TOWN AND COUNTRY PLANNING ACT 1990 - SECTION 77 AND TOWN AND COUNTRY PLANNING (INQUIRIES PROCEDURE) (ENGLAND) RULES 2000

APPLICATIONS BY LONDON ASHFORD AIRPORT LTD

SITE AT LONDON ASHFORD AIRPORT LIMITED, LYDD, ROMNEY MARSH, TN29 9QL

SUMMARY PROOF OF EVIDENCE OF MALCOLM SPAVEN MA (Hons) MSc

on behalf of Lydd Airport Action Group

on

AVIATION OPERATIONAL ISSUES (excluding those relating to nuclear safety)

PLANNING INSPECTORATE REFERENCE: APP/L2250/V/10/2131934

LPA REFERENCES: Y06/1647/SH and Y06/1648/SH

INQUIRY DOCUMENT REFERENCE: LAAG/10/B

1. Professional qualifications and experience

1.1 My name is Malcolm Spaven. I hold an M.A. (Honours) degree from the University of Edinburgh and an M.Sc in Rural and Regional Resources Planning from the University of Aberdeen. I am the principal of Spaven Consulting.

1.2 Spaven Consulting has specialised in assessments of aircraft noise around airfields and in low flying areas, and assessments of the impacts of renewable energy developments on aviation. My clients have included wind energy developers, airports, trade associations, non-governmental organisations and community groups.

1.3 I am a qualified pilot with a commercial pilot's licence, an instructor's rating, a night rating and an instrument meteorological conditions rating. I work as a flying instructor at Edinburgh and Fife Airports.

1.4 On behalf of gCAP Ltd I perform audits of instrument approach procedure charts for airports in the UK, Ireland and France.

1.5 I am familiar with the details of the proposed development and the development site. I have carried out analysis work on the proposed development on behalf of Lydd Airport Action Group since 2006.

2. Scope of evidence

2.1 In my main proof of evidence [LAAG/10/A], I deal with the following matters:

- inadequacies of the aviation information provided in the planning application
- feasibility of the flight paths depicted in the airport's planning submissions
- the airport's December 2009 submissions on the subject of noise and visual impacts
- flight path assumptions in assessments made by the Nuclear Installations Inspectorate
- practical constraints on the use of Lydd Airport by commercial airliners.

2.2 In this summary proof of evidence, I address all of the above issues with the exception of 'flight path assumptions in assessments made by the Nuclear Installations Inspectorate'.

2.3 In this summary proof, references to the relevant paragraphs of my main proof [LAAG/10/A] are appended in square brackets.

3. Inadequacies of the aviation information provided in the planning application

3.1 There have been numerous inadequacies and inaccuracies in the aviation information presented in the airport's submissions since 2006. A significant number of these remain in the airport's proposals.

3.2 For the purposes of assessment of the impacts of the development, the baseline should be taken as the current and recent past levels of aviation activity at Lydd Airport, not the 300,000 passenger level which the airport has proposed. [3.3 to 3.5]

3.3 The noise contours which are the basis for the airport's assessment of the noise impact of the development are based on inaccurate and erroneous data on the types of aircraft which fly on particular flight paths. Consequently the noise contours should not be relied upon. [3.6 to 3.18]

3.4 There are inconsistencies in the depiction of which Flight Paths are used by which Groups of aircraft types. This raises further questions about the reliability of the noise contours. [3.19 to 3.20]

3.5 The fundamental assumption in the noise assessment that aircraft use runway 03 for 30% of the time and runway 21 for 70% of the time is unreliable because it overestimates the capability of larger and faster aircraft to land on runway 03. [3.21 to 3.27]

3.6 The airport's assumptions about the extent to which aircraft will be permitted to fly through Danger Area D044 are unreliable. [3.28 to 3.32]

3.7 The flight paths depicted in Figures 16.1 and 16.2 of the ES are unreliable because they omit the new RNAV approach orientations, and make a number of inconsistent and inaccurate assumptions about aircraft routings. [3.33 to 3.54]

