

October 24th, 2008

Terry Ellames
Planning Department
Shepway District Council
Civic Centre, Castle Hill Avenue
Folkestone, Kent, CT20 2QY

Dear Terry

Lydd Airport Action Group - Response
Second set of Supplementary Environmental Information - Planning
Applications: Y06/1647/SH (new terminal to accommodate up to 500,000ppa)
and Y06/1648/SH (runway extension - 294m extension plus 150m starter
extension)

LAAG believes the planning applications - Y06/1647/SH and Y06/1648/SH should be rejected. The second set of Supplementary Environmental Information (SEI (2)) does not change our view and we stand by the comments made in our original response and in our response to the first set of Supplementary Environmental Information (SEI (1)) dated November 15th 2007.

In the SEI (2) Lydd Airport has outlined proposals for a possible on-site sewerage treatment works to support its development but has stated that this will only be assessed on planning approval. This is a major development in its own right and requires the same level of assessment in the planning process as the extension of the runway and the new terminal. Since a treatment works has the potential to adversely affect the European Natura sites (SAC and SPA) due to the impact of waste water discharge its plans must be appropriately assessed along side those for the runway extension and new terminal.

Much of the information presented in the second set of Supplementary Environmental Information, as in the original planning application and SEI (1), is inadequate and in places incorrect. **The persistent reluctance to provide accurate information is reason alone to reject the planning application.**

Further, there remains a wide body of crucial information that has not been addressed as the following shows – LAAG’s recommendations made in response to the first set of Supplementary Environmental Information (SEI) published in November 2007 are set out below with Lydd Airport’s response summarized in bold.

- (1) Re-submit the planning application based on the plans outlined in the Scoping Opinion, with the outline planning application for phase 2 of the terminal supported by an EIA based on 2mppa. **Not Provided**
- (2) Provide a “do nothing scenario”. **Not Provided**

(3) Provide accurate, comprehensive flight path information for both commercial and light aircraft. **Remains incorrect**

(4) Provide accurate baseline information about the airport today, including accurate statistics for aircraft movements, the nature of the current aircraft mix, and the location and description of restricted flight zones over and around the Dungeness nuclear power stations and the Lydd and Hythe Military Ranges. **Baseline movements now correct for 2005 but current aircraft mix still inaccurate, although more realistic than in SEI(1) - other aspects not provided (e.g. previous no fly zones around Dungeness are inaccurately drawn)**

(5) Reassess all information dependent on flight paths and the correct baselines - noise contours, the impact of noise on birds of conservation interest, bird hazard control, socio economic impacts, light and air pollutant analyses and the impact of light and air pollution on invertebrates. **New flight path information still incorrect so above needs repeating based on accurate flight paths**

(6) Provide an analysis of how increased operations at Lydd will fit into en route airspace - i.e. how traffic integrates with that from other airports. This is essential for the understanding of flight paths for commercial passenger carrying aircraft. **Not Provided**

(7) Provide an environmental assessment of the impact of the removal and re-installation of the ILS aerials, or if it is intended for the aerials to remain in the current location, outline how the airport intends to fully utilise the extended runway without breaching International Civil Aviation Organisation (ICAO) and CAA guidelines. **Not Provided**

(8) Assess the impact of the seasonality of the business on pollutants at the receptors. **Not Provided**

(9) Provide an analysis as to why passenger numbers have been consistently lower than 5000 ppa for the last 10 years and why Lydd Airport needs to extend the runway when it is still only operating today at less than 1% of its current terminal capacity of 300,000 ppa and less than 2.5% of the Aviation White Paper's assessment of its likely projected operating capacity of 125,000 in 2030. **Not Provided**

(10) Provide an analysis of how Lydd Airport's new facilities, flight infrastructure and use of runways compares with other regional airports. **Not Provided**

(11) Undertake a radar based migratory bird studies as this is the only definitive way in which to gauge the scale of bird migration at Dungeness. **Not Provided**

(12) Undertake a comprehensive aquatic and terrestrial invertebrate survey covering a wide range of habitats over at least the area of the airport, but preferably a wider area. Habitats includes vegetated shingle, wetlands, dry grassland, ephemeral vegetation, scrub, swamp, margins of standing water, marshy grassland, semi-improved and unimproved, but managed grassland and bare shingle. All historic data must be taken into account and at least four visits

during the season made, starting in mid May and using all the trapping methods already employed. **Not Provided. Kent Wildlife did NOT sanction this stance.**

