

NIGHT FLIGHTS REVISITED

A short pamphlet arguing that the next few months leading up to a new aviation strategy is the ideal time to look again at the thorny question of night flights



My niece once said to me, “Night flights. Aren’t these flights which just happen to fly at night? Why should you be concerned about them?” If you haven’t experienced the impact night flights can have, it is a perfectly reasonable question.

However, night flights can and do cause problems. We must, though, be careful not to overstate the case. There are many people overflowed by night flights who are not woken up by them. But for some people night flights are a real problem. If your sleep is constantly interrupted by flights through the night or if the first flight well before 6am is your regular alarm call, night flights become a big issue for you and, indeed, may damage your health.

In this short publication we look at:

- The number of night flights at UK airports
- The impact they can have on health
- The costs and benefits of night flights
- How essential they are
- And what actions could be taken to improve the situation

This is not an in-depth study; more of a call for a reassessment of night flights.

Flight Numbers

Airport (in alphabetical order)	Number of scheduled 'night' flights
Birmingham (11pm- 6am)	15 average
East Midlands (11pm – 6am)	42 average
Edinburgh (11pm – 6am)	19 average
Gatwick (11.30pm – 6am)	45-50 (summer); 18-20 (winter)
Glasgow (11pm – 6am)	18-24 average (summer)
Heathrow (11.30pm – 6am)	17-18 average
Leeds Bradford (11.pm – 7am)	15 (summer); 6.5 (winter)
Luton (11.30pm – 6am)	13-32 (the higher numbers in the summer)
Manchester (11.30pm – 6am)	31 average
Newcastle (11pm – 7am)	20 (average summer day)
Stansted (11.30pm – 6am)	35 (summer); 20 (winter)

Comments:

We have tried to be as accurate as we can but the figures need to be read as **indicative**. This is mainly due to the difficulty in collecting the statistics. Only a few airports are clear about the exact number of night flights flying. Too many are not. The information is hard to find on websites and in their literature. It is probably not a conspiracy of silence; more a reflection that the provision of the information is not top of their agenda. Below we make the recommendation that airports should be required to provide clear, accessible information about night flights.

A number of airports have **restrictions on the type of planes** which can operate pre-6am. Some airports do not permit the noisiest planes. Some manage night flights through the overall noise they create during the noise climate rather than the number of planes permitted. We have not taken this in to account.

We have concentrated on the hours between 11/11.30pm and 6am but a number of local communities have told us that **the hour between 6am-7am** is hugely problematic. A lot of people are still trying to sleep at this time yet it can be one of the busiest hours at many airports. We recognise, however, that reducing flights during this hour is more difficult at many airports (though perhaps not all) than dealing with pre-6am flights.

The designation of airports may require revisiting. The Government is responsible for setting the night flight regime at the three **designated airports** – Heathrow, Gatwick and Stansted. There are airports with as many or more night flights as these three airports which are not designated. This seems illogical. There is a case for more airports to be designated.

Recommendation:

All airports are required to put upfront on their website and in other relevant places clear, accessible information about their night flight regimes: hours of operations; number of flights operated; night quotas etc.

Recommendation:

The Department for Transport examines the case for designated more airports.

Health Impacts

Warwick University Study

Research from Warwick Medical School published in the *European Heart Journal* (1) in February 2011 is based on the experiences of hundreds of thousands of people across eight countries. Chronic lack of sleep produce hormones and chemicals in the body, which increases the risk of developing heart disease, strokes and other conditions such as high blood pressure and cholesterol, diabetes and obesity, according to Dr Michelle Miller of the University of Warwick. She and Professor Francesco Cappuccio, who co-authored the report, followed up evidence spanning seven to 25 years from more than 470,000 participants across eight countries, including Japan, the US, Sweden and the UK. Professor Francesco Cappuccio said: "If you sleep less than six hours per night and have disturbed sleep you stand a 48% greater chance of developing or dying from heart disease and a 15% greater chance of developing or dying from a stroke".

"If you sleep less than six hours per night and have disturbed sleep, you stand a 48% greater chance of developing or dying from heart disease"

Professor Francesco Cappuccio

The World Health Organisation Study

The World Health Organisation (WHO) Study, *Night Noise Guidelines for Europe* (2), published in 2009, found:

- If sleep is regularly disturbed for any reason, it has an effect on people's health.
- Even if people don't wake up, there is "sufficient evidence" to show that noise increases people's heart-rate.
- There is some, but "limited", evidence that noise at night can cause heart problems, depression and other mental illness.
- Children, including babies, because they spend longer in bed, are "considered a risk group" even though they usually sleep through noise better than adults.
- Since older people, pregnant woman and ill people find sleeping more difficult, they are particularly vulnerable to being disturbed by night noise.

References

(1). *European Heart Journal*, Feb, 2011 -

<http://www.mattasons.com/tag/european-heart-journal/>

(2). *Night Noise Guidelines for Europe*, World Health Organisation, 2009

For a good summary of these studies and others, *Health Consequences of Aircraft Noise*, Kalternback et al

Recommendation: The Department for Transport uses all the latest evidence about the impact of night flights on health and quality of life when drawing up a night-flight policy.

The Costs and Benefits

There are economic benefits of night flights in terms of operational efficiencies to airlines; passengers' time; savings to business; 'just-in-time' deliveries; and job opportunities – having a job can also improve a person's health.

