

## AIRCRAFT FUMES

**Winging it**

**P**ERHAPS it is no coincidence Brenda will no longer use the RAF's aging British Aerospace 146 for royal duties. The Committee on Toxicity is to consider a report that suggests airline pilots have suffered "alarming" cognitive failures after prolonged exposure to polluted air in cockpit and cabins.

Most of the 27 pilots in the clinical study had been flying BAe 146s or B757s, believed to be the worst for engine leaks which contaminate the air that is pumped into the craft.

Some of them reported mixing up or being unable to retain vital numerical data about altitude, speed and direction provided by air traffic control. Some were completing tasks in the wrong sequence, setting incorrect levels for climbing or descending and taking off with the wrong flap settings.

Other pilots questioned in the clinical study reported that they had been unable to respond to instructions from air traffic control and had been unable to recall vital things like whether the



aircraft's undercarriage had been raised or lowered.

Six of the pilots are apparently still flying. One, now 50, who has retired and did not wish to be identified, told the *Eye* he realised something was seriously wrong when he could not remember the basic pre-flight check routine. Now he has trouble with words, extreme fatigue and memory loss.

The *Eye* first reported concerns about dangerous toxic fumes in the craft, including the Queen's BAe 146, back in 2000, when reports starting surfacing around the world, particularly in Australia, about alarming incidents of pilots

being overcome by fumes, dizziness and headaches. Even then there were concerns about the long-term effect on pilots health of leaking organophosphates into the craft.

Now, the clinical study by Dr Sarah Mackenzie Ross, a consultant clinical neuro-psychologist from University College London, has also found high levels of a range of volatile organic compounds, such as benzene and toluene, in their blood and body fats. Nickel was found in all B757 pilots.

Although the study is limited because there are no "controls", Dr Mackenzie Ross reported that the levels of toxic chemicals in the blood were higher than population averages.

All of the pilots reported chronic health problems, including fatigue and gut problems, and numbness in their finger and toes. They all suffered memory loss and difficulties in retrieving words.

The airline industry has been reluctant to admit that there is a problem, arguing that any organophosphates entering the aircraft are in such small doses as to be insignificant. The preliminary findings by Dr Mackenzie Ross, while not providing any kind of causal link, might suggest otherwise. Curiously none of the pilots has been invited to attend the Committee on Toxicology meeting.