



Mr. Patrick Ky  
EASA Executive Director  
Postfach 10 12 53.  
50452 Cologne,  
Germany

Subject: Contaminated air on aircraft.

Monday, 31st July 2017

OPEN LETTER

Dear Mr. Ky

The Global Cabin Air Quality Executive (GCAQE), as you will know, is the leading global organization representing cabin crew, ground engineers and pilots on the issue of contaminated air on aircraft.

For over 10 years we have urged EASA to take a pro-active role to resolve the contaminated air on aircraft issue. We have written to you numerous times and have met with your representatives both in May 2015 and more recently on the 4th July 2017.

The most recent meeting was with eight EASA representatives, two from the European Commission and one from the Fraunhofer Institute. It is the outcome of the last meeting that has triggered us to write to you personally as EASA Executive Director and put our serious concerns on the public record.

It was clear from the last meeting in Cologne that the over riding position EASA appears to have adopted in relation to contaminated air, is one that better serves the interests of the aerospace industry, delays action to resolve the issue and one that totally fails to listen to those workers who spend their working lives onboard aircraft: our members. Members who are reporting impairment and sometimes incapacitation in flight, reporting that flight safety is being compromised and experiencing ill health, both short and long term following exposure to contaminated air. Our members are being ignored. Our members and members of the public, raising concerns about the risk to their unborn child of being exposed to contaminated air, are also being ignored – this is of grave concern to us, especially when one of the ingredients in the oil they are breathing, is stated as being a risk to the unborn under REACH. The European Chemicals Agency (ECHA) has recently published that the oil additives have never been tested under the conditions of use in an aircraft. [1] Therefore, this is just one more of many reasons why the reliance by EASA on supposed safe limits and exposure limits, is completely flawed. However, EASA and the Commission continue to rely

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1. ECHA. (2016) Decision On Substance Evaluation Pursuant To Article 46(1) Of Regulation (EC) NO 1907/2006. For Tris(methylphenyl) phosphate, CAS No 1330-78-5. European Chemicals Agency, Helsinki.

upon these. EASA and the industry have been clearly advised that such safe limits do not apply to the aircraft environment in which bleed air exposures are well accepted to be occurring, however neither will acknowledge this is the case. This is despite many organisations within and outside the aviation industry recognizing they do not apply, such as WHO, Aerospace Medical Association, Mobil, AIHA, ASHRAE and the ACGIH.

EASA should primarily seek to protect the health and safety of those who work onboard aircraft and the travelling public but it has failed to do so.

EASA contracts poorly defined and often unnecessary research, which fails to effectively listen to crew organisations as stakeholders, fails to look at the evidence and which relies on industry biased and flawed studies to further procrastinate and fail to take action.

The fact your funded research states that a future large scale project plan should undertake a human exposure study to **“end the misguided discussion on cabin air quality once and for all”** and that aerotoxicity is completely **“incomprehensible”** [2], provides a basis for showing just how far removed you are from seeking to resolve this issue. Likewise in 2000, the UK House of Lords study similarly suggested that cabin air quality data should be collected to refute the common allegations of poor air quality in aircraft. [3] This is precisely what the industry has been doing for decades, just like EASA is undertaking again now. The studies undertaken are failing to ask the right questions and failing to analyse any results gained, in a responsible and appropriate manner. They therefore are supplying the industry with the answers it wants: there is no problem or the problem has some other cause, such as being psychosomatic.

Numerous scientists have stated there are flaws in your contracted studies but your employees are not listening. Scientists have stated exposure to contaminated air causes ill health but again you do not listen, you only listen to industry-biased studies. There are very many examples of how EASA is 1) refusing to listen to the evidence and 2) selecting the science to suit.

It is very clear from our last meeting that key responsible EASA employees are carrying out their duties insufficiently. Failing to review evidence that does not help their position of denial.

Not one of your appointed team had reviewed the MSc work of our Head of Research Dr. Susan Michaelis, who clearly outlines in her exemplary thesis from Cranfield University, that EASA and the FAA are failing to regulate on cabin air quality under your own regulations. [4] Most had never read her PhD on the issue. [5] Not one of your members actually was aware of the 1999 Malmo incident [6], in which both pilots were totally incapacitated due to exposure to contaminated air in the descent. Failure to be aware of this data is surely nothing less than negligent.

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2. EASA (2017) Research Project : CAQ Preliminary cabin air quality measurement campaign.. Final report EASA\_REP\_RESEA\_2014\_4. Cologne: European Aviation Safety Agency

3. HOL (2000) UK House of Lords Session 1999-2000 5th Report HL 121-I Select Committee on Science and Technology - Air Travel and Health. 2000. London: House of Lords

4. Michaelis S. (2016) Implementation Of The Requirements For The Provision Of Clean Air In Crew And Passenger Compartments Using The Aircraft Bleed Air System. Cranfield: Cranfield University. <http://www.susanmichaelis.com/caq.html>

5. Michaelis S. (2010) Health and Flight Safety Implications from Exposure to Contaminated Air in Aircraft. (PhD Thesis) Sydney: UNSW. <http://handle.unsw.edu.au/1959.4/50342>

6. SHK. (2001) Report RL 2001 : 41e. Incident Onboard Aircraft SE-DRE. Sweden, 12 November 1999. Stockholm: Statens haverikommission (SHK) Board of Accident Investigation.

Your team's total lack of understanding on the actual reality of under reporting was shocking. Not one of them was aware of the published under reporting paper from a survey of British Airways pilots in 2003, which showed that 96% of all events are never reported. [7] Under-reporting has been widely recognized, including by EASA. [8] You cannot rely on flawed data and ignore the mechanism that ensures exposure takes place to do nothing – this is again negligent of EASA.

We appreciate aviation is ultimately an economical business but solutions exist to this problem – some fly on DHL Boeing 757 aircraft already. We urge EASA to legislate to introduce effective total cabin air filtration – technology that will be presented by Pall Aerospace at the Aircraft Cabin Air Conference in London in 2017.

The only hope to prevent crew looking at industrial action or negative PR campaigns against EASA is to start by having your experts actually listen to the evidence and solutions that exist. I would urge you to send all of your, supposed contaminated air experts to the September aircraft cabin air quality conference. One of your team will be speaking at the conference in London, on EASA initiatives, but we strongly urge you to send people from certification, propulsion, medicine and flight safety. This will enable them to meet the actual real subject experts, most of whom EASA has never contacted.

You are listening to one side of the debate only and ignoring key air accident investigation reports, findings and recommendations. You trust our professional members to fly millions of passengers every day – please listen to our concerns, listen to the available evidence and legislate to resolve this issue.

We look forward to hearing from you and your suggested way forward.

Sincerely,

Captain Tristan Loraine BCAl  
GCAQE Spokesperson

A global coalition of health and safety advocates committed to raising awareness and finding solutions to poor air quality in aircraft

[www.gcaqe.org](http://www.gcaqe.org)

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7. Michaelis S. (2003) A survey of health symptoms in BALPA Boeing 757 pilots. J Occup Health & Safety - Aust NZ 2003; 19: 253–261.

8. EASA (2011) Comment Response Document (CRD) To Advance Notice Of Proposed Amendment (A-NPA) 2009-10 - Cabin Air Quality Onboard Large Aeroplanes. Cologne: EASA