



Review of Departure Noise Limits at London Gatwick

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LONDON GATWICK

Introductions



Agenda

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Background

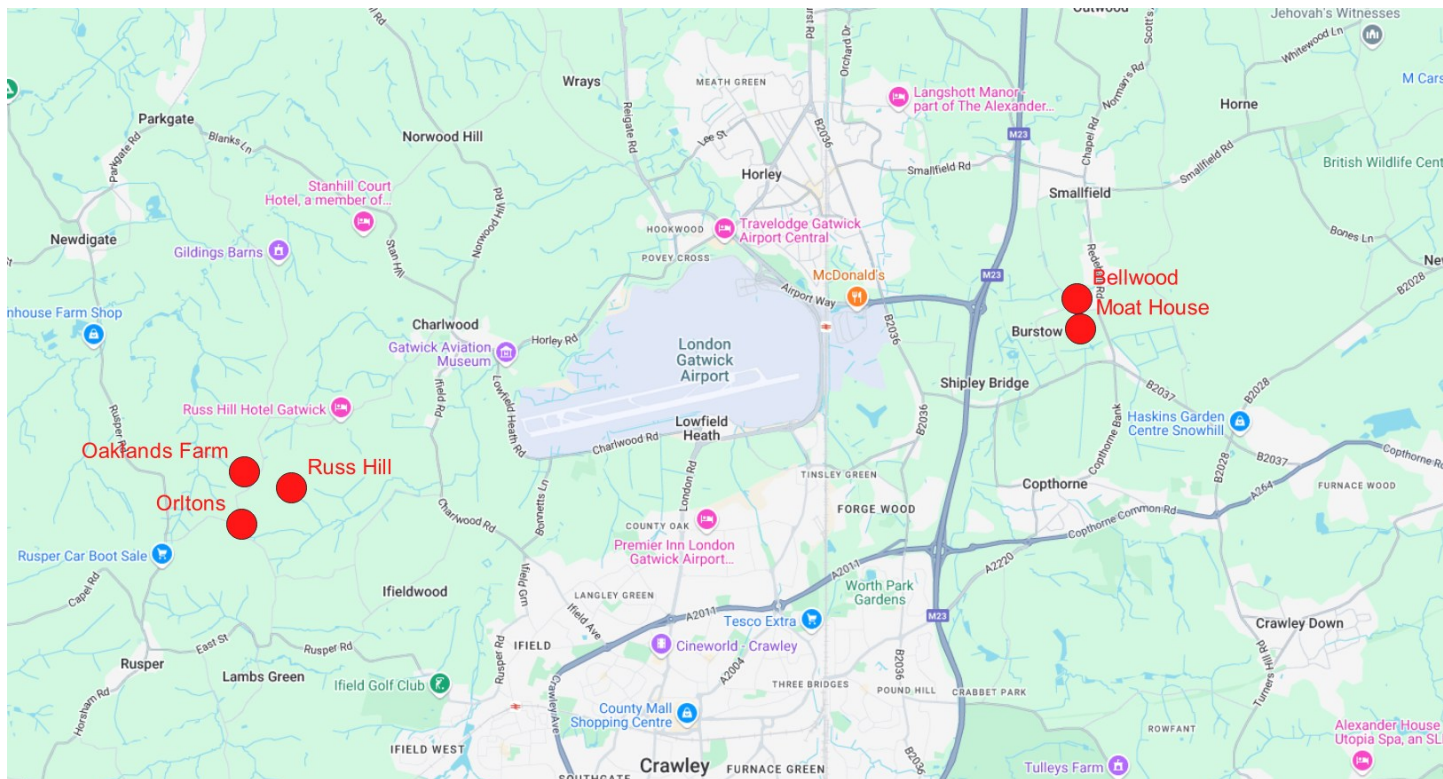
- Gatwick has a departure noise limit scheme defined by the UK Department for Transport. It was introduced in 1968 and last updated in 2001.
- **Objective** - to deter excessively noisy departures by fining those that exceed set noise thresholds.
- In 2022, a new scheme was proposed, and several industry and community workshops were held.
- Gatwick's Noise Management Board set about introducing a new scheme that not only reduced limits but increased fines as well.



