

# Hitcham and Taplow Society / 22 May 2017

## Responses to UK Airspace and Airports Consultations

### Preface

The Hitcham and Taplow Society has been in existence for over 50 years. It has a main objective to ensure that all development within the district is of the highest standard and preserves the quality of the environment. It represents a significant proportion of the residents of Taplow.

The Society wishes to place on record the following responses and observations on two consultations:

- UK Airspace Policy: A framework for balanced decisions on the design and use of airspace (DUKAP)
- Draft Airports National Policy Statement: New runway capacity and infrastructure at airports in the South East of England (DANPS)

The relevant issues are so interconnected that this response will be sent in its entirety to both consultations.

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### UK Airspace Policy: A framework for balanced decisions on the design and use of airspace

#### Summary

We can summarise our response as follows:

- The DUKAP is unjustifiably optimistic about future noise reduction.
- We disagree fundamentally with idea of concentrating flights into some perceived ‘minimum noise route’. The advent of greatly improved aircraft navigation and flight control systems should enable maximised dispersion of flights rather than their concentration into narrow corridors.
- The responsibility for noise control should remain independent of the operating airport.

#### Specific Responses

- **Challenges arising from Airspace Use and Modernisation**

Much is made of aircraft becoming quieter. Just as we welcome the planned phasing out of older four-engine aircraft (such as B747s and A340s) in favour of quieter two-engine aircraft and newer four-engine aircraft, we will also welcome new technology which reduces aircraft noise. However, all technology has its limits and assertions that significant further noise reduction can be expected are not supported by enough evidence or logical projections indicating with any kind of certainty whether, when and what improvements will be achieved. It is reasonable to anticipate years of unmitigated environmental detriment, especially as the reality is more likely to be that any improvements will be marginal, costly and therefore at risk of being judged economically unviable.

We strongly disagree that “the benefits of noise reduction brought about by new technology should be shared between industry and those affected by aircraft noise” (DUKAP Para 3.14). For the three-quarters of a million people who currently live under Heathrow’s flightpaths (over a quarter of all in Europe impacted by aircraft noise), the benefit of any small recently achieved or potential noise reduction of each individual aeroplane is more than countered by the continuing and projected significant increase in the number of flights. Consequently, all noise reduction benefit should accrue not to the commercial advantage of the “industry” but to those affected in this very densely populated area.

- **Changes to Airspace**

Whilst we welcome proposals (DUKAP Para 3.13) to involve communities in making decisions about airspace change, but we are surprised to see no mention of Heathrow – not only the main hub for London (the world’s busiest city by aircraft passenger count) but also only the UK’s busiest airport and the busiest in Europe. It is important for decision-makers to acknowledge that the area surrounding Heathrow is so densely populated that there is little opportunity for improvement and that adding a third runway can only make this situation worse. Further, we strongly disagree that “when any change occurs to the noise levels that a community experiences, it is not necessarily important to that community how the change came about” (DUKAP Para 4.2). We believe it

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essential to maintain confidence in the process by ensuring that any proposed changes are properly explained and justified. Lack of clear communication will fuel resentment.

We welcome proposals to improve and bring clarity to the three-tier airspace change process, for Air Navigation Service Providers to engage with local communities when amendments to vectoring practices could lead to a Permanent and Planned Redistribution of aircraft (DUKAP Para 4.31) and for the approval of the Civil Aviation Authority to be secured for the procedural change before it is implemented. However, it is essential that any affected groups should be fully informed and involved in meaningful consultation prior to any decision to implement changes.

- **Route Design**

We do not agree that the 4,000 feet limit for Noise Preferential Routings (NPRs) should be the maximum height at which noise is prioritised over other issues (DUKAP Para 5.4). Noise from aircraft at higher altitude remains an issue for many people. Further, this metric has always been disingenuous since it relates to aircraft height above sea level and not to their actual height above settlements. Consequently, we believe it should be reset for all UK airports to 7,000 feet above sea level.

