Birmingham Airport

Aviation deposits and odours

Sustainability Team
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Oily Deposits

Sometimes, people mistakenly believe aircraft routinely dump fuel, or even toilet waste in the air. Occasionally we will be contacted by a member of the public with a complaint regarding a deposit they believe is from an aircraft which has over-flown their property.

These ‘deposits’ can range from a film or layer on windows, scum on a pond or a substance on washing lines, garden furniture or roofs. When we receive such a complaint, the Airports Sustainability Team will on occasions visit the property. Once at the property they will take a statement from the house-holder, take pictures of the affected area and, where possible, take samples for laboratory analysis.

Algal growth on a garden fountain

Fuel Dumping

Dumping of expensive aviation fuel is not a routine activity and is strictly controlled. The Civil Aviation Authority (CAA) state that fuel dumping, except in an emergency, is an offence liable to a statutory fine.

Common short and medium haul aircraft are not equipped to dump fuel, for example the Airbus A320 and the Boeing B737. The prefered method to reduce fuel on these aircraft in an emergency, is to circle around the airport until safe to land.

Long haul aircraft such as the Airbus A380 and Boeing B777 are equipped to jettison fuel in emergency situations only. According to CAA guidelines fuel should be dumped over the sea or if this is not possible it should be above 10,000 feet to allow the fuel to evaporate before reaching the ground.

However, in an emergency the pilot has the final decision. All such incidents are reported to the CAA.

Contrails

Everybody has seen them criss-crossing the sky, a visual reminder of where aircraft have been. But what are they? Dumping fuel? Toilet waste? Or something more sinister? Well, no! The answer is far simpler.

They are condensation trails – contrails. The hot exhaust gases condense when they fly through what is known as ‘saturated’ air – air that is ‘wet’ – and form lines of very fine ice droplets which look very similar to ordinary clouds.

Kerosene Odours

The human nose is a very sensitive organ and can detect even very small amounts of aviation kerosene in the air. The majority of the time odours of aviation fuel and engine exhausts are blown away in the wind without any notice. However, if the conditions are particularly still then it may be more notice-able, but hopefully shortlived.

Although aviation fuel and exhaust gasses can have a distinctive odour, it can be confused with household gas. If you are in any doubt as to the source of an odour contact your local gas provider or call the **National Gas Emergency Service on 0800 111 999** available 24/7.

Medical experts assure us that the although the odour associated with kerosene is not pleasant it is not hazardous to health but, in recognition of the concerns of local residents that there may be some link between the Airport and respiratory problems, we commissioned a study into this whole subject. This was a substantial piece of research which took two years to complete and did not report an incidence of higher respiratory disease within the area surrounding the Airport compared to a similar area without an airport. I hope this reassures you that we do take this matter very seriously.

In addition, we have an Ambient Air Quality Monitoring Station deployed on the airfield (since April 1995) which monitors and measures a range of compounds 24 hours a day. We share and compare our data with Birmingham City Council and Solihull Metropolitan Borough Council. This provides us with information on current ambient air quality, monitoring levels of Ozone, Nitrogen Dioxide, Carbon Monoxide, Sulphur Dioxide and Particulate Matter 24 hours a day.

Ice Falls

Icefalls from aircraft are rare. Icefalls happen when ice forming on the aircraft fuselage breaks off as the aircraft descends into warmer air. The accumulation of ice may be caused by a variety of factors including atmospheric conditions.

In comparison to the huge number of flights in UK airspace – over 2 million a year or an average of more than 5,200 flights a day – there are an average of only 31 icefalls reported a year. Most cause little or no damage to property.

Nevertheless, it is an issue taken very seriously by the aviation industry. Fundamentally, our regulator the Civil Aviation Authorities (CAA's) primary aim is to prevent icefalls by regular system checks.

The Airport and The CAA has no liability for damage which may be caused to property as a result of an icefall, but, the CAA as the regulator of UK civil aviation safety, investigates reported icefall incidents. This is not an easy process, particularly when a number of aircraft may have been in the area at the time and because of the difficulty of determining the trajectory of a falling object.

Contacting the Sustainability Team

We hope that this document has helped to explain how aircraft operate at Birmingham Airport and addressed any concerns or queries that you may have. However, should you require further information please contact the Sustainability Team via the form available at the link below:

https://www.birminghamairport.co.uk/community-complaint

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