

Diocese of London



A report on the proposed expansion of HEATHROW AIRPORT

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ENVIRONMENTAL CHALLENGE**



St Peter and St Paul Harlington

February 2009

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St Mary Harmondsworth

Introduction and summary

British Airports Authority (BAA) is developing proposals for a new third runway and sixth terminal to Heathrow, to the north of the A4 Bath Road, and south of the M4.

By way of background, the history of the development of these proposals, and of responses to previous consultations, is recapitulated. Current policy and action are summarised, leading to the recent government decision to support expansion. Planning permission will however still be needed. The issues having a bearing on whether or not the proposed new runway and terminal should go ahead are then analysed. These are listed on the previous page (opposite), and summarised below. Possible mitigating measures and other scenarios are examined, including the need for continuing provision for worship and mission. Alternatives to expansion are appraised. In conclusion, policy positions are proposed. Further advice that may be needed is indicated.

Summary of issues

Air traffic is predicted to expand; the government wishes to provide for this. Heathrow has greatly expanded; five terminals are now in use. BAA regards Heathrow as having a valuable 'hubbing' role, a means of connection for travellers passing through. The pressure on terminals has been eased by Terminal 5, and 'Heathrow East' is to replace T1 & 2; but the runways remain congested. A third runway and sixth terminal would bring business benefits as well as more runway capacity – though the economic benefits of 'hubbing' are doubted.

There would be severe human, community, amenity, heritage and spiritual impacts from further development. The village of Sipson would be destroyed and its 700 homes demolished, displacing the whole population. Harmondsworth, Longford, Harlington and Cranford would be seriously affected; the latter two of these might become uninhabitable. It is no longer proposed to demolish St Mary's Church, Harmondsworth – the new runway will pass just to the north – but it might still have to close, and low-flying aircraft are likely to render St Peter & St Paul Harlington and St Dunstan Cranford unuseable. This would mean the loss of three ancient churches, severing their connections with communities – and with loved-ones buried in their graveyards. The semi-rural setting of Harmondsworth would be damaged; and a much larger area of west and south London would be affected by noise and air pollution. The government has said these will be controlled, but the noise impact is not yet verifiable, and the control of air pollution may be unenforceable.

Greenhouse gas emissions from air traffic would not be reduced. Improvements in efficiency are planned; but a 50% cut – not increase – in traffic would still be needed to match the UK's planned 80% reductions by 2050. The government is proposing only that aviation emissions are reduced back to 2005 levels – well above the 1990 baseline. That would mean other sectors having to make at least 89% cuts – likely to prove unattainable. This paper argues that the fight against climate change makes it essential for air travel to be controlled and limited.

History of this paper

The writer was originally asked by the Joint Operations Team to submit a briefing paper to Senior Staff, on the Diocese's position in relation to expansion of Heathrow Airport. This paper was then submitted to the Diocesan Bishop's Council on 11 November 2008. Council adopted its conclusions, and resolved that it be presented for consideration by Diocesan Synod on 12 March 2009.

The paper has now been revised for presentation to Synod, acknowledging developments in the interim. In particular, the government's decision in favour of development is taken account of, with reactions to it; and a new page has been inserted on the advice of the newly established Committee on Climate Change. The summary above has been added. A major overhaul to the footnotes has also been necessary. The conclusions (page 28) remain the same, except that mention is now included of the village of Longford, alongside the impact on Harmondsworth.

Background

The photograph on the front panel of this report is of St Peter and St Paul Harlington, viewed from the west. The eastern end of the new third runway would lie just over the churchyard boundary, behind the camera. Aeroplanes would ascend and descend low over the tower, even closer to the ground over the western churchyard, seen in this image.

A sketch map is included, opposite.

2002-2003

The government and BAA first proposed a third runway in 2002. At the time, this was treated within the Diocese as primarily a matter for the Diocesan Advisory Committee, which had a duty to report on the most obvious impact, viz the demolition of St Mary Harmondsworth. Most of Harmondsworth village centre would also have gone. The threat to St Mary's was raised with the Ven Christopher Chessun, then Archdeacon of Northolt, by the Bishop of London, and by the Archdeacon with Brian Cuthbertson as DAC Secretary.

The DAC decided to oppose the runway; a response letter was submitted to the government, followed by a report by Peter Aiers, David Brown and Brian Cuthbertson. The Bishop wrote the Foreword.

2005

The DAC wrote again in opposition in 2005, in response to consultation on BAA's masterplan.

2006

In December 2006, following further press coverage, Brian Cuthbertson, on behalf of the Care of Churches Team and advised by Luther Pendragon, published a letter in *The Times*.

The letter pointed out that BAA's own studies showed that development of the airport 'within existing limits' was feasible, whereas the government still proposed to proceed with a new third runway and sixth terminal, resulting in much greater impact.

2007-2008

Since that time, more developed proposals have been published by the government and consulted upon.

The area designated for the runway has been moved further north; its length has been extended. The boundary now just misses most of Harmondsworth village. However, the runway itself aligns directly with Harlington (the distance between the church and the eastern end of the runway being about one third of the runway's length), and also with St Dunstan's Church Cranford, which stands further away to the east but would also be severely impacted. The village of Sipson would be demolished in its entirety, displacing all its residents.

A response for the Diocese was submitted by the Bishop of Willesden, after consulting internally. Coming in effect from the Diocese not the DAC, a wider range of factors was surveyed; the stance taken was one of balanced and principled comment. Concerns were boldly expressed, especially the effects on Harlington and Cranford; while the potential benefits of development to London were recognised.

In May 2008, the Archbishop of Canterbury, Dr Rowan Williams, issued a message of support to the 'Make a Noise Carnival', in opposition to BAA's expansion plans.

Government decision

Remaining consultations

A further consultation, on a 'Heathrow Equalities Impact Assessment', ended on 9 November 2008. Response was made, highlighting the pressure on the Church in serving the whole population within the Parish of Harmondsworth. Although the government and BAA have been requested several times to include the Diocese in consultations, they have still not done so. Indeed, other than the Gurdwara Sri Guru Singh Sabha, *all* faith groups were excluded from this latest consultation ^{*}.

In correspondence, it was pointed out that the Diocese would need to be engaged in providing pastorally and parochially within and around any airport development; the Church and the airport ought to communicate. A dialogue has now begun on these and other issues.

A report in *The Times* in September 2008, a couple of days before Ruth Kelly's resignation as Transport Secretary, stated Ms Kelly's strong support for BAA and the Government's plans for Heathrow, and reported that an announcement giving the 'go-ahead' would be made in November.

Government 'go-ahead'

The government's decision was in the event postponed to 2009, to give time for more consideration – possibly because the closing date of the equalities consultation had not been reached; a premature decision would have breached undertakings not to pre-empt responses.

In January 2009 then, the government finally announced its support for the development, as it was widely expected that it would. In the meantime, Ruth Kelly had been replaced at the Department of Transport by Geoff Hoon, who made the announcement for the government [#].

The government made a number of concessions, setting up new regulatory systems in relation to air quality and CO₂ emissions, limiting flights from the new runway and stipulating that it may only be used by new aircraft which comply with the latest emissions standards [~]. The government has held out the prospect of a new high speed rail link – in addition to rather than instead of the new runway. It has retained 'westerly preference', deciding against runway mixed mode – which would have allowed flying both ways during flying hours – and extended runway alternation, for benefit of Hatton, North Feltham and Windsor; although ending the Cranford agreement which prevents easterly take-offs from the existing north runway.



Harmondsworth meadow

^{*} According to the consultation, faith groups were not among the categories of 'equality group' statutorily required to be consulted (in the present specific case).