We have been here before. In the 1960s, aircraft departing Heathrow first achieved dispersion – the spreading of flights as widely as possible within a given corridor – by flying Standard Instrument Departures (SIDs) within NPRs, thus reducing concentration and therefore frequency of occurrence and disturbance to those on the ground. We were dismayed in 1972 when Heathrow instigated a ‘minimum noise route’ – a narrow SID which subjected Taplow and Hitcham to maximum noise – which operated for seven years before public pressure succeeded in restoring a flightpath fan to reduce noise concentration. This was all many years before modern aircraft navigation technology and Global Positioning Systems enabled the development of Performance Based Navigation (PBN). Consequently, we believe it is wrong and entirely illogical to conclude (DUKAP Page 41) that, because PBN enables much more exact control of an aircraft’s path, flights can and therefore should be concentrated into narrower corridors. We contend that the reverse is true: PBN makes it much more practical than previously to achieve noise mitigation by dispersion, and that dispersion using PBN must be a preferred option to concentration. We strongly disagree with any proposal to reroute or increase concentration in NPRs over less densely populated areas (such as Taplow and Hitcham) on the basis that this would lead to a smaller number of people being affected by aircraft noise. This would simply displace the burden from one community to another; it is not a solution for managing environmental impacts. Reducing noise impact should be about reducing noise for all and not just about just about decreasing the size of the affected population through noise displacement.

- **Noise Metrics**

While we welcome the intention to reduce the Lowest Observed Adverse Effect Level (LOAEL) from 57dB to 51db LAeq for daytime noise and 45dB at night (DUKAP Para 5.49), we contend that these average LOAELs are disingenuously misleading. Firstly, the concept of noise being experienced by a population is an administrative fiction; noise is experienced by single individuals. Secondly, how each of us perceives noise disturbance is governed less by averages than by three factors: actual peak noise, frequency of occurrence and level of ambient noise. Today, the WOBUN (WOB) and BROOKMANS PARK (BPK) SIDs and their associated NPRs subject residents of the otherwise tranquil Taplow and Hitcham (some seven miles from Heathrow) to intermittent but persistent peak noise of possibly 60-to-70dB. People in a busy city hardly notice flights passing overhead because the ambient noise level is already high, but flights over quiet rural areas such as ours are much more disturbing and will be more so if the frequency of these peaks increases by 80% (as suggested by the projected increase in Heathrow passenger numbers from 75m to 135m). If imagination and energy were directed appropriately, we would expect it to be possible to develop a more relevant and generally acceptable LOAEL as a basis for holistic noise optimisation.

Further, the proposals rely too heavily on modelling for predicted noise profiles. It is unsatisfactory that there is little or no use of ground-collected data under flightpaths other than very close to Heathrow. It is also poor that the modelling appears to be using manufacturer-supplied noise metrics (rather than real data recorded ‘in the field’) and is therefore quite possibly wildly optimistic. We recommend that Community Noise Monitoring equipment be installed along the WOB and BPK SID NPRs to collect incontestable current noise data for accurate comparison with future peak and average noise levels.

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- **Independent Commission on Civil Aviation Noise (ICCAN)**

In principle, we support the creation of an ICCAN with its primary purpose being to “rebuild the trust lost in [the air travel] industry by communities” (DUKAP Para 6.8) and agree that it should publish and promote best practice guidance to ensure a consistent approach between all UK airports, particularly with respect to noise management (DUKAP Para 6.12). However, it may be hard to rebuild “trust lost” if the ICCAN is led by such as Sir Howard Davies, concurrently chairman of the Airports Commission (which recommended Heathrow’s expansion) and a director of Prudential plc (which was reported as investing heavily in property around Heathrow prior to that recommendation being made). An ICCAN would only be of value if it was truly independent and had the very best expertise and data (see below).

- **Other noise controls at the designated airports**

While we accept that Heathrow (and any other airport) should design its own noise management solutions, it must do so to the satisfaction of an ICCAN with the authority, expertise and data necessary for it to set noise control limits, to monitor performance through the independent collection and analysis of data and (if necessary) to enforce compliance. Noise control must be about noise reduction for everyone, not merely about reducing the number of people affected by displacing it from one community to another.

