FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: NE-10-28

SUBJ: Turbine Engine Operation in Volcanic Ash Airspace **Date:** April 22, 2010

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, owners and operators of aircraft equipped with turbine engines that operate in airspace where volcanic ash may be present, of recently issued communications from engine manufacturers. This SAIB is specifically directed toward operators that operate in Europe or operate in and out of Europe, while the Icelandic volcano, Mount Eyjafjallajokull, is still active. Although a specific airworthiness safety concern has not been determined, we are issuing this SAIB to highlight recent actions and emphasize the need for operator awareness. At this time, the airworthiness concern is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

On March 20, 2010, Mount Eyjafjallajokull erupted after almost 200 years of inactivity. On April 14, 2010, EUROCONTROL shut down airspace throughout various airports in Europe as a result of the drifting volcanic ash cloud from the eruption. Since that initial shutdown, the UK CAA has led a coordinated effort that included the FAA. The effort identified an acceptable level of dissipating ash concentration which has subsequently allowed EUROCONTROL to allow flights to resume in most regions.

Volcanic ash can pose a significant threat to aviation safety. During the 1980s, a number of flights into volcanic ash clouds occurred that resulted in the simultaneous shutdown of all engines. Volcanic ash can present short-term as well as long-term operational hazards to turbine engines. While the short-term affects of erosion and power loss are well documented, the long-term effects of repeated exposures are not well understood.

This SAIB provides information and recommends that operators follow all new and existing Maintenance and Operational Instructions from the respective aircraft and engine manufacturers (Type Certificate Holders) including any recommended post-flight checks on aircraft that might have flown through airspace contaminated with volcanic ash.

The European Aviation Safety Agency (EASA) is issuing a Safety Information Bulletin on operations in and around volcanic ash.

Recommendations

Before flying from the United States to Europe or within Europe, aircraft owners and operators should review the following recommendations:

- ✓ Although the FAA does not recommend engine operation or flight into a visible volcanic ash cloud, we do recommend that you obtain definitive information on operational limitations

around ash clouds, if any, from each of the European National Authority of the State(s), of which you plan flight operations.

- ✓ Follow all aircraft and engine manufacturer's operating and maintenance instructions pertaining to operations in airspace where volcanic ash may be near or present.
- ✓ Report any inadvertent encounter with volcanic ash or relevant findings, including abnormal engine behavior, to the respective type certificate holders of the aircraft and engines.

For Further Information Contact

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