

Aircraft stacks



What is a stack?

A stack is a fixed circling pattern in which aircraft fly whilst they wait to land. When airports are busy, there can be a build up of aeroplanes waiting to land. Air Traffic Control (ATC) must ensure there is a safe gap between each aeroplane as they come in to land. To achieve this, aircraft will sometimes circle around in the stack until air traffic controllers are able to fit them into the landing pattern. You may well have experienced this yourself when flying into a busy airport.

Where are the stacks?

Every airport has several stacks. Heathrow has four: Bovingdon; Lambourne; Ockham and Biggin. The map below shows where they are.



How long have the stacks been there?

The stacks have been in the same locations since the 1960s. The Department for Transport are responsible for the location of the stacks. They could not be moved without an airspace change public consultation.

Noise created by aeroplanes holding in a stack

The minimum height of aircraft in the stack is 7,000ft. So the aeroplanes are still high up. Therefore, the noise from aircraft in the stack should not cause a nuisance on the ground. However, sometimes people are disturbed. This tends to be more often when a stack is over the countryside, where there is very little background noise and so the aircraft are more noticeable.

What about when aeroplanes leave the stack?

People living between the stack and the final approach may hear noise as the aeroplanes leave the stack and make their way to the final approach to Heathrow.

As there are no set heights or routes for arriving aircraft, once they have left the stack, aeroplanes are directed individually by ATC to ensure they are safely spaced for arrival. Therefore, they can legitimately go anywhere they are directed. ATC do this to ensure high levels of safety and efficiency.

This process means that people living or working anywhere between the stacks and the final approach to the airport may be over flown by arriving planes and so may be affected by aircraft noise.

What is done about noise from arriving aeroplanes?

Please see the separate fact sheet on arrivals for full details of our measures to manage noise created by arriving aircraft.

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Our other factsheets

Please see our other fact sheets which provide information on:

- Arrivals
- Departures
- Go arounds
- Night flights
- Aircraft noise on the ground
- Heathrow and helicopters
- The legal overview.

Further information

If you would like further information, please contact the Flight Evaluation Unit:

By telephone: 0800 344 844

By e-mail: noise_complaints@baa.com

By post: Flight Evaluation Unit
Second Floor Meridian
The Compass Centre
Nelson Road
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Website: Make an enquiry on our website:
www.heathrow.com/noise

Please note that the freephone telephone number is an answerphone. Please leave your name, contact details and brief details of your enquiry. A member of the FEU will contact you as soon as possible.