- **Compensation**

Airspace change promoters should not make changes unless any noise impact is fully mitigated or proper compensation made to affected groups. Further, we do not agree that the expected financial benefits of any airspace change should inform whether and at what levels compensation may be payable (DUKAP Para 4.40). If a financial benefits analysis shows insufficient returns to make compensation payments available, and yet the proposal will have significant noise impacts, then it should not be permitted to proceed.

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## **Draft Airports National Policy Statement: New runway capacity and infrastructure at airports in the South East of England**

### **Summary**

We are surprised and disappointed that the proposal for a third runway at Heathrow is highly biased towards approval rather than being an objective analysis and presentation. Most seriously, there is a complete absence of expected flight path development and of implications for housing and transport beyond the immediate area. These are areas of concern for Hitcham and Taplow. The dearth of such critical information makes it impossible for us to accept that the DANPS is evidence-based not policy-led.

### **Specific Responses**

- **Bias**

The DUKAP (Para 6.8) proposes the creation of an Independent Commission on Civil Aviation Noise (ICCAN) with the primary purpose of rebuilding “the trust lost in [the air travel] industry by communities”. This admirable aim is betrayed by the poor quality of the DANPS, not least because it is littered with shallow assertions in lieu of evidence or justifiable logic. It smacks of a flawed argument – even in places where it has no relevance to the topic being discussed, and often without credible supporting evidence or analysis – to see repeated the assertion: “Heathrow Northwest Runway scheme delivers the greatest strategic and economic benefits, and is therefore the most effective and appropriate way of meeting the needs case”. How is it justifiable to state (DANPS Para 1.3) that the consultation is not seeking views about the detailed design of the scheme itself or any associated infrastructure when it is impossible to weigh up the decision-making rationale without considering details and their potential impacts? We had hoped to see a balanced argument, with a conclusion on why Heathrow’s third runway is recommended. Instead, all we are offered are arguments for and none against. To be convincing, the analysis should be clinical, forensic and eminently impartial. It is anything but.

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Terminal 5 was first mooted in 1996 with reassurances that it would enable Heathrow to increase its capacity to 80m passengers each year without the need for a third runway. T5 opened in 2008 and Heathrow handled 75m passengers in 2015 yet now claims a third runway is essential. The DANPS rules out a fourth runway (Para 5.259) but, since we see nothing to convince us this will not be another broken promise, we believe should be made a legally-binding commitment.

Major infrastructure projects often significantly exceed their original cost estimates due to so-called unforeseen risks, some of which were not only foreseeable but should have been by 'those in the know'. Consequently, it would be prudent to have a thorough understanding of the risk profile and cost implications of the various options for increasing airport capacity in the south-east of England. However, we can take little confidence that the DANPS has a strange contradiction between Para 3.70, which claims the Heathrow Northwest Runway scheme will provide benefits to passengers and the wider economy sooner than other options, and Para 3.45, which says "the delivery dates for both Heathrow schemes [are] likely to be more risky than that [at] Gatwick".

It is difficult to take any number seriously when so many seem to be selectively 'spun'. Here are three examples:

- It is claimed that Heathrow passengers arriving or departing by road will decrease from 58% to 45%, but the latter is a percentage of a much bigger number. Passenger numbers are forecast to increase by 80% from 75m to 135m; applying the quoted percentages suggests that road traffic will in fact increase from 43m journeys to 61m. These numbers appear to contradict Heathrow's pledge to keep airport-related traffic volumes no greater than today.
- Para 3.56 refers to arrival flights and states that "respite would decrease from one-half to one-third of the day" yet Heathrow's own proposals make it clear that a three-runway operation would mean most communities under such flightpaths would in fact only enjoy respite for a quarter of the day, so they would be overflowed three-quarters of the time.
- The Airports Commission's original expectation for increased jobs and prosperity led to it forecasting an economic benefit of £147bn by 2050, rising to £211bn in some scenarios. How can anyone be confident that the latest (significantly reduced) forecast benefit of £60bn (Para 3.25) will not diminish further?

