

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

**PROOF OF EVIDENCE OF  
TIM MASKENS BA (Hons) MA (Cantab.)**

**AIRPORT OPERATIONS**

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

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**1. Introduction**

1.1 My name is Tim Maskens. I am the Senior Air Traffic Control Officer (SATCO) and the manager responsible for Air Traffic Services at London Ashford Airport (the “Airport”).

1.2 My professional Air Traffic Control (ATC) qualifications are: Civil Aviation Authority (CAA) Aerodrome Control and Approach Control Procedural ratings, with On-the-Job Training Instructor endorsement, and a Meteorological Observer’s Certificate. In addition, I have a BA (Hons) in Botany from the University of Cambridge.

1.3 My initial training was conducted at the Airport from 1989 - 1992. I joined first as an Air Traffic Assistant before attending formal CAA courses at Dundridge and Bailbrook Colleges of Air Traffic Control. This was followed by practical on-the-job controller training. From 1992-2004, I worked at London Biggin Hill Airport before returning to the Airport in 2004 as SATCO. My initial task was to re-establish ATC operations which had been discontinued due to lack of funding in 1996, under previous ownership. In the intervening years, there had been an uncontrolled air-ground or Flight Information Service to aircraft with the provision of very limited navigational aids. As part of the huge investment in the Airport by the current owners, we installed new air traffic control communication, navigation and meteorological systems in 2005 and 2006, and recruited and trained air traffic controllers and air traffic service assistants.

**2. Scope of evidence**

2.1 My Proof of Evidence will start by considering existing operations at the Airport and explain why a runway extension pursuant to the Applications is required. I do not intend to deal with the requirement for the new terminal development as this is addressed in more detail by Ms Congdon.

- 2.2 I will then briefly describe the development pursuant to the Applications with particular reference to a diagram from the ES (CD1.38). Operational components of the runway extension are then described and their function explained.
- 2.3 My evidence will explain how the flight paths were derived, taking into account various factors such as airspace, weather, aircraft types, pilot abilities, as well as compliance with legislation and aviation practice.
- 2.4 I will then consider Rule 6 Party comments, particularly those of Lydd Airport Action Group (“LAAG”) in so far as it is possible to do at this stage. I reserve the right to respond to any detailed or additional comments raised by Rule 6 Parties in their evidence by way of rebuttal if necessary or appropriate.
- 2.5 My evidence will briefly compare the current unrestricted operations at the Airport with the proposed planning restrictions and obligations relating to Airport operations which would exist by way of planning condition and section 106 agreement pursuant to the Applications. My evidence demonstrates that any potential environmental effects arising from the Applications can be dealt with or contained and that the Applications will in fact result in a number of key benefits to the Airport and its surroundings.
- 2.6 I will summarise the key points and conclude my evidence.

### **3. Existing Airport Operations**

- 3.1 Over the last 56 years the Airport has catered for a wide range of aircraft ranging from microlights to the Bristol Freighters, Carvairs, Viscounts and BAC1-11s of its heyday. Aircraft numbers and types have varied considerably over the years. Although the largest passenger throughput was experienced in the 1950’s and 1960’s, (with 254,954 passengers in 1961 – source CAA, Appendix 1), the

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busiest year for aircraft movements was 1979, with over 60,000 landings and take-offs.

- 3.2 Appendix 2 is a CAA chart of the current Airport infrastructure showing the runway, which may be used in either direction. Runway 21 refers to landing or taking off in the direction of 210 degrees (approximately South-West); runway 03 refers to landing or taking off in the direction of 030 degrees (approximately North-East). The taxiways, aircraft parking aprons and buildings are also shown on the chart.
- 3.3 Appendix 3 is a photograph, taken in 2006, of a private Boeing Business Jet (B737) on the main apron Bravo at the Airport. This is the largest size of aircraft that can use the current runway length of 1505m, but with fundamental limitations. It could only operate as a short-range private flight, carrying just its owner and family, or positioning empty (e.g. for engineering or long-term parking) with just the crew on board, but not fare-paying passengers. The Airport can currently be used for a wide range of aircraft from single engine training aircraft to large executive jets such as Global Express and Gulfstream 550, in addition to the B737 discussed above.
- 3.4 The reason why the B737 can only operate with such limitations is two-fold:
- 3.4.1 Aviation regulations require longer runway distances for a given aircraft to carry fare-paying members of the public; and
- 3.4.2 The increase in weight of the same aircraft loaded with passengers, luggage and fuel necessitates more runway for landing and, particularly, for take-off when the aircraft is full of fuel.
- 3.5 Therefore, it is important to the Airport that the proposed extension to the runway pursuant to the Applications is permitted in order to allow commercial air transport operations using the B737 sized aircraft to operate with a full payload

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and to offer an alternative for passengers to one of the already congested London airports.

