



**RESPONSE TO THE AIRPORTS COMMISSION FROM LONDON BIGGIN HILL AIRPORT
AND REGIONAL AIRPORTS LTD – AVIATION DEMAND FORECASTING PAPER**

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Private & Confidential

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Airports Commission

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Dear Sir

AVIATION DEMAND FORECASTING PAPER

**RESPONSE TO THE AIRPORTS COMMISSION FROM LONDON BIGGIN
HILL AIRPORT AND REGIONAL AIRPORTS LTD**

I am writing on behalf of London Biggin Hill Airport (LBHA) and its parent company Regional Airports Ltd (RAL), of which I am Chairman, to the Airports Commission's call for comments on its Discussion Paper No1: Aviation Demand Forecasting. However, LBHA, as a significant player within the Business Aviation sector in the UK (see Appendix 1 Fig 1 for map of all London Airports including Business Aviation facilities) has also been actively engaged in recent months in an initiative led by the Airport Operators Association and the British Business and General Aviation Association, to raise the profile of this important component of the aviation industry within Government and ensure that its voice and its need for a clear and coherent policy framework are fully taken into account in DfT's preparation of its Aviation Policy Framework and the Commission's consideration of interim and long term policy options. With this in mind, I am confident the views that I outline below will have wider resonance for the Business Aviation sector as a whole within the UK.

Whilst I recognise that the Discussion Paper focuses squarely on demand forecasting issues in the scheduled aviation sector, and as such contains little that is of direct relevance to LBHA or the wider Business Aviation generally, given the Commission's broad remit, I have not taken silence to indicate disinterest or any lack of desire to engage. This is especially the case as decisions on scheduled aviation capacity, potentially could have significant *indirect* impacts on what is a substantial and economically important component of the wider aviation sector in the UK. It is worth noting, for example, that:

- Eurocontrol estimates Business Aviation to comprise almost 8% of all controlled air traffic movements within Europe;
- according to CAA data, there were 164,000 Business Aviation movements from UK airports in 2011 - equivalent to an airport the size of Manchester and some 30,000 greater than from Stansted in the same year - and well over half of these were from South East Airports;
- the industry is worth €3-4bn a year according to research by Price Waterhouse Coopers from 2009;
- it provides swift, on-demand access to key decision-makers, entrepreneurs, senior executives and time-critical specialist operational staff as LBHA's use as a Gateway during the 2012 Olympics showed (see Appendix 2);
- is often essential to providing convenient access to business and investment opportunities in new, frequently emerging markets, that are not yet developed enough to support scheduled services (Appendix 1 Fig 2); and that
- analysis by Oxford Economics on behalf of the European Business Aviation Association, found that the value of time of executives using Business Aviation was nine times higher than that of their equivalents flying business class on scheduled airlines.

For these reasons, therefore, Business Aviation is an important part of the aviation mix in the UK generally, but the South East in particular, that should not be overlooked in your deliberations, whilst at the same time it is also important to recognise that the impact of the core debate on scheduled capacity is material to the future development sector as it affects:

- Air space and air traffic management provision and priorities;
- residual capacity available for Business Aviation use at the principal scheduled airports;
- the commercial environment in which dedicated Business Aviation airports such as Biggin Hill and Farnborough amongst others, have to make major decisions about future investment in infrastructure and associated facilities;
- regional and local spatial and transport plans.

In this context, it needs to be understood that Business Aviation:

- is showing long term growth trends that are ahead of those in scheduled air traffic movements and particularly strong from the fastest growing economies, within Europe and around the World;
- is competing for runway capacity throughout the day with scheduled aviation at capacity constrained airports such as Heathrow and Gatwick;
- is in a similar position during peak and shoulder periods at Airports such as Luton, London City and Stansted;
- requires valuable physical space for dedicated stands and terminal facilities at many of these airports; and that

- Business Aviation facilities such as Northolt, whose runway alignment converges with those at Heathrow, reduce potential options for maximising scheduled capacity there or optimising noise preferential routes.
- Is better, for reasons of safety such as jet vortices and the non scheduled nature of the industry, to be provided with attractive alternative airport capacity nearby.

