



FOR IMMEDIATE RELEASE:

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London

Aircraft air quality conference confirms aircraft air supplies creating serious flight safety and health concerns, with solutions identified

The largest international conference on aircraft cabin air quality, took place at Imperial College London, last month, 19-20 September 2017.

The conference brought together the leading scientists, doctors, engineers and subject matter experts to present and discuss the latest science, evidence and solutions related to the contamination of aircraft breathing air supplies.

Transport Canada, the UK Civil Aviation Authority, as well as six major North-American and European air carriers and some manufacturers made the significant choice to attend this year's conference. This points to the fact that the need to address cabin air quality issues is increasingly being embraced by industry and regulatory bodies. The GCAQE applauds these groups for joining the conversation and remains hopeful and open to others participating in the near future.

It was clearly demonstrated that air supplies contaminated by jet engine oils occur in 2 differing ways. Firstly, low-level leakage of oil from the engines into the cabin breathing air will occur in all flights as a function of the design sourcing the bleed air from the compressor section of the aircraft engines. Less frequently, failure or partial failure of the oil sealing system will result in a higher level of exposure.

It was made very clear that the exposure to the complex mixture related to the oil and fluid exposures is no longer acceptable. Exciting solutions were presented, including the easyJet announcement to trial the new PALL Aerospace filters, which introduce full filtration of engine bleed air at its source. Developments in testing for toxin exposure using hair sample and blood biomarkers, as well as new portable air sampling technology were greatly welcomed.

While the aviation industry now accepts that exposure to contaminated air supplies is associated with acute effects, the conference clearly demonstrated that long-term health effects are expected and documented.

The GCAQE Head of Research, Dr Susan Michaelis, was advised by a leading engine manufacturer, that:

“Those who chose to not attend the conference for political reasons, made a big mistake.”

The GCAQE spokesperson Captain Tristan Loraine said:

“The conference made it abundantly clear that the time to cease downplaying the extent of this problem is here and the aviation industry must put the wellbeing of the passengers and workers first. Solutions do exist as demonstrated at the conference, such as filtration and sensor equipment.”

The GCAQE calls for all airlines to introduce bleed air filtration and sensor technologies and for future aircraft to be designed to take the air supply from a source independent of the engines or APU - to be bleed free.

The GCAQE also renewed its call to the aerospace industry to inform passengers and crews about the true risks associated with exposure to the oils and fluids.

The conference presentations, proceedings and film footage will be available shortly via the conference website.

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Additional information on the issue is available at: www.gcaqe.org

Further details on the conference are available at: <https://www.aircraftcabinair.com/>

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Notes to editors:

- An educational film and brochure on this issue are available at: www.gcaqe.org
- Cabin breathing air on all aircraft apart from the Boeing 787 is taken directly from the engines and provided unfiltered to the aircraft. This is known as 'Bleed Air'.
- Bleed air is known to become contaminated with engine oils and/or hydraulic fluids. These are hazardous substances, especially to the unborn.
- Contaminated bleed air events have been recognised as occurring since the 1950s.
- No aircraft currently flying has any form of detection system fitted to warn when these events occur, despite regulations and standards requiring warning systems
- Flight safety is being compromised by contaminated air events.
- Crew and passengers have been reporting short and long-term health effects as a consequence of exposure to contaminated air.
- Contaminated air events are not rare and known to be under reported.
- Passengers are never told when they are exposed.