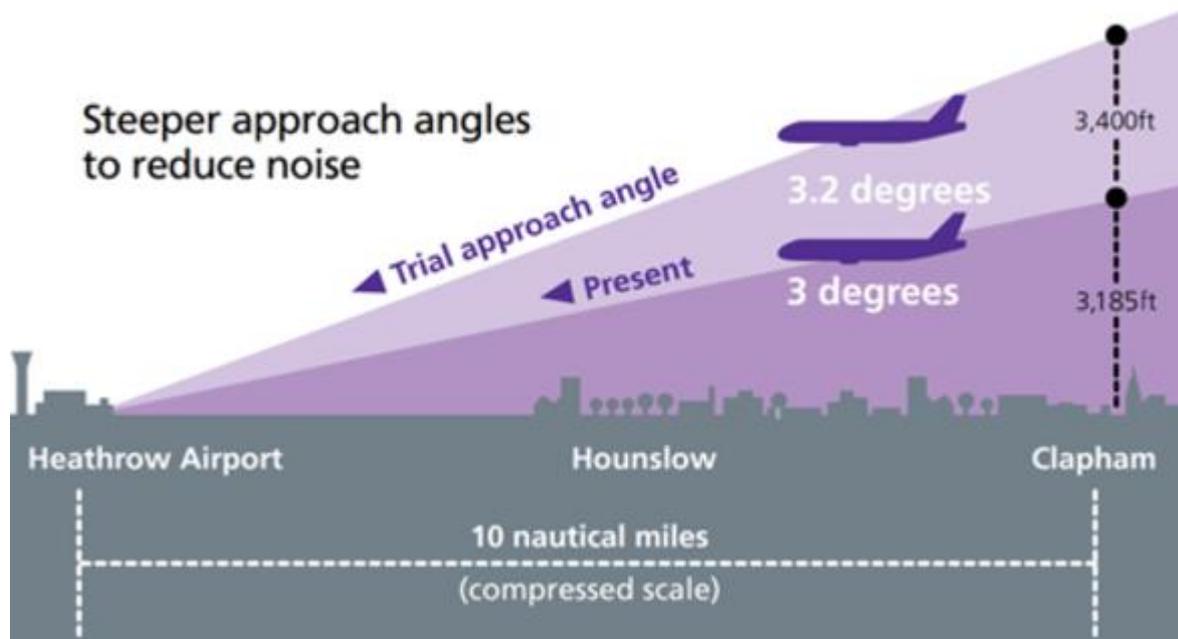


Heathrow Airport Slightly Steeper Approach Trial – Phase 2

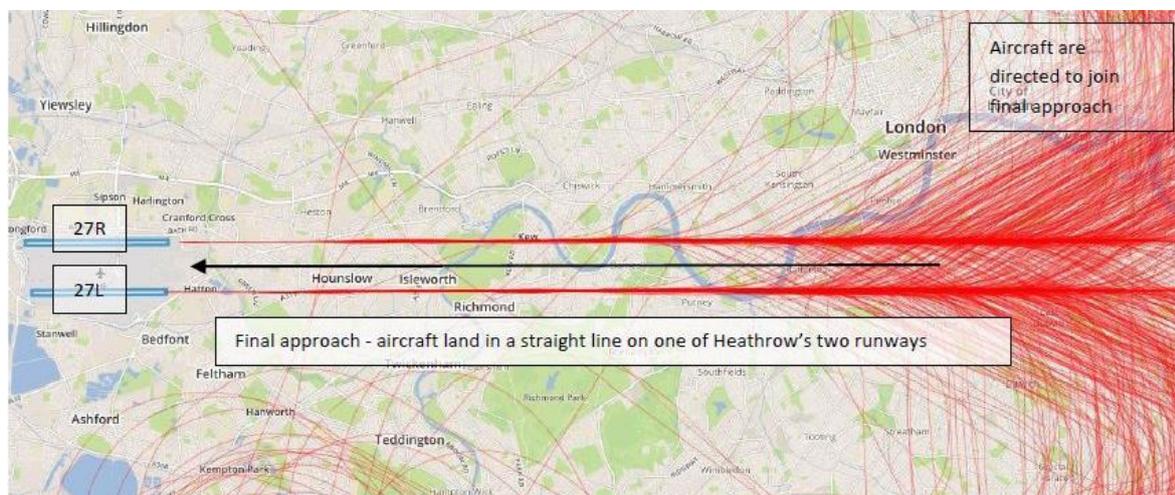
Following the previous trial which ran from September 2015 to March 2016, Heathrow airport will be carrying out a second trial which will see some aircraft follow a 3.2° approach angle when coming into land. The standard approach angle for a large majority of airports around the world is 3°.

This slightly steeper approach will mean that aircraft will remain higher, for longer, which in turn will have a noise benefit for communities who live under one of Heathrow's four well defined approach paths.

