Communications Department

External Information Services



3 October 2018

EIR Reference: E0003886

Dear

Thank you for your recent request of 31 August 2018, for the release of information held by the Civil Aviation Authority (CAA).

Your request:

'This morning between around 2am and 5am - don't worry, I was already awake because of the arrivals screaming in - a light aircraft repeatedly flew over Chiddingstone heading in the direction of Gatwick.

Can you please confirm if it was 'trialling' the planned route for RNN - presumably that will be conducted with CAA's knowledge.

Can you please also send us precise details of the proposed corridor of doom, I understand it was shown to NMB so it exists.

I understand that the minimum join point to the ILS at night is 10nm; can you please tell me if any circumstances that would cause the trial to join anywhere other than 10 nm as that can ONLY be the most efficient in terms of reducing noise, fuel burn and CO2.

I'm sure it's a cut and shut like everything else that your cosy cartel operates to protect the aviation industry at any social, health or economic costs but can you please explain to me how the 'benefits' of the trial will be measured.

Can you please also steer us towards examples of other airports that operate PBN on night arrivals so that we can find out what the impact has been - positive or negative - on health and well-being.

If this is the first trial of its kind my assumption is that will be recorded as well; or is it the case that airports under CAA jurisdiction can act with impunity?

Please explain that and feel free to dispel us of the belief that this is just another cynical ploy by the entirely bogus NMB to fluff up the sale price of Gatwick when GIP imminently cashes in its chips.'

Our response:

Your request has been considered in line with the provisions of the Environmental Information Regulations 2004 and we are able to provide the following information.

Civil Aviation Authority

Aviation House Gatwick Airport South Gatwick RH6 0YR www.caa.co.uk

Email: foi.requests@caa.co.uk

The CAA is not directly involved in the provision of Air Traffic Control Services nor is it responsible for monitoring or maintaining individual flight data on daily aircraft/helicopter movements. However, we understand that there were two nights of calibrator flights in your area conducting navigation aid calibration on 30 and 31 August 2018. These calibration flights were not in relation to the planned Reduced Night Noise Trial. While we appreciate that in the circumstance you describe aircraft noise can cause disturbance, such activity is vital to the safe operation of the UK's aviation infrastructure.

In relation to the proposed trial, earlier this year the CAA introduced its new airspace change process (CAP1616), which ensures greater transparency, community engagement and analysis for proposals to change the design of UK airspace. The detailed requirements of the process and the date it came into effect were aligned with the outcome of the Government's 2017 consultation on airspace and noise policy. Our new guidance explaining the regulatory process for changing airspace design including community engagement requirements can be found here. Please refer to pages 90-93 within CAP1616 for information specific to airspace trials.

In accordance with CAP1616, the trial sponsor, Gatwick Airport Ltd (GAL), must specify a defined objective by submitting a Statement of Need to the CAA (Step 1A). This must include a trial plan, which is a clear explanation of:

- what the trial involves
- what the trial is aiming to investigate, prove or validate (i.e. a defined objective)
- before and after descriptions, where relevant
- what data and outcomes the trial sponsor needs in order to prove or otherwise that the trial has been a success
- how the sponsor has considered and assessed the likely noise impact of its proposal and how this will inform the level of stakeholder engagement required
- the confirmed start and end date. The change sponsor will also be required to complete a safety assessment that will be reviewed by the CAA.

We received a Statement of Need from GAL on 28 September 2018, this is can be found on our website at: https://www.caa.co.uk/Commercial-industry/Airspace/Airspace-change/Temporary-airspace-change-proposals-and-airspace-trials-currently-being-developed/.

We have contacted GAL who have given their permission for us to release a PowerPoint presentation which was presented at NMB11 on 27 June 2018 on the Reduced Night Noise Trial. It must be stressed that the routes depicted on slide 19 are the 'proposed preferred trial routes' and therefore may be subject to change.

Regarding your comments on the minimum Instrument Landing System (ILS) joining point, GAL's Statement of Need confirms that current night-time noise abatement procedures relating to the ILS minimum joining point will not be changed for the trial. Further details of GAL's planned Reduced Night Noise Trial can be found on Gatwick Airport's Noise Management Board (NMB) website at: https://www.gatwickairport.com/business-community/aircraft-noise-airspace/noise-management-board/.

There have not been any other PBN night noise trials in the UK, and any future trials would have to follow the trial requirements of CAP1616.

