amendment No. 2, of Procedures for Air Navigation Services – Air Traffic Management (PANS-ATM) (Doc 4444), 15.8, as developed by the ATM Sub-Group of the IVATF.

15.8 PROCEDURES FOR AN-ATC ATS UNITS WHEN A VOLCANIC ASH-CLOUD CONTAMINATION IS REPORTED OR FORECAST

Note. — Airspace over international waters (high seas airspace) is delegated to States by ICAO for the provision of air traffic services. Access would not normally be denied unless specified by ICAO.

15.8.1 If a volcanic ash-cloud contamination is reported or forecast in the FIR for which the ATS unit is responsible, the controller should:

- a) as required, relay all information available immediately to pilots whose aircraft could be affected to ensure that they are aware of the ash-cloud's position of the hazard and the flight levels affected;
- b) suggest appropriate re-routing to the flight crew to avoid an the area of known or forecast ash-clouds activity;
- ~~c) inform pilots that volcanic ash clouds are not detected by relevant ATS surveillance systems;~~
- ~~d) if the ACC has been advised by an aircraft that it has entered a volcanic ash cloud the controller should:
 - ~~a. consider the aircraft to be in an emergency situation;~~
 - ~~b. not initiate any climb clearances to turbine-powered aircraft until the aircraft has exited the ash cloud; and~~
 - ~~c. not initiate vectoring without pilot concurrence.~~~~
- c) request the intentions of the pilot-in-command and endeavour to accommodate requests for re-routing or level changes; and
- d) request a pilot report if the route of flight will take the aircraft into the forecasted contamination area and provide the pilot report to the appropriate agency.

Note 1. — Volcanic contamination refers to volcanic activity where a volcano has erupted and volcanic ash, volcanic gases or other phenomena is reported by VAAC/Meteorological office.

Note 2. — Responsibility for aircraft safety rests with the pilot, therefore the final decision of route, whether it be to avoid or proceed through an area of volcanic contamination, is the pilot's responsibility.

15.8.2 Each State should develop appropriate procedures and contingency routings for avoidance of volcanic ash clouds that meet the circumstances of the State and fulfil its obligations to ensure safety of aircraft. If the ATS unit has been advised by an aircraft that it has entered an area of volcanic contamination, and is requesting assistance, the controller should:

- a) consider the aircraft to be in an emergency situation;

- b) provide the aircraft with any information requested as well as any additional relevant information;
- c) not initiate modifications of route or flight level assigned unless requested by the pilot or necessitated by airspace requirements or traffic conditions;;
- d) not initiate vectoring without pilot concurrence; and
- e) notify appropriate authorities and ATS units.

~~15.8.3 Controllers should be trained in procedures for avoidance of volcanic ash clouds and be made aware that turbine engine aircraft encountering an ash cloud may suffer a complete loss of power. Controllers should take extreme caution to ensure that aircraft do not enter volcanic ash clouds.~~

~~*Note 1.— There are no means to detect the density of a volcanic ash cloud or the size distribution of its particles and their subsequent impact on engine performance and the integrity of the aircraft. Experience has shown that the recommended escape manoeuvre for an aircraft which has encountered an ash cloud is to reverse its course and begin a descent if terrain permits. The final responsibility for this decision, however, rests with the pilot.*~~

~~*Note 2.— Guidance material is provided in Chapters 4 and 5 of the Manual on Volcanic Ash, Radioactive Material and Toxic Chemical Clouds (Doc 9691).*~~

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