SSE GUIDANCE FOR NATS DEPARTURE ROUTE PROPOSAL CONSULTATION AT STANSTED AIRPORT

INTRODUCTION

This SSE Guidance is primarily prepared for communities close to Stansted Airport and residents living under the Dover and Clacton departure flight paths. SSE is urging residents and local councils to respond to this consultation since, while the proposal would remove daytime departures for a large area to the south-east of the airport, it would double the number of flights departing towards the east coast. This intensification of flights to the east would have an adverse noise impact on the local communities affected particularly since this largely rural region enjoys low ambient noise levels.

The NATS proposal involves switching daytime flights (6am to 11pm) from the existing south-east (Dover) departure routes to the existing east (Clacton) departure routes. These two routes account for half of all departures from the airport. Departure routes to the west of the airport and all arrival routes are not affected by this proposal and remain the same. The whole area is already overflown by other flights, not just these particular routes.

NATS says that the result would reduce the overall number of people regularly overflown in the day as well as reducing CO_2 emissions. In addition, NATS says that switching to the Clacton route would allow aircraft to achieve a more continuous climb than possible on the Dover route leading to more efficient operation.

BACKGROUND INFORMATION

In 2013, Stansted Airport handled just under 18 million passengers on 133,000 flights. It has planning permission to expand to 35 million passengers per annum and 264,000 flights. Hence Stansted is currently operating at half its permitted capacity and the new owners MAG believe the airport has the potential to serve about 25 million more passengers a year than it does now – i.e. 43 million. An intensification of traffic of this magnitude therefore has the potential for more than four times the present numbers of aircraft on the Clacton routes if these changes were to be implemented.

The Government's policy is to limit, and where possible reduce, the number of people in the UK significantly affected by aircraft noise. The Government's guidance to the Civil Aviation Authority ("CAA") is that the priority for airspace up to 4,000ft should be to minimise the noise impact of aircraft and the number of people on the ground significantly affected by it. In airspace between 4,000ft and 7,000ft, the focus continues to be minimising the impact of aviation noise on densely populated areas but this may also be balanced by efficient traffic flow that minimises emissions. For airspace above 7,000ft, minimising aircraft emissions becomes important and mitigating noise impacts is no longer a priority.

This consultation is part of a wider programme to modernise airspace over the south east of England known as the London Airspace Management Programme ("LAMP") and is being consulted upon in phases. NATS say that a later LAMP phase in 2018/2020 would propose more significant changes to Stansted routes together with Heathrow, Northolt and Luton airport route changes. This present consultation does not take into account any potential development of additional runways at any London airport.

The consultation closes on 8 September 2014 and any changes arising would not be implemented before winter 2015.

THE CONSULTATION DOCUMENTS

The consultation documents can be found via link www.nats.aero/lampstansted. The maps provided in these documents give an analysis of the traffic levels, densities and heights on the Dover and Clacton departure routes. This provides a good picture of what would happen if these changes were to be implemented. It allows residents to judge for themselves the likely impacts by comparison with the current situation.

However, a set of maps that NATS has not provided are those prepared by the CAA for Stansted Airport. This set of four one page maps provides an overall picture of all the arrival and departure routes for both runway directions at Stansted and show traffic on a typical summer day in 2013 via link http://www.stanstedairport.com/about-us/local-environmental-impacts/noise/noise-in-your-area. It is recommended that these maps are studied in addition to those provided by NATS since they give a good overview of all Stansted flight paths. The traffic is shown as actual radar tracks, colour coded for height and with an analysis of traffic density and frequency of usage of the routes.

The one page CAA departure maps showing the Dover and Clacton routes can be found via the links below:

- Westerly departures http://www.stanstedairport.com/media/1097532/2013mapsdepartureswest.pdf
- Easterly departures http://www.stanstedairport.com/media/903318/departureseast.pdf.

In its consultation Summary Leaflet, NATS says that the benefits of the changes are:

- Reduced $C0_2$
- Reduced delay
- Reduction in the number of people regularly overflown during the day

NATS says that approximately 10% of flights on the Dover route currently manage a continuous climb, the rest being kept lower for longer, whereas on the Clacton route approximately 85% of flights currently achieve a continuous climb.

In this consultation, NATS has (rightly) focused on local environmental impacts below 7,000ft and provides information on flights up to this height.

IMPACTS OF THESE PROPOSED CHAGES

The primary environmental consequences of switching flight paths are noise, emissions and visual intrusion.

Noise and visual intrusion

The NATS documents show flight paths, flight densities and heights (in height bands). No information is given on noise levels – either for aircraft noise or for ambient noise levels - against which aircraft noise events could be compared. NATS say that since this proposal is a change to the use of existing routes, people affected would already know what overflying aircraft sound like and the simplest way of describing the impact is to give a relative indication to compare with what people experience today, for instance a doubling of the flights on the Clacton route.

There is merit in this approach in that it enables people to make a judgment about the increase or decrease of flights at a specific location based on their current perception of aircraft noise and visual intrusion. NATS has analysed the change in the total numbers of flights based on 2012 traffic. This analysis is shown in the table below.