[#] Geoff Hoon's full statement is at www.dft.gov.uk/press/speechesstatements/statements/infrastructure. In 2008, he had also overturned the decision of Uttlesford District Council, which had been to limit expansion of traffic at Stansted – indicative of the continuing trend in government policy.

[~] A system of so-called 'green slots'. Objectors have questioned whether this particular concession will make any difference, since the existing runways, carrying at least two thirds of the airport's capacity, would still be available for use by older aircraft.

Current position

Status of government 'go-ahead'

In making its statement to Parliament, the government declined to allow the House of Commons a vote on its decision – on the grounds that 'quasi-judicial' matters of this kind are not normally resolved by a vote of MPs ^{*}.

Hitherto, developments of this kind were normally dealt with by Act of Parliament, as in the case of the Channel Tunnel rail link. Airport expansions by contrast are now to be dealt with through the planning process, under the new Planning Act, which became law in November 2008. The new Act established a new Planning Commission to deal with infrastructure projects and other very major developments. The process is 'streamlined', with the role of the Commission essentially being to determine whether the development is in accordance with government policy. Clearly the expansion of Heathrow is now current specific government policy, and the expansion of aviation as a whole remains general policy.

This makes it much easier than hitherto for a scheme of this kind to pass. However the Prime Minister did acknowledge that he expected a planning enquiry to take place. According to *The Times*, the government has asked BAA to submit an early planning application, with a view to opening the new runway by 2015, not 2020 as previously projected. It will be for objectors to argue that it is contrary to other general policy, such as climate change policy (and/or EU law).

Counter-proposals

The Shadow Transport Secretary stated to the Conservative Party Conference in 2008 that the Conservatives in Government would cancel plans for Heathrow expansion, and instead develop a new high-speed rail link to the Midlands and North, substantially reducing demand for domestic flights from Heathrow. This opposition pledge has since been repeated in the course of debate, but has yet to be incorporated in a conservative election manifesto [#]. As noted, a new rail link is now on the government's agenda too, but as an addition not an alternative. Such a scheme remains to be developed; the immense difficulties of implementing it have been widely remarked in the Press. The '2M Group' however, supported by Wandsworth Council, has launched a scheme for a new 'compass point network' [~].

Mayor Boris Johnson has proposed studying the feasibility of an entirely new scheme for an island airport in the Thames Estuary, apparently entailing phasing out the use of Heathrow entirely in the ultra-long term (but not restricting growth in aviation). Boris Johnson and both the other principal mayoral candidates opposed Heathrow expansion at the mayoral election.



Kansai International, an island airport

^{*} John McDonnell MP, the local member for Heathrow and Harmondsworth and a prominent opponent of expansion, was suspended for seizing the mace. There was however a vote on the ensuing debate – rather an arcane distinction. The government won by a majority of 18. There were MPs on both sides of the House who voted the other way.

[#] It is unclear to what extent any future government could influence the outcome of an application already going through the planning process, or after granting of planning permission. It is a private, not a government project.

[~] A BBC article reporting this variously costed it at '£1.5 bn' and '£1.5m', putting the government's hub scheme (derided by 2M's consultant as 'a bad plan') at '£4.5' (sic). It is much too soon to estimate the cost of any scheme by the government, which is no further than seeking preliminary advice as part of wider rail infrastructure expansion.

Issues

Political developments form part of the background to discussion. The Diocese should continue to address the substantive issues on their merits, having regard to the wellbeing of the Church and its people, of London as a whole, and indeed the planet.

Overall, the Diocese's position could have been one of studied neutrality. But at some point, the evidence would have started to point one way or the other, indicating support or opposition to the proposals. Correspondence in the *Church Times* has urged the Church to adopt a position of public opposition to the development. But for any such stance to be advised, the issues ought to be surveyed and balanced.

The approach of this paper is to summarise these issues in non-technical terms. Previous responses, and the analyses and consultation documents published by BAA and the government, are to hand; from these and other sources, facts and figures can be supplied if requested; supporting information is also given here in footnotes.

In qualitative terms therefore:-

Aviation

Traffic has increased continuously for many years through Heathrow and other airports, and is expected to continue to do so. The government has made forecasts. Such forecasts can be self-fulfilling: if more people are expected to travel by air, less provision may be made elsewhere, eg on the railways^{*} – effectively directing people towards flying.

But there is clearly spontaneous growth too. The speed of growth is capable of being influenced by policy, but it would be hard to argue that it is purely an artefact of government decisions.

Aviation is still privileged by the UK government. It is excused from making reductions in greenhouse gas emissions, and from any tax on aviation fuel. This strongly promotes the expansion of air travel.

Heathrow Airport

Heathrow is the world's busiest international airport. There are others with more domestic flights, eg Chicago O'Hare. Heathrow now has five operating terminals. Terminals 1-3 are all in the central area, T4 to the south, T5 to the west.

The two runways have existed from the establishment of Heathrow as a civilian commercial airport. It is remarkable that the airport has coped with just two runways, with such massive expansion of its terminal capacity.

It was planned from the beginning to expand further north. John Betjeman would have been aware of this, when he wrote his ironic lines:-

*"Leave no old village standing
Which could provide a landing
For aeroplanes to roar ..."*

Current proposals are therefore a revival, after an interval of several decades, of an original intention. They are not entirely new – though that does not necessarily make them right.

^{*} The government is now addressing this particular aspect.

Hubbing

BAA sets much store by Heathrow's position as a hub, a staging post for longer journeys. That is how it gains much of its traffic, also the source of some benefit to the local economy. BAA wants Heathrow's hubbing role to be cherished, hence they do not favour losing traffic even to other London airports. Passengers might not fly to or through Heathrow without the ongoing connection to their final destination – which may not even be in the UK.

Should Heathrow cease to be Europe's leading hub airport, then the needed capacity would much reduce – but the resulting business would shift not to Gatwick or Stansted, but to Paris or Amsterdam – causing detriment to the UK economy.

On the other hand, the benefits to the wider economies of London, or the UK, of Heathrow *qua* an international hub have, been widely questioned ^{*}.

Development within existing limits

In spite of the foregoing, BAA examined in some detail whether development of the airport could be retained within its present boundaries. Present government policy makes it very unlikely they will have to pursue this strictly bounded scenario, but they may have wished to be seen to have studied all options – and there could be a change of government.

If they had had to, BAA would have worked within existing limits, whilst foregoing the third runway with extreme reluctance. Adjustments would have been made to runway sharing, take-off and landing directions, more night flights permitted. BAA might still have returned with a bid for a third runway in the future.

Terminals and runways

The operation of Terminals 1 – 4 was under extreme pressure, but now T5 has worked through its teething troubles it is operating smoothly. BA transferred to T5, other airlines moved to T4, with corresponding easing of traffic through T1-3.

Terminal 3 has been refurbished; observation in August 2008 showed this to be much improved. A further visit to observe T1 and T2 suggested these original terminals also do not seem overloaded (albeit in October).

Why then the need to expand? As far as terminal capacity is concerned, BAA's oft-repeated claim that the airport is 'jam packed' (the government says 'at 99% capacity') seems exaggerated. Much has been made in the media of the under-staffing of security and check-in facilities, and the over-provision of shopping. However, T1 – 5 do meet the calculated demand at the time of the T5 public enquiry, since when there does not seem to have been any substantial upward revision.

By contrast, the two runways appear to be very heavily used: the queueing of aircraft to take off can be readily observed.

BAA's claim – and undertaking – at the T5 enquiry, that a third runway was not needed, was never credible [#]. It does not appear feasible to increase the number of departures and landings by more than one eighth at most, within existing flight paths and the number of hours permitted each day.

^{*} See '**Business and people**', next page.