3.6 It is widely acknowledged that the pressures on existing capacity in the South East of England are severe, but the Government has ruled out new runways at London airports or a new airport in the Thames Estuary. Instead, the Government seeks to minimise environmental impact from aviation by requiring existing airports to become more efficient (as evidenced by the creation of a South East Airports Task Force) and for airlines to fly with fuller planes (encouraged by the proposed Air Passenger Duty regime). The runway extension pursuant to the Applications will enable the Airport to make a contribution and deliver that increase in efficiency by, amongst other things:

3.6.1 Allowing B737 type aircraft to fly with a full payload of passengers from the Airport;

3.6.2 Extending the range that other aircraft can fly from the Airport;

3.6.3 Maximising the availability of routes and aircraft choice to operators;

3.6.4 Improving the efficiency of aircraft runway operations in adverse weather (the longer runway will give pilots more flexibility to optimise aircraft performance for certain conditions e.g. in a crosswind or on a wet runway)

3.6.5 Providing a useful diversion airport, thus contributing to operational efficiency gains in the South-East.

**4. Proposed operations pursuant to the Applications**

4.1 For the sake of clarity, I summarise technical aviation terms which I use below:

4.1.1 Instrument strip – area surrounding the runway that is clear of obstacles (navaids excepted);

4.1.2 Cleared and graded area – area without steep gradients within the instrument strip;

4.1.3 Runway end safety area (RESA) – for the safe undershoot or overrun; and

4.1.4 Starter extension – provides more take-off run for runway 21 (only. It is not available for landing, or for take-off run on runway 03.

4.2 Appendix 4 is one of the drawings from the ES (CD 1.38) showing the proposed runway extension of 294m at the north-east end with its 150m starter extension.

4.3 It is important to note that the proposed runway extension of 294m at the north-east end with its 150m starter extension is the only part of the infrastructure development that involves replacing any existing grass or arable farmland with asphalt runway. The other areas marked out on the map around the extended area – instrument strip, clear and graded area and that portion of runway end safety area (RESA) that does not overlap the starter extension – will be allowed to revert to grass. The remaining, existing, length of the runway also requires no alteration as it already possesses the required strip and RESA for commercial aircraft operations. The evidence of Dr Mark McLellan, the Applicant's Ecology witness, deals further with this (LAA/9/A).

4.4 The dimensions of the existing and proposed instrument strip, clear and graded areas, RESAs and starter extension are in accordance with CAA requirements

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laid down in their authoritative document on these matters called CAP (Civil Aviation Publication)168 – ‘The Licensing of Aerodromes’(CD16.1)

## **5. Flight paths**

5.1 Appendices 5 and 6 to my evidence contain flight path diagrams for runway 03 and runway 21 respectively. These diagrams have been updated from those included in the ES at Figures 16.1 and 16.2 of CD1.41a and CD 1.41b simply to correct a minor typographical error of labels 11 and 12 which became transposed in the final publication of the document.

5.2 The route taken or due to be taken through the air by an aircraft is known as a flight path. When describing what flight paths multiple aircraft fly along to and from an airport, the general practice is to represent this by a line on a chart, which represents the average route through a swathe of airspace which has lateral and vertical elements which takes account of dispersion, the range of aircraft/pilots’ abilities and environmental factors.

5.3 Some flight paths are flown visually by aircraft, some are defined by instruments and some have elements of both. Some are charted, such as CAA instrument approach charts and some are described in text form in the CAA document CAP32 ‘The UK Aeronautical Information Publication’ (UK AIP) such as the visual arrival routes and all of the departure procedures (Appendix 8) This is standard CAA practice for small airports such as the Airport which are outside of controlled airspace.

