

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

# N JO 7110.616

Effective Date: March 7, 2013

Cancellation Date: August 22, 2013

## **SUBJ**: Volcanic Activity

**1. Purpose of This Notice**. This notice adds the detection of sulfur gases ( $H_2S$  and  $SO_2$ ) in the aircraft cabin to the list of significant weather phenomena that are to be handled and disseminated in pilot reports (PIREP).

2. Audience. This notice applies to FAA air traffic control facilities and flight service stations.

**3.** Where Can I Find This Notice? This notice is available on the MyFAA employee Web site at https://employees.faa.gov/tools\_resources/orders\_notices/ and on the air traffic publications Web site at http://www.faa.gov/air\_traffic/publications/.

4. Cancellation. This notice cancels N JO 7110.602, Volcanic Activity, effective October 12, 2012.

**5. Procedures**. Amend FAA Order JO 7110.10, paragraphs 9-2-5, 9-2-10, and 9-2-14, to read as follows:

## 9-2-5. SOLICITING PIREPs

**a.** Solicit PIREPs for the affected area(s) when one or more of the following weather conditions exist, are reported, or forecast to occur:

Subparagraphs a1 through a6, no change.

7. Volcanic eruption, ash clouds, and/or detection of sulfur gases: hydrogen sulfide  $(H_2S)$  or sulfur dioxide  $(SO_2)$  in the cabin.

(a) If only  $H_2S$  or  $SO_2$  is reported, ask the pilot if volcanic ash clouds are in the vicinity.

(b) The smell of sulfur gases in the cockpit may indicate volcanic activity that has not yet been detected or reported and/or possible entry into an ash-bearing cloud.  $H_2S$ , also known as sewer gas, has the odor of rotten eggs.  $SO_2$  is identifiable as the sharp, acrid odor of a freshly struck match.

No further changes to paragraph.

# 9-2-10. PIREP CLASSIFICATION

Categorize PIREPs as follows:

a. URGENT. The following weather phenomena must be classified as an URGENT (UUA) PIREP:

Subparagraphs a1 through a5, no change.

6. Volcanic eruption, ash clouds, and/or detection of sulfur gases  $(H_2S \text{ or } SO_2)$  in the cabin.

(a) If a pilot only reported the smell of  $H_2S$  or  $SO_2$  in the cabin and confirmed no volcanic ash clouds were present, classify the report as a ROUTINE PIREP.

(b) The smell of sulfur gases in the cockpit may indicate volcanic activity that has not yet been detected or reported and/or possible entry into an ash-bearing cloud.  $H_2S$ , also known as sewer gas, has the odor of rotten eggs.  $SO_2$  is identifiable as the sharp, acrid odor of a freshly struck match.

No further changes to paragraph.

## 9-2-14. PIREP FORMAT

Using TEIs as described below, prepare PIREPs for system entry in the following format:

Subparagraph a through f6, no change.

**g.** /WX. Flight visibility and flight weather. Report weather conditions encountered by the pilot as follows:

### Subparagraph g1, no change.

2. Enter flight weather types using one or more of the standard surface weather reporting symbols contained in TBL 9-2-1.

TBL 9-2-1	
Weather	Type and Symbols

Туре	METAR Code
Volcanic Ash (incl. eruption, $H_2S$ or SO <sub>2</sub> )	VA

Subparagraph g3 through k4, no change.

**I.** /RM. Remarks. Use this TEI to report a phenomenon which is considered important but does not fit in any of the other TEIs. This includes, but is not limited to, low level wind shear (LLWS) reports, thunderstorm lines, coverage and movement, size of hail (1/4'' increments), lightning, clouds observed but not encountered, geographical or local description of where the phenomenon occurred, International Standard Atmospheric (ISA) reports and contrails. Report hazardous weather first. Describe LLWS to the extent possible.

Subparagraphs 11 through 17, no change.

8. Volcanic Activity. Volcanic eruption, ash clouds and/or sulfur gases are Urgent PIREPs. Reports of volcanic activity must include as much information as possible; for example, the name of the mountain, ash clouds observed and their movement, the height of the top and bottom of the ash clouds, etc.

(a) If a pilot detected the smell of sulfur gases  $(H_2S \text{ or } SO_2)$  in the cabin and reported volcanic ash clouds, include "VA" in Weather and "H2S", "SO2," or "SULFUR SMELL" in Remarks.

#### NOTE-

The smell of sulfur gases in the cockpit may indicate volcanic activity that has not yet been detected or reported and/or possible entry into an ash-bearing cloud.  $H_2S$ , also known as sewer gas, has the odor of rotten eggs.  $SO_2$  is identifiable as the sharp, acrid odor of a freshly struck match.

#### EXAMPLE-

UUA /OV PANC240075 /TM 2010 /FL370/TP DC10 /WX VA /RM VOLCANIC ERUPTION 2008Z MT AUGUSTINE ASH 40S MOV SSE SO2

(b) If a pilot only detected the smell of sulfur gases ( $H_2S$  or  $SO_2$ ) in the cabin and confirmed there were no volcanic ash clouds, classify the PIREP as Routine and include "VA" in Weather and "H2S NO ASH," "SO2 NO ASH," or "SULFUR SMELL NO ASH" in Remarks.

### EXAMPLE-

UA /OV PANC240075 /TM 2010 /FL370/TP DC10 /WX VA /RM SULFUR SMELL NO ASH

No further changes to paragraph.

**6. Distribution**. This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, System Operations, and Mission Support; the Office of ATO Safety and Technical Training; the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

7. Background. The FAA is responsible for providing meteorological data to stakeholders of the National Airspace System. This includes disseminating and distributing observations, forecasts, and warning messages that pertain to volcanic activity including volcanic ash. PIREPs for volcanic activity and volcanic ash are provided to air traffic control in a specified format which is delineated in the Aeronautical Information Manual. These reports are then forwarded to the Volcanic Ash Advisory Centers and are used to issue volcanic ash SIGMETs. These changes follow new International Civil Aviation Organization guidelines as set forth by the International Airways Volcano Watch Operations Group and are in effect as of November 2010.

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