[#] If BAA had pushed for a third runway before Terminal 5, the latter might not have been needed. When the Runway 3 scheme was introduced, the sixth terminal to go with it was not immediately asserted to be necessary. The reasons for adding T6 appear to have been logistics mainly – the difficulty of transferring passengers to T4 and 5 – not capacity.

Heathrow East

This project, fairly recently conceived, is to demolish the Queen's building (between Terminals 1 and 2), and develop a new terminal to take over from the geriatric T1 and 2. Heathrow East is planned to open about a year from now^{*}. It should improve the quality of passenger experience, but not much affect the arguments for and against expansion.

Business and people

Expansion of Heathrow would bring immediate economic benefits to London, to the UK and to the local population, including an estimated 60,000 jobs in the construction phase, 8000 new on-site jobs by 2030, and more in surrounding areas of West London[#]. Many people who live in the surrounding villages either work for Heathrow now, or could work for an expanded Heathrow.

By the same token, the economic benefits of business and airport growth are UK-wide, indeed worldwide, not just local. Understandably, the arguments for expanding Heathrow are mainly expressed in terms of bringing benefits to London – as the name of one pressure group, 'London First', implies. According to the front page of this organisation's website:-

"London First works on behalf of the capital's leading employers to make London the best city in the world in which to do business."

This is a more limited aim, though a worthy one.

The interests of business may not coincide with the needs of residents. Companies which will benefit most by the expansion of Heathrow may well be transnational corporations, needing to fly their executives in and out for short stopovers – not those who live here and yearn for a good night's sleep. Therefore West London residents – at least those not directly benefiting from the airport – are in effect being asked to make sacrifices for the sake of the wider good.

In November 2008, the No Third Runway Action Group (NoTrag) published a report entitled 'Impact of a 3rd Runway and 6th terminal on local residents' concluding, *inter alia*, that "The social and human cost is devastating". Another campaign group, Hacan Clear Skies, published a critique of the business case with the conclusion "Heathrow can serve business needs without expanding".

Sipson village

The people most affected by expansion will be the residents of the c 700 houses to be demolished to make way for the new runway and terminal.

Owners have the moral right, at the very least, to be compensated according to a fair market valuation – based on their pre-2002 value plus an uplift equivalent to prices across west London in the same period. To avoid blight, this should also be payable, at an equivalent interim valuation, for any wishing to leave before compulsory purchase orders are applied.

Clarification is being sought on whether the bond scheme which was offered by BAA would still fulfil the essential criteria above, and on any implications of the current falls in the housing market.

Letting of properties might also be explored – there ought to be a lively rental market so close to Heathrow.

* 'A year from now' originally meant 2009, on the premiss that T2 would close in 2008 – but it has yet to do so.

These are among various estimates. BAA says 'tens of thousands' of new jobs; Brendan Barber, TUC General Secretary, is quoted as claiming expansion would 'create and sustain around 150,000 jobs'. Presumably both these figures would not all be local: Heathrow itself has 170,000 jobs now (Ruth Kelly, 2007), 'over 100,000 British jobs' (Geoff Hoon, 2009).

Although medieval in origin (no later than 1214), architecturally Sipson is an unremarkable village, with little special character albeit there are three listed buildings. If that were the only factor which stood in the way of the airport, it could hardly outweigh the much greater interests involved. But the community is much more important. Sipson is in Harmondsworth Parish; there is not now any church in the village (there used to be). A number of Sipson residents are members of the congregation at St Mary's.

The erasure of Sipson is an integral part of the impact of the airport's plans, taken as a whole. Therefore, should a policy of opposition be adopted, Sipson should be regarded as one of the main reasons.

The Diocese should extend support to the residents of Sipson, whatever the outcome.

Harmondsworth Church

St Mary's Harmondsworth was the unnamed 'One Church' referred to in the 2002 consultation as to be demolished, and therefore the principal subject of the DAC report – adopting the same phrase for its title (double meaning intentional).

St Mary's Church is Grade II* listed. It has been argued, unsuccessfully, that it ought to be upgraded to Grade I.

The probable date of foundation, 1067, used to be published in the diocesan yearbook. Architectural features of that date, and of every century in between, are still extant.

The church is a remarkable survival. Most importantly, it is a consecrated place, a house of God which has been in use continuously for more than 900 years. Relatives of many still living locally are buried in the churchyard, and are frequently visited: there are always fresh flowers on the graves.

The pleas of the DAC and others on behalf of Harmondsworth were heeded – up to a point. The church is no longer to be demolished, the new airport boundary is drawn along the east and north sides of the churchyard. That is some comfort, but a limited one. The Vicar and wardens have reached the conclusion that with aircraft taking off and landing so close to the north, the church would become unuseable.

Harmondsworth village

This very attractive place should be visited by anyone who has not had that pleasure. You would never know you are so close to an airport – the flightpaths are west and east from the two runways, and the village is to the north. It is in a time warp. That should not be an incentive to erase it, for those who desire to embrace the future!

Apart from St Mary's Church, the village contains the Great Barn (Grade I listed, scheduled ancient monument) and a number of other Grade II listed buildings. Most of the village centre was previously to be demolished. It is now to be spared, apart from the eastern part towards Sipson. This remains under threat, including one or two of the listed buildings.

How viable will Harmondsworth be with the airport immediate to east and north, and an area to the west earmarked for ancillary development? It will stand on a peninsular almost strangled by the airport, living under constant threat of further expansion. The Parish will be truncated by the new development, with movement and communications made much more difficult. Connecting roads will be severed, especially to the east.

It will be difficult to restrain further encroachments on the village. The north side of the High Street may even be physically de-stabilised by ground works.

Longford

This small village is situated at the north-western tip of the present airport, already beleaguered by earlier developments, and destined to become even more so.

Harlington and Cranford

Mention was made in the 'One Church' report of the impact on these two villages from expansion, although it was not then clear that this would be so great. The runway is aligned to point straight in their direction.

Aircraft will fly so close above the tower of St Peter & Paul Harlington that the Church must surely become unusable. The future of St Dunstan Cranford would be doubtful at best.

Harlington is a Grade I listed building, Cranford Grade II* (with a lych gate listed in its own right). Harlington was founded not later than the 12th c and has a Norman doorway. There was already a priest at Cranford even before that, not later than 1086.

Detailed reports have been prepared by the Church Buildings Council on both these churches, and also Harmondsworth.

All these three churches are living communities of worship and mission, sacred places where 'prayer is valid'. Is the Church willing to see them threatened in this manner?

Cranford village and church

It should be realised that St Dunstan's Church stands to the east of the proposed third runway, but is detached from the village further south, which already stands to the east of the existing north runway.

Cranford village currently benefits from the Cranford agreement, restricting over-flying. Part of the present proposals involves terminating this agreement, meaning that flights will take off and land straight over the village, making it almost uninhabitable.

The simultaneous impacts on church and village are likely to result in both being abandoned.

Unlike in the case of Sipson, it is unclear that the residents of Cranford would necessarily be compensated, since their homes would not actually be demolished. The risk of injustice this raises needs to be addressed.

The physical environs

The 'One Church' report included sections by David Brown surveying the wider semi-rural and recreational hinterland of Harmondsworth. These will be significantly impaired; it is not proposed to rehearse this analysis here, though the resulting damage is much to be regretted. BAA ought to be required to implement specific and appropriate mitigation measures.

Archaeology

The impact on archaeological strata and remains was also made much of in the 'One Church' report. The area was inhabited in mesolithic times, which is certainly of interest.

However, more work has been done by English Heritage since 2002, to appraise the surviving archaeological deposits. These are now judged to be so compromised by previous developments that there is little case to be made for preserving them *in situ* as a whole. More is probably to be gained by examination and recording at the right stage early in any development – for which sufficient provision in time and budget should be made.