The clear bias of the DANPS is compounded by the leafletting which failed to mention the increased number of flights, the loss of respite and any new flight paths whilst lauding the economic benefits, thus further demonstrating lack of Department for Transport (DfT) impartiality and undermining public trust. The Environmental Audit Committee (EAC) branded the proposal "magical thinking" but failed to press for a solution that is not illusory.

- **Air Traffic**

We are unconvinced by the hub-airport argument (DANPS Para 2.13) when two-thirds of Heathrow passengers start or end their flights in London and only one-third transfer onto other flights. Currently, that means 25m passengers each year use an airport in a suburb of a densely-populated city when they don't need to land and take-off a short journey from the city centre. Neither are we convinced about the reason for selecting Heathrow when Stansted was originally designed as, and was always planned to be, the UK's hub airport. This was even referred to in the 2003 White Paper on Air Transport and, as recently as 2008, British Airports Authority (BAA) were planning to expand Stansted. Little has changed in this short space of time other than the decision to remove Stansted from BAA ownership leaving Heathrow as the preferred choice for commercial not environmental reasons.

Today, Taplow and Hitcham are under the WOB and BPK SID-associated NPRs, but what of the future? Although Airports Commission maps on the BBC website show a similar but more concentrated configuration when Heathrow's third runway begins operation, neither the DANPS, the DUKAP nor the recent DfT consultation exhibitions held locally provided any information about the likely routes of future flightpaths, their heights or frequency. We understand that there are many variables involved but it is ridiculous that a consultation about the acceptability of the expansion omits any mention of these flightpaths, let alone any definitive information. After all, they are the entire purpose of the proposed project.

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It is totally unacceptable that policy should be formed without clarity on where flightpaths will be, how frequent overflights will be, what peak noise will be experienced where and when, and how many people will be impacted and to what degree. At the very least, the DANPS should:

- offer examples of how the extra flights are to be distributed (using the declared benefits of technology development) and how and when the numerous options will be analysed;
- commit to providing this detailed information at such a time that a proper public consultation can be held before *fait accompli* kicks in.
- **Housing**

The lack of joined-up thinking is astonishing.

The justification for Heathrow's expansion includes the supposed benefits of increased economic activity at and around the airport. Heathrow itself claims up to 50,000 new jobs will be created at the airport and in supporting businesses. When the need to rehouse those displaced by the expansion is factored in, some calculate that 17,000 new homes will be needed in addition to those already required for other reasons by 2036. Where will they go?

Many consider the areas west of Heathrow to be prime locations for these new houses despite much of the land being Green Belt. This area includes Taplow and Hitcham sitting under two primary NPRs which will subject them to noise of an unspecified degree (see comments on the DUKAP). South Bucks District Council, Slough Borough Council and the Royal Borough of Windsor and Maidenhead (RBWM) sit along the A4 and carry much Heathrow-related business and housing. Each is currently preparing new Local Plans. None can meet current projected housing need without acquiring Green Belt land, which would fly in the face of declared Government policy. We are concerned that these Local Plans can take no account of the Heathrow impact (because its expansion is not yet policy) and believe very strongly that normal planning criteria and process should not be overridden for its sake.

- **Road Transport**

The lack of joined-up thinking continues. There is to be extensive re-engineering of roads around Heathrow but the DANPS fails to consider either the need for a holistic plan for local road improvement or the need to be clear and firm about who should pay for what.

The assertion that "the promoter would pay for changes to the M25, A4 and A3044 and any local roads" (DANPS Para 3.39) is not supported by any agreement between Government, Heathrow and the Mayor of London over the nature, scale and cost of road improvements. In fact, there has been no complete assessment of transport impacts and therefore no understanding of the need for local road improvements. The promoter should be required to make a comprehensive assessment of surface access needs, complete with a commitment to improving the local road network. This assessment of surface access needs must consider a broad range of issues including (but not limited to):

