Steeper Approaches trial 17 September 2015 – 16 March 2016

Background

Most planes coming into land at Heathrow wait in ‘holding stacks’. The stack acts as a waiting room, allowing air traffic controllers to efficiently organise planes for landing.

Once the planes leave the holding stack they are directed by air traffic controllers to the final approach in to Heathrow. NATS controllers sequence the planes from all four stacks into a single stream of traffic and guide them safely in a straight line onto one of Heathrow’s two runways.

The international standard approach for most airports in the world is set at 3 degrees, except for obstacle clearance (e.g. buildings, mountains etc.). Recent experience at Frankfurt airport has demonstrated that slightly steeper approach angles are possible in the short to medium term to reduce noise for people living nearby.

Starting on 17 September 2015 we will be trialling an approach angle of 3.2 degrees. This requires no modifications to aircraft equipment or specific pilot training. The trial has been approved by the CAA and is planned to run until 16 March 2016.

The steeper approaches trial is one of 10 practical steps we’re taking through our Blueprint for Noise Reduction to explore ways to improve the noise climate around Heathrow.

The diagrams below show the final approaches to Heathrow’s northern or southern runways on westerly and easterly operations.

Final approach on westerly operations (i.e. during periods of westerly winds)
FAQ

What is the purpose of the trial?
An aircraft’s angle of descent has an effect on the noise experienced by people below. The steeper the angle, the less time an aircraft spends at low altitudes, which means that fewer people should be affected by higher levels of noise.

The trial will assess the operational and noise implications of slightly steeper approaches.

How much higher will aircraft be on approach during the trial?
At 8 nautical miles from touchdown (which is approximately where the procedure comes into effect) aircraft will be 170 feet higher than usual.

Will you trial even steeper approaches if this trial is successful?
Potentially, yes. We believe approaches of up to 3.5 degrees are feasible in the longer term. Our aim is to incorporate steeper angles of descent in our proposals for redesigning the Heathrow airspace as part of the Government’s Future Airspace Strategy.

London City airport use an approach of 5.5 degrees, why can’t Heathrow?
Steeper approaches used at other smaller airports such as London City are as a result of obstacle clearance requirements. These airports are used by entirely different aircraft fleet mixes which precludes the angle being used at most international airports, including Heathrow.

Will all flights arriving at Heathrow be required to use the trial procedure?
No, the trial is optional. The conventional 3 degree approaches will still be available. Airlines with the necessary navigation equipment will be encouraged to approach the airport at 3.2 degrees in order to help us gather relevant data.

The trial will be in effect for all four runway approaches (27R, 27L, 09R, 09L).

Are there any conditions when the procedure won’t be used?
The use of 3.2° approaches will only be allowed when visibility is good (known as Category 1 conditions).

Will this improve the noise impact for residents living under the final approach?
Evidence suggests that some residents may benefit from reduced noise as a result of steeper approach angles.
Mobile noise monitors have been deployed for the duration of the trial which will be used to help verify the modelling.

**Does the trial affect the position of flights before they reach the final approach?**  
No, we do not expect any changes to the position of aircraft before they reach the final approach into the airport.

**Will the trial have any impact on departing flights (position or altitude)?**  
No, the trial does not affect departures.

**Will you be reporting your findings from the trial?**  
Yes, we will produce a report with the findings following the completion of the trial.

**More information:**  
For more information, please contact the Community Relations team on 0800 344 844 or email noise@heathrow.com.

The Heathrow Airport Consultative Committee (hacc.org.uk) and Heathrow Community Noise Forum (Heathrow.com/hcnf) have been briefed about the trial.

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The Steeper Approaches trial is one of 10 practical steps in our Blueprint for Noise Reduction. You can find a copy of this on our website – Heathrow.com/noise – and follow the quick link on the home page.