Burials

The graveyards at Harmondsworth and Harlington (and Cranford) do not appear now to be immediately threatened, though the several perimeters of the airport will extend close to, and in Harmondsworth's case right up to, their boundaries.

The tranquillity of the churchyard settings will be much impaired, and the noise and sheer terror of aircraft taking off and landing over Harlington will be a deterrent to anyone venturing to visit a loved one there.

Local people have also been very concerned about the impact on a local cemetery, Cherry Lane Cemetery. BAA had acknowledged that potentially a new access road might pass through the cemetery, but not through any area occupied by graves. However, any such option has now been ruled out: BAA has committed to avoiding the cemetery entirely.

Noise

Apart from the immediate intense noise impact on Harlington and Cranford especially, it is feared that there will be a wider impact for residents of west London as a whole.

In the last year or so, there has been some easement for parts of south London at least, apparently due to reconfiguration of flight paths. It is inferred that this is for the purposes of air traffic control, rather than the airport. It is hard to be sure whether the pain is now distributed more widely and fairly, or merely shifted elsewhere for some of the time^{*}.

The noise contours before and after the proposed development have been plotted in government consultation documents; the government claims that the area and number of people affected by noise above 57 decibels will not increase and should even reduce; but it has not been feasible, with any certainty, to verify this claim and the data in consultations.

57 dB is a high threshold to define as the limit of acceptability. It does appear that the land area will increase within which noise will rise above levels which most would consider an annoyance, and that the frequency of air movements within that area, and areas defined by higher levels – therefore the continuousness of noise – may also increase.

On balance, an overall worsening of the noise levels experienced, added together across the population, appears probable. This might possibly be mitigated, including by improvements in aircraft design – on which the government partly relies for the claims it has made.

Air pollution

The government had offered repeated assurances that the third runway will not go ahead until European air quality targets are met. That would not necessarily have guaranteed that actual measurements would have fallen below the required values in advance of construction. It seemed to mean something like that the government must by then have reason, in good faith, to believe that they would achieve compliance before the runway begins to be used.

The government has now given the Civil Aviation Authority and the Environment Agency the responsibility of regulating emissions and air quality in and around Heathrow[#].

* Weather patterns also have a bearing. Aircraft may come in high or low according to cloud cover.

In the latest consultation, the government stated that its test was "being confident of meeting European air quality limits". But it had already said it was very confident; therefore it had met its own test. There would be something faintly risible about a standard which required no more than a feeling of confidence to be enjoyed by the party supposed to meet it.

The government by giving the CAA and the EA these new regulatory roles, has shown itself alert to this criticism, while escaping the need to secure controls before development is embarked on. How this regulatory system will operate in practice is complex, however, and would need some clarification to be sure of its adequacy.

The new Head of the Environment Agency, Lord Smith of Finsbury, has already declared his belief that compliance with EU limits would be impossible, that "it is absolutely certain that nitrogen dioxide levels will go way beyond what they ought to be for human health" ^{*}, and others have said the same since.

Objectors have expressed doubts whether having built a new runway, BAA could possibly be prevented from using it – should the CAA and/or the Environment Agency officially conclude that its use is not compatible with necessary emissions cuts – or that any government would have the will when the time came to force BAA to do so.

BAA did however state, in principle, that it would accept such supervision. Colin Matthews, Chief Executive of BAA, was quoted by the BBC as saying "... we understand that we can only increase the number of flights if we can safeguard levels of noise and air quality" [#].

Greenhouse gas emissions

Rightly or wrongly, previous responses to consultations on Heathrow, by the DAC and for the Diocese, hitherto generally omitted consideration of CO₂ and other greenhouse gas (GHG) emissions, and climate change.

However, from about 2005 onwards, this aspect had become harder and harder to ignore. 2005 was the year of a major international conference in Exeter, "Avoiding Dangerous Climate Change", called by Tony Blair. This conference had the effect of dramatically raising media, and therefore public, awareness of climate change.

Aviation is responsible for some 1.6-2% of global greenhouse gas emissions. The effect of oxides of nitrogen and vapour trails at altitude increases this contribution some two to four-fold. Still it *may* amount, at present, to only about one twentieth of the causes of the greenhouse effect upon the whole planet [~].

What skews the picture dramatically is to allow for the facts that:-

- Aviation is predicted to go on growing dramatically
- It is not yet included in the obligation on all other sectors to reduce GHG emissions
- If expanded as proposed, Heathrow by itself would become the UK's largest single source of GHG emissions.



www.scienceblog.org/images

^{*} Not quite the same as saying they will exceed EU limits, but he probably meant that too.

[#] More recently, a full-page advertisement in *The Times* of 19 January 2009, signed by Colin Matthews, welcomed the government's decision to approve the development, and also the environmental limits to be imposed.

The advertisement also assured residents that BAA would 'seek to build strong links with its neighbours, particularly those in Sipson, to provide clarity on ... the concerns of homeowners affected'. It gave a web link for further information, at www.heathrowairport.com/thirdrunway.

[~] The effects of such emissions at altitude are very imperfectly known. It would be unwise to rely on over-optimistic assumptions.

The UK government previously refused to include international aviation and shipping in the targets in the Climate Change Bill, on the grounds that this needed international agreement first (because each flight takes off in one country and lands in another). However, in response to a backbench rebellion, and strong lobbying by NGOs and others, it finally agreed after all to take account of aviation and shipping 'in relation to the targets' in the Climate Bill ^{*}.

However that did not mean that aviation would be obliged to observe the targets for the economy as a whole, rather that emissions for the aviation sector would be added to those of other sectors before determining the UK's total emissions and reductions thereto. The government therefore asked the Committee on Climate Change (CCC) to 'include aviation in its advice', and the Committee did so in its first report in December 2008 [#].

Advice of Committee on Climate Change

The commitment of the government, on which the advice of the Committee on Climate Change has been given, is to reduce aviation emissions merely to their level in 2005. This would still represent a substantial net increase from the baseline of 1990 (aviation emissions grew faster than any other sector). To compensate, other sectors must make cuts of 89% by 2050, not 80%, which had itself already been increased from the previous target of 60% reductions [~].

It is necessary to understand the context of the Committee's advice. It is not given in a vacuum. In particular, it is not permitted to advise or comment on policy, but rather to advise on how policy can be achieved. It cannot say "expansion in aviation should not be permitted", but rather must say "if expansion in aviation is to be permitted, overall reductions in emissions can still be made by the following means" (eg, stabilising total aircraft emissions by reducing the emissions of each by as much as the increase in the number of flights, and sharing the whole of the 80% around other sectors).

^{*} Domestic flights were already included in targets, although their effect is much less. Carbon costs of international journeys can be appended as a footnote to Kyoto reports, but there is still no prospect of international agreement on the method of calculation. The hub status of Heathrow is one factor working against agreement, since the emissions attributable to passengers in transit would, in part, be chargeable to the UK – unless the whole of their journey were split between the country of origin and the final destination, which neither of them would be likely to agree to.

The UK Government was also resisting inclusion of aviation in EU targets for renewable energy (distinct from emission reduction targets in the Climate Bill, and also EU carbon trading schemes). It is not known whether there is to be any concession on this aspect; meanwhile, the EU has agreed how to include aviation in emissions trading.

Negotiations are conducted for the UK by the Department of Business Enterprise and Regulatory Reform (the reassuringly cool-sounding BERR). The former Secretary of State (who told the 2008 Labour Party Conference that new coal-fired power stations would make no difference to UK carbon emissions, because the surplus would be traded) was moved to Defence in the autumn 2008 reshuffle. He was replaced by Peter Mandelson, who summarised the position on Heathrow thus: "It's a classic dilemma – we want to forge ahead in implementing our climate change ambitions when others are not but we don't want to lose our economic competitiveness in the process. We want to do both these things."