In forecasting terms, the critical metrics where Business Aviation should be taken into account in your work are the number, types and destinations of aircraft movements, otherwise these will not be properly reflected in your subsequent runway capacity analysis, airspace planning, economic and connectivity assessments and environmental appraisals. Ultimately, we are concerned this could result in your recommendations to Government not making appropriate provision for Business Aviation's capacity requirements, and failing to fully recognise the potential system level benefits of dedicated Business Aviation reliever airports, such as those to be found serving many world cities (eg Teterboro and Morristown in New York, Le Bourget and Pontoise in Paris, Van Nuys in Los Angeles and Al Bateen in Abu Dhabi). These are illustrated in Appendix 3, which provides a brief explanation of the Federal Aviation Authority (FAA) system of airports and its application in New York. We think this could provide a useful approach around which to model future policy for Business Aviation airport capacity to serve London.

With this in mind, and recognising that the forecasting tools available to you from DfT do not have the capability to model future Business Aviation demand, we believe there is an important gap in the analytical base from which you will be working, and that this needs to be addressed. In this regard, LBHA/RAL may be able to be of direct assistance to the Commission, as we have been developing a London Business Aviation demand-capacity analytical model for our own purposes, and its outputs will be in a form that I suspect can be very easily factored into your wider forecasts. The model relies upon data from reliable sources, is simple, transparent, with an easy user interface that allows key assumptions to be changed as required.

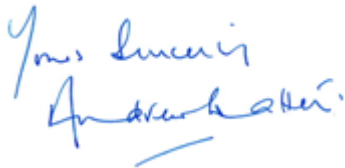
If this is something that might be of interest, we would be pleased to arrange to meet you or your secretariat to discuss it, and if appropriate make it available for the Commission for its own use. I am certainly hopeful that it may circumscribe work, which for the reasons I have set out above, I hope you agree, it would be remiss of the Commission not to undertake.

With regards to capacity, the current input assumptions being used in the DfT models do not take any account of any potential use of existing runways by Business Aviation. They either need to be adjusted to reflect this, or qualified by an explicit acknowledgement that it has been assumed that Business Aviation will not be able to use the requisite airports, and therefore, that:

- either the need for dedicated provision to be made elsewhere needs to be explicitly recognised in your report to Government;

- or impacts such as the loss of associated economic benefits and connectivity with the use of Business Aviation, need to be factored into your wider analysis.

I trust this is helpful, and my team and I are at your disposal should you wish to discuss further.

A handwritten signature in blue ink, appearing to read 'Yours sincerely Andrew Walters'.

Andrew Walters
Chairman

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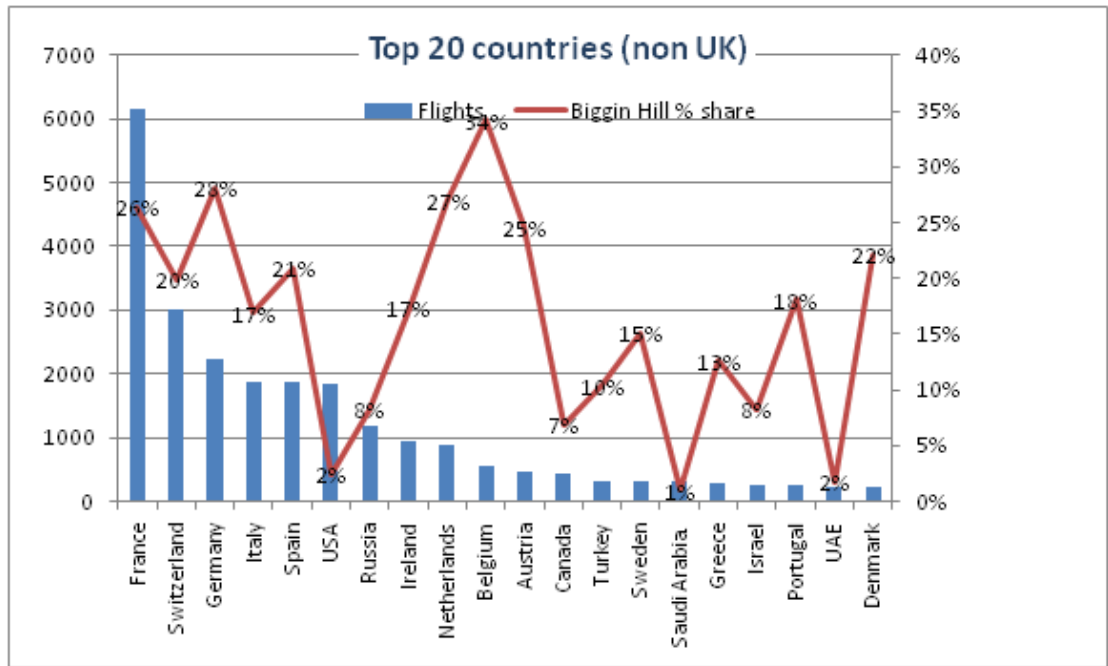
- Appendix 1 : Map of London Airports
- Appendix 2 : Olympic Lessons and Olympic Legacy – Opportunities for Biggin Hill Airport
- Appendix 3 : Extracts and a Brief Explanation of the Federal Aviation Authority (FAA) System of Airports and its application in New York

