

NOTTINGHAM EAST MIDLANDS AIRPORT

PROPOSED NOISE PLAN

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1. INTRODUCTION

1.1 The NEMA Noise Plan has the following overall objective:

- To provide a framework for continuous improvement in the noise climate of the region affected by Nottingham East Midlands Airport.

1.2 Five strategic policies are required to achieve the overall objective:

- To quantify and keep under review the number of people affected by NEMA aircraft noise, particularly at night.
- To define limits for and seek continuous improvement in aircraft noise levels.
- Continually to optimise approach and departure procedures and routes.
- Develop the noise insulation policy.
- Provide input to the planning authority's development control strategies.

2. THE FIVE STRATEGIC POLICIES

To quantify and keep under review the number of people affected by NEMA aircraft noise, particularly at night.

AIR NOISE

2.1 Use a combination of modelling and monitoring to define the noise climate, and refine the Integrated Noise Model (INM) to include continuous descent approaches where relevant, and to include ground topography. Carry out field monitoring to validate the INM results.

2.2 Establish the number of people-nights with SEL levels of 90 dB and above.

- 2.3 Establish the number of people-nights with aircraft-related L_{Amax} levels of 60 dB and above.
- 2.4 Establish the number of people living within the 55 dB L_{Aeq} (8h night) contour.

GROUND NOISE

- 2.5 Establish the number of people-nights with SEL levels of 90 dB and above.
- 2.6 Establish the number of people-nights with aircraft-related L_{Amax} levels of 60 dB and above.
- 2.7 Establish the number of people living within the 55 dB L_{Aeq} (8h night) contour.

To define limits for and seek continuous improvement in aircraft noise

AIR NOISE

- 2.8 Set and operate a system using a period noise quota; the quota to be based on the CAA quota count system with the following modifications. For all aircraft except those in the "Exempt" category only a maximum period quota is required—i.e. for non-exempt aircraft, the sum of the quota counts of all aircraft taking off or landing in the night quota period is sufficient for the purposes of noise control. As a consequence, growth in non-exempt aircraft numbers can be offset by the use of quieter aircraft. An additional limit is only required for exempt aircraft which score zero in the quota count system. This may be achieved either by an overall limit on movement numbers, or by assigning each "Exempt" aircraft a Quota Count of 0.25 and including it in the noise quota.
- 2.9 Define progressive objectives for noise quotas in future years.

- 2.10 Define progressive objectives for the number of people-nights with 90 SEL or more.
- 2.11 Define progressive objectives for the number of people-nights with 60 dB L_{Amax} or more.
- 2.12 Review annually the airport's noise infringement levels and enforcement locations and their effect on noise exposure.
- 2.13 Maintain prohibition on training flights at night.
- GROUND NOISE
- 2.14 Determine optimum locations for ground running of engines.
- 2.15 Establish and enforce a noise budget for airlines and maintenance companies based on durations of ground runs and power settings.
- 2.16 Provide ground power and service outlets and develop policies to ensure maximum use in place of APUs.
- Continually to optimise approach and departure procedures and routes.*
- 2.17 Use field monitoring results to optimise approach and departure procedures.
- 2.18 Review landing procedures including use of reverse thrust.
- 2.19 Review take-off procedures including use of Whiskey 1 departures.
- 2.20 Subject to 2.17, require continuous descent approaches.
- 2.21 Review departure procedures including power cut-backs and monitor results.
- 2.22 Modify the INM to include approach and departure procedures.

Develop the noise insulation policy

- 2.23 Define targets for uninsulated total people-nights with exposure to 90 dB SEL or more.
- 2.24 Progressively develop the noise insulation policy with the objective of meeting the targets in 2.23.

Provide input to the planning authority's development control strategies

- 2.25 Taking account of the targets, provide the local planning authority with Noise Exposure Category maps for foreseeable future years.