(13) Undertake a separate moth survey - a minimum of four moth trapping sessions during the season. **Moth Survey undertaken but inadequate.**

(14) Survey for medicinal leeches in all ditches on site or connected with them and all other water bodies. **Not Undertaken**

(15) Assess the impact of light pollution on invertebrates and changes in flora due to increased nitrogen inputs since vegetation changes will adversely affect rare invertebrates in the area. **Not Undertaken**

(16) Ensure adequate mitigation proposals are in place (for invertebrates), that the Airport commits to these, and that provision is made for monitoring in the future to assess the efficacy of the mitigation undertaken. **Proposals remain inadequate**

COMMENTS – SUPPLEMENTARY ENVIRONMENTAL INFORMATION

The main points regarding the current set of Supplementary Environmental Information (SE2) are summarised below:

1.0: Flight Paths & Implications

Much of the flight path information remains incorrect – See Appendix 1 – *Spaven Consulting - Review of Submitted Information on Aviation Operational Aspects, October 2008*. The summary of this report is shown below:

- The fleet mix for existing operations omits the two principal aircraft types used in current commercial aircraft operations at Lydd.
- Apart from accepting that BAe146 aircraft cannot turn left on departure from runway 21 and cannot land on runway 03, the flight path assumptions are identical to those used in the original ES and the October 2007 SEI. They replicate all the errors of those documents.
- The depicted flight paths for aircraft turning left on departure from runway 21 breach the restricted airspace around the Dungeness power station. These flight paths are therefore illegal and cannot be the basis for any noise assessment.
- There is no explanation of how turboprop airliner and business jet types can make approaches to runway 03 given that it has no instrument approaches and would require aircraft to fly through the Lydd Range danger area.
- All jet take-offs from runway 21 are assumed to depart the Lydd area to the south east, whereas all takeoffs from runway 03 are assumed to depart straight ahead towards Folkestone. This is untenable since departure directions will be determined by the ultimate destination of the aircraft.

- The definition of 'large' and 'small' aircraft is inconsistent with the depiction of flight paths in the various Figures in the SEI.
- No figures are provided for the number of occasions on which aircraft are assumed to be able to fly through the Lydd Range danger area.
- Overall, the inaccuracies and incorrect assumptions with regard to flight paths render any noise or air quality assessment invalid.

NOTE: “turboprop” airliner types refer to Dash 8, ATR42 and SAAB 340

1.1: Modal Split

The 70/30 modal split determined by wind direction alone remains incorrect for the following reasons: (a) the flight restrictions caused by the operation of the Lydd Military Range (operational for at least 300 days of the year) and Lydd Airport’s commitment not to operate at night (2300 to 0700 hours). (b) There is no ILS on runway 03 so commercial aircraft might not be able to use the runway when the wind dictates due to insurance obligations. (c) The right turn on departure from runway 21 is challenging for larger aircraft such as the B737, A319, and BAE 146 which means in calm wind conditions larger aircraft could choose to take off from 03 rather than runway 21.

1.2: Baseline

Lydd Airport’s baseline aircraft flight movement figure for 2005 has been corrected (22,044 movements), but the estimate of aircraft types currently using the airport on a daily basis, although more realistic, remains incorrect as the table does not include the Trislanders and the recently acquired Chieftains. The Trislanders provide the daily scheduled service to Le Touquet (the source of <3000ppa). These aircraft types have NOT been mentioned in the ES, SEI (1) or the current SEI (2). (The estimate of aircraft types currently using Lydd Airport is shown in 2.1.3, Table 1, page 3 of the *Response to Queries Relating to Noise Impacts of the Proposed LAA Runway Extension* and proposed LAA Terminal Extension (volume 7 of 8).)

Note: the existing operations flight path information is also incorrect – for example, departures from runway 21 for the annual average and southerly mode tables show all the existing aircraft turning left on departure from runway 21, yet, Cessnas and Pipers can currently be observed turning left and right on departure from Lydd Airport. See Appendices 2 – *Flight Path Information, Response to Queries Relating to Noise Impacts of the Proposed LAA Runway Extension and Proposed LAA Terminal Extension*.