5.4 Flight paths can be described in terms of the following criteria:

5.4.1 by aircraft size or speed – some aircraft types may not be able to fly certain paths;

5.4.2 whether the aircraft is fixed wing or helicopter – the former group must utilise a runway, the latter not necessarily so;



- 5.4.3 by the intended flight route;
  - 5.4.4 whether landing or taking-off;
  - 5.4.5 whether flying a visual or an instrument approach; and
  - 5.4.6 by considering which end (direction) of the runway is to be used for landing or take-off.
- 5.5 The flight paths for the Airport are represented in the ES and the diagrams at Appendices 5 and 6 so as:
- 5.5.1 to cater for a wide range of stakeholders with different backgrounds and interests;
  - 5.5.2 to strike a balance between presenting the information in such a way to make it comprehensible yet retain sufficient technical accuracy;
  - 5.5.3 to focus on the local area where aircraft are flying lower and where the various environmental impacts may need to be considered; and
  - 5.5.4 to enable consideration of relevant segments of flight paths for all sizes of aircraft (split into 4 groups) as overlaid on a detailed ordnance survey map of the local area.
- 5.6 The flight path track allocations indicated in Appendices 5 and 6 are currently usable by the existing mix of aircraft (the largest possible aircraft being B737) operating at the Airport and will continue to be used when the runway is extended for the proposed commercial air transport operations with the Applications. There will be no requirement for the creation of any additional flight path tracks as a result of the runway extension.

- 5.7 The ES submitted with the Applications already accounts for the repositioning of the runway 21 landing threshold by 329m north-east from its current position as demonstrated, for example, in the identification of the consequential noise contour (CD1.41a and CD1.41b) and in the air quality impact assessment diagrams (CD1.34c)
- 5.8 In accordance with normal practice, the diagrams were derived from the authoritative document on airport operations, the CAA publication UK AIP (the relevant extract from the Airport's AIP entry is shown in Appendix 8). The contents of the UK AIP are only published following a rigorous application process, and remain subject to ongoing CAA audit.
- 5.9 LAAG has sought to criticise the Airport's diagrammatic representation of the indicative flight paths, but these criticisms are not justified. Moreover LAAG's own interpretations of the flight paths are inaccurate or incomplete. I note that LAAG has labelled one of its diagrams on its website as being 'CAA' and another as 'approved'. If this is an effort to give the diagrams credibility it is not a valid one (Appendices 9 and 10).

## **6. Design and approval**

- 6.1 The UK CAA Directorate of Airspace Policy (DAP) which is responsible for the safe and efficient use of UK airspace, designed and published the Airport's instrument approach procedure charts. The DAP is also responsible for dividing airspace and classifying use or restrictions of different sections, such as the Restricted Area around Dungeness Power Station and the Danger Areas encompassing the Army firing ranges. The DAP has therefore taken these airspace designations into account during the design of the Airport's flight procedures, in accordance with standard practice.

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6.2 The practical application of those procedures, and all of the flight procedures in the CAA's UK AIP, are regulated by the CAA Safety Regulation Group (SRG) whose jurisdiction over the Airport is covered by the following departments:

6.2.1 Aerodrome Standards Department (ASD) – ensuring the aerodrome structure and general operation comply with the appropriate safety standards;

6.2.2 Air Traffic Standards Department (ATSD) – for the safety regulation of air traffic services; and

6.2.3 Air Traffic Standards – Engineering – ensuring the safe installation and operation of communication, navigation and surveillance equipment used by Air Traffic Control

6.3 The Airport infrastructure, its licensed operational staff, equipment, procedures, manuals and documentation are audited annually by all three sections of SRG to ensure ongoing compliance with safety requirements.

6.4 Failure at any time to maintain the required standards could lead to revocation, suspension or variation of the Airport's CAA Licence as described in the Air Navigation Order 2009.

