

**Heathrow Airspace Modernisation
– implications for Richmond Park
Background briefing
August 2023**

1. Airspace Modernisation

The UK Airspace Modernisation is the first complete overhaul of UK airspace usage in more than 50 years and builds on new technology – performance-based navigation (PBN) using satellites rather than ground-based radar – which allows much more accurate control of aircraft navigation and therefore more precise flight paths.

The modernisation is divided into two parts – upper airspace (over 7,000 ft) and lower airspace (under 7,000 ft). The CAA is conducting the overall strategy and process; for the lower airspace, each airport develops its own plans and the CAA approves them.

2. Process and timing

The CAA has set out a standard process, including the stages and main requirements, with guidelines for airports as to how to develop proposals (CAP1616). Within that framework, different airports have been using different methodologies and timing.

In Stage 1 (Aug-Dec 2021 for Heathrow) the Design Principles (DPs) for new flight paths were set.

In Stage 2 (April 2022 to July 2023) Heathrow developed a very large model of all possible airspace (ie flight path) options, then evaluated them against the Design Principles and technical considerations to produce first a long-list and then a short-list of options (151 in total).

Heathrow uploaded the output from Stage 2, including the short-list, to the CAA portal on 28 July and it was made public in batches starting on 4 August. The CAA reviews the output to decide whether it meets the tests for passing the Stage 2 ‘gateway’.

In Stage 3 (Sept to Dec 2023 or to March 2024) Heathrow undertakes a more detailed (‘full’) analysis of the shortlisted options and decides the final new flight paths for public consultation in 2024/25. Implementation of the new flight paths is planned for 2027-2029.

3. Flight paths over Richmond Park

Note: Aircraft always land into the wind. The prevailing winds in the UK are from the south-west/west, so arriving aircraft generally (70% of days) arrive and depart toward the west (called westerly operations) and toward the east (easterly operations) on 30% of days. Richmond Park is impacted by westerly arrivals and easterly departures.

Currently Richmond Park is very largely free of aircraft and their noise. No arrivals fly over the Park (the arrival path for westerly arrivals on Heathrow's southern runway - 27L - is half a mile north of the Park boundary) and only a small proportion (5% of all departures) fly across the southern tip of the Park.

Heathrow's short-list includes 17 westerly arrival flight path options that impact Richmond Park (40% of the total of 43 westerly arrival options), which is likely to result in up to 60,000 flights a year. Some of the flight paths go directly over the centre of the Park, others go over one side or the other, but all of them will create very loud, continuous noise across the whole Park's open landscape.

The short-list also includes 14 departure flight paths that impact Richmond Park, out of a total of 96 easterly departure flight paths. While the number of flights is likely to be no more than today (12,000 a year) the spread of them across the Park including over the centre and northern part of the Park will affect the whole Park rather than just a small part of it.

4. About Richmond Park

Richmond Park is London's largest royal park and the largest enclosed urban park in Europe, covering 2,500 acres. It was enclosed as a hunting park by King Charles I in 1637 with an eight-mile long wall, which is still in place.

Richmond Park is a Special Area of Conservation (SAC), a Site of Special Scientific Interest (SSSI), a National Nature Reserve (NNR) and a Grade 1 Registered Historic Park and Garden of 'special historic interest'. It is probably the most heavily protected park in the country.

Richmond Park's biodiversity is of national and international importance for wildlife conservation. It is home to thousands of species of birds, bats, butterflies, beetles, bees and wasps, other invertebrates and fungi (many rare and protected) and 600 red and fallow deer. It has 1,200 veteran trees, up to 650 years old, and is the largest area of lowland acid grassland in London, with its accompanying grasses and wildflowers.

Richmond Park is probably the quietest place in London, with ambient noise of less than 25dB at night, equivalent to a deep rural area, and 35-40dB during the day (at night it's probably the darkest place in London). People come to Richmond Park from all over London and wider afield to enjoy its peace and tranquillity, as a respite from the bustle and noise of the city.

Richmond Park is world famous. It is visited by over 5.5 million people per year (similar in popularity to the British Museum), with a rapidly increasing number of overseas visitors, drawn by social media. It's a magical space, loved by hundreds of thousands of Londoners.

5. About The Friends of Richmond Park

Founded in 1961, the Friends of Richmond Park (FRP) is a charity dedicated to 'the conservation and protection of Richmond Park and its peace and natural beauty for the benefit of the public and future generations' and to 'advance public education about the Park'. It has 3,600 members and 300 volunteers. Its patrons are Sir David Attenborough, Clare Balding and Baroness Susan Kramer.

The Friends funds conservation projects in the Park and its volunteers staff the Park's Visitor Centre, do conservation work and litter picking and run the Discoverers education programme for families.

The Friends' campaign to protect and conserve the Park including on issues such as the Park's policing, traffic, local planning issues, control of sporting events and the impact of Heathrow developments. It has also developed a range of publications, videos and films, including the 2017 20-minute film *Richmond Park National Nature Reserve* made with Sir David Attenborough.