[#] The Committee on Climate Change was established by the Climate Act when it became law in late November 2008, but before that it was set up in shadow form. Therefore it was ready with its report which was issued with statutory status on 1st December by decision of a single meeting of the Committee.

The government is now required to 'legislate or explain why not' in accordance with the Committee's advice. The flaw in this process is that 'explaining why not' would happen after the need to legislate – which might well be too late to secure the calculated mitigation to climate change.

[~] Geoff Hoon's Commons statement appeared disingenuous in implying that aviation will contribute to 80% cuts.

2005 was the start year of the EU Emissions Trading Scheme. The Committee advised that since aviation is included in trading, it is '**not essential**' (CCC's emphasis) that it be set any reductions target. But it still advised doing so 'for completeness', and 'to signal the importance of aviation within the overall climate mitigation strategy'.

Ed Miliband, the new Secretary of State for Energy and Climate Change, had stated in his address to the Environment Agency's conference the week before that carbon pricing was not enough to regulate emissions, having in the same speech noted that aviation would be subject to such pricing.

The Committee advised *accounting for aviation emissions*, but not explicitly *including them in carbon budgets*. It concluded that it was 'essential' that trends in the UK's aviation emissions be included *in its climate change strategy*.

These are not mere fine distinctions. As the first footnote above illustrates, there is a risk of assuming that nobody's emissions matter, because all can trade them with each other. So far, wishful thinking of this kind has contributed to the upward pressure on the cap in the EU's emissions trading scheme (though the CCC has not fallen into this trap).

The Chairman of the Committee on Climate Change, Lord Turner of Echinwell, is also Chairman of the Financial Services Authority – quite a burden of responsibility! Early in 2009, he told the parliamentary committee on the credit crunch that in the past (before his chairmanship) the FSA was restrained from voicing concerns about the banking systems by pressure from the government. That is ironic, because the Climate Change Committee is coming under very similar strictures now. In 10 or 20 years time will it be said that ‘with hindsight’ the CCC should have been given more liberty to advise the government in accordance with the concerns that it had? It is often said that the Committee will ‘hold the government to account’ – that is true to a limited extent if at all. It might not be *appropriate* for it to do so – but the limitations on the advice it can give do need to be realised.

Secondly, the Committee on Climate Change must base its advice on established public domain data and predictions, which largely means on the IPCC’s 2007 report ^{*}. It cannot be expected to revisit and re-write or update the IPCC’s conclusions, or anticipate that body’s next report; rather it has little option than largely to adopt the IPCC’s conclusions – and implicitly has done so, albeit illuminated by an abundance of other sources.

In particular, the Committee has relied on the conclusion that worldwide cuts of (only!) 50% in greenhouse gas emissions are needed by 2050. On this it bases its calculation that the UK as a developed economy, with much higher than average emissions, must make cuts of 80% in order to contribute its share of global cuts.

In its 2006-7 sessions, the Parliamentary Environmental Audit Committee had made the remarkable observation that, should the government’s own predictions for growth in aviation prove correct, emissions of greenhouse gases by aircraft attributable to the UK would be greater than the entire UK allowance, and all other sources would have to reduce to below zero! Therefore aviation by itself would be capable of defeating measures to combat climate change.

The Committee on Climate Change reached a less threatening conclusion, based on the Department for Transport’s central scenario, that UK-related international aviation could “account for around 35% of the UK’s GHG emissions cap implied by our preferred global emissions reduction scenario”.

What appears missing is any risk analysis of the consequences of global cuts having to rise above 50%, and therefore UK cuts above 80%. But informed opinion and debate are increasingly tending to the view that this will be essential, indeed that cuts may be needed of *more than 100% worldwide, ie reducing today’s atmospheric concentrations below their current level*, which is c 380 ppm_v CO₂ plus about 70 ppm_v other greenhouse gases [#]!

It is true that any efforts to perform such a miracle would largely concentrate on the electricity generation sector, by way of such exotic technologies as biomass carbon capture and storage, and possibly on new geo-engineering technologies [~].

Nevertheless, any continuing growth in aviation would raise the bar even further, arguably rendering it impossible to jump it. The Committee on Climate Change does not appear to have addressed any such risk. By the time it does so, the necessary action may well be slipping still further beyond reach [^].

^{*} The IPCC is the Inter-Governmental Panel on Climate Change.

[#] ‘ppm_v’, or parts per million by volume, is the standard measure for atmospheric content of any gas.

[~] The author’s attention has been drawn to a proposal by James Lovelock (originator of the ‘Gaia’ conjecture) for anaerobic burning of crop waste and ploughing it into the soil, thus burying its carbon content. What this would do to soil fertility is not known (by the author of this paper).

[^] This exemplifies a possible flaw in climate policy-making generally: it seems to lack a formal mechanism for any real-time state-of-the-art inputs comparable, for example, to those in defence procurement.

Other airports, dioceses, sites

It would hardly be reasonable to oppose the enlargement of Heathrow if the consequence were merely to expand another airport or airports instead – Gatwick or Stansted (or Charles de Gaulle or Schiphol) – with similar impacts on historic churches in other dioceses, residents in other areas affected by noise, and so on.

Following the Competition Commission's ruling, BAA invited expressions of interest with a view to selling Gatwick. They are already committed to expanding Stansted, but not as an alternative to Heathrow.

The implication of the hubbing concept is that most of the expansion which is proposed for Heathrow can only happen at Heathrow, or not at all ^{*}.

An entirely new proposal, such as the Mayor's suggestion of an island airport, would alter the case radically. Frankly this is no more than an amusing diversion, with no realistic prospect of coming to fruition. It would bring severe impacts of a different kind, such as the effect on bird life (fatal to an earlier scheme for Maplin Sands). It would not help at all regarding climate change. Therefore to grasp at the Mayor's straw as though it afforded some relief would seem cynical and, it is suggested, should not be given credence [#].

The long term

Runway 3 and Terminal 6, if built, will not bring airport expansion to an end.

BAA has stated it cannot rule out a proposal for a fourth runway and a seventh terminal, on a site to be identified, either north of the M4 (in West Drayton), or to the south (Bedfont or Stanwell). It is much too soon to make specific response to this prospect in itself – even assuming the threat of climate change vanishes and 'business as usual' ~ can resume unabated – but it now looms in the background to all discussions.

A City speech of British Airways' Chief Executive, during autumn 2008, was very telling. In it, he severely criticised the Conservative proposal for a new high speed rail link instead of a new runway, describing it as 'beyond belief'. British Airways had only just taken up occupation of Terminal 5, of which it has exclusive use – yet it remained unsatisfied (and still does).

It does have to be asked, can indefinite expansion ever be sustainable? Will it not always be supported by the same arguments as are deployed now? Does there come a point to draw the line, if so why not now?



www.nottingham.ac.uk

^{*} A leader in *The Times* on 18 December 2008 advocated consideration of 'the Gatwick Option', saying "the Government should not be blind to an attractive runway alternative"; but although Gatwick does not appear to have received any further consideration, *The Times* welcomed the government's decision effusively when it came (heaping scorn on those who disagreed with it).

[#] The Mayor himself has acknowledged that it would face obstacles, but urges that it should be examined for the sake of leaving no stone unturned.

~ 'Business as usual' is a term of art in climate discourse, meaning the rate of greenhouse gas emissions if no reductions are attempted.

Mitigation

Most of the arguments outlined above, at least those which count against airport expansion, assume that nothing can be done to mitigate their impact.

As previously noted, several significant concessions have already been granted by the government. Meanwhile, the aviation industry is developing means towards significant cuts in emissions *. In addition, other mitigation measures might be feasible:-

Westerly preference

The government has decided to preclude 'runway mixed mode' – whereby aircraft fly in both directions from each runway. Runway alternation is to be extended for benefit of additional communities; the principle of westerly preference – about 70% of flights heading west of the runways to avoid densely populated areas – also appears to be retained. These decisions are welcome in themselves.