## **7. Assumptions for the ES**

7.1 In constructing the flight operational inputs for the ES, a conservative approach was taken to give confidence that the outcomes – in terms of any environmental effects – could be reasonably described as the likely 'worst-case' and that in reality any effects would be less and within acceptable limits. The assumptions were as follows:

7.1.1 Airspace considerations:

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- a) Danger Areas D141 and D044 (the Army firing ranges approximately 10km NE and 3km SW of the Airport, respectively), were assumed to be always active for the purpose of impact assessment, so aircraft movements were only allocated to flight paths that remain clear of the Danger Areas. In reality, the firing ranges are not always active, and the airspace over them may then be utilised by aircraft which has the consequence of reducing any noise footprint in the vicinity of Lydd Town. (Appendix 7 [Fig. 16.21 CD1.41a and CD1.41b])
  
  - b) Dungeness Power Stations Restricted Area R063 – is permanently active. Although the CAA's restriction only stipulates that aircraft landing or taking off from the Airport must remain 1.5nm horizontally or 2000ft vertically from the centre of this airspace, the Airport has applied its own additional restrictions, published by the CAA and indicated on the flight path diagrams, whereby aircraft above 5700kg maximum take-off weight must follow paths which are even further from the Power Stations.

#### 7.1.2 Likely fleet mix and movements

- a) Aircraft types - the selection for the 2006 ES (and retained in Appendix 16.4 to CD 1.41a and CD1.41b) contained a mixture of aircraft that were in general operation in 2005. Some of those aircraft in the original ES mix are currently being phased out and will be replaced by a newer generation of quieter, more fuel efficient aircraft types.
  
- b) Climb performance – Generally the older types of air transport aircraft and executive jets that are used for the assumptions in the ES have worse climb performance than the newer generation of aircraft which are being introduced, thus any environmental effects will be further improved in reality in the future.

- c) The 2006 ES assumed a high rate of growth in traffic to a peak of 500,000 passengers per year. The evidence from Ms Congdon, the Applicant's Socio-Economics witness (LAA/4/A), will demonstrate the likelihood of a much more gradual growth in passenger numbers and associated flight movements. Consequently the rate of change of any environmental effects would be more gradual in reality.

### 7.1.3 Runway direction

- a) The modelling in the ES assumed an average runway utilisation ratio for runways 21/03 of 70%/30% respectively, based on historical utilisation, but recognising that runway 21 is the preferential landing runway for the largest aircraft in the future fleet mix. The fleet mix tables in Appendix 16.4 to CD1.41a and CD1.41b) show the runway and flight path allocations for different sized aircraft split into 4 groups. Actual runway utilisation for individual aircraft depends on many factors such as wind direction, visibility and cloud base, navigational aids, landing distances, traffic patterns and airspace considerations to name but a few. For comparison, Southend Airport's runway 24/06 has an operating split average of 74%/26% (Southend Airport Runway Extension ES Oct 2009), and Manston's runway 28/10 is operated at an average ratio of 67%/33%.

## **8. Rule 6 Party comments – Lydd Airport Action Group (LAAG)**

- 8.1 So far as I am aware, the only Rule 6 Party that has expressed any dissatisfaction with the detail of what has been presented and shown in the Applications concerning the existing and proposed aircraft operations is LAAG.

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- 8.2 In the absence of any detail as to the specific points of objection relating to operations at the Airport in the LAAG Statement of Case, I reserve the right to address any further details or comments that LAAG seek to raise in their evidence by way of Rebuttal if necessary. Without prejudice to that, I deal briefly below with some of the previous assertions that have been made by LAAG in respect of the Applications.
- 8.3 As indicated above, LAAG has asserted that serious flaws remain in respect of the Applications relating to flight paths and modal split (runway utilisation). I do not consider this assertion to be justified or properly explained. The Airport has in fact presented a thorough and comprehensive appraisal of flight paths and fleet mix allocations for the Applications in question.
- 8.4 LAAG has also previously claimed that the new GPS-backed CAA-designed RNAV approach procedures have been ignored. This is inaccurate. These procedures were introduced to the Airport to provide an eventual replacement for the non-precision Non Directional Beacon (NDB) approach as well as a direct approach to runway 03 when weather conditions are favourable and when Danger Area D044 is closed. The ILS approach remains the procedure of choice for the foreseeable future because of its greater precision. But in any event, approach paths under the runway 21 RNAV and ILS procedures converge up to 1.5 nautical miles before the runway threshold and have the same angle of descent of 3.5 deg. None of the departure flight paths or visual approach paths are affected in either case.
- 8.5 LAAG has also asserted that the Airport has operational shortcomings that they claim will make it unviable. There is no basis or justification for these assertions, particularly when the Airport's operations are compared with those of other thriving airports throughout the UK. In this context, it appears that LAAG are claiming that adjustment of the ILS to permit aircraft to land on the extended runway will not be possible without moving the localiser. This is simply not the case. The localiser will remain in place and only the glide path aerial will be moved.

