

Reduced Night Noise Trail for arrivals to east and west of airport

Context of the trial

Gatwick airport is planning a trial to reduce noise from arriving aircraft at night. The trial aims to reduce the incidences of 'outlier' arrivals by reducing the number of aircraft flying excessively noisy profiles and/or flying at unnecessarily low altitudes.

- The trial is to take place next year from 1.30am-5am, early summer due to delays as originally planned for early 2020.
- The trial is set to start at 6,000ft not 7,000ft – we have questioned why?

Heatmap

Figure 1 below shows a heatmap of the arrival swathes to the east and west of the airport based on Jan – Jul 2017 data for flights arriving between 01:30 and 05:00 local. Only traffic below 7,000ft is shown. Areas with <1% of overflights have been removed.



Figure 1. Arrivals heatmap for Jan-Jul 2017 01:30 – 05:00 (local), traffic below 7000ft

- **Noise monitors** have been put in place prior to the trial to compare noise before and during the trial under the routes, although some routes do not have noise monitors throughout the corridor of arriving traffic closest to the runway.

Routing of trial

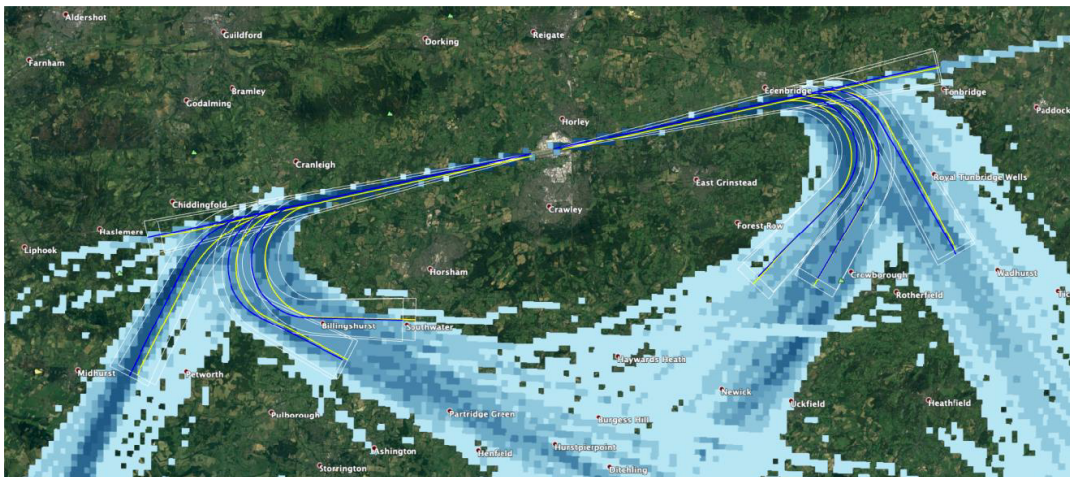


Figure 6: Trial tracks with overflight cones overlaid on current traffic

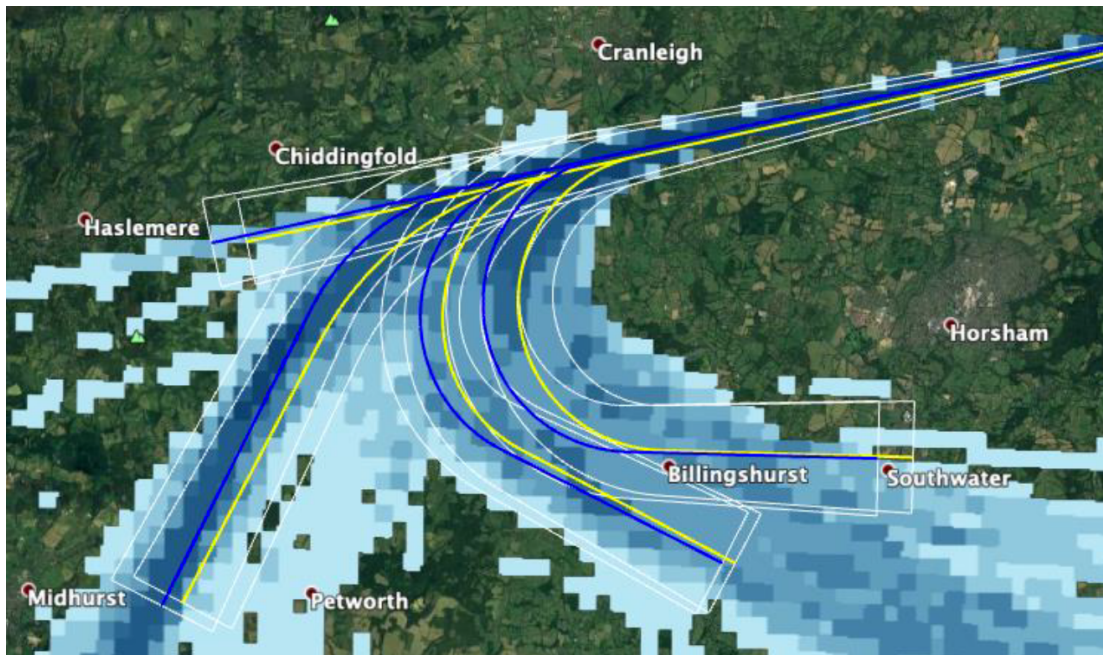


Figure 7: Trial tracks with overflight cones – Easterly arrivals detail

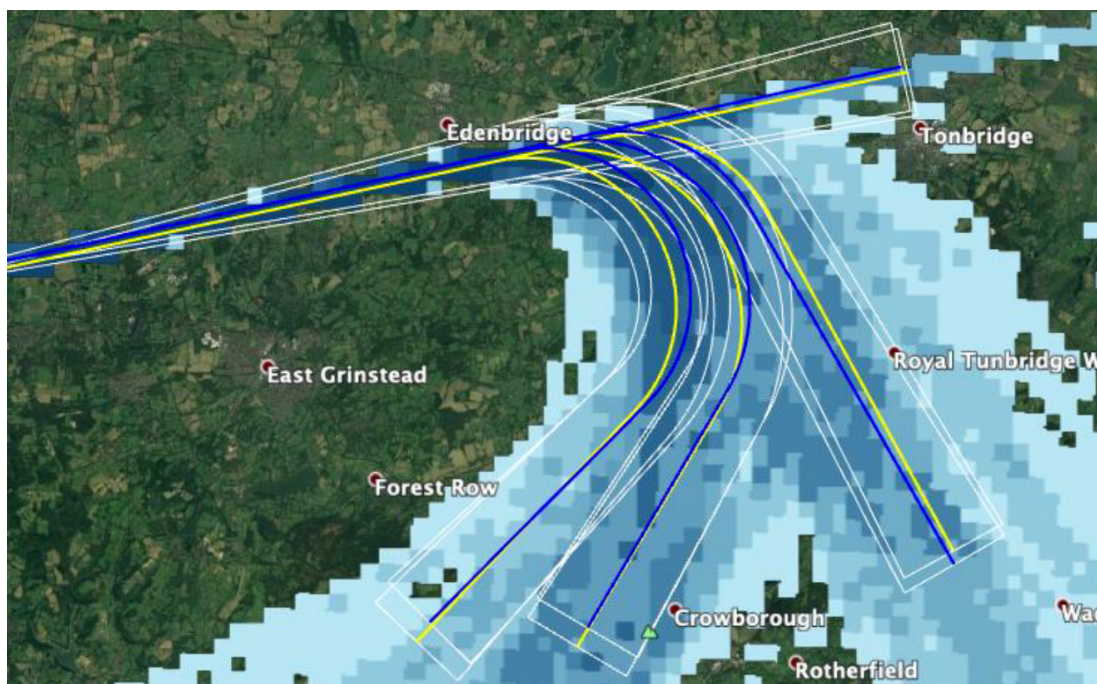


Figure 8: Trial tracks with overflight cones – Westerly arrivals detail

- **Computerised trial of RNN Trial conclusion is** - The results show that the Trial-like arrivals and the trial arrivals have a smaller 60dB Lmaxnoise footprint than the outlier aircraft

The trial-like arrivals have a smaller footprint than the outlier aircraft by between 4% and 41%

The hypothetical trial arrivals have a smaller footprint than the outlier aircraft by between 10% and 38%.