4. Feasibility of depicted flight paths

4.1 Questions remain over the practical feasibility of some of the flight paths proposed by LAA.

4.2 Flight Path 1, which is the only means by which airliner-sized aircraft can make an approach to runway 03 when D044 is active, is not a viable flight path for most or all of these aircraft because the distance between the runway threshold and the boundary of the D044 range is insufficient to accommodate the required manoeuvre safely. [4.2 to 4.20]

4.3 Consequently, it can be concluded that airliners will be unable to operate into Lydd Airport when the wind speed and direction requires them to land on runway 03 and the Lydd Range is active. [4.15]

4.4 For commercial airliners departing from runway 21 when the Lydd Range is active, the radius of turn required to avoid the range by an adequate safety margin would in turn require a bank angle which is unlikely to be achievable under European air safety rules. [4.21 to 4.32]

4.5 There are no departure turns at any other UK airport which are equivalent to what would be required from runway 21 at Lydd. Examples from Hobart, Cairns and Nice show that the Lydd runway 21 departure turn would be more challenging than those. [4.33 to 4.37]

4.6 Airlines will have to place stricter limits on the weight of departing aircraft in order to complete the turn on departure from runway 21, or will choose to depart from runway 03 when the wind permits. [4.38 to 4.39]

5. Noise and visual impacts

5.1 Section 5 of my main proof of evidence reviews information in the LAA response to questions from Shepway District Council, dated December 2009. [CD 1.44]

5.2 The use of the ATR42 as the baseline aircraft from the point of view of assessing the noise and visual disturbance of birds is invalid since it is an infrequent user of the airport. [5.2 to 5.7]

5.3 The claim that the ATR42 and Boeing 737 are likely to generate similar visual disturbance is untenable since all variants of the Boeing 737 are significantly larger than the ATR42. [5.8]

5.4 The location of the photographs taken to illustrate visual disturbance is likely to understate the visual impact, particularly of aircraft departing from runway 21. [5.9]

5.5 The implication that the noise impact of an ATR42 and a Boeing 737 are comparable is untenable. The noise footprint of a Boeing 737 is several times larger than that of an ATR42. [5.10]

6. Practical constraints on the use of Lydd Airport by commercial airliners

6.1 Section 7 of my main proof of evidence assesses practical operational and other constraints on the use of Lydd Airport by commercial airliners.

6.2 Wind data indicate that Lydd Airport would not be able to meet the ICAO recommended figure of runway usability on 95% of occasions, for aircraft of Boeing 737/A319 (Group 1) size. [7.2 to 7.8]

6.3 The airport proposal that Group 1 aircraft would land on runway 21 in a tailwind of up to 10 knots takes no account of the environmental and aircraft configuration conditions which affect an aircraft's ability to land in a tailwind in particular circumstances. [7.9 to 7.16]

6.4 Data from Boeing indicate that a Boeing 737-800 with a full passenger load could not land on the extended runway 21 at Lydd in a 10 knot tailwind. Limitations on payload would be required. [7.17 to 7.25]

6.5 Boeing 737-700 aircraft are also likely to have to apply payload limits when landing on the extended runway 21 at Lydd, particularly when the runway is wet. [7.22 to 7.23]

6.6 When the runway extension is completed, the existing Instrument Landing System will not meet the ICAO requirement that the ILS localiser course crosses the extended runway centreline at a point where the ILS glidepath is at a height of at least 180 feet above the runway threshold. This will mean that the runway 21 landing threshold is likely to be displaced by some 95 metres, thus reducing the declared Landing Distance Available and therefore reducing further the maximum weight at which aircraft can land on that runway, particularly in a tailwind. [7.26 to 7.31]

6.7 The Lydd runway is and will remain 32 metres wide, compared to the standard width for commercial airport runways of 45m. This will result in

further restrictions on take-off operations from this runway by larger aircraft, particularly in crosswinds. [7.32 to 7.33]

6.8 CAA policy dictates that the width of the runway at Lydd prevents any of the declared runway distances – TODA, TORA, LDA or ASDA – being greater than 1979 metres. This will mean that some of the existing declared runway features will not be available after the runway extension is completed, thus placing further limits on operations out of Lydd by larger aircraft. [7.34 to 7.40]
