



Edinburgh Airport Noise Advisory Board

Richard Moriarty
Chief Executive
Civil Aviation Authority

09/09/2018

Dear Mr Moriarty,

Following on from the very brief presentation on noise calibration given at the recent Edinburgh Noise Advisory Board meeting of 14th August at the Edinburgh Airport Hilton at which the CAA was represented by Tim Johnson, Stuart Lindsey and Annie Gilbert, we would like to more formally seek a response to our work which to date indicates a high level of uncertainty around the Noise Mapping prepared by ERCD and used as a basis for the recent Edinburgh Airport ACP and its Noise Action Plan submitted to the Scottish Government.

We understand that the noise mapping for EDI supplied by ERCD is produced using the ANCON model based on reference vertical profile data measured at Gatwick airport rather than flight profile data representative of Edinburgh Airport. We further understand that, while the output of the ANCON model for LGW is validated against noise monitors at Gatwick, no local checking of the output of the ANCON model for EDI has been carried out against noise monitor data from Edinburgh.

Under CAP725 Sn B32-34 and 165, "The data on aircraft flight paths must adequately represent actual operational air traffic patterns." There are requirements for Vertical profile information and dispersal information to be included. Under the more general requirements of B20, Environmental assessment should be "Rigorous – applying best available scientific knowledge, including methodologies and techniques relevant to the problem under investigation";

No data has been supplied to support the assumption by the ERCD that the reference vertical profiles used for noise modelling at EDI are representative of operations at EDI and by assuming that all aircraft follow the nominal departure track of the various SIDs, the ERCD fails to take into account lateral dispersal when modelling noise for EDI. Dispersal is taken into account at all major UK airports where ANCON models are used except Edinburgh and Glasgow.

In a letter dated 7th August to Annabelle Ewing MSP you wrote that "The ANCON noise model is validated against airport noise measurements wherever possible using the best available information. Ideally we would use noise information recorded in the vicinity of

Edinburgh Airport". However, in that same letter it is clear that ERCD did *not* collect, or, in any event, use available noise information recorded in the vicinity of Edinburgh Airport in preparing or checking the noise maps for Edinburgh Airport.

An independent technical assessment has been carried out by EANAB which does use data from Edinburgh Airport at monitors EDI01, EDI02, EDI03 and EDI07, the latter being a temporary monitor from 2015. This was presented to EAL www.eanab.org.uk/?page_id=136 at the EANAB meeting 1st August and a summary was presented to the CAA on 14th August which shows that the maps and noise levels in the Airspace Change Proposal significantly underestimate the actual noise and consequently the number of people affected. A subsequent review by EANAB also indicates significant differences in flight profiles between Gatwick and Edinburgh.

As you will be aware, the respective geomorphological dispositions of Gatwick and Edinburgh airports are also fundamentally different from each other, not least because of the proximity to Edinburgh Airport of a large body of water, the estuary of the River Forth, and the different properties of land and water in reflecting sound. In consequence, the use by EAL of a dataset which does not take these differences into account and which assumes that the noise measurements will be substantially the same in the vicinity of Edinburgh Airport as they are in the vicinity of Gatwick constitutes a fundamental failure to follow the CAP725 requirements and undermines the reliability of the EAL noise maps.

The analysis of the actual noise around Edinburgh Airport shows that it is significantly greater than estimated by the ERCD and as a result leads to a significant underestimation of the population impacted by noise above 54 dB LAeq 16 hr with a consequential uncounted adverse impact on health and quality of life of those people omitted from consideration.

In light of the fundamental flaw in the dataset which underlies the noise mapping exercise, not only EAL's application but also the public consultation carried out by EAL is severely compromised. In particular, because the ERCD data has been presented to the public as the basis for both the ACP and the Noise Action Plan, it is likely that consultees will have been misled by the information presented in the consultation, and, in some cases, individuals may have refrained from responding in the mistaken belief (induced by the misleading data) that they would not be adversely affected to the extent that, in reality, they will be affected.

In these circumstances, we regard both processes to have been fundamentally based on incorrect information and respectfully ask you to negotiate with Edinburgh Airport Limited to consider whether EAL should withdraw the ACP application as well as to withdraw from circulation the maps which were used, and to require their replacement by maps drawn using the best available information, consistent with the CAP725 requirements.

Yours sincerely,

Lindsay Cole
Chairman EANAB