

Community noise monitoring at East Midlands Airport

Background

East Midlands Airport has invested in a state of the art Aircraft Noise and Operations Monitoring System – ANOMS. The ANOMS system allows us to assess noise from aircraft operating at the airport, linking data from our network of noise monitors with the tracks flown by aircraft.

Our network currently includes five fixed noise monitors at locations which have been selected to enable aircraft noise measurement. These are shown on the map below. Our Noise Action Plan includes a commitment to install a sixth noise monitor at a site in Melbourne, this is expected to enter service in 2022, which is also shown below. Additional noise monitoring can be undertaken using our mobile noise monitor. This paper outlines the way in which community noise monitoring is undertaken and how locations are agreed to site our mobile noise monitor.



Requests for community noise monitoring

Periodically East Midlands Airport receives requests for community noise monitoring from community members or Parish Councils. Residents who make direct requests for community noise monitoring are asked to approach their Parish Council who can coordinate requests and liaise with our Community Engagement team.

Requests for community noise monitoring are passed to the Flight Evaluation Unit and discussed with the Monitoring, Environment, Noise and Track (MENT) Sub-Committee of the Independent Consultative Committee (ICC). Upon agreement of an annual noise monitoring programme, the Community Engagement team and Flight Evaluation Unit will work with Parish Council partners to identify a suitable monitoring location and deploy the mobile noise monitor.

Selecting a community noise monitoring location

Community noise monitoring represents a significant investment by the airport, which includes expensive technology and data analysis. As such, community noise monitoring must be undertaken at suitable locations which meet a range of criteria as listed further below. As such, the Community Engagement team and Flight Evaluation Unit will work with Parish Council partners to ensure that a site can be provided which is:

- Secure, with safe access for airport staff and our appointed contractors;
- Not adversely impacted by external noise influences, such as roads and railways. Consideration must also be given to the noise impacts of buildings and trees;
- Served by the mobile phone network O2, enabling 3G connectivity for data to transfer to our systems; and
- Able to offer easy access to a standard power supply. (the mobile noise monitor uses very little energy, typically costing less than 5 pence per day in power consumption).



Where several requests are received for community noise monitoring it will be necessary for the airport to consult the MENT Sub-Committee of the ICC on how these sites will be prioritised. Consideration will be given to the proximity of our fixed noise monitors and, at times when the airport has received requests for community noise monitoring at several locations, we will not deploy a mobile noise monitor to a location that is within 2.4 kilometres (the width of our noise preferential departure routes) of a fixed noise monitor.

Duration of community noise monitoring

Community noise monitoring will be undertaken during the peak operational summer months. This coincides with the period for which 'Summer 92 Day' noise contours are produced. As such, we aim for mobile community monitors to be deployed for three months between 15 June and 16 September, or a period close to these dates. This approach provides a high likelihood of monitoring airport activity of both easterly and westerly operations (as runway direction is determined by the wind direction). A 92 day monitoring period will also ensure sufficient data is collected for analysis and reporting and support the validation of noise contour modelling by the airport.

Community noise monitoring and reporting

Once a suitable location has been agreed and a monitoring exercise commences, our Flight Evaluation Unit will begin monitoring the data received. Throughout the monitoring period, data from the monitor will be displayed in our [WebTrak](#) system, our publicly available radar replay website. Upon completion of the monitoring exercise, we will prepare a noise report which will be shared with the MENT Sub-Committee of the ICC, the relevant Parish Council and published on the airport website. Data from the monitoring exercise may also be used to inform noise assessments of the airport, including the production of our annual noise contours.