“Aerotoxic” Fact or Fiction?
Captain John Hoyte
Aerotoxic syndrome?

- Pattern of neurological symptoms related to damage of Central nervous system. 1999.

- Nervous, immune, gastro intestinal, respiratory & cardiovascular systems.

- Caused by exposure to oil vapours in “bleed air” aircraft.
Bleed air?

- Jets to 1962 B 707, DC8 – Non Bleed air.
- Jets in future B 787 - Non Bleed air.
Personal effects

- BAe 146 1989 – 2005

- Neurological damage – brain fog, speech difficulties, awful memory.
  - Character & personality change.
  - Chronic fatigue.

Intoxicated but without the alcohol.

Alzheimer's or BSE / CJD?

Put down to job – No GP & No AME information. Grounded 2006

Chronic stress – anti depressants / Chronic poisoning.
Aerotoxic Association

• May 2006 TCP (organo phosphate) found in blood / fat & UCL research. 27/27 pilots.

• Aware of global scale of issue.

• January 2007 AA – Information and Support. Prevent similar mistakes.

• June 18th 2007 Launch of AA.
Evidence of ill Health?

• Personal experience & colleagues testimonies. Misunderstood / Misdiagnosed?

Recurring pattern:

Good health........
***FUME EXPOSURE(s)***
Sudden long term ill health – classic ‘mysterious’ symptoms....
Medical denial & unintended ignorance?
*Chance discovery of probable cause*

Eureka - AEROTOXIC moment!!!!!
14 International experts concluded:

- Chronic and acute illness in aircrew.
- Significant flight safety issues.
- Passengers also suffering.
- Call for URGENT action.
“The B 787 will have a no bleed architecture. This will eliminate the risk of engine oil decomposition products from being introduced in the cabin air supply in the rare event of a failed engine compressor seal. In addition, this improves fuel efficiency.....”

Boeing to HOL 2007.
Key Facts and Figures

- 1 in 2000 A fume event flight. 400 Pax!
- 196,000 passengers exposed per year (537 per day)
- **ALL** Bleed air A/C
- 81% of pilots report fatigue Balpa
  - Will Prove TCP and time of exposure
Technical Solutions

• Filter the bleed air - EDM 1017
• Change oils to less toxic non TCP type
• Install toxic chemical detectors
• Boeing 787 technology – return to NON bleed air
Double standards?

• Smoke in public places - **Smoke in airliners.**

• Blood test athletes / drunk drivers – **Blood test pilots.**

• CFS / ME – an illness looking for a cause...

• Aerotoxic Syndrome - an illness with a known cause.

• Overwhelming evidence **CARM** – Requires 100% proof by endless testing.
The Future

• AEROTOXIC ASSOCIATION FREE from June 18th 2008

• Fume event invitation, June 2008.

• Legal cases.
Conclusion

- Definite problem for air crew and passengers. Covered up, diminished, denied by CAA and industry until more convenient time.
- Still No official name or NHS recognition.
- Explains much mystery ill health in aircrew and passengers. Anti depressants antibiotics....
- Precautionary principle should apply to ALL victims. Benefit of ANY medical doubt.
- Public enquiry? ALL stakeholders