# LAA/5/B

APP/L2250/V/10/2131934 & APP/L2250/V/10/2131936

SECTION 77 TOWN AND COUNTRY PLANNING ACT 1990 – REFERENCE OF APPLICATIONS TO THE SECRETARY OF STATE FOR COMMUNITIES AND LOCAL GOVERNMENT

TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES 2000

## SUMMARY PROOF OF EVIDENCE OF
## Mr RICHARD PERKINS BEng(Hons) CEng MIOA

## NOISE

In respect of:

| | |
|---|---|
| Planning Application Reference: | Y06/1647/SH (New Terminal Building) |
| Planning Application Reference: | Y06/1648/SH (Runway Extension) |

relating to land at London Ashford Airport, Lydd, Romney Marsh, Kent, TN29 9QL

PB 125 YEARS

LYDD London Ashford Airport

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## 1 INTRODUCTION

1.1 My name is Richard Perkins. I am a Chartered Engineer and a Member of the Institute of Acoustics. I have a Bachelor of Engineering Degree in ElectroAcoustics from Salford University and I have 16 years' experience in the field of noise and vibration. I am a Technical Director with Parsons Brinckerhoff Ltd at Queen Victoria House, Redland Hill, Bristol.

1.2 My evidence covers all of the noise and vibration matters in connection with the Applications, which I have had responsibility for since 2004.

## 2 LEGISLATION, GUIDANCE AND SIGNIFICANCE

2.1 In order to assess the noise and vibration impacts of the Applications, I have considered the policy framework in place in England at national, regional and local levels, along with the guidance documents and British Standards referred to by these policies.

2.2 Planning Policy Guidance Note 24 - Planning and Noise (**CD6.13**) (PPG24) is current Government guidance. The Governments position on aviation is provided in "The Future of Aviation White Paper" (**CD5.24**) and "The Future of Air Transport Progress Report" (**CD5.25**).

2.3 The current thresholds of annoyance quoted in the Future of Aviation White Paper are based on the Aircraft Noise Index Study (ANIS) which was reported in 1985. The study related levels of community annoyance to average daily noise levels ($L_{Aeq,16hr}$) and suggests that the onset of significant community annoyance occurs at 57 dB, moderate community annoyance occurs at 63 dB, and high community annoyance at 67 dB.

2.4 The conventional method to present noise from an airport, as stated in PPG24, is to create noise contour maps. Daytime noise is averaged over a 16 hour period from 07.00 to 23.00. Night time noise (23.00 - 07.00) is averaged over an 8 hour period from 23.00 to 07.00.

2.5 Accordingly, in the context of the situation at London Ashford Airport (the "Airport"), with reference to onset of significant community annoyance levels in the ANIS study, the following significance thresholds for $L_{Aeq,16hr}$ have been adopted for the purposes of the Applications:

- 57 dB is a minor impact;
- 63 dB is a moderate impact; and
- 69 dB is a severe impact.

2.6 Most people are able to distinguish a change of 1 dB(A) in a pure continuous tone, but changes in a fluctuating sound, such as transportation noise, are not so easily perceived. A change of about 3 dB(A) represents the threshold when, in the long-term, changes in traffic noise levels (as distinct from steady sounds) would be perceived. A difference of 10 dB(A) corresponds to a 10 fold increase in sound energy which corresponds to an approximate subjective doubling in loudness. Doubling the energy level (for example the volume of traffic) increases the noise level by 3 dB(A).

2.7 The impact of noise changes in the steady state levels at each property is considered to be as follows:

| **Noise Change (dB)** | **Level of Impact** |
|---|---|
| 0.1 - 2.9 | Negligible |
| 3.0 - 4.9 | Slight Impact |
| 5.0 - 9.9 | Moderate Impact |
| 10.0 and more | Substantial Impact |

2.8 The likelihood of complaints from ground operations is assessed by reference to BS4142: 1997. A difference of around +10 dB or more indicates that complaints are likely. A difference of around + 5 dB is of marginal significance. If the rating level is more than 10 dB below the measured background noise level then this is a positive indication that complaints are unlikely.

2.9 With reference to the guidance contained within the Design Manual for Roads and Bridges (DMRB), an increase in road noise of greater than 3 dB is taken to represent a slight or marginal impact.

