

## **RESPONSE BY BERKHAMSTED TOWN COUNCIL TO NATS CONSULTATION ON CHANGES TO TCN AIRSPACE.**

NATS is carrying out a consultation on airspace changes to the airspace known as Terminal Control North (TCN). This is the most fundamental change to aircraft departure and arrival routes in the London area for decades. The changes are designed to reduce delay while maintaining safety and improving environmental performance. It is unclear, however, why this review is taking place at this particular time, as there is no apparent link to planned airport expansion nor to schemes for reducing environmental impacts (i.e. through reducing aircraft fuel use). This response comments on the criteria used to design the changes, the lack of a quantifiable technique for measuring the noise impact on rural as opposed to urban areas, the ambiguity of the statements in the document about aircraft altitudes, the quantification and significance of expected delay reductions, and the short duration of the consultation period. The response concentrates on the departures and arrivals at Luton Airport, which have the biggest impact on Berkhamsted.

### **Objectives/criteria used in designing airspace and route changes**

The main objective of the proposals is reducing the number of people over-flown. This criterion is given by the DfT, however, the DfT policy allows also for the minimising of the impact on any changes to AONBs. In addition the DfT report *UK Air Passenger Demand and CO2 forecasts*, November 2007, foresaw air traffic management contributing to gains in efficiency and helping to address carbon emissions and climate change. The consultation document says that "Government policy will continue to focus on minimising over-flight of more densely populated areas below 7000ft. However, where it is possible to avoid over-flight of National Parks and AONBs below this altitude, without adding to environmental burdens on more densely populated areas, it clearly makes sense to do so." It also says "When balancing the various design objectives, improvements in fuel efficiency and minimising the number of people over-flown below 7000ft were given greater priority than avoiding over-flight of AONBs and National Parks." The proposals for TCN do not provide any overall reduction in average fuel burn and CO2 emissions. So NATS has ignored the balanced approach required by Government policy and the only criterion that NATS has used when revising the routes is to minimise the number of people over-flown.

Many of the rural areas proposed to be over-flown are well populated. In particular, the effects of the changes to Luton Airport operations will actually be to increase the populations over-flown. The figures for residents within the 57 dB L(Aeq, 16h) contour area show an increase due to Luton movements despite those contours being dominated by arrivals traffic which does not change so close to the runway. Population counts within the 57 dB L(Aeq, 16h) contour rises from 4,758 under current arrangements to 10,068 under the proposed arrangements for the forecast 2009 contours. This indicates a large increase in people exposed to noise at 57 dB L(aeq,16h) which is the level, based on 1980's research, which Central Government uses as the daytime level which marks the onset of significant community annoyance.

The flight path changes as outlined in the consultation document will re-route outbound flights to the SW over the rural Chilterns at levels much lower than they currently do today

and with much greater frequency. The main flight paths from Luton to the SW will pass over the Chilterns at 3000 to 4000ft. Particular routes of concern to Berkhamsted and its environs are:

#### Easterly Departures to the South West.

These routes should have the swathe limited to avoid Hemel Hempstead as there can be no justification to over-fly the town as presently shown. The route centre line should also be moved slightly further northwest to avoid over flying Berkhamsted while still allowing Princes Risborough to be avoided.

#### Westerly Departures to the East and SouthEast.

These routes will over fly the Chilterns AONB and particularly the scarp slope beyond Dunstable, seriously affecting popular recreational areas where tranquillity should be retained. Not only will aircraft be as low as 3000ft but they will also be increasing engine power to accelerate and climb, leading to noise levels higher than indicated in the tables provided in the document.

Alternative routing should be chosen to mitigate this impact.

#### **Lack of a quantifiable technique for measuring tranquillity.**

The Rural White Paper "Our Countryside: the Future", 2000, states in para 9.4.2 "*protecting the countryside from further intrusion of noise is not a luxury. It is about preserving and promoting a feature that is genuinely valued by residents and visitors alike*". The Rural White Paper also committed the Government to publish " a measure of change in countryside quality, including such issues as biodiversity, tranquillity, heritage and landscape character. "(para 9.5.2)

The NATS proposals aim to concentrate flights over rural areas rather than urban areas. This seriously threatens the tranquillity of the affected rural areas. NATS has ignored the fact that noise is far more intrusive and distressing in a rural environment, where ambient noise levels are very low, and has not sought to mitigate its impact in any way. NATS has applied inadequate criteria when designing the proposed changes.

The proposal for adopting P-RNAV technology will also lead to concentration of traffic over dwellings under the centre line of the new routes unless the aircraft are vectored off the route. This will concentrate noise for those under the routes and this concentration of aircraft flights will mean residents over a large (long and thin) area will be badly affected by noise levels, which will be well above the otherwise low ambient noise levels.

There is no acknowledged study, which compares the aircraft noise impact in tranquil areas such as the Chilterns to that in urban areas. The consultation document itself says: "In previous consultations the CAA has accepted that measurement of aircraft noise in relation to tranquillity is relatively undeveloped and that no universally accepted metrics or measuring methodology exists for the assessment of tranquillity. Therefore it has not been possible to undertake tranquillity measurements for this project". So NATS has ignored the problem.

The changes will significantly increase noise pollution and lead to a general loss of tranquillity within the AONB, causing nuisance to many thousands of local residents and visitors using the Chilterns countryside for quiet leisure activities. The consultation document shows that most of the Chilterns is likely to be affected by noise at levels that will cause nuisance and a much wider area is therefore affected than is claimed by NATS.

There should not be any changes made to arrival and departure routes on this scale until the effect on tranquillity has been quantified.

### **Ambiguity over aircraft altitudes**

Understanding the noise impact of these proposed changes has been made more difficult as the consultation document does not make clear the height that aircraft could be expected to be flying at when following an NPR and whether noise abatement systems might be operated. The minimum heights shown are a worst case but provide little idea of what heights the typical aircraft would normally be and when they could be expected to vector off the set routes. Also according to para. D11.10 of the consultation document, the heights below about 3000 feet are with reference to airport site level and above that with reference to sea level. It is not clear whether this means that the heights at, say 4000 ft, on the maps showing departures and arrival routes are above the airport site or above mean sea level.

Luton Airport is approximately 500 ft above mean sea level but the top of the scarp slope of the Chilterns is more than 800 ft above mean sea level and 300ft above the site of Luton Airport. So the altitude above the ground is, in the case of the routes over-flying the Chilterns, overestimated. At a point just to the east of Princes Risborough (Green Hailey Farm)– the hill rises to 247 meters (810ft above MSL), at Aston Hill in Wendover Woods it rises to 260m (853ft above MSL). So allowing for navigational height errors the aircraft would be significantly closer to the ground when above the Chilterns than indicated in the consultation document, and as pointed out above, will be using increased engine power at these points in order to accelerate and climb.

### **Quantification and significance of delays.**

The Consultation Document states that one of the objectives of the route changes is reducing delays. The document quantifies delays at 30,000 hours over a period of 5 years, i.e. 6,000 hours per year. They also talk of 2.4 million flights per year through the airspace – that equates to just 45 seconds per flight. This seems small in comparison with the amount of additional environmental noise damage to tranquil areas. NATS proposals do not bring about a sufficiently large reduction in delay in comparison with the existing arrangements, to warrant the proposed changes.

It is not stated what effect these proposals will have on delays at Luton.

### **Short duration of the consultation period given complexity of the proposals**

The period for this consultation is just 13 weeks (against a minimum permissible of 12 weeks) for such a wide ranging and complex proposal affecting so many people, with so little supporting evidence this is inadequate.