Appendix 1

Fig 1. Map of London Airports



Fig 2. Top 20 Non-UK Business Aviation Destinations from London and Biggin Hill's Share of Each Market



Appendix 2 : OLYMPIC LESSONS AND OLYMPIC LEGACY OPPORTUNITIES FOR LONDON BIGGIN HILL AIRPORT

1. Ahead of the Games

1.1 The Traffic Forecast

The Department for Transport commissioned Atkins to produce an Air Traffic Review and Airport Capacity Assessment. The primary objective was “to ensure that sufficient capacity is available for air access to London, but that the additional demands imposed by the Games related traffic, both passengers and aircraft, did not cause serious disruption to the normal activities of the main UK airports, in what will be a peak summer period. The DfT wished to examine whether the forecast demand for additional non scheduled flights, including charter, General/Business Aviation (GA) and Head of State (HOS) over and above the existing scheduled traffic, is likely to create a shortfall in available airport capacity in the South East of the UK”. Findings included:

- A number of the smaller airports in the South East are currently underutilised and have significant spare capacity in relation to runways, aircraft stands and passenger handling.
- The Business Aviation clients visiting the UK will expect to be able to transfer directly from their arrival airport by helicopter to a venue close to the Olympic Games or Central London.
- Biggin Hill is believed to be well suited to long stopping traffic due to its abundance of parking, as is Farnborough.
- The forecast of the additional Olympic generated movements (Atkins table 16) of Business and General Aviation flights, and Head of State flights, excluding the base traffic, showed:-

Airport	GA/BA	HOS	Total	%
Luton	264	6	270	17
Gatwick		18	18	1
Stansted	340	36	376	24
London City	8		8	1
Biggin Hill	669	14	683	44
Farnborough	82	86	168	11

These flights were 70% commercial charter and 30% private and almost entirely the generally smaller aircraft used in Business Aviation and/or small passenger flights, under 75 seats.

1.2 Airspace and runway capacity planning

Prior to the Games NATS and Airport Coordination Limited (ACL) carried out an extensive study in consultation with all airports in the South East to allocate and link airspace capacity with runway capacity, introducing a slot allocation system for the period of the Games. Biggin Hill was allocated 21 movements per hour, either inbound or outbound.

2. What Happened?

The Business Aviation departures from the London airports, with Games traffic and non Games traffic together were as follows:

Business Departures from London Airports, 26 July-13 August 2012

Airport	Total	Market Share	Y O Y Trend	Private	Charter
Luton	734	29.7%	-33.7%	-36.3%	-31.4%
Farnborough	534	21.6%	-15.8%	-30.1%	-10.0%
Biggin Hill	423	17.1%	-60.2%	-38.6%	-73.5%
Oxford	300	12.1%	-9.9%	4.3%	-19.5%
Stansted	261	10.6%	-153.4%	-260.0%	-79.1%
London City	142	5.8%	-8.4%	35.7%	-12.3%
Blackbushe	40	1.6%	-5.3%	-20.0%	8.7%
Gatwick	34	1.4%	2.9%	11.1%	-4.3%

Source: WingxAdvance Nov 2012 Executive & VIP Aviation International

- Base traffic unexpectedly declined but Biggin Hill was still 60% up on the same period in the prior year.
- The slot allocation system worked extremely well, with few delays and remained well within the 21 flights per hour cap.
- Cancellations arose close to the Games, after slots had been booked. For example, as a result of concerns for security in the national press a major US communications group withdrew its three corporate aircraft due to be based at Biggin to operate daily shuttles with customers in and out of Biggin Hill.
- A major European car manufacturer operated a 50 seat aircraft on alternate days in and out of Biggin carrying crew and guests and reported a high degree of satisfaction with the connectivity to the Games, as for example did many small Games family passenger groups who used the airport on chartered aircraft.

3. Lessons for the Legacy

- There is capacity in the London airspace for up to 21 flights per hour at Biggin.
- The Games proved that Biggin Hill was a popular and convenient airport for the non scheduled flights into and out of London and that this unique role could be developed as a feature within the London airport system, as it is in New York and several other world cities, eg Teterboro in New York and Le Bourget in Paris.