2.10 In accordance with BS5228:2009-Part 1 (**CD8.10**), the criteria I have adopted for construction noise significance is 65 dB(A).

## 3 METHODOLOGY

3.1 The study area is taken to be an area within 10km of the Airport. The study area is a mixture of residential, with a scattering of industrial estates, commercial receptors and community facility receptors.

3.2 An extensive mitigation package is being proposed by the Applicant, as detailed in my Proof, to be secured by a section 106 agreement and planning condition, balancing the needs of the Airport with the concerns of the local affected residents. The package will include such measures as a noise management plan, no scheduled flights between the hours of 23:00 and 07:00, noise preferential flight paths and fines for excessive noise from aircraft. In addition, the Applicant has offered corporate commitments for the provision of noise insulation and voluntary purchase of properties.

3.3 It is also proposed that if planning permission is granted for the Applications, that aircraft (fixed wing) movements are capped at 40,000 per annum (excluding emergency and governmental activities and the Air Show). This represents a doubling of movements from current levels. Notwithstanding that helicopters account for 6.6% of the Airport's current movements, it is proposed that helicopter movements are capped to a figure below 6.6%, at 2,000 movements per annum. Excluding emergency and governmental activities and the Air Show, there would also be a restriction on movements in the night period (2300 to 0700). These restrictions are contained in the proposed planning conditions.

3.4 No mitigation for road traffic noise is proposed since no significant impacts are predicted.

3.5 The Airport will ensure the appointed contractor will undertake all construction activities in accordance with the best practice guidance in BS5228:2009 (**CD8.10**).

3.6 I have looked at a number of scenarios to evaluate the range of effects created by an annual average, a summer average (Upper Parameter), and various single mode operations, as well as single event levels. This has been undertaken for:

- no development/fallback position (Future Baseline);
- a Future Development scenario with the runway extension to 300,000 ppa; and
- a Future Development scenario with the runway extension and new terminal building to 500,000 ppa.

## 4 EFFECTS OF THE SCHEME PURSUANT TO THE APPLICATIONS

4.1 I have examined the potential noise and vibration effects of the proposed runway extension and new terminal building pursuant to the Applications, both in construction and in operation.

4.2 The number of movements would approximately double from that currently experienced in either of the two development scenarios or the fallback position. The differences in noise impact occur as a result of a number of aircraft in each group changing in favour of larger aircraft to deliver more passengers.

4.3 In both the Runway Extension and the fallback scenarios, the majority of properties would experience negligible or slight noise increases, with only a minority experiencing moderate noise increases. Overall, no properties would be exposed to annual or summer average levels above 57 dB(A).

4.4 In the Terminal Building scenario, a number of properties would experience slight noise increases, but only a minority would experience moderate noise increases. Overall, only one property in the annual average, and three properties in the summer average would fall within the 57 dB(A) contour. These numbers are extremely low in comparison with most airports in the UK and I do not consider these noise effects to justify refusing planning permission on noise grounds.

4.5 The noise from ground operations would occur at relatively large distances from receptors, and infrequently during the day. I conclude that this is not likely to lead to any significant number of complaints under normal operating conditions.

4.6 An increase in road traffic movements as a result of the Applications would result in a negligible increase in noise levels on the roads surrounding the Airport overall, with the potential for only minor noise increases for a few properties between 1am and 7am for short periods of time.

4.7 In terms of mitigation, the Airport is offering an extensive range of options such as noise preferential flight paths, no night flights (excluding emergency and governmental activities and the Air Show), and a Noise Management Plan. The Airport has also gone further with a corporate commitment to the noise insulation scheme and the ‘Five Communities Scheme’ which you would only normally see associated with larger airports.

4.8 Construction activities have the potential to increase noise levels at the location of nearby sensitive receptors, however due to the temporary nature of this noise source, and the distances involved, I do not consider that the impact would be significant.

## 5 CONCLUSION

5.1 I have considered all of the likely noise impacts from the Applications. The three properties that would be exposed to a noise level of 57dB(A) is extremely small relative to other airports in the UK, and even then is only just on the threshold for significant community annoyance. In addition, the mitigation offered would reduce even further these noise impacts.

5.2 I therefore conclude that the noise impact of the proposed runway extension and the proposed new terminal pursuant to the Applications would be of minor significance, and acceptable, and there is no proper basis for refusing planning permission for these Applications on noise grounds.