- The displacement effect. Hotels, industry and other commercial premises will need to relocate to accommodate the third runway. This will put further pressure onto local infrastructure, not least the local road network. The cumulative effect of all this should be considered and a holistic mitigation plan developed, especially when deciding who should pay for the surface access improvements (DANPS Para 3.38). If commercial premises must relocate due to Heathrow expansion, the local community will suffer all the detriment of increased traffic congestion and freight; if this is a direct cause of its expansion, Heathrow should bear the costs. And if new commercial premises are needed as a direct result of expansion (for example, to service the construction of a third runway at Heathrow or associated developments), costs should also be borne by Heathrow.
- The freight effect. It is recognised that "expansion is likely to increase congestion on existing [access] routes and have environmental impacts such as increased noise and emissions" (DANPS Para 5.6) but, given that it could double in volume (DANPS Para 7.30), greater understanding is required of how much freight traffic will use local roads rather than trunk roads. No commitment has been made to manage freight at sustainable levels and no realistic plans demonstrate this being as achievable. It is not enough to simply ask Heathrow to "develop and keep under review plans to improve the impact of road freight serving the airport" (DANPS Para 5.37). Consequently, we would welcome a legally-binding commitment from Heathrow to develop and seek well-informed DfT approval to a freight management plan that keeps

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freight and other commercial vehicles off minor local roads and restricts them to the trunk road network, complete with an ability to impose sanctions if this requirement is contravened.

- The disruption effect. Care should be taken to assess the disturbance, inconvenience and associated costs that will affect communities well beyond the M25. These works will run for years and could well create chaos west and north of Heathrow – not least in the roads joining the A4 from the north which are quite unsuitable for heavy lorries. We need to see clear management plans for ensuring clean traffic flows during this work and to ensure that construction traffic is held to agreed arteries (with significant penalties for failures). The proposals should take account of (and provide funds to alleviate) the road pressures that the expansion will create well beyond the M25. The M4 is a major feeder to Heathrow; what account has been taken for the fact that it is being increased in capacity as a Smart Motorway and will see significant traffic growth even before Heathrow is expanded? The A4 is a relief road for the M4, which means that when an accident closes the motorway, traffic is diverted onto the A4 which has but a single lane each way across Maidenhead Bridge. How will that be handled? RBWM is currently planning a growth of 14,000 houses (predominantly in Maidenhead, and therefore A4-dependent) yet no road infrastructure improvements are anywhere near to being ‘in the pipeline’. Even little Taplow will soon see residents settling in over 300 new homes, an increase of almost 40%. There is no evidence that all this new traffic has been factored into the equations.

Further, we believe it will be necessary for some form of independent scrutiny to ensure that the planning assumptions regarding the uptake of sustainable transport modes are realistic and achievable, and that (to avoid ‘scope creep’) the environmental impact of future surface access requirements and the nature of any required mitigation should be anticipated and include in any application. And while we welcome the idea of performance targets and congestion charges (DANPS Para 5.28), this should be a requirement not merely a recommendation otherwise it could slip into oblivion. Also, any congestion charges must be combined with restrictions on local roads to avoid rat-running by either passenger or commercial vehicles, and airport bus routes must be supported by legitimate park-and-ride schemes so that local villages do not become congested with airline passengers seeking to avoid airport parking fees.

- **Rail Transport**

To give substance to the hope that passengers and staff will travel to and from Heathrow by train rather than by road, DfT officials at recent exhibitions made much of a new rail link to Waterloo and an extension of the existing Heathrow Express from Paddington to pass further under the airport to join the existing Great Western Railway at Langley, thus providing a direct rail connection from the west. This all seemed very grand but rather reminiscent of that old saying: ‘If wishes were horses then beggars would ride’. While ideas and aspirations are fine (and the second of these would give Taplow a convenient rail link to Heathrow), major investment decisions should not be driven by dreams and possibilities. Nor should the public be encouraged to think they are attainable until there is a viable and accepted business case and clarity about who will pay and local residents and businesses will be compensated for being displaced, disturbed or disrupted.

- **Air Quality**

We welcome recognition that surface access should be delivered “in a way that minimises congestion and environmental impacts, for example on air quality” (DANPS Para 5.5). However, previous Heathrow submissions have focused only on airborne emissions from passengers and staff, and excluded those of cargo and other commercial vehicles. Whilst carbon emissions from freight is mentioned (DANPS Para 5.76), air pollution from freight and other commercial vehicles during both construction and operations should also be included in the assessment and clearly emphasised as a requirement.