There are also economic costs arising from the health impacts of night flights; lower productivity at work; and possible premature deaths.

Aviation Research Study

15/08/2017



ECONOMIC IMPACTS OF NIGHT FLIGHTS: RESEARCH STUDY FINAL REPORT



SYSTRA

In 2017, the Department for Transport published a report it had commissioned from Systra which looked at the economic impacts of possible changes to the night flight regimes at Heathrow, Gatwick and Stansted. But it only examined at the impacts of the night flights regime as experienced by airports, airlines; passengers and public accounts. The Department made clear the report did not 'seek to assess the impacts associated with changes in noise pollution from aircraft' but added 'whilst this impact is not considered here, it does form an important part of the Department's considerations in decisions on changes to the night flights regime'.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/638624/economic-impacts-of-night-flights-research-study.pdf

Recommendation: The Department for Transport carries out an up-to-date review of the full costs and benefits of night flights in advance of its new aviation strategy being published.

How essential are night flights?

Careful reading of the key reports published over the last decade and a half suggests many night flights are less essential than is often thought.

What flies at night?

Night flights are different to day flights. During the day most flights using European airports are short-distance; only 13% are over 2000 kilometres; nearly 80% are less than 1500km; the most common distance is around 500km. During the 'deep night', between 12pm and 5pm, 30% of flights are long-distance flights (over 2000 kilometres). The other noticeable difference is the number of cargo flights at night. More than 40% of cargo flights take place between 11pm and 7am. 17% of non-scheduled flights take place during the night. Source: *EuroControl Trends in Air Traffic Volume 5, 2009*

Why fly at night?

The EuroControl Report found that there are three reasons for night flights:

- The airlines use the last hours of the day and the first hours of the night to catch up on delays and ensure their aircraft are in the right place for the next day.
- Night flights allow the budget airlines and the non-scheduled airlines (usually operating holiday charter flights) to make full use of their aircraft. This keeps their costs down.
- Freight at night is necessary because customers want the goods the next day.

We deal with the freight argument first. Most freight does not need to arrive at night. A report from the International Logistics Quality Institute in 2004 found that just 10% of short-distance express freight is time-critical, with no evidence that most of the freight on long-distance night flights is time-critical.

The other two arguments for night flights – to ensure the aircraft are in the right place for the next day and to make full use of the planes – are simply for the benefit of the airlines. If they could not operate at night, they would be forced to offer fewer flights or buy more planes and fares may rise. A comprehensive European Commission report put it like this:

“the argument for night flights seems to be basically commercially rather than operationally driven.”

Source: *Assessing the Economic Cost of Night Flight Restrictions*, European Commission 2005

Does this rule out all night flights?

The European Commission report found:

“If the same restrictions apply to all the competing airlines flying the European long-haul routes, they do seem to be able to adapt their schedules and get over slot availability, congestion, and connections, and fly by day.”

That would be a huge 'ask', requiring international logistical changes. It could not be achieved by one country on its own. And certainly could not be put in place before the forthcoming aviation strategy is published!

Recommendation: The Department for Transport needs to take a cold, hard look at just how many flights need to fly at night; at how many of these could be transferred to the day without harming the economy; and how the country's distributional systems would cope if more freight arrived during the day. And come up with plans in its aviation strategy to put in place a new night flight regime. This might include new restrictions on night flying and/or disincentives to fly at night. It might mean the Government 'designates' more airports so that Government sets out the overall night framework as it currently does at Heathrow, Gatwick and Stansted.

What actions can be taken

Recommendation 1:

The Department for Transport uses all the latest evidence of the **health and quality of life impact of night flights** when drawing up its night-flight policy.

Recommendation 2:

The Department for Transport carries out an **up-to-date review of the full costs and benefits of night flights** in advance of its new aviation strategy being published.

Recommendation 3:

The Department for Transport needs to take a cold, hard look at just **how many flights need to fly at night**; at how many of these could be transferred to the day without harming the economy; how the country's distributional systems would cope if more freight arrived during the day; and, at Heathrow, if a third runway is built, how the extra capacity could be used to reduce the number of pre-am flights.

Recommendation 4:

And come up with plans in its aviation strategy to put in place **a new night flight regime**. This might include new restrictions on night flying and/or disincentives to fly at night. It might mean the Government 'designates' more airports so that Government sets out the overall night framework as it currently does at Heathrow, Gatwick and Stansted.

Recommendation 5:

To make cutting night noise **a key component of the Noise Reduction Plans** it is expected airports will be required to draw up as part of the Government's new aviation strategy.

Recommendation 6:

To ensure communities which continue to be overflown by night flights receive **adequate and fair compensation**.

Recommendation 7:

All airports are required to put upfront on their website and in other relevant places clear, **accessible information** about their night flight regimes: hours of operations; number of flights operated; night quotas etc.

Recommendation 8:

The Government invests in **research and development into noise-cancelling devices**. Currently many people use ear plugs or white noise to mask the noise. However, noise-cancelling devices would be better. These are small gadgets that you can stick on your window or wall which will not only cancel real-world noise, but isolate the noises you'd prefer not to hear. There is a lot of research going on into them at present but much of it is stalling due to a lack of financial support.



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