RESEARCH INTO FIRE, SMOKE OR FUMES OCCURRENCES ON TRANSPORT AIRPLANES

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Introduction

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➢ **The study has been commissioned by the FAA and UK CAA**

➢ **It involves the collection and analysis of data related to Smoke, Fire and Fume events on US registered airplanes:**
- **Type certificated to FAR 25 and operating in accord with FAR 121.**
- **Both cargo and passenger airplanes**
- **Data period 2002 to 2011 inclusive**

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Objectives

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1. Collect data relating to occurrences involving fire, smoke, fumes or odors and false fire/smoke warnings
2. Compile the data into an Occurrence Database
3. Compare Genuine and False occurrences by source of fire, smoke, fumes or odors and consequences (Diversions, Overweight Landings, etc.)
4. Analyze the data to derive any likely trends in the rates of occurrence (per flight/hour) by airplane category (regional, narrow body, wide body)
5. Analyze the data to determine the likely monetary impact of the occurrences and any trends in these impacts

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Data Sources

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➢ **The occurrence data to be analysed has been collected from the following sources:**

  o **FAA Aviation Safety Information Analysis And Sharing System (ASIAS)**

  o **The NTSB Aviation Accident Database**

  o **FAA Service Difficulty Reports SDRs**

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Timescales

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➢ **The project is scheduled for completion by April 2015**

➢ **However Initial Data analysis will be complete by January 2015**

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Progress

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- ➢ **The Occurrence Database has been constructed**
- ➢ **Over 800,000 records have been synthesized to approximately 16,000 as being relevant**
- ➢ **Data entry for 2002 and 2003 is now complete – 2004 to be completed by the end of May**
- ➢ **Initial Analysis has started**

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Deliverables

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Deliverables

The deliverables of the project are:

➢ **A Database containing all Fire, Smoke and fume Events analyzed**
➢ **A Report containing the data sources, analysis methods, results and conclusions**

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