APPENDIX 3 EXTRACTS AND A BRIEF EXPLANATION OF THE FEDERAL AVIATION AUTHORITY (FAA) SYSTEM OF AIRPORTS AND ITS APPLICATION IN NEW YORK

1. Introduction

There are over 19,000 airports, heliports, seaplane bases and other landing facilities in the United States and its territories. Of these, 3,330 are included in the *FAA's National Plan of Integrated Airports Systems (NPIAS)*, are open to the public, and are eligible for Federal funding via the Airport Improvement Programme (AIP).

There are seven categories of airport, as set out, in para 2 below, based upon three factors:

- Their commercial passenger throughput.
- Their percentage of the national passenger throughput.
- The number of aircraft based at the airport.

2. The Federal Airport Categories

A guiding principle of the FAA is that airports should be flexible and expandable, able to meet increased demand and to accommodate new aircraft types.

Large Hubs

Large hubs, such as JFK, Chicago, San Diego each account for at least 1% of total US air passengers on scheduled services and have little general aviation activity. The 30 large hub airports account for 69% of all air passengers.

Medium Hubs

Medium hubs are defined as airports that each account for between 0.25% and 1% of total US air passengers. There are 37 medium hub airports accounting for 20% of all air passengers and they can have a substantial amount of general aviation activity with an average of 129 based aircraft.

Small Hubs

Small hubs are those airports with between 0.05% and 0.25% of total US passengers. There are 72 small hub airports that together account for 8% of all air passengers and less than 25% of the runway capacity is used by scheduled airlines, so these airports can accommodate a great deal of general aviation activity, with an average of 134 based aircraft at each airport.

Nonhub Primary

A Nonhub Primary service airport has more than 10,000 annual air passengers but accounts for less than 0.05% of the national air passenger demand. There are 244 such airports and account for 3% of all air passengers. These airports are heavily used by general aviation aircraft, with an average of 99 based aircraft per airport.

Non Primary Commercial Service

These smaller airports have between 2,500 and 10,000 annual air passengers on commercial air services. There are 139 of these airports accounting for 0.1% of national air passenger demand and are used mainly by general aviation with an average of 38 based aircraft.

Reliever Airports

Reliever airports are general aviation airports in metropolitan areas that provide attractive alternatives to using congested hub airports and provide general aviation access to the surrounding area. To be eligible for Reliever designation, these airports must be in a metropolitan area and have 100 or more based aircraft.

General aviation Airports

The FAA (*see general aviation Airports; a National Asset May 2012*) has recently divided general aviation airports into four categories – National, Regional, Local and Basic. These general aviation airports provide connections to the larger aviation system whilst also providing access to their respective communities. Their role varies among individual airports:-

- *National* – Serves national and global markets with very high levels of activity with many jets and multi engine propeller aircraft. Averaging about 200 total based aircraft.
- *Regional* – Serves regional and national markets with high levels of activity with some jets and multi engine propeller aircraft. Average is 90 based aircraft.
- *Local* – Serves local and regional markets with moderate levels of activity and 33 based propeller driven aircraft and no jets.
- *Basic* – Often serving critical aeronautical functions within local and regional markets with low levels of activity.

3. Applying the FAA System to New York

JFK, Newark and LaGuardia airports serve over 100 million passengers annually and account for 95% of the 3,700 daily scheduled commercial airline aircraft operations in the region, and about two thirds of the 5,000 daily commercial operations at airports within 100 miles of the centre of Manhattan.

In January 2011 the Regional Plan Association (RPA) published *“Upgrading to World Class – The future of the New York regions airports”* in which it considered the economic and operational impact of congestion and recommended solutions. The report noted that during the long period from the 1970’s into the 1990’s measures that forestalled the need for a fourth airport included:

- Slower than projected growth in air travel.
- The pricing out of most general aviation aircraft at the major airports, with much of it shifting to Teterboro, opening up capacity for air passengers.
- The advent of a new intercity rail connection with Washington and Boston.
- Larger aircraft that serve the growth in air passengers with fewer aircraft movements.

Turning to future plans the policy examined options that would directly improve capacity at the core airports:

- Ban general aviation flights during peak periods.
- Ban all cargo flights during peak periods.
- Cap frequencies in individual markets during the peak period.
- Ban short distance air carrier flights during peak periods.
- Ban flights with low seating capacity during peak periods.

