REPUBLIC OF LATVIA

Tel: +371 67300664
Fax: +371 67300660
Email: ais@lgs.lv
AFS: EVRAYNYX
URL: https://ais.lgs.lv

State Joint-stock Company
"Latvijas gaisa satiksme"
Aeronautical
Information Service
Muzeju iela 3
Lidosta "Rīga"
Mārupes pag., Mārupes nov.
LV-1053, Latvija

AIC A 003/2024

Effective from 28 MAR 2024

Published on 28 MAR 2024

A 003. VOLCANIC ASH

1. Introduction

The purpose of this AIC is to provide operators, owners and maintenance organisations with guidance on aircraft operations where volcanic ash contamination may be a hazard to flight operations.

2. Key principles

- The operator is responsible for the safety of its operations under the oversight of their respective State regulatory authority. The guiding principle for such operations is the use of a safety risk management approach, as described in ICAO Doc 9974 "Risk management of flight operations with known or forecast volcanic ash contamination" and EASA Safety Information Bulletin (SIB) 2023-13.
- In order to consider whether or not to operate into airspace forecast to be, or aerodromes known to be, contaminated with volcanic ash, the operator should have in place an identifiable safety risk assessment (SRA) within its Safety Management System (SMS).
- In order to decide whether or not to operate into airspace forecast to be, or aerodromes known to be, contaminated with volcanic ash, the operator's SRA must be accepted by its State regulatory authority.
- The safety control measures set out in ICAO Doc 9974 and EASA Safety Information Bulletin (SIB) 2023-13 are intended to be sufficiently robust that they facilitate acceptance, without further investigation, by a State whose airspace is forecast to be affected by volcanic ash. The State can - based on the implementation of internationally accepted Safety Management principles - be confident in the ability of operators from other States to undertake operations safely in its airspace.

3. Terminology

The following definitions of contamination are applicable in Latvia regarding the operation of aircraft in airspace contaminated with volcanic ash.

- **Area of Low Contamination (to be displayed in Cyan):** Airspace of defined dimensions where volcanic ash may be encountered at concentrations equal to or greater than 0.2 x 10-3 g/m3, but equal to or less than 2 x 10-3 g/m3.
- **Area of Medium Contamination (to be displayed in Grey):** Airspace of defined dimensions where volcanic ash may be encountered at concentrations greater than 2 x 10-3 g/m3, but less than 4 x 10-3 g/m3.
- **Area of High Contamination (to be displayed in Red):** Airspace of defined dimensions where volcanic ash may be encountered at concentrations equal to or greater than 4 x 10-3 g/m3.

These definitions are consistent with ICAO EUR/NAT Volcanic Ash Contingency Plan (VACP) (EUR Doc 019/NAT Doc 006, Part II) and EASA Safety Information Bulletin (SIB) 2023-13.

4. SRA application in Latvia

4.1 Areas of ash contamination

1. In Latvia, aircraft operators will be allowed to make decisions based on their SRA in the forecast areas of low, medium and high ash contamination.

2. Therefore, Latvia will allow operators to make decisions based on their SRA, as accepted by their respective State regulatory authority, in the forecast areas of low, medium and high ash contamination.

4.2 Common SRA recognition

As part of its overall decision-making process regarding the operation of aircraft in airspace forecast to be, or aerodromes known to be, contaminated with volcanic ash, Latvia will allow aircraft operators registered in other States to base their decisions on their SRA, as accepted by their State regulatory authority, in accordance with the above-mentioned approach (see 4.1) to decision-making in Latvia.

5. Notification of volcanic ash contamination

In the case of a potential contamination of Latvian airspace with volcanic ash, Volcanic Ash SIGMET (VA SIGMET) and NOTAM messages for Riga Flight Information Region (Riga FIR) will be issued.

5.1 VA SIGMET

VA SIGMET will provide a warning for the airspace in which the presence of any ash is forecast. No information about ash contamination levels is given in a VA SIGMET. The official Volcanic Ash Advisory Centre's (VAAC's) products prepared to internationally agreed standards (Volcanic Ash Advisory (VAA) and Volcanic Ash Graphics (VAG)), as well as special air-reports provided by pilots, will be used to prepare and revise VA SIGMETs for Riga FIR.

5.2 NOTAM

NOTAM will be published on the basis of information received from the MWO and will give information on the status of the volcano eruption or its significant changes, references existing information such as VAA/VAG, Volcanic Ash Concentration Charts and VA SIGMET.

6. Detection of volcanic ash

No ground-based instruments, specialised research aircraft or aerosol sonde will be available for detection of volcanic ash in Latvian airspace during a volcano event. Only satellite observations and pilot reports, if available, will be used as a best estimate of where the ash cloud is currently present in the airspace.

7. Volcanic ash reporting

7.1 In-flight reporting

1. If any volcanic ash is encountered during a flight within Riga FIR, the pilot shall report to the ATS unit with which the pilot is in radiotelephony communication, the following information: volcanic ash encounter, aircraft identification, position, flight level or altitude, time of the observation and any further relevant information.

2. Pilots should also report to the ATS unit the absence of visible volcanic ash in the areas where ash is forecast.

7.2 Recording and post-flight reporting

1. If any volcanic activity is observed during a flight, the pilot should complete the ICAO Volcanic Activity Report (VAR) form with detailed information (position, colour, smell, dimensions, level and time of observation, impact on the flight, etc.). On the arrival of the flight at any Latvian aerodrome, the flight crew member or the aircraft operator shall transmit, without delay, the completed VAR form to the Meteorological Watch Office (MWO) Riga by e-mail: avio.metservice@lvgmc.lv or by fax: +371 67032638.

2. If any volcanic ash is encountered during the flight, whether or not any damage occurs, it must be reported to the Civil Aviation Agency of Latvia by email: SIDD@caa.gov.lv or by phone: +371 67830969.

Replaces AIC A 002/2023