

Research Into Smoke, Fire, or Fumes Occurrences on Transport Airplanes

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This study has been carried out at the request of the Federal Aviation Administration (FAA) and the United Kingdom Civil Aviation Authority (UK CAA) under the provisions of a UK CAA contract.

The broad objectives of the study are to collect and analyze data relating to in-service occurrences involving Fire, Smoke or Fumes on US registered aircraft. This involved the compilation of data into a bespoke Fire, Smoke or Fumes Occurrence (FSF) Database compiled in Microsoft Excel.

The analysis compares genuine and false occurrences by source of fire, smoke, fumes or odors and consequences (Diversion, Overweight Landings, etc.). The data has also been analyzed to derive any likely trends in rates of occurrence. These objectives have now been achieved for data collected over the period 2002 to 2011 and are addressed in this report.

A further objective of the study is to analyze the data to determine the monetary impact of the occurrences and any trends in these impacts. This will be addressed in subsequent phases of this study and this report amended to reflect the results.