The RDA report concludes that creating the additional capacity will require a combination of actions, some of which can be implemented in the next few years, while others could take two decades or more to complete. They examined six options and concluded:-

- Airspace management technology could make a short, medium and long term contribution, but not enough to keep pace with demand.
- Expanding outlying airports could shift demand to the regions, opening up more capacity at the core airports and should be encouraged.
- Improved high speed rail could make a modest improvement.
- Building a new airport was untenable at this time, due to costs and the need to be close to either Kennedy or Newark.
- Managing demand to encourage higher capacity flights, reducing sub 50 seat and sub 250 mile flights and caps on over served markets were considered worthy of investigation and that regulation could play a role.
- Expanding capacity at the three major airports provided the greatest potential for increasing capacity and reducing delays.

4. Reliever Airports in New York

Due to different operating requirements between small general aviation aircraft and large commercial aircraft, general aviation pilots often find it difficult to use a congested commercial service airport. In recognition of this, FAA has encouraged the development of high capacity general aviation airports in major metropolitan areas. Large commercial aircraft typically operate at much higher speeds than small general aviation aircraft thereby making it difficult to have both types of aircraft use the same runways during periods of high commercial aircraft activity. This is due, in part, to variances in approach air speed and to wake turbulence considerations. Segmentation between scheduled and non scheduled flights is therefore also a safety factor.

The following are the principal Reliever airports in the New York area (see map Appendix 1), with the most recent publicly available data demonstrating how each has evolved in its own particular way to meet its local demand and take some of the load off the core airports. The attached map shows the geographical spread around the New York and Metropolitan area.

- ***Teterboro Airport***
Just 12 miles from mid town Manhattan, Teterboro airport is considered a general aviation Reliever airport. It does not offer scheduled airline service nor does it permit operations of any aircraft in excess of 100,000 lbs and its goal is to remove the smaller and slower aircraft from the regional air traffic that would cause major congestion at the New York Port Authorities main airports of Kennedy, Laguardia and Newark. The airport has two runways – 7,000/6,013 ft and had 153,250 flights in 2010 with 172 based aircraft. The airport has more than 1,137 employees. The airport is open 24 hours with voluntary night movement restrictions.
- ***Morristown Municipal Airport***
Morristown municipal airport is a designated general aviation Reliever airport for the New York metropolitan area. The airport is 27 miles from New York City with two FBO's and two runways 5,999/3,998 ft and is open from 0600 to 2300 hrs daily. The airport accommodates flying training and commercial charter services.
- ***Westchester County Airport (White Plains)***
Westchester Airport is considered a Reliever airport in the New York metropolitan area that has now been categorized by the FAA as a non hub primary commercial service airport. The airport has two runways 4,451ft/6,548ft respectively and in the period 2010/11 had 197,037 flights with 310 based aircraft. The airport has five FBO's and two flight schools. 23% of flights are commercial aviation carrying close to 1 million passengers, 48% heavy general aviation and 29% light general aviation.
- ***Republic airport***
Republic airport is a designated Reliever general aviation airfield. In 2010 there were 2,329 commercial passengers carried on short distance charter flights, two Business Aviation FBO's serving corporate and light aviation passengers and 523 aircraft based at the airfield. 92% of the 192,216 annual flights in 2010 were general aviation, with 8% Air Taxis. There are two runways 5516ft/6827ft respectively.
- ***Long Island MacArthur Airport***
MacArthur airport is considered a Reliever airport on Long Island although it is now classified by the FAA as a non hub primary commercial service airport. The most recent figures indicate 302 based aircraft with 80% of the 173,346 annual flights as general aviation, 15% scheduled commercial flights and 5% Air Taxis. There are two main runways 7,006ft/5,034ft respectively.

5. Further Information

Recommended further information can be found at:

- a) Federal Aviation Administration report to Congress. National Plan of Integrated Airport Systems (NPIAS) 2009 – 2013. Web address:
http://www.faa.gov/airports/planning_capacity/npia/reports/

- b) Upgrading to World Class – The future of the New York Regions Airports. Regional Plan Association January 2011. Web address: <http://www.rpa.org/2011/01/major-new-rpa-study-finds-new-airport-capacity-needed.html>
- c) US Department of Transportation Federal Aviation Administration. General Aviation Airports; A National Asset. A fresh look at the many roles general aviation Airports play in the National Air Transportation. May 2012. Web address: www.faa.gov/airports/planning_capacity/ga_study/media/2012AssetReport

Appendix 1 Google map of New York Airports

BH Jan 2013

