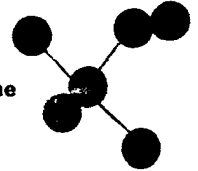


ACVA Atlantic Incorporated

10378 B Democracy Lane
Fairfax, VA 22030
(703) 352-0102



Release: 3.00pm 15 August 1989

POOR AIR QUALITY POSES HEALTH THREAT TO AIRLINE PASSENGERS

Poor air quality is a serious and growing problem on commercial airliners, representing a potential threat to passengers' health and a genuine threat to their comfort, an indoor air specialist has told a US Congressional hearing.

Gray Robertson, president of ACVA Atlantic Inc., which pioneered the analysis, diagnosis and treatment of indoor air pollution, told the Public Works and Transportation Subcommittee on Aviation that the cabin air in most airplanes is becoming increasingly polluted as airlines attempt to cut costs by decreasing ventilation.

"It is clear that airlines and aircraft manufacturers are taking steps that are aggravating the problem of indoor air pollution rather than moving toward solving it," Robertson testified.

....more

2501330836



"In the vast majority of cases, poor indoor air quality is caused by inadequate ventilation, often coupled with poor filtration. In an aircraft, as in any enclosed space, this forces passengers to breathe air contaminated by a variety of pollutants, many of which can have serious health effects," said Robertson, who bases his findings on a review of all reported data and reports on airliner air quality.

Robertson also said that the US's smoking ban on internal flights of two hours or less, the topic of the Congressional investigation, failed to address the real problem.

Passenger complaints about symptoms like sore eyes, scratchy throats, headaches, fatigue and respiratory problems have prompted the National Academy of Sciences' National Research Council (NAS) to review airline air quality and safety.

"Pollutants found at high levels on planes included carbon dioxide, fibres and dust, fumes and vapours from fuel and other sources, ozone, and a variety of bacteria, fungi and viruses. These can all cause the symptoms experienced," said Robertson.

"Ironically, there was no evidence of excessive levels of carbon monoxide, airborne particulates or nicotine, all of which have been linked to tobacco smoke as a source."

But the NAS report found that 11 percent of the flights had violated Federal Aviation Authority standards for ozone, with some levels more than eight times higher than recommended, and carbon dioxide levels exceeding recommended limits.

The NAS report also revealed that the ventilation of aircraft cabins did not meet accepted norms for offices.

"Professional bodies like ASHRAE (Association of Heating, Refrigeration and Airconditioning Engineers) and BOCA (Building Officials and Code Administrators) recommend a minimum 20 cubic feet per minute (cfm) of fresh air per person.

2501330837

....more

"In stark contrast the NAS found that on a typical 747 Jumbo flight, passengers flying economy get seven cfm - only a third of the recommended level. Passengers in First get a better deal, with over 30 cfm but the best place to be is in the cockpit where the crew enjoy 150 cfm," said Robertson.

Although the airlines argue that reducing ventilation saves money on fuel, Robertson testified that the cost of providing adequate ventilation is relatively small. Increasing ventilation to the recommended rate on a typical five-hour flight aboard a 747 with 400 passengers would cost only an extra 60 cents per passenger, or the cost of one additional plane ticket overall, Robertson said.

Robertson's recommendations to the committee included:

- . Maximize ventilation rates;
- . If airplanes are designed to run on recycled air, enforce effective air filtration;
- . Enforce compliance through inspection and monitoring;

"According to all available data, the smoking ban has not achieved and will not achieve clean indoor air on commercial airliners," Robertson concluded. "If the goal of the Committee is to ensure a clean and healthy environment for airline passengers, improving ventilation standards and systems will go immeasurably further than attempts to react to any individual pollutant."

- ends -

Note to Editors

1. A transcript of Gray Robertson's testimony to Congress is available on request.

2. Further information: Nick Gordon-Brown
Edelman Public Relations
Kingsgate House
536 Kings Road
LONDON SW10 0TE
Telephone: 01-835 1222

2501330838