No noise infringements since May 2019



Location of 5 Fixed Noise Monitors



New Proposed Scheme

Current Scheme

- All aircraft in single category
- Fines
 - Up to 3dB over limit = £500
 - Over 3dB = £1,000

Time period	Times (local)	LMax Limit (dBA)
Day	07:00 to 22:59	94dB
Shoulders	23:00 to 23:29 06:00 to 06:59	89dB
Night	23:30 to 05:59	87dB

New Proposed Scheme

- Now based on Quota Count (QC) classification

QC Category	Day Limits 07:00 to 22:59 local	Night/Shoulder Limits 23:00 to 06:59 local
Low QC	80dB	75dB
Mid QC	83dB	78dB
High QC	86dB	81dB

QC Category	Day Fines	Night/Shoulder Fines
Low QC	£1,000	£1,500
Mid QC	£1,250	£2,000
High QC	£1,500	£2,500

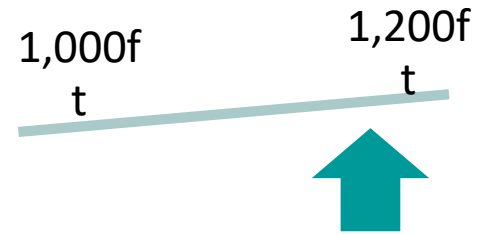
NMT Positional and Wind Adjustments



LOC ID	Latitude	Longitude	Elevation (ft)
101	51.139293	-0.253642	381
103	51.135348	-0.262377	390
104	51.156683	-0.116702	217
105	51.141060	-0.261907	374
106	51.159947	-0.117293	213



New Min. Altitude Requirement



- Noise monitor **positional adjustments** were originally calculated on a basis of altitude requirement of 1,000ft AAL at 6.5km from the airport.
- Analysis of 2022 data, aircraft climb profiles are **steeper** than in the past, and the altitude above noise monitors is therefore **higher** than it was in 1995, when the current limits and NMT adjustments were being consulted.
- New NMT positional adjustments were therefore calculated using a new altitude requirement of 1,200ft AAL at 6.5km from the airport.
- Gatwick will accordingly require aircraft to reach **1,200ft** altitude at 6.5km from the airport instead of 1,000ft as today.

“The current noise limits are too high and the variation from plane to plane, even pilot to pilot”

“Restrict flights to only those aircraft using latest fuel economy and noise limits”



Comments on proposed scheme

“GATCOM supports GAL’s proposal to set new departure noise limits to better incentivise good operational practice across all aircraft and not just the noisiest aircraft, to ensure that aircraft are flown in the quietest way possible”

“Noise limits should be set far below existing noise levels”



Methodology



Purpose built ANOMS Test System

Worked with Envirosuite to build an All Up Weight Return (AUWR) to populate missing QC data.

AUWR supplemented by Gatwick's Noise Charge Model

New aircraft types are added weekly and upload new AUWR regularly

Noise infringements calculated from 'Wind Adjusted LMax' values

All Up Weight Return



Limitations



Took 2 years to successfully build the AUWR into the ANOMS system with Envirosuite



Wind data not fully available (yet) - 96% availability



Some manual intervention required where aircraft does not exist in AUWR



Does not backfill historic missing QC data



Only exists in ANOMS Test system currently



May not be accepted by Secretary of State (UK Government) after 6 months trial period

Initial Results



Fully implemented in ANOMS Test from April 2025



April to June 2025 – 12 infringements identified (1 x westerly op, 11 x easterly ops).



Need more westerly ops to verify limits are set correctly



Monitoring July to September 2025 for westerly infringements



Transition period to begin in Q4 2025

Next Steps



- 6-month transition period
 - No fines but airlines will be notified of infringements
 - Verifying QC data
 - Expected to begin Q4 2025
- Once the trial ends, the Secretary of State will review the new scheme
- If approved, we will move our scheme to ANOMS Production system.





Questions?

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