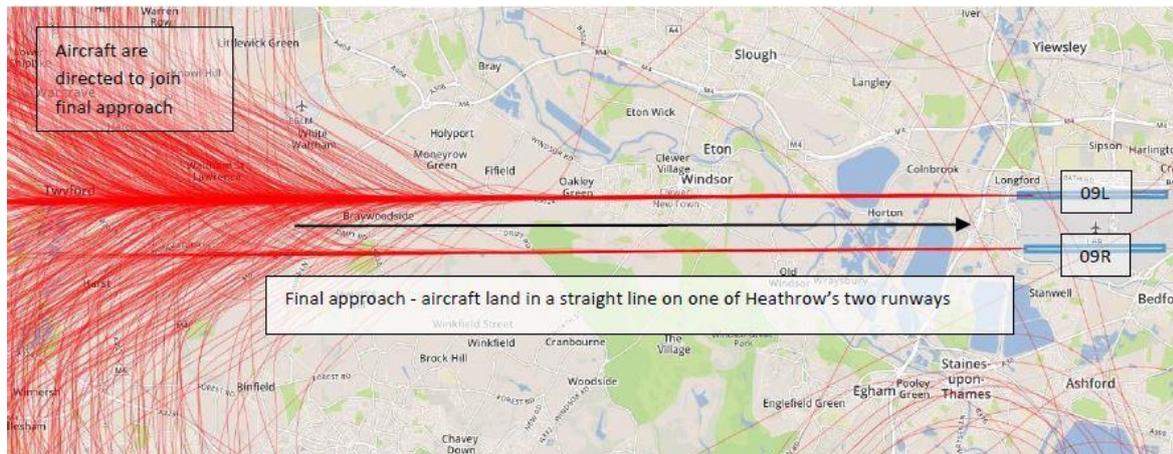


The diagrams below show the final approach paths to Heathrow's northern and southern runways on westerly and easterly operations.

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



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



FAQ

When will the trial run?

The trial will begin on 25th May 2017 and run through to 11th October 2017.

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.

ICAO (International Civil Aviation Organisation) clearly states that approaches greater than 3° should not be used for any other purpose other than terrain or obstacle avoidance. However, Heathrow and the UK Civil Aviation Authority (CAA) want to ascertain the benefits of slightly steeper approaches for environmental reasons. The data gathered will help us inform both national and international policy.

Why are we doing this trial again?

Following the previous trial, the Civil Aviation Authority (CAA) asked us to carry out a second trial to see what effect warmer temperatures have on the approach angle flown. As the RNAV procedure is based on barometric pressure (air pressure) and temperature, we are anticipating that the angle flown by aircraft participating in this second trial may vary slightly. This is due to warmer average temperatures in the summer months. The average temperature during the previous trial was 9.6°C and this led to an average angle flown of 3.14°. Warmer temperatures should see this rise closer to 3.2°.

This second trial will allow us to compile a full range of data prior to introducing this new procedure on a permanent basis.

What will change?

As this trial is for landing aircraft only, departure routes will not be affected and there will be no changes to any aircraft tracks. Arriving aircraft will still follow existing tracks but will be higher on the

approach path. This approach will be available on both runways at Heathrow from both an Easterly and Westerly direction.

Will you trial even steeper approaches if this trial is successful?

Potentially, yes. We believe approaches of up to 3.5° 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. However, it is important to note that some aircraft may not be able to fly 3.5° approaches without significant upgrades and this will need to be considered as part of the longer term strategy.

London City airport has an approach angle of 5.5°, why can't Heathrow?

London City airport is surrounded by obstacles so a greater approach angle is required to ensure safety margins are maintained. The types of aircraft that use the London City approach are specially certified and designed to fly the steeper procedure and have various modifications that allow them to do so. The flight crews are also specially trained and the aircraft are generally smaller.

3.2° is a best fit angle of approach for all Heathrow aircraft types and sizes. 3.2° requires no modification to the aeroplane and does not require any extra crew training.

What is the noise benefit?

The previous trial concluded that there was a minor noise reduction benefit. Although this is a small benefit, we believe that in conjunction with a number of other Heathrow initiatives, the noise experienced by local residents will continue to decrease.

A full break down of the noise monitoring results from the previous trial can be found [here](#).

Will all flights arriving at Heathrow be required to use the trial procedure?

No, the trial is optional. The conventional 3° approaches will still be available. Airlines with the necessary navigation equipment will be encouraged to approach the airport at 3.2° 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 you be reporting your findings from the second trial?

Yes, we will produce a report with the findings following the completion of the second trial and this will complement the previous report which can be found [here](#).

Where can I find out more?

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

The Slightly Steeper Approach trial is one of 10 practical steps in our Blueprint for Noise Reduction. You can find a copy of this on our website [here](#).