8.6 LAAG has also previously claimed that the Airport now has lower activity as compared with the activity used in the baseline year of the ES, having regard for CAA records of scheduled passengers. But the statistics LAAG has used do not include passengers carried on air taxi movements or pleasure flights. In fact, in the first 10 months of 2010, the total movements of the aircraft above 5.7 tonnes more than doubled compared with the whole of 2009. Despite the current economic climate, the Airport is in fact steadily increasing business rather than contracting as LAAG appear to suggest.

8.7 LAAG has previously sought to promote objection to the Applications on the basis of safety issues with respect to Dungeness Power Station. The safety issues they have raised are unjustified and significantly misrepresent the position. As dealt with by the Applicant's planning witness in more detail (Mr Sean McGrath (LAA/14/A)), there are in fact no objections to the Applications with the proposed flight paths from the relevant safety regulators; the operator of Dungeness Power Station has not sought to become a Rule 6 Party; the Airport was given permission for the same type of development but with a greater number of aircraft movements in 1992, and Dungeness B is scheduled to close in 2018. I consider the objections that have been made and encouraged by LAAG to be completely unjustified.

**9. Planning obligations and conditions relating to airport operations**

9.1 I can confirm that the Airport currently has no planning restrictions on:

9.1.1 type or operating mode of aircraft (beyond any limitations inherent from the runway length);

9.1.2 the number of flight movements;

9.1.3 the number of helicopters;

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- 9.1.4 the definition of the flight paths to be flown by particular aircraft; (beyond the restrictions relating to the Danger Areas and Restricted Area at Dungeness);
  - 9.1.5 the numbers of passengers or the amount of cargo;
  - 9.1.6 the operating hours (24 hour operations therefore being possible);
  - 9.1.7 engine testing; and
  - 9.1.8 fly ins, flypasts and air shows, parachuting and other non-standard aviation activities.
- 9.2 Planning Conditions and Section 106 planning obligations are proposed with these Applications specific to the operation of aircraft which will introduce for the first time restrictions on the Airport including:
- 9.2.1 flight path restrictions to ensure the assessments in the ES are not breached or exceeded in respect of noise, effects on birds, air quality or nuclear safety;
  - 9.2.2 restrictions on the numbers of flights;
  - 9.2.3 a limit on helicopters, and a noise preferential flight path (fig. 16.28 to CD1.41a and CD1.41b);
  - 9.2.4 a restriction on the number of passengers;
  - 9.2.5 a restriction on the largest aircraft permitted to operate; and
  - 9.2.6 a limitation of maximum hours of operation for take-offs and landings to 0700-2300 i.e. no night flights.



**10. Summary and Conclusion**

10.1 In my evidence I have identified that:

10.1.1 There are operational reasons why the runway extension is needed in order to maximise efficient use of the Airport by B737 size and other aircraft, having regard to the limitations that the current infrastructure imposes upon commercial air transport operations;

10.1.2 The methodology used in compiling the flight paths and operational information for the ES has been in accordance with recognised standard practice;

10.1.3 The Applications would be compliant with regulatory requirements for the construction and operation of the runway extension;

10.1.4 The assumptions as to the operations of the Airport in the ES are reasonable, conservative and likely to assess the 'worst-case' scenario so that the actual impacts of the proposals will be less than that assessed and therefore the proposals are realistic and achievable;

10.1.5 The effect of the Airport's operations will be mitigated and/or improved in any event through the introduction of a comprehensive list of conditions and S106 obligations which will introduce restrictions on the Airport's activities for the first time.

10.2 I consider that there are therefore strong and compelling reasons in terms of Airport operations for the Applications to be approved, and no good reason in these respects for planning permission to be refused.