However, the 'Cranford Agreement', avoiding flying over Cranford, is to be abandoned – a change that is much to be regretted. An additionally weighted system of westerly preference from the new runway could perhaps be introduced in its place; this would be of particular benefit in avoiding low flying over Harlington village and church, and Cranford church.

Improved site planning

The Heathrow proposal already shows the runway as far north as it can be sited, close to the M4. Further repositioning does not seem feasible between the Bath Road and the M4. However, it might be possible as the scheme develops to improve the layout of other elements. The footprint of the new terminal might be minimised. Ancillary facilities – airline offices and the like – might be able to be squeezed into a multi-storey strip development between the runway and the M4, reducing the encroachments around Harmondsworth village centre.

A road tunnel might be required crossing the whole site from west to east, retaining an umbilical chord to the village from the rest of London. Other tunnels, including beneath the runway itself, could optimise logistical connections. It does not appear viable to bury the whole of the M4 in a tunnel, though if this were an option it would ease matters considerably.

Increase air frame size, reduce flights, increase numbers

Deployment of the new A380 'super-jumbo' seems to hold out some hope of this.



news.cnet.com

* The aviation industry, by way of its advisory/research council ACARE, is committed to a total improvement of 50% in efficiency associated with new aircraft by 2030, including changes to air traffic control as well as to airframes and engines. Revolutionary new designs for aero-engines are under development, by Rolls Royce and no doubt others.

The Committee on Climate Change gives a slightly different, but compatible, figure of 40-50% improved fuel efficiency by 2025, backed up by an analysis by QinetiQ, and a survey of fuel sources and airframe/engine advances.

Either way, how the planned improvements will translate into global reductions by 2050 also depends on the life expectancy of older aircraft remaining in 2030 (any units introduced after 2025 would be likely still to be in service by 2050, unless withdrawn sooner for safety or as a contribution to efficiency in itself), and on whether the air traffic control regime can be reformed as hoped.

This may result in fewer flights being needed for the same number of passengers, reducing the runway to terminal ratio.

However, the A380 is limited to certain airlines and routes.

Alternative/low carbon aviation fuels

Virgin Airways have briefly experimented with using biofuel for aviation. An intriguing development of an entirely new algae-based fuel is thought to have first been announced by Solazyme, since when it has been taken up by many others. Solazyme's website quotes Michael Faraday:-

"Nothing is too wonderful to be true if it be consistent with the laws of nature."

Let us hope not, though it may still take a while to bring it to market, and reductions in emissions are needed right now. And biofuels are problematic generally, due to the resulting loss of cultivable area for food and/or deforestation*.



farm2.static.flickr.com

Summary

Measures such as those above should not be disregarded. But they ought realistically to be discounted by the time taken to deliver them, and any risk that they may not provide feasible or viable, or they may not deliver the efficiencies aimed for.

* Sceptics have estimated that to harvest enough algae, an area the size of Ireland would need to be permanently under cultivation. Undeterred, developers have claimed that "While we speak, we are expanding thousands and thousands of square metres of sites in greenhouses ... in Holland and in the open air in the south of Spain and in China."

Boeing are reportedly dealing with a New Zealand algal biofuels developer. Airbus and Boeing agree that biofuels are likely to be used by the airline industry, Boeing has said by 2013, Airbus thinking not necessarily till 2030. Airbus estimates a proportion of 30% biofuel use; the proportion proposed by Boeing is not known.

The International Energy Agency, quoted by the Committee on Climate Change, predicts 30% use of biofuels worldwide by 2050.

But there is reason to think that some of the new aero-engine designs (see footnote to previous page, opposite), will not employ biofuels. Therefore savings from biofuels and from these new engines, at least, may be mutually exclusive.

Even if 30% use is achieved, 70% would remain carbon consuming, requiring a further 50% cut overall; after allowing for trading, these figures suggest that aviation would still have to shrink – if not by 80%, at least by up to half, to match other sectors.

Parish and people, worship and mission

Should the third runway/ sixth terminal proposal become a reality, then the question of how to replace parish provision would become unavoidable. It is right to consider it now, without prejudicing the arguments for and against the runway.

Parish boundaries would no doubt have to be revised, taking account of the new realities. This would presumably be done under the Pastoral Measure.

Pastoral provision for travellers and visitors should also be made. At present there is an interdenominational chapel at Heathrow, with a prayer room, located in the central area. According to Heathrow's website, there are six other prayer rooms, one each in T2 and T4, two each in T3 and T5. The accommodation of some of these prayer rooms might be described as somewhat perfunctory.

The Heathrow chaplaincy was formerly served, for the Church of England, by the Priest-in-Charge of St Mary Harmondsworth. The suspension of presentation to the benefice of St Mary's has been lifted and a new house-for-duty Incumbent appointed.

The Anglican chaplains at Heathrow are currently part-time and non-stipendiary or lay. A revised local ecumenical partnership is soon to be established. Progress is being made on the multi-faith chaplaincy. The need for a stipendiary Anglican chaplaincy post is recognised, and work is also in progress to set this up.



Entry to St Mary Harmondsworth

Alternatives to airport expansion

If the Diocese should decide to oppose airport expansion in current circumstances – what are the alternatives? One must have something to say.

Railway improvements

As previously noted, the Conservative Party and others have mooted the idea of new high speed rail to Birmingham, Leeds, Manchester. As an alternative to the new runway this would save, they claim, 66,000 flights per year. This needs worked up analysis in support.

The disruption of a new railway would be greater even than a new airport runway. It could take decades longer (and billions more) to deliver (cf the Channel Tunnel Rail Link, the West Coast Main Line – and the comparatively modest Crossrail).

The possibility of new rail capacity should be seen as mitigating the shortfall in airport capacity should the runway not be built, rather than as offering equal provision in place of it.

Before the government took up the railway idea, British Airports Authority indicated that it too was in favour of it – but in addition to airport expansion, not as an alternative.

BAA did point out, not unreasonably, that a new railway could not be built with the same money as would have paid for Runway 3 and Terminal 6. The latter is private money from the aviation industry. Other sources, public and/or private, would have to be found for this railway project ^{*}.

Such a project does however have much to commend it. Originally the Channel Tunnel was seen as offering faster links from the continent to the whole of Britain, not just the South-East (that was one, but not the only, reason for replacing the Waterloo Terminal with St Pancras).

It would link airport arrivals not just to the North of England, but also southwards through the tunnel to Paris and Brussels (an alternative to some of Heathrow's hubbing capacity). It would relieve the pressure on regional airports as well.

The previous edition of this report claimed that improved connection to French Railways would be of particular value in climate terms, since SNCF's power is nuclear-generated, making it one of the most low-carbon means of transport anywhere in the world [#].

^{*} Although other local railway connections to serve the airport are being promoted by BAA.

[#] This was based on the premiss that France has its nuclear power stations already, therefore discounting the controversy around building new ones (but not any risk of accidents). But nuclear sceptics have questioned whether nuclear power stations are low carbon even once in operation – any carbon cost of procuring plutonium ore, for example, seems to be 'a riddle wrapped in a mystery within an enigma'.

Reduce passenger numbers

This is the crunch option, facing up to the negative impacts of long term growth in aviation.

Having studied the very thorough analysis in the first report of the Committee on Climate Change, with the considerable respect and deference that it deserves, it still seems inescapable that all aviation should be included in necessary greenhouse gas reductions, and that those reductions should start now, by reducing demand and/or supply, beginning in the UK – unilaterally if necessary, but preferably negotiating similar reductions in Europe and worldwide.