1.3: Inaccuracies, omissions, contradictions

The information is peppered with inaccuracies, contradictions and omissions. For example, in the Fleet Mix Information – Appendices I - *Response to Queries Relating to Noise Impacts of the Proposed LAA Runway Extension and Proposed LAA Terminal Extension* – the Existing Operation correctly shows the revised existing fleet mix for the 70/30 split, but for the northerly and southerly scenarios, the fleet mix reverts to the patently incorrect mix given in the first round of supplementary information (SEI (1)) which shows the BAE 146, Dash 8, ATR42-500 and SAAB 340/SF340B as baseline (existing) aircraft types. Further, upper parameter assumptions have not been provided.

The Noise Modelling Assumptions given in Appendices 3 of the above state, under the heading, Future Takeoff Assumptions: *Larger aircraft and jets taking off using the starter extension will have to turn to the right to avoid the 1.5nm radius Dungeness restricted airspace and avoid over flying the town of Lydd.* A turn to the right on departure from runway 21 does not “avoid over flying the town of Lydd” - rather, it means that these aircraft will inevitably fly over the town of Lydd. Further under the heading Noise Assumptions it is stated: *For a “single mode” day in a “northerly” operation (runway 03), small planes would land from the South and take off to the North. Large planes would still land from the North up to a tail wind of 10 knots, above which they would be diverted to an alternative airport. Large planes would still have to take off to the South and turn right over Lydd.* The last sentence is nonsense – there is no basis for saying that large aircraft will use 21 for departure when the wind is northerly, in any credible circumstances. Moreover, the airports flight path map in SEI (2) does not show large planes turning to the right on departure for a northerly scenario. See *Spaven Consulting’s Report* for further examples.

1.4: Flight path, departure from reality – example of implications

The scale of the flight path information’s departure from reality has major implications for local residents at Lydd and for the protected habitats, particularly the Dungeness Special Area of Conservation (SAC) in the Lydd vicinity. For a runway 21 Southerly mode departure based on 500,000ppa Lydd Airport assumes that only the B737, A319 and Bae146 will turn right on departure. In reality in NON calm conditions, all aircraft over 5700kgm ie., Boeing 737, A319s, Bae 146s, Dash 87, Atr42-500, Saab 340/SF 340B, Lear jet 35A, Citation II, CNA, 750 Citation X will turn right on takeoff from runway 21 over Lydd town. It is also possible that some of the light planes < 5700kgs will also turn right if their destination warrants. Since "large" aircraft taking off on 21 and turning right will in general be operating at full power as they pass over Lydd, this generates the maximum emissions as well as maximum noise. Lydd residents will thus experience high noise and pollution levels, while vulnerable plants and invertebrates in the vicinity are likely to be adversely affected by the pollution. Since the SAC is designated for its fragile shingle vegetation which is susceptible to nitrogen deposition it is vital that accurate information is provided otherwise the Appropriate Assessment will be invalid.

In summary, inaccurate information about flight paths and the “current conditions” scenario invalidates the subsidiary studies that are dependent on this framework - the noise contour maps, impact of aircraft noise on bird species of conservation interest, air quality analysis, the invertebrate surveys, the social implications of the airport’s development and the Appropriate Assessment required under the Habitats Regulations.

2.0: Nuclear Safety

LAAG’s nuclear safety consultant, the consulting engineer John Large of Large & Associates has reviewed the SEI (2) and has concluded that there is no reason to change the conclusions he set out in the report dated March 17, 2007. The letter outlining his conclusions is included as *Appendix 2* and the conclusions he made in his March 2007 report are set out below.

For the expansion to 500,000 passengers per annum (ppa) I predict that the overall risk of a commercial airliner accidentally crashing onto the Dungeness NPP site to be

1.4507E-06 per year, that is odds of 1 in 689,229 in each year. Should LAA expand to 2,000,000 ppa then the risk of aircraft crash increases to 2.9099E-06 per year or the odds of 1 in 409,691 in each year.

Both of these risk levels are substantially higher (ie more frequent) than the 1 in 10 million level of acceptable odds or risk of accidental aircraft crash imposed by the Nuclear Installations Inspectorate (NII) in order to maintain the nuclear safety case. In this respect, the LAA generated risk would be unacceptable in terms of the potential radiological consequences to individual members of the public and, in societal terms, generally as a whole.

In his Appendix 2 letter John Large also highlights the **additional risk** associated with the construction of a new nuclear power station at Dungeness, particularly when British Energy has confirmed that any new nuclear plant could be sited further inland possibly by a couple of hundred metres due to rising sea levels.