We are unconvinced that “the Heathrow Northwest Runway scheme would be capable of being delivered without impacting the UK’s compliance with air quality limit values” (DANPS Para 5.30). Contrary evidence continues to grow. In contrast to Gatwick (which does not breach EU air quality limits), Heathrow’s end-2016 summary of air quality concludes that:

- Air quality surveys for 2016 show that NO<sup>2</sup> concentrations increased across the south-east of England and remained above EU limits at Hillingdon and Hayes. As airport emissions are currently contributing up to 16% of total NO<sub>x</sub> at these stations, Heathrow’s expansion will clearly make this situation worse.

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- Air quality statistics for 2016 show the daily mean limit of 50ug/m<sup>3</sup> of PM<sub>10</sub> was exceeded on 32 days in Hayes and, whilst this is within the regulatory limit of 35 days per annum, it is a health hazard that Heathrow expansion's will not improve.
- The increase in new aircraft in use at Heathrow in 2016 only represented about 2-to-3% of total aircraft movements and is insufficient to make significant reductions in air pollution.

Further, the 2015 Business and Sustainability Assessment said that “unmitigated impact of the Heathrow Northwest Runway scheme is *significantly adverse*” and that “mitigations could only limit this impact to *adverse* if delivered with concerted impact from all parties, including Heathrow Airport, but given the increases in pollutant concentrations are various health receptors and despite the fact that EU and local policy limits are not necessarily breached, the impact is unlikely to be able to reach a *neutral level*”.

Other industry sectors, such as power and surface transport, are being required to make deep cuts in greenhouse gas emissions to accommodate increases from aviation expansion. Current evidence suggests this is a completely unrealistic expectation. The Climate Change Committee observed that it will be challenging for the UK to meet future carbon budgets and its 80% target for 2050. While power industry reforms are expected to reduce its emissions until 2020, there is a high degree of uncertainty beyond that date. Projected transport sector emissions reductions fall short of their trajectory and further measures will be needed to meet its future carbon budgets. Consequently, we are not convinced by the assertion (DANPS Para 2.31) that Heathrow's third runway can be delivered within the UK's climate change obligations. Further, given that the Airports Commission analysis “assumed certain carbon-limiting developments [are] largely outside the applicant's control” (DANPS Para 5.74), we wonder what sanctions will be imposed on an expanded Heathrow if it exceeds its emissions forecast and carbon budget.

Air studies are theoretical and modelled on a series of assumptions which lead to many unrealistic conclusions and assertions about the benefits of legislation and future technology which simply cannot be guaranteed. Here are some issues:

- Heathrow's proposed air quality management strategy relies on new diesel vehicles emitting fewer pollutants than current models, but recent studies demonstrate that even Euro 6 diesel engines emit much more NO<sub>2</sub> on the road than they do in laboratory testing. Once the third runway is built at Heathrow, will the ICCAN have the authority to suspend operations if air quality limits are breached?
- The UK hopes the increased use of electric vehicles will reduce air pollution yet will not achieve its 2020 targets and is unlikely to achieve those for 2030. When and how will the DfT respond to the EAC challenge to explain “how air quality standards [can be met] given what we now know about real-world emissions, which are higher than the Government business case [for the third runway]”?
- For various reasons, not least the scrapping of decarbonisation policies and funding, we do not accept that a new runway is deliverable within the UK's climate change obligations (DANPS Para 3.7). It is unclear if the UK will remain within the EU emissions trading scheme after ‘Brexit’. Its aviation expansion policy is based on a hypothetical international framework for carbon trading which does not yet exist and, since they are not covered by domestic legislation or international agreements, international flights are free from all climate constraints and are therefore accountable to nobody. It is a positive step for the International Civil Aviation Organization to agreed carbon offsetting for some international flights, but this is not the complete solution – airlines should be decarbonising, not paying others to do it for them. There would need to be a quantum improvement in aircraft efficiency to reduce carbon emissions and mitigate the greenhouse gas effect, and yet aviation technology is already reaching a point where it will be impossible to decarbonise any further.