Carbon trading is not an adequate substitute, though it may have a place in the context of every industry playing an equivalent part in reducing emissions, and none gaining the privilege of passing that obligation on to others, without having to trade for it.

It is therefore hard to resist the argument that any government should be establishing bold fiscal measures to de-incentivise air travel, starting with a tax on aviation fuel at a fair valuation of the environmental cost. If the airline industry is prepared to buy credits on top of that, and charge passengers accordingly, then so be it ^{*}.

Every country is going to have to address the same issues, sooner or later; no-one will gain a free competitive margin by not doing so, except in the short term perhaps.

In any event, the imperative to mitigate climate change should take precedence over national interests – strong though our desire to promote the flourishing of London and the UK may be [#].

Stabilise and reduce

Too sudden changes in policy or fiscal regimes are not to anyone's advantage.

What seems needed is a phased plan, over a period of perhaps a decade, to limit the growth in traffic, restrict it to a calculated ceiling, and then to begin reductions, in Heathrow and all other UK airports.

At the same time, equivalent action by all our European neighbours and competitors should be strongly urged by the UK Government, in negotiations within the European Union.



St Dunstan Cranford

^{*} Such huge credits might not be available in the market – if they are, and at a price the frequent flyer can afford, then the cap is too high!

[#] It would be ironic as well as tragic, should Runway 3 ever be built, if the reception of climate refugees ended up as one of its chief functions!

Transitional considerations

It is important not to succumb to Micawber planning – something will not necessarily ‘turn up’ – whether in the shape of hitherto undreamed of technologies, a breakthrough in international negotiations, or any radical re-evaluation of climate change forecasts (in a more favourable direction, at any rate).

BAA has studied how current levels of traffic will be accommodated before a new runway is opened, whether or not it is finally approved. If passenger flow can be accommodated, by ‘growth within existing limits’, this might include:-

- Further improvements to terminals and logistics, and possibly also –
- Termination of the Cranford agreement but with no new runway, and/or –
- More night flights.

These measures are undesirable to varying degrees. Yet they do seem to raise the possibility that the growth of Heathrow might be stabilised within the next 1 – 2 decades, without need for physical expansion.

The possible effects of the ‘credit crunch’ and ‘peak oil’ also need to be taken into consideration. The ‘credit crunch’ needs no introduction here. Now is not an easy time for futurology, with so many economic factors fluctuating wildly; it is too easy to hope this will pass and calmer waters return, leaving no more than passing ripples on the economic pond *.

‘Peak oil’ is, as yet, not such a household phrase. It is the hypothesis that within about the next 5 years, the rate of oil production will level off and maybe decline, while demand continues to increase. This is no more than a hypothesis, but not one that it would be prudent to disregard. The credit crunch, or its after-effects, are more likely to ease or postpone any ‘peak oil’ phenomenon, which would likely be hastened should economies and finance re-stabilise. But one or other, or something like it – a third oil crisis of some kind – are considered likely scenarios. This may also mitigate rises in air traffic (and maybe ease global warming – every dark cloud has a silver lining).

The conclusion to be drawn could be that a window of opportunity still exists to avert the onset of some or all of the adverse scenarios which we face – by radically reviewing patterns of air travel, the need for it, the key drivers, and the policy and fiscal levers which might be applied to slow or even reverse current trends. The chance may not return soon – in relation to climate change, probably never.

One possible response to this opportunity would be to:-

- Keep the option of expansion open
- Pause nearer the time, in 5 – 10 years say, then –
- Review whether to resume the delivery process.

The downside of such a strategy would be to keep all concerned on tenterhooks. Business would be unable to plan, while residents and property owners in West London, especially Sipson, would be indefinitely blighted.

The alternative seems to be to accept the logic of climate change first and foremost, and to a lesser extent economic and resources constraints; to recognise that indefinite growth is unsustainable and when (even if!) resumed must, sooner or later, finally hit the buffers; and to begin planning now to manage supply and demand within sustainable ceilings.

* The previous edition of this report, written before the possibility of recession was acknowledged by governments, remarked that “long term downturns in one or more sectors of the international economy cannot be discounted”.

Legal advice

The Diocese may wish to seek legal advice concerning any issues affecting the churches in Harmondsworth, Harlington and Cranford.

The precedent of the Channel Tunnel Rail Act is worth recalling. The Diocesan Solicitors, Winckworth Sherwood, were the Bill's parliamentary agents.

However, it is not proposed to carry out expansion of Heathrow by Act of Parliament, but rather through the town planning process. The London Borough of Hillingdon opposes the development *. However, as previously noted, under the Planning Act which became law in November 2008, the local authority no longer has power to determine the application. It comes within the criteria for major infrastructure projects, to be determined by the new statutory Planning Commission.

In relation to the Channel Tunnel, faculty issues arose relating to works within the remaining part of the churchyard of Old St Pancras, arising from the railway works on the boundary. Of the three churches affected by airport development, Harmondsworth is the only one where works appear inevitable directly on the boundary.

Advice may also be needed concerning diocesan property within the land to be compulsory purchased.

A challenge is expected, presumably by way of judicial review, to the legality of the development, and/or the government's decision to support it. This challenge is supported by the Mayor of London. Nevertheless, it is not suggested that the Diocese should take part. Participation in public street protest, or 'direct action', is also not to be advocated.

Communications advice

Depending on the conclusions drawn from this review, the Diocese could:-

- Treat these conclusions as informing the Diocese's own strategy for worship and mission, for procurement and management of property and resources and/or
- Communicate the balance of evidence and opinions, in response to consultations, more or less as has been done so far, or –
- Make them the subject of public advocacy – especially if a position of opposition to airport expansion is adopted.

In relation to any of the above options, advice should be sought from the Diocese's Communications Consultants, before deciding what to communicate to whom, whether to publish, and in what form.

The first option appears valid, with or without the other two. The second is limited by the government and BAA having reached their conclusions on previous consultations (which the Diocese fully participated in). No further consultations appear to be in the offing, except perhaps on technical sub-issues. However, there will be an opportunity for further submissions in the course of the planning process. The third option has been employed to some effect already, beginning in 2002 and ever since – not in the sense of public protest, but in the making of calm but resolute contributions to reasoned debate #.

* As also do L B Richmond and others.

See the last paragraph of **page 27**, below.

Discussion

The arguments for and against expansion of Heathrow, and in particular the proposal for a third runway and sixth terminal, may be summarised under the headings of:-

- Heritage
- People and places
- Noise and pollution
- Business and the economy
- Worship and mission
- Climate change.

Heritage

The impact of the new runway, in purely heritage terms, has been lessened by moving the boundary further north. It is no longer proposed to demolish any churches.

Whilst the impacts to the setting and environments of Harmondsworth, Harlington and Cranford are still regrettable in heritage terms, constant reiteration might – however unreasonably – come to be seen as contumacious. This could impair relations with the airport in the future *.

Nonetheless, it would still be appropriate – as part of conditions upon the granting of any planning permission – to press for appropriate and specific mitigation measures, including:-

- The layout and design of new developments, especially around Harmondsworth
- Aesthetic treatment of new buildings and landscaping within the setting of church buildings
- Prevention of cross boundary damage by encroachment and earthworks.

People and places

The Church should stand with the people of Sipson in continuing to give their concerns, and their human rights, due weight. The village of Cranford may also become uninhabitable, even if not actually demolished. Life in Harmondsworth village is likely to be severely impaired. The pressure on Longford will also increase.

Ultimately these considerations may not be enough to stand in the way of airport development, which ordinarily might be expected to bring much wider benefits to far more people. However, that is far from uncontentious in this case. A much larger proportion of the population of London are likely to suffer from the ever greater encroachment of Heathrow and over-flying aircraft on their daily lives.