John Large states. *“The effect of siting a third nuclear plant at Dungeness at, say, 200m due north of the existing nuclear plants would not only render i) its north boundary nearer to the proposed airport take-off point, but there would be a corresponding ii) increase of the overall area of the ‘ground footprint’ and iii) enlargement of projected height profile of the combined hazardous nuclear plants, so: 4) these three changes to the siting, footprint and profile together give rise to the increase of the chance that a crashing aircraft would impact on part of the hazardous nuclear facility at Dungeness, which directly interprets to a further increase in projected frequency of accidental aircraft crash.”*

3.0: Invertebrates

The invertebrate consultants Dr John and Barbara Ismay have reviewed the Supplementary Information and have concluded that most of the recommendations they made in their October 2007 have been ignored. They believe *“the whole invertebrate survey in 2005 was based on the wrong assumptions and is therefore invalid, while the 2007 survey was far too restricted in areas, habitats and species groups covered”*. The consultants have reiterated the nature of the additional survey work required. See their report Appendix 3: *Further Comments on the Planning Applications (Y06/1647/SH and Y06/1648/SH) and supplementary Environmental Information for Lydd Airport October 2008* (The Ismay Report).

3.1: Moth Survey

The Ismay Report concluded that the Moth Survey carried out by Lydd Airport’s consultant’s is inadequate for the following reasons:

- (a) The survey was not conducted in the footprint of the development due to access problems.
- (b) The survey was influenced negatively by the hanger lighting which was close by.
- (c) The survey was only conducted in one location, and in one time frame, whereas it should have been conducted in at least four locations and, at least four times during the season.
- (d) In addition to light trapping the survey needs to include searches for larvae as unlikely that all moths would be in the adult stage during the survey.

- (e) Some of the rarer Lepidoptera feed as larva on plants recorded from the development footprint – surveys should concentrate on these
- (f) The survey only considered the impact of lighting from the terminal building and the adjacent car park, but did not take into account lighting from the runway extension.

The Ismay Report reveals other shortfalls in the information required to adequately assess whether this development will have an adverse impact on this important invertebrate area. For example, in the Biodiversity Action Plan the consultants point out that it is not possible to assess the potential for encouraging invertebrate species since most of the species in question have not been surveyed. They also point out the need to ascertain the chain reactions that occur when nitrogen deposition leads to changes in habitats and the consequences for invertebrates, the questionable conclusion of the lighting impact assessment due to the failure to outline concrete mitigation strategies, and the need to assess great crested newt (vertebrate) mitigation strategies (creation of new habitats) for their adverse impact on invertebrates.

4.0: Runway Pond and Great Crested Newts

There remains uncertainty over the status of the large pond adjacent to the runway (Pond A). In the original planning application the airport claimed it wanted/needed to fill in the pond. It now claims that this will not be necessary and appears to claim that the runway strip will be maintained at 105m either side of the centre line. This is incorrect as the runway strip should extend to 150m. CAA regulation CAP 168 requires that a code 4 instrument runway (proposed expanded Lydd Airport) requires a runway strip extending to 150m either line of the runway centre line. The area extending to 105m either side of the runway should be cleared of obstacles and graded. In the area between 105m and 150m - where Pond A is located - the nature of the obstacles “tolerated” at higher operating levels is less clear.

The airport must renew its risk assessment to take account of the future aircraft types and the increase in planned movements to be accommodated. It is unclear whether this risk assessment has been carried out. Although it is perfectly legal for Lydd Airport to undertake this risk assessment after planning permission has been given, due to Lydd Airport’s sensitive location and Pond A being one of the principle features of the Dungeness SAC, we believe Shepway District Council should request that the risk assessment be carried out as part of the planning application. NOTE it is Lydd Airport’s responsibility to assess whether or not Pond A constitutes an obstacle and needs to be filled in, not the CAA’s. The CAA only assesses Lydd Airport’s risk assessment to determine whether it meets licensing requirements. This uncertainty means that it will be impossible to prove that there will not be adverse impacts associated with the development and therefore under the precautionary principle planning permission should not be granted.

Pond A is one of the principal reasons for designating the Special Area of Conservation (SAC) being one of the best sites for protected great crested newts. It is a key breeding ground for the species and is used by breeding water fowl such as little grebe. Filling in the pond would cause adverse impacts to great crested newt populations.

The importance of Pond A is clearly set out in *Appendix 4: Swift Ecology, Response*

to Questions. The paper also sets out the conservation objectives for the SAC and the airports obligations to maintain the integrity of the area for newts.

LAAG also asked Swift Ecology to estimate the percentage of potential newt habitat within the SSSI and the SAC affected by the development. For the SSSI the figure is 1% and for the SAC 1.4%. These are small numbers but are considerably larger than the figures estimated by the airport in their work - *Impacts on Designated Sites Drainage Ditches and Great Crested Newts*, Appendix 3 Volume 6 of 8. Swift Ecology uses Natural England's principles to determine the newt habitat and has a more realistic picture of the denominator of the equation. The airport has assumed for example, a much larger area of the SSSI used by great crested newts which reduces the percentage (See Appendix 4: *Swift Ecology: Response to Questions and Appendix 4A – Great Crested Newt Habitats*).

Swift Ecology outlines the shortcomings of the mitigation proposals for Great Crested Newts, highlighting that some of the proposals will cause damage to shingle habitats and geomorphology and produce unintended adverse subsidiary impacts. *The Ismay Report – Appendix 3, 5.5* also outlines some of the negative consequences for invertebrates arising out of the airport's great crested newt mitigation programme ie mitigation for great crested newts could lead to changes in habitat that would adversely impact some invertebrates.

5.0: Biodiversity Action Plan

The Biodiversity Action Plan (Appendix 5, Volume 6 of 8) is inadequate and displays a worrying lack of knowledge of the fundamentals required to put a successful plan into motion. For example, in response to 4.4 – In regard to great crested newts, fish do not need to be removed from ponds if there are an adequate number of ponds of differing depths. Fish will be controlled by variable climatic conditions that cause some ponds to occasionally dry out whereas deeper ponds are more likely to be suitable in drought years. Removal of fish from all of the ponds would be unsustainable, and disadvantageous to bird species that feed on them.

Netting the ponds would be disadvantageous to the medicinal leech. This species requires warm blood meals to breed, most likely provided by nesting waterfowl such as moorhen and mute swan. Depriving them of their warm blooded prey could also affect great crested newt populations as the medicinal leech could predate on them more intensely.

Netting the ponds would also damage communities of SSSI qualifying breeding wetland birds including little grebe (which uses the SSSI in nationally important numbers).

It is also difficult to assess the potential for encouraging certain invertebrate species since most of the species have not been named. Reed beds support a large number of rare invertebrates yet the airport is highlighting the need to tailor reed bed to accommodate bird management strategies (3.15). The reed beds have not been surveyed for invertebrates and this needs to be undertaken before a biodiversity action plan can be successfully put in place. See *Appendix 3: The Ismay Report, 5.1*

6.0: Sewerage

Appendix 7, Volume 6 of 8 - Lydd Airport provides a sewerage report for the first time. It is totally lacking in substance. Although it is accepted that an on-site treatment works is the most practical option, the airport only agrees to assess a proposal upon planning approval. This is unacceptable. A sewage farm would be an integral part of the airport. Lydd Airport must decide on which sewage solution is most appropriate for an airport with a capacity up to 500,000ppa in this location and submit detailed plans. These plans must be scrutinised along with the plans for the runway extension and the new terminal since the treatment works has the potential to adversely impact on the European Natura sites (SAC and SPA) due to the impact of waste water discharge.

7.0: Nitrogen

Appendices 10, 11 and 12 of Volume 7 of 8 make no mention of the impact of seasonality in aircraft movements on air pollution levels. This seasonality will affect air quality generally and levels of nitrogen deposition. When the need to assess seasonality is combined with the points made in 1.4 above (concentration of right hand departures from runway 21) it demonstrates how far the nitrogen /air quality studies made in these appendices are from reality. The air quality studies should be reassessed using the correct flight paths and having taken into account seasonality, as the bulk of Lydd Airport's business is likely to be carried out between April and September.

Yours Sincerely

Louise Baton
Lydd Airport Action Group
The Hook
Madeira Road
Littlestone
Kent TN28 8QX
01797 361 548
www.lyddairportaction.co.uk

Appendix 1:- Spaven Consulting - Aviation/Flight Paths

Appendix 2: Nuclear Safety

Appendix 3: Ismay Report - Invertebrates

Appendix 4: Swift Ecology - Great Crested Newts/Other Ecological Issues

Appendix 4A: Swift Ecology - Great Crested Newt Habitat Map