If you are not satisfied with how we have dealt with your request in the first instance you should approach the CAA in writing at:-

Caroline Chalk
Head of External Information Services
Civil Aviation Authority
Aviation House
Gatwick Airport South
Gatwick
RH6 0YR

caroline.chalk@caa.co.uk

The CAA has a formal internal review process for dealing with appeals or complaints in connection with requests under the Environmental Information Regulations. The key steps in this process are set in the attachment.

Should you remain dissatisfied with the outcome you have a right to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office FOI/EIR Complaints Resolution Wycliffe House Water Lane Wilmslow SK9 5AF https://ico.org.uk/concerns/

If you wish to request further information from the CAA, please use the form on the CAA website at http://publicapps.caa.co.uk/modalapplication.aspx?appid=24.

Yours sincerely

Jade Fitzgerald

Information Rights Officer

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CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.



ACTIVITY UPDATE SINCE NMB/10

- "Response to CNG" presentation on 23 May
 - Covering safeguarding, quantitative objectives and communications
- Noise modelling undertaken to estimate the benefits from RNAV
 - Noise benefit of removal of outliers
- Proposed trial routes have been developed taking account of feedback
 - More detailed work will be necessary for route design

ACTIVITY UPDATE SINCE NMB/10

- Technical discussions held with NATS and Trax:
 - More design work is required on the routes and the planned trial start date could be at risk
 - The RNN trial could be suspended on nights when the traffic volume is considered by NATS to be too high
 - NATS foresee no constraint for easterly arrivals, although if there was a conflicting traffic risk, then the RNAV procedure may be terminated



AIMS AND OBJECTIVES

High-level aim:

 Demonstrate the noise benefits of RNAV at Gatwick, and its other effects, for arriving aircraft through a 6 month trial

Objectives:

- Demonstrate that RNAV can reduce the peak noise levels generated per arrival per aircraft type
- Compare the 'with RNAV' and 'without RNAV' noise situation by placing RNAV routes inside the existing arrivals swathe
- Inform future planning and gather operational data on RNAV use at Gatwick
- Evaluate new community engagement initiatives and processes

THE TRIAL WILL

Demonstrate the noise benefits of RNAV – compare with and without RNAV

Inform future planning as to the impacts of RNAV

Gather data on RNAV operational performance and noise impacts

Further develop the NMB's understanding of arrivals RNAV

Evaluate new community engagement initiatives and processes

THE TRIAL WILL NOT

- Identify routes for use in future airspace design
- Overfly people currently outside of the night time arrival swathes
- Move the minimum night-time ILS joining point from 10NM
- Optimise routes for capacity improvements or efficiency
- Evaluate future mechanisms for higher-density sequencing, FED, respite or other concepts
- Introduce an airspace change without consultation

RESPONSE TO COMMUNITY FEEDBACK

SAFEGUARDING AND COMMUNICATIONS

(QUANTITATIVE OBJECTIVES IN NEXT SECTION)



SAFEGUARDING

- The trial will not proceed if the noise modelling does not present the expected reduction in N60 events
 - See next section

- The trial will be suspended if, once an initial sample of data is analysed, it is found that the objectives are unlikely to be met
 - This would probably not be determined until the second month of the trial

 The trial will be suspended to evaluate any safety concerns that are raised by operational staff

COMMUNICATIONS

- GAL will prepare a dedicated website page on the RNN trial
 - It will include a "community friendly" description of the trial that can be emailed
 - It will be updated with the trial progress and the results of the trial once it has finished

CNGs will be asked for details of how they plan to communicate the trial



INTRODUCTION

Noise modelling has been used to predict benefits of the trial

- Using noise data recorded August October 2017
 - From the University of Sussex Perceptions of Noise study (Imm-15)

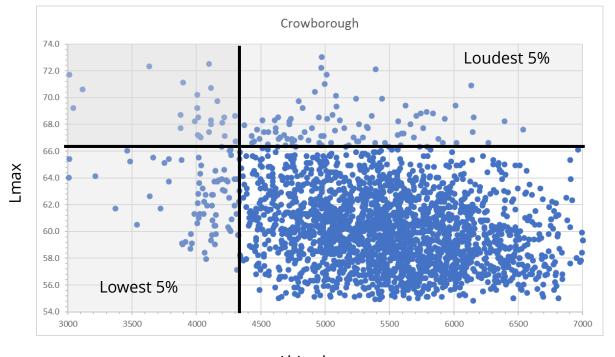
- Results are indicative of likely effect of RNAV
 - But there may still be unknowns for live traffic, trial results could be different