It is unclear that Londoners gain more by flying more than they suffer by being woken up at night. Indeed they may be indulging in one partly to get away from the other! The unreasonableness of this should continue to be strongly argued.



Sipson

* BAA, through a mutually esteemed intermediary, has offered the Diocese a giant load of free manure for use on its allotments projects at Sipson and elsewhere. We were assured that this offer was 'a serious one'.

Noise and pollution

These are the most tangible aspects which are likely to have an adverse effect on people living and working in London, increasingly as the airport expands and traffic increases.

The government has so far failed to demonstrate, except to its own satisfaction, that it is able to bring air quality within legal and acceptable limits. It has given regulatory roles to the Civil Aviation Authority and the Environment Agency^{*}, but there are doubts on whether these would prove enforceable. The noise impact is more difficult to evaluate, but may also be substantial.

Therefore the government and BAA should provide estimates of future noise and air quality levels, which are:-

- Specific
- Assured in their delivery within the project procurement process and timescale
- Should the project proceed, enforceable in the future after the new runway is in operation.

Business and the economy

It is right to acknowledge that, other things being equal, airport expansion should deliver business expansion and new jobs, with tangible benefits to the local area, London, the South-East, and the wider economy.

But other things are not equal. The assumption that continuing growth is likely to return, and if it does whether it will be any more sustainable economically than it was before the recession broke out, is a contested one – even more so in terms of resources use and the environment.

The benefits to UK business of the ‘hubbing’ aspect of Heathrow’s role – which constitutes the bulk of the case for expansion – have also been vigorously rebutted.

Any economic benefits, real or predicted, need to be set against the economic costs of climate change as forecast by the Stern Review. The latter are likely to prove much greater.

Worship and mission

It appears that, if the expansion of Heathrow goes ahead as planned, nine centuries of Christian worship and mission in St Peter & St Paul Harlington will come to an end.

The churches of St Dunstan Cranford and St Mary Harmondsworth are also likely to close. Even if St Mary’s and St Dunstan’s were able – just – to continue, they would do so with diminished and demoralised congregations.

The connections of many people with their loved ones’ places of burial will also be severed.

The above outcomes should be stoutly resisted. The Diocese should press for patterns of take-off and landing that will minimise noise levels over these churches.

It would also be necessary to review parish boundaries and staffing. On the other hand, new opportunities to serve a wider population of visitors and travellers to, from and through the airport will emerge. If, in spite of the arguments presented, expansion and the new runway and terminal go ahead, then the Diocese should persevere in discussions with the Airports Authority to secure maximum benefit from these contingent opportunities.

^{*} At the same time, the Committee on Climate Change is advising on CO₂ emissions. The interrelationships within what will be a complex network of advice and control are not entirely clear.

Climate change

The points made above would be less persuasive if aviation were, as is often alleged, making no more than a marginal contribution to greenhouse gas emissions. But that is not so. The present contribution is relatively small perhaps, but significant.

Growth forecasts in aviation are predicated on the assumption of uniquely privileging this sector by allowing something not much short of 'business as usual' to continue, whilst not taxing fuel, nor including emissions within net greenhouse gas emissions reductions below the 1990 baseline, only taking account of this in the totals^{*}. The expansion of Heathrow is entirely conceived in terms of supporting further growth, not just improving the handling of current demand.

Unless radical technological improvements are developed and delivered in time – this is optimistic at best – unrestricted growth in air travel has the capacity to more than cancel out all efforts to reduce emissions in other sectors put together (according to the Parliamentary Environmental Audit Committee), or at least to seriously rival them (as estimated by the Committee on Climate Change) – and thereby potentially to defeat those efforts.

Even on the Committee's assumptions, very little margin remains for other sectors to absorb the burden of aviation's share of emissions; should the interpretation of scientific evidence informing limits on atmospheric concentrations become more stringent – as it is doing already – the UK's contribution to the fight against climate change may well be sentenced to inevitable failure.

Furthermore – as has been explained – according to the CCC's advice, if aviation is allowed to expand, target reductions for all other sectors will rise to 89%. That would include the Church, and other owners of historic buildings. It has recently been decided to raise the target to 80%. The implications of altering a building stock which largely consist of listed buildings need to be taken into consideration – and there are numerous other sector-specific constraints which are likely to make such targets undeliverable nationwide.

So far from being a marginal contribution, aviation turns out to be one of the key drivers of the success, or otherwise, of efforts to combat climate change – on a par with such questions as whether to permit new coal-fired power stations, and/or whether to expand nuclear power.

Any and all business and jobs are threatened by severe climate change. Heathrow is not the whole airline industry, but a large part of it, and it occupies a leading role. It may become the UK's largest single emitter of greenhouse gases. Others are watching to see what the UK and Heathrow will do. Runway 3 will signal to the world that open season has begun for new runways and terminals. Paris, Amsterdam etc will accelerate to catch up (recession permitting) – and do so first. Whereas if the UK government had had the courage to cancel the Heathrow (and Stansted) projects, others would have been more likely to take their feet off the gas. Circumstances might even have been created in which governments could begin meaningful discussions about controlling aviation traffic generally.

Therefore, the case for restricting air travel appears very formidable, as part of measures to combat climate change. In this context, it is hard to see how a new runway can be justified.

On such a point of principle, the Church as one of the key stakeholders in civil society ought to feel mandated to speak up in resolute opposition to what may well turn out, in no more than a few decades, to have been a disastrous and reckless adventure by the aviation industry, assisted by a failure of nerve and political will (as far as climate change is concerned) on the part of the government.

^{*} See **page 15**, text and footnotes.

Conclusions

With a degree of regret, it is recommended that the Diocese should oppose the development of a new third runway and sixth terminal at Heathrow. It would not seem possible to equivocate by advising in favour on the basis of one set of factors, whilst opposing on others at the same time.

Were it not for the growth in aviation and greenhouse gas emissions, it might have been possible to continue with a stance of principled comment, for and against other aspects of the development, without adopting an overall position in favour or in opposition.

However, on the state of current knowledge, the threat of climate change is very severe, and its impacts are expected to be much greater than the benefits which may come from airport expansion. Indeed it would be likely to negate any such benefits. Therefore the Diocese should be prepared to oppose this development.

This recommendation has regard to the special contribution of Heathrow to greenhouse gas emissions from aviation. This factor is expected to exert a determining effect on measures in the UK and elsewhere to combat climate change, in a negative direction – should its expansion be allowed to continue in accordance with the UK Government's forecasts and current policy.

It is hard for this writer to see how the Diocese can go on encouraging its people and parishes to make sacrifices in reducing their own carbon footprints, whilst tacitly accepting an area of public policy which may render such efforts futile.

However, any decision to oppose airport development might be reviewed, should scientific opinion on climate change substantially change, and/or in the event that measures to reduce emissions, including new technologies, are developed soon enough – together with adequate assurance of their effectiveness *.

Sufficient responses would still be needed, and should continue to be urged, in relation to various other negative impacts which have been identified. These concern noise, air pollution, the consequences for residents of Sipson and Cranford, the threat of closure to Harlington, Cranford and Harmondsworth churches, and the impairment to the integrity and quality of life in Harmondsworth village, and in Longford. Mitigation of heritage impacts should still be advocated.

The Diocese should stand alongside the people of Sipson in particular, who are under threat of eviction from their homes.

Dialogue should be pursued in relation to continuing provision for worship and mission in and around the airport. The Diocese should begin consideration of parochial arrangements in the Harmondsworth and Longford, Harlington and Cranford areas.

Brian Cuthbertson
Head of Environmental Challenge
October 2008 – March 2009

* On 12 March 2009, London Diocesan Synod received this report, and adopted its conclusions on the present page, with the exception of this sixth paragraph.