

# Christopher Booker's notebook

By Christopher Booker

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## Pilots disabled by poisoned air

A few years back Susan Michaelis, Tristan Loraine and John Hoyte were successful airline pilots, earning up to £100,000 a year. Last Monday, with health and livelihood destroyed, they joined forces with some 20 other similarly disabled pilots, to launch a campaign to alert the public to what should be seen as one of the most alarming scandals of our time.

Yet two days later came further evidence of how the regulatory authorities, in alliance with the airline industry itself, have stopped at nothing to cover up a health disaster whose financial costs for the industry could run to many billions.

The essence of the problem is that the air supply to the cockpits and cabins of many modern airliners is bled off from their engines, where it becomes contaminated with carcinogens, immunosuppressants and highly toxic organo-phosphorus (OP) chemicals, especially a compound known as tricresyl phosphate (TCP) used as an anti-wear additive. Both crew and passengers are thus exposed to small amounts of OPs and a cocktail of other nasties. OPs, more commonly used as pesticides, cumulatively attack the nervous system, causing disorders ranging from nausea, headaches and dizziness to, eventually, serious mental and physical breakdown.

Although this problem was first identified 30 years ago, following a near-fatal incident in the US, it was kept so quiet that when hundreds of pilots in the 1980s began to experience adverse reactions they had no idea why. One of the first to track down the cause was Susan Michaelis, flying BA146s in Australia, when in 1997 she was permanently grounded by severe illness. Two years later, at her instigation, an official inquiry by the Australian Senate heard enough expert evidence to confirm that the cause of so many pilots and cabin crew suffering ill-health was contamination of cabin air by TCP and other chemicals.

In 2001 the cause was taken up in Britain by Captain Loraine, a senior member of the British Air Line Pilots Association (BALPA), who flew Boeing 757s. But from the industry and regulators, such as the Civil Aviation Authority (CAA), they met with a wall of denials. Although more pilots were suffering from "aerotoxic syndrome" every year, there began a cover-up which uncannily paralleled the methods used by government in the 1990s when the health of thousands of farmers was destroyed by OPs in sheep dip.

Ironically, in 2005, just after he had organised a BALPA conference of leading scientists and other experts from all over the world, Captain Loraine himself became seriously affected. Initially doctors for his airline saw no reason why he should not continue flying, but in 2006, following further exposure to contaminated air, he was permanently grounded by the CAA.

The career of Captain Hoyte, an experienced BA146 pilot, ended the same year for the same reason, although he was repeatedly told by doctors for his airline and the CAA that his only problem was "stress".

Tests run on both pilots by the leading medical experts on OP poisoning, including Professor Mohamed Abou-Donia, of Duke University, North Carolina, and neuropsychologist Dr Sarah Mackenzie-Ross of University College, London, confirmed brain cell death, cognitive problems and exposure to TCP, explaining why both had become textbook cases of OP-induced chronic neurotoxicity.

Dr Mackenzie-Ross, who since 2003 has been carrying out an extensive study of sheep farmers and airline pilots, has estimated that, in 2004, 197,000 airline passengers in Britain alone could have been exposed to contaminated fumes. The evidence suggests that a great many people have been made ill while flying without having any idea why. One of the scientists studying this problem, Professor Chris van Netten, a Canadian epidemiologist, has analysed swabs taken from many different airliners, finding traces of TCP in more than 80 per cent of the aircraft tested.

Yet, despite the overwhelming weight of evidence, the regulators and the industry have continued to deny that the TCP problem exists. For three years now, as with the sheep farmers before, the British Government has relied on its Committee on Toxicity (CoT) to conduct a seemingly interminable investigation into "cabin air quality", marked by a conspicuous reluctance to address the problem of TCP.

Last week, Michaelis, Loraine and Hoyte joined forces at Portcullis House, Westminster, to launch the Aerotoxic Association, backed by 110 MPs and many peers, including those veterans of the battle to expose the scandal of OP poisoning, the Countess of Mar and Lord (Paul) Tyler. On Wednesday, however, the CoT produced the minutes of yet another of its meetings. As official obfuscation, they were almost self-parodic. They referred to BALPA submitting "data relating to organo-phosphates", but this was the only reference to OPs in the document. The remaining 20 pages, dealing with anything from carbon monoxide to the need to review pilot-training procedures, showed that the committee had no interest in whether airline crews and passengers were being poisoned by TCP from engine oil. It is high time this particular cover-up was blown wide open.

**Merkel stages a coup d'état in the fine print**