QUANTITATIVE OBJECTIVES

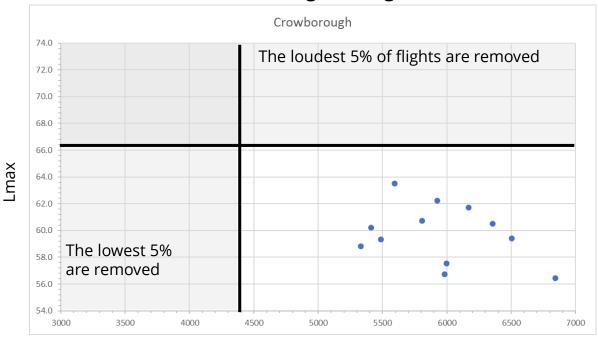
- Objective 1: The loudest outliers reduced by 90%
- Objective 2: The lowest outliers reduced by 90%
- Notes:
 - Loudest outliers are the 5% loudest arrivals (by aircraft type)
 - Lowest flying aircraft are the 5% lowest flying aircraft (by aircraft type)
 - The data will be a sample of at least 1000 aircraft
 - Measured at each noise monitor location

CROWBOROUGH NOISE MODELLING

All arrivals



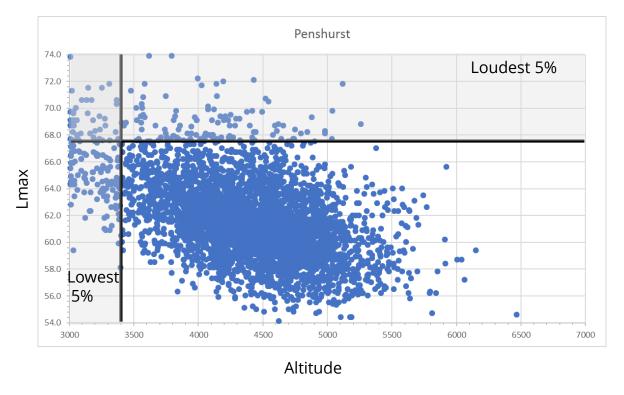
Arrivals within 500ft of optimal altitude and descending at 3 deg +/- 10%



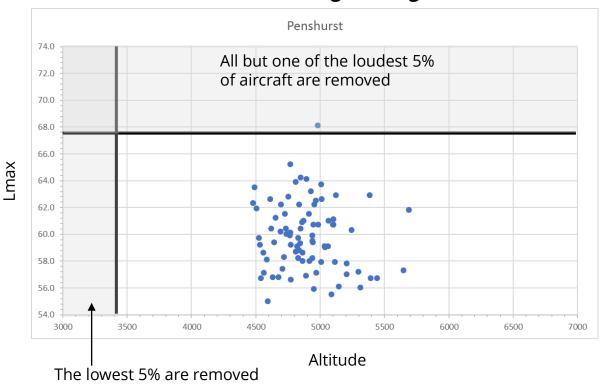
Altitude Altitude

PENSHURST NOISE MODELLING

All arrivals



Arrivals within 500ft of optimal altitude and descending at 3 deg +/- 10%



Number of arrivals

3980

82



COMMUNITY FEEDBACK ON ROUTE PLACEMENT FROM 23 MAY

- Move Runway 26 routes to the west, away from current swathe and use an 8NM join
 - This suggestion has been rejected because the RNAV routes need to be in the areas of the current swathe so we can compare 'before' and 'after' and to meet the objective of avoiding newly overflown
- Avoid concentration
 - An extra route has been added to each direction (so there are 4 instead of 3 as previously proposed)
 - Routes do not merge or cross before joining the ILS
 - Routes have been separated to minimise overlap of the overflight areas

HEATMAP OF ARRIVALS

During trial hours

Aim is to put the routes in the higher density areas of the swathe



Less than 1% not shown

PROPOSED PREFERRED TRIAL ROUTES

Subject to change in the design process

Approximate locations of routes

White lines show limit of "overflight", i.e. areas of approximately equal noise

Minimise overlap of overflight areas



Discussion and Recommendation