Route	Existing routing Average flights per day	Proposed routing Average flights per day
Clacton	51	109
Dover	58	Negligible

NATS says that the overall area regularly overflown below 7,000ft during the day will be reduced and therefore the population exposed to potential noise will also be reduced. Nonetheless, it is clear that closer to the airport below 4,000ft, more households and more people would suffer an increase in daytime overflights than the number of households and people where overflights would be eliminated. The respective numbers given in the NATS analysis are given in the table below. No information is given for households and population for overflights between 4,000ft and 7,000ft.

	Area	Households	Population
Easterly runway (≈ 30% of the time)	In which regular daytime flights would be eliminated (current Dover)	320	780
Westerly runway (≈ 70% of the time)	In which regular daytime flights would be eliminated (current Dover)	290	690
Easterly runway (≈ 30% of the time)	In which daytime flights would increase (current Clacton)	800	2,050
Westerly runway (≈70% of the time)	In which daytime flights would increase (current Clacton)	120	350

Emissions

Based upon computer simulation modelling, NATS has assessed the potential fuel savings and CO_2 benefits. These assessments are shown in the table below.

	2012 traffic + 20% growth	2012 traffic + 40% growth
Average enabled fuel burn saving per departure to the south east	100-200kgs	100-200kgs
Annual flights via Dover route that would benefit by switching to Clacton route	20,000 flights	24,400 flights
Annual fuel saving	2,000-4,000 tonnes	2,300-4,700 tonnes
Annual CO_2 saving	6,400-12,700 tonnes	7,400-14,900 tonnes

The reduction in CO_2 emissions by switching from the Dover route to the Clacton route, compared with the total CO_2 emissions for all traffic operating at Stansted, would realise a saving of less than 1%.

Continuous climb
Continuous climb operations have implications for noise, CO_2 emissions and fuel efficiency. NATS claims that the net effect of these proposals will be less noise and that aircraft will climb higher and more quickly on departure. However, the Government's guidance to the CAA is that continuous climb is considered to have an overall neutral impact on noise. It involves the redistribution of noise, with more noise at the beginning of the flight and less noise further away from the airport. Its main benefit is to reduce fuel burn as aircraft reach efficient cruising levels earlier thus leading to fuel savings and a reduction in the amount of emissions, including CO_2.

Areas of Outstanding Natural Beauty ('AONBs')
There would be no change to flights in the vicinity of Dedham Vale or Suffolk Coast and Heaths AONBs. No National Parks are affected by this proposal. However, the proposal would bring more traffic closer to the southern boundary of Hatfield Forest – a National Trust property and a Site of Special Scientific Interest and the UK's best remaining Medieval Royal Hunting Forest.

SSE SUMMARY OF THE PROPOSED DEPARTURE ROUTE CHANGES

SSE's position is that there should be clear and compelling benefits for local residents before any changes are implemented.

The overall benefits to the airlines are reduced fuel consumption and more efficient operation. Aircraft operate more efficiently at higher altitudes meaning that less fuel is burned creating fewer CO_2 emissions. When aircraft are at higher altitudes it is also less likely that there would be local impact from noise or visual intrusion.

For the environmental impacts, SSE's summary is:

- While 1,470 fewer people would be overflown below 4,000ft, 2,400 people would be overflown more intensively.
- Continuous climb has an overall neutral impact on noise. More noise nearer the airport, less further away.
- The reduction in overall CO_2 emissions is very small – less than 1%.
- No information is provided for numbers of households and population overflown by aircraft between 4,000ft and 7,000ft other than NATS' statement that there would be a reduction in the overall area regularly overflown below 7,000ft.

SSE strongly recommends that local residents and communities carefully study the detailed maps and proposed traffic numbers for their respective localities and urges them to respond to the consultation and make their views known. SSE has commented earlier that for people living near Stansted Airport and under flight paths, there would inevitably be winners and losers if these changes were to be implemented.

SSE also encourages all local communities and residents to point out to NATS that a major noise reduction initiative, not included in this proposal, is the implementation of Continuous Descent Approach for all easterly arrivals. This has the potential to reduce noise from about 10 to 25 miles from the airport over a large area under the arrival flight paths by up to 5 decibels. It would also result in fuel savings and reduced CO_2 emissions.

HOW TO RESPOND

- Online to www.NATS.aero/lampstansted You can provide your feedback about the proposal and you can upload a file such as a Word document or PDF

- Or by post to:

  Stansted SID Airspace Consultation
  Box 25A, 4000 Parkway
  PO15 7FL

Online responses will be automatically acknowledged by email. If confirmation of receipt by post is needed, please use recorded delivery.

- Comments regarding the consultation process as set out in the CAA Guidance on the Application of the Airspace Change Process CAP725 should be sent to the CAA at:

  Airspace Business Coordinator – Airspace, ATM and Aerodromes
  Re: Stansted SID Airspace Consultation
  Safety and Airspace Regulation Group, CAA House
  45-59 Kingsway, London WC2B 6TE

  E-mail: airspace.policy@caa.co.uk

The closing date for responses is 9pm on Monday 8 September. However it has been noted that this consultation period falls over the summer holiday period and respondents may wish to request an extension to